

CAPACITY NEEDS FOR PROJECT MANAGEMENT IN ARMENIAN HIGHER EDUCATION: FINDINGS FROM THE ERASMUS+ EU-BRIDGE MULTI-STAKEHOLDER ASSESSMENT

NARINE VARDANYAN

National Academy of Sciences of the RA
International Scientific-Educational Centre
PhD in Philological Sciences
Associate Professor
narine.vardanyan@isec.am

ATOM MKHITARYAN

National Academy of Sciences of the RA
International Scientific-Educational Centre
Dean, PhD in Physical-Mathematical Sciences, Associate Professor
atom.mkhitaryan@isec.am

DOI: 10.54503/2579-2903-2026.2-105

Abstract

The deepening internationalisation and Europeanisation of higher education requires Armenian higher education institutions not only to expand international cooperation but also to develop the individual and institutional capacities needed to design and manage European educational and research projects. This study aims to identify the main capacity needs and gaps in Armenia's higher education sector and assess their alignment with the components envisaged by the EU-BRIDGE project ("Strengthening Higher Education for European Project Management in Armenia"), implemented under the Erasmus+ Capacity Building in Higher Education action.

The study uses a mixed-methods approach, combining data from three complementary components: a quantitative survey of 180 participants, a survey of 14 experts in higher education and quality assurance, and the results of a focus group discussion with representatives of 23 organisations, along with six in-depth interviews. The integration of data from different sources enabled a comparative analysis of the perspectives of different stakeholder groups and thematic triangulation of the findings.

The results demonstrate a high level of interest in participation in European programmes within the Armenian higher education sector; however, this interest is not always accompanied by sufficient practical experience and institutional support. The main capacity needs include identifying funding opportunities; developing project ideas and applications; budgeting and financial management; identifying international partners and building consortia; and project planning, monitoring,

evaluation, and reporting. At the same time, limited access to information and advisory support, financial and time constraints, insufficient English-language proficiency, and a lack of institutional support mechanisms were identified as significant barriers.

The study shows that capacity development cannot be limited to short-term training activities. Stakeholder assessments highlight the need for practice-oriented learning, mentoring, simulation of real projects, international networking, experience sharing, and the development of a digital professional community. These findings broadly align with the EU-BRIDGE project's components on training, experiential learning, social innovation, project simulation, and professional networking. The findings can contribute to the development of evidence-based mechanisms for capacity building and sustainable participation in European projects in Armenian higher education, as well as inform the design and implementation of similar Erasmus+ initiatives.

Keywords: higher education, internationalisation, Europeanisation, project management, capacity building, needs assessment, Erasmus+ EU-BRIDGE.

ՀԱՅԱՍՏԱՆԻ ԲԱՐՁՐԱԳՈՒՅՆ ԿՐԹՈՒԹՅԱՆ ՈԼՈՐՏԻ ԾՐԱԳՐԵՐԻ ԿԱՌԱՎԱՐՄԱՆ ԿԱՐՈՂՈՒԹՅՈՒՆՆԵՐԻ ԿԱՐԻՔՆԵՐԸ. ERASMUS+ EU-BRIDGE-Ի ԲԱԶՄԱՇԱՀԱԿԻՑ ԳՆԱՀԱՏՄԱՆ ԱՐԴՅՈՒՆՔՆԵՐԸ

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ՀՀ ԳԱԱ գիտակրթական միջազգային կենտրոնի դոցենտ,
բանասիրական գիտությունների թեկնածու

narine.vardanyan@isec.am

ԱՏՈՄ ՄԻԻԹԱՐՅԱՆ

ՀՀ ԳԱԱ գիտակրթական միջազգային կենտրոնի դեկան,
ֆիզիկամաթեմատիկական գիտությունների թեկնածու,
մանկավարժության դոցենտ

atom.mkhitaryan@isec.am

Համառոտագիր

Բարձրագույն կրթության միջազգայնացման և եվրոպականացման խորացումը Հայաստանի բուհերից պահանջում է ոչ միայն միջազգային համագործակցության ընդլայնում, այլև եվրոպական կրթական և հետազոտական ծրագրերի մշակման և կառավարման համապատասխան անհատական ու ինստիտուցիոնալ կարողություններ: Սույն հետազոտության նպատակն է բացահայտել այդ կարողությունների հիմնական կարիքներն

ու բացերը Հայաստանի բարձրագույն կրթության ոլորտում և գնահատել դրանց համապատասխանությունը Erasmus+ «Բարձրագույն կրթության կարողությունների զարգացում» գործողության շրջանակում իրականացվող EU-BRIDGE («Strengthening Higher Education for European Project Management in Armenia») նախագծի նախատեսվող բաղադրիչներին:

Հետազոտությունն իրականացվել է խառը մեթոդներով՝ համադրելով երեք փոխլրացնող բաղադրիչների տվյալները՝ 180 մասնակիցների քանակական հարցման, բարձրագույն կրթության և որակի ապահովման ոլորտների 14 փորձագետների հարցման, ինչպես նաև 23 կազմակերպությունների ներկայացուցիչների ֆոկլուս-խմբային քննարկման և 6 խորացված հարցազրույցների արդյունքները: Տվյալների համադրումն ապահովել է տարբեր շահակիցների տեսակետների համեմատական վերլուծություն և արդյունքների թեմատիկ տրիանգուլյացիա:

Արդյունքները ցույց են տալիս, որ Հայաստանի բարձրագույն կրթության ոլորտում առկա է եվրոպական ծրագրերին մասնակցելու բարձր հետաքրքրվածություն, սակայն այն միշտ չէ, որ ուղեկցվում է համապատասխան գործնական փորձով և ինստիտուցիոնալ աջակցությամբ: Հիմնական կարողությունների կարիքները վերաբերում են ֆինանսավորման հնարավորությունների բացահայտմանը, նախագծերի գաղափարների և հայտերի մշակմանը, բյուջետավորմանն ու ֆինանսական կառավարմանը, միջազգային գործընկերների որոնմանն ու կոնսորցիումների ձևավորմանը, նախագծերի պլանավորմանը, մոնիթորինգին, գնահատմանը և հաշվետվողականությանը: Միաժամանակ, որպես կարևոր խոչընդոտներ առանձնացվել են տեղեկատվության և խորհրդատվության սահմանափակ հասանելիությունը, ֆինանսական և ժամանակային սահմանափակումները, անգլերենի ոչ բավարար իմացությունը և ինստիտուցիոնալ աջակցության մեխանիզմների պակասը:

Հետազոտությունը ցույց է տալիս, որ կարողությունների զարգացումը արդյունավետ չի կարող սահմանափակվել կարճաժամկետ վերապատրաստումներով: Շահակիցների գնահատականները վկայում են գործնական ուսուցման, մենթորության, իրական նախագծերի սիմուլյացիայի, միջազգային ցանցային համագործակցության, փորձի փոխանակման և թվային մասնագիտական համայնքի ձևավորման անհրաժեշտության մասին: Այս արդյունքները ընդհանուր առմամբ համապատասխանում են EU-BRIDGE ծրագրի՝ ուսուցման, գործնական փորձառության, սոցիալական նորարարության, նախագծերի սիմուլյացիայի և մասնագիտական ցանցավորման բաղադրիչներին: Հետազոտության արդյունքները կարող են կիրառվել Հայաստանի բարձրագույն կրթության ոլորտում կարողությունների զարգացման և եվրոպական նախագծերին կայուն մասնակցության փաստահեն մեխանիզմների ձևավորման, ինչպես նաև նմանատիպ Erasmus+ նախաձեռնությունների նախագծման և իրականացման համար:

Բանալի բառեր՝ բարձրագույն կրթություն, միջազգայնացում,

եվրոպականացում, նախագծերի կառավարում, կարողությունների զարգացում, կարիքների գնահատում, Erasmus+ EU-BRIDGE:

Introduction

The internationalisation and Europeanisation of higher education have become important dimensions of higher education reform over the past two decades. The expansion of international academic cooperation, institutional capacity, research collaboration, and universities' competitiveness is increasingly linked to the ability of higher education institutions (HEIs) to operate effectively within European and international academic networks. Within the European Higher Education Area (EHEA), the Bologna Process and European Union initiatives, particularly the Erasmus+ programme, have reinforced these processes by supporting academic mobility, institutional development, innovation, and international cooperation.

For HEIs participating in European cooperation and funding programmes, effective engagement involves more than access to external financial resources. It requires individual professional competences and institutional capacities in project development and management, strategic and financial planning, quality assurance, partnership building, and organisational support. The ability to initiate, coordinate, implement, monitor, and sustain European projects is therefore increasingly important for meaningful and continuous international engagement. Participation in European programmes should consequently be understood not only as project activity but also as part of broader institutional development and internationalisation.

This issue is particularly relevant in the Armenian higher education context. Internationalisation and alignment with European principles and practices have become important directions of higher education reform in Armenia. Armenian HEIs have gradually expanded their participation in Erasmus+ and other European cooperation programmes, contributing to academic mobility, curriculum modernisation, inter-institutional cooperation, and quality improvement. However, participation remains uneven, and engagement in competitive European funding programmes is still relatively limited. HEIs continue to face institutional, organisational, financial, and human-resource constraints that affect the scale and quality of their European engagement.

Research on higher education internationalisation indicates that successful participation in European programmes depends not only on institutional willingness or access to funding, but also on qualified human resources, project development and management experience, international networks, digital competences, effective governance, and quality assurance mechanisms. Capacity development is therefore essential for translating interest in international cooperation into practical project activities and sustainable institutional practices. Capacity-building interventions are more relevant and effective when informed by systematic needs assessments involving multiple stakeholder groups. Such an approach can identify both individual skills gaps and institutional barriers that may limit the application

of acquired competences. Combining evidence from different stakeholder groups also helps identify areas of convergence and divergence and align capacity-building measures with institutional and sectoral priorities.

Against this background, the Erasmus+ Capacity Building in Higher Education project EU-BRIDGE – “Strengthening Higher Education for European Project Management in Armenia” seeks to strengthen the capacity of Armenian HEIs and relevant stakeholders to participate more effectively in European educational and research programmes. The project combines interconnected components, including a specialised curriculum in European project management, a Pilot Academy, Social Innovation Labs, project simulation activities, and a digital community platform and professional network. Their relevance and effectiveness depend largely on alignment with the Armenian higher education ecosystem’s actual needs and capacity gaps of the Armenian higher education ecosystem.

To establish this evidence base, EU-BRIDGE conducted a comprehensive needs assessment involving different stakeholder groups*. The assessment combined quantitative and qualitative evidence from students, academic staff, young researchers and youth representatives; higher education leaders, quality assurance specialists and sectoral experts; and representatives of organisations, employers, the private sector, and civil society. This design enables the examination of capacity needs from multiple perspectives while connecting individual competence requirements with institutional and organisational conditions for successful European project participation. Despite growing research on the internationalisation of Armenian higher education, limited attention has been given to the systematic assessment of the individual and institutional capacities required for participation in European educational and research funding programmes through the simultaneous involvement of multiple stakeholder groups. There is also limited research directly connecting identified stakeholder needs with the design of capacity-building interventions within Erasmus+ projects. Addressing this gap matters because effective capacity building depends not only on identifying learning needs but also on understanding the institutional conditions, support mechanisms, and practical opportunities needed to apply acquired competences. Accordingly, the aim of this study aims to identify the main individual and institutional capacity needs and gaps affecting participation in European educational and research programmes in Armenia and to assess how well the planned components of the EU-BRIDGE project respond to these needs.

The study addresses the following research questions:

RQ1. What individual and institutional capacity gaps constrain the participation of Armenian higher education institutions and relevant stakeholders in European educational and research programmes?

RQ2. What knowledge, skills, and institutional support mechanisms are considered priorities for strengthening participation in European projects?

RQ3. To what extent do the identified needs and expectations of different

stakeholder groups converge, and how do they inform the planned outputs and components of the EU-BRIDGE project?

By addressing these questions, the study contributes to the discussion on capacity development and the internationalisation of higher education in Armenia. Its particular contribution lies in combining quantitative and qualitative evidence from multiple stakeholder groups and linking identified capacity needs to the design of a specific Erasmus+ capacity-building intervention. Beyond identifying skills gaps, the study examines how individual competences, institutional support, and opportunities for practical engagement relate. The findings provide an evidence base for strengthening sustainable participation in European projects and designing more practice-oriented and institutionally embedded capacity-building initiatives in Armenian higher education.

Literature Review and Research Background

Internationalisation and Europeanisation of Higher Education

Internationalisation has become a major dimension of higher education development and reform. Although scholars interpret it differently, Knight (2004) defines it as the process of integrating international, intercultural, or global dimensions into the purpose, functions, and delivery of post-secondary education. This perspective moves internationalisation beyond individual activities, such as mobility or international agreements, and frames it as a process affecting the core functions of higher education institutions (HEIs). Subsequent scholarship has expanded this understanding. De Wit, Hunter, Howard, and Egron-Polak (2015) relate internationalisation to teaching and learning, research, institutional strategies, partnerships, and the development of students' and staff competences. They emphasise that internationalisation should be assessed not merely through quantitative indicators, such as mobility numbers or international agreements, but also through the quality and strategic relevance of international engagement.

The concept of comprehensive internationalisation provides a broader institutional perspective. Hudzik (2011) conceptualises internationalisation as an institution-wide process involving leadership, governance, teaching, research, services, partnerships, and institutional culture. It therefore cannot be confined to international relations offices or selected staff members; it requires the involvement of academic, administrative, and support units, and the integration of international dimensions into institutional strategies and practices. The European context has provided a particularly strong policy framework for these developments. The Bologna Process and the establishment of the European Higher Education Area (EHEA) have promoted convergence through reforms in degree structures, quality assurance, recognition, mobility, and international cooperation. However, as the Bologna Process Implementation Report demonstrates, the pace and depth of implementation vary across countries and institutions. Europeanisation, therefore, involves not only formal policy convergence but also the institutional capacity to

translate European principles and instruments into sustainable practices.

This broader perspective is also reflected in the literature on internationalisation at home. Beelen and Jones (2015) argue that international and intercultural dimensions should not be limited to participants in international mobility but can also be embedded in domestic teaching, learning, curricula, and institutional environments. Internationalisation consequently depends on both institutional capacity and the competences of a broad range of actors. For this study, these approaches suggest that participation in European projects should be understood as part of broader processes of institutional internationalisation and Europeanisation. The capacity to initiate and manage European projects therefore depends not only on individual administrative competences but also on institutional strategy, human–resource development, partnership capacity, quality assurance, digital readiness, and organisational learning.

Institutional Capacity and Competences for European Project Management

The growing role of externally funded European cooperation has increased the importance of project-related competences within higher education institutions. Participation in competitive European programmes requires staff to manage a complex project cycle, from identifying funding opportunities and developing project concepts to consortium building, proposal writing, budgeting, implementation, monitoring, evaluation, dissemination, and reporting. These activities require technical knowledge, practical experience, interpersonal skills, and institutional support. The project-management literature increasingly conceptualises competence as multidimensional. In a systematic literature review, Papp–Horváth, Tóth, and Tóth (2024) show that project-management competence encompasses multiple dimensions and cannot be reduced to knowledge of methodologies. Similarly, Ochoa Pacheco et al. (2023) highlight personal and social competences, particularly leadership, communication, and emotional intelligence, in research on project-manager competences and project success. Winiarska (2026), reviewing 90 publications from 2000–2024, further highlights the growing importance of leadership, communication, stakeholder management, digital competences, flexibility, and adaptive approaches. Overall, project management increasingly requires a combination of technical, interpersonal, strategic, and adaptive competences.

These findings are directly relevant to European higher education projects. Successful participation in Erasmus+ and similar programmes requires competences extending beyond conventional administrative project management, including interpreting programme priorities, developing coherent proposals, building international partnerships, designing work packages and budgets, defining measurable outcomes, managing intercultural collaboration, and communicating results. Project-management capacity in higher education should therefore be understood at both individual and institutional levels. At the individual level,

relevant competences include proposal development, project planning, financial management, monitoring and evaluation, communication, teamwork, negotiation, leadership, and digital collaboration. At the institutional level, capacity involves structures and procedures that enable staff to access information, obtain methodological support, identify partners, prepare applications, manage projects, and retain and disseminate knowledge generated through project participation.

The distinction between individual competence and institutional capacity is critical for sustainability. Staff training alone may have limited effects where institutions lack organisational support, incentives, time allocation, appropriate procedures, or mechanisms for sharing expertise. Conversely, institutional structures cannot be fully effective without staff possessing the competences to use them. Capacity development should therefore be understood as an interaction between people, organisational structures, institutional strategies, and opportunities for practical learning. The literature on project-management education further supports a practice-oriented approach. Rather than focusing primarily on the transmission of explicit knowledge, research emphasises experience, behavioural competences, and workplace application. Project-management education should therefore combine knowledge, skills, attitudes, and experience. This is particularly relevant to Erasmus+ project development, where the ability to apply knowledge to real proposals and partnerships is as important as familiarity with programme rules.

Erasmus+ and Capacity Building in Higher Education

Within the European policy environment, Erasmus+ is a major instrument for international cooperation and capacity development in higher education. Although widely associated with mobility, the programme also supports cooperation projects that strengthen institutional capacities, modernise educational provision, develop partnerships, and promote structural change. The Capacity Building in Higher Education (CBHE) action is particularly relevant to this study because it explicitly connects international cooperation with institutional capacity development. The Erasmus+ Programme Guide emphasises strong participation and shared ownership among partner institutions, particularly those from countries not associated with the Programme, as conditions for responsibility, sustainability, and effective outcomes. It also identifies needs assessment as a key first step in CBHE project development, aimed at identifying areas requiring improvement and the underlying reasons for existing gaps. This orientation has important implications for capacity-building design. Needs assessment should address not only knowledge and skills gaps but also the institutional and organisational conditions that generate or reinforce them. A systematic assessment involving multiple stakeholder groups can therefore provide a stronger basis for project design than one limited to a single institutional category. Shared ownership is equally important. When capacity-building projects are designed externally, training and other interventions may remain disconnected

from institutional priorities. In contrast, involving partner institutions and stakeholders in identifying needs and shaping activities can better align capacity development with institutional strategies and longer-term organisational change. CBHE projects can also generate impacts beyond individual training outcomes, including curriculum development, quality assurance, governance, institutional strategies, international partnerships, and new organisational practices. In this sense, they reinforce the broader understanding of internationalisation developed above: European projects can function as mechanisms of institutional learning and change rather than merely as externally funded activities.

Internationalisation and Erasmus+ Capacity Building in Armenia

Armenia's engagement with the European higher education policy space has developed substantially since its accession to the Bologna Process in 2005. Erasmus+ has become a key mechanism for Armenian HEIs to cooperate with European institutions, develop educational initiatives, participate in mobility schemes, and undertake capacity-building projects. Recent research provides empirical evidence of the contribution of Erasmus+ Capacity Building in Higher Education (CBHE) projects to the internationalisation of Armenian higher education. Fljyan (2024/2025) analysed ten EU-funded CBHE projects implemented in Armenia between 2015 and 2020, focusing on curriculum development, the social dimension of higher education, and institutional internationalisation strategies. The study found contributions to new study programmes and innovative pedagogies, stronger institutional approaches to internationalisation, academic partnerships, and the adoption of European practices, while also identifying institutional and policy challenges to sustainability. The National Impact Study of Erasmus+ CBHE projects in Armenia likewise examined ten projects implemented during 2015–2020 in relation to curriculum and policy development, inclusiveness, and internationalisation. By assessing impact at individual, institutional, and national levels, it highlighted the multidimensional nature of capacity development. These studies provide an important foundation for understanding Erasmus+ in Armenian higher education. However, they primarily examine the impact and outcomes of completed projects rather than systematically identifying the capacity needs that should inform new interventions. Existing research therefore tells us more about what previous Erasmus+ projects have achieved than about the barriers and competences currently perceived as most important by different stakeholder groups. This distinction is important for Armenia's continued engagement with European higher education programmes. Sustainable participation requires not only accumulated project experience but also broader access to project-development competences, information, mentoring, international networks, and institutional support. Previous participation may remain concentrated among experienced institutions, departments, or individuals, leaving other potential participants with limited opportunities to develop the capacities required for effective engagement.

Research Gap and Analytical Framework

The literature reviewed above reveals three interconnected strands. First, internationalisation and Europeanisation scholarship increasingly conceptualises international engagement as an institution-wide process involving strategy, governance, teaching, research, partnerships, and human-resource development. Second, project-management research shows that successful project implementation depends on a broad combination of technical, interpersonal, strategic, digital and adaptive competences. Third, research on Erasmus+ and CBHE demonstrates that European cooperation projects can contribute to institutional development and internationalisation, including in Armenia. However, these strands have been integrated through a systematic, multi-stakeholder assessment of the capacities required for participation in European educational and research programmes. In Armenia, empirical evidence remains limited on the simultaneous assessment of individual competence gaps, institutional support needs, practical barriers, and stakeholder expectations and their direct connection to the design of a specific Erasmus+ capacity-building intervention. The present study addresses this gap by conceptualising capacity development as a multidimensional phenomenon at the intersection of individual competences, institutional support, practical experience, international networks, and collaborative learning opportunities. Capacity building is therefore understood as more than training: it involves the conditions enabling stakeholders to move from interest in European cooperation towards sustained and institutionally supported project participation. This perspective provides the conceptual basis for the EU-BRIDGE needs assessment and for examining how its planned components—project-management training, the Pilot Academy, Social Innovation Labs, Project simulation, and digital professional networking—will be implemented. The study thus seeks not only to document capacity gaps but also to show how multi-stakeholder evidence can inform a more practice-oriented, institutionally embedded capacity-building intervention in Armenian higher education.

Methodology of the Study

This study used a mixed-methods approach to assess the capacity needs, challenges, and support requirements affecting the participation of Armenian higher education institutions' (HEIs) and related stakeholders' participation in European educational, research, and grant programmes. Conducted within the Erasmus+ EU-BRIDGE project, the study combined quantitative evidence with expert and organisational perspectives to provide a comprehensive assessment of capacity needs. The needs assessment comprised three complementary components targeting distinct stakeholder groups. The **first** component was a quantitative survey of 180 respondents, including Bachelor's and Master's students, doctoral candidates, young researchers, researchers, academic staff, and civil society representatives. We used purposive sampling to target potential beneficiaries of EU-BRIDGE activities. Respondents were based in Yerevan and nine other

regions of Armenia; 69.4% were based in Yerevan, 77.8% were women, and they represented different age groups. The **second** component was an expert survey involving 14 specialists with professional and/or research experience in higher education, quality assurance, international cooperation, research management, and Erasmus+/EU programmes. Selected for the relevance of their expertise, they represented Armenian universities, research institutions, and sectoral organisations, including the National Centre for Professional Education Quality Assurance and the National Erasmus+ Office in Armenia. This component provided an institutional and strategic perspective complementing the views of potential beneficiaries. The **third** component used qualitative methods and focused primarily on external stakeholders. An online focus-group discussion involved representatives of 23 organisations, followed by six in-depth interviews with representatives of additional organisations. Thus, the qualitative component incorporated perspectives from 29 organisations, including civil society organisations, employers, private-sector actors, and other relevant stakeholders. It explored organisational experiences, perceived barriers, capacity needs, and expectations regarding participation in European projects. Together, the three components provided a multi-stakeholder evidence base for identifying capacity gaps at individual and institutional levels. Combining quantitative, expert, and qualitative evidence also enabled comparison across stakeholder groups and identification of areas of convergence and divergence regarding European project participation.

Data Collection and Research Instruments

Data were collected through three complementary research instruments: a quantitative questionnaire, an expert questionnaire, and a qualitative component comprising a focus-group discussion and in-depth interviews. The instruments examined capacity, experience, barriers, and support needs related to participation in European programmes. The quantitative survey was administered online via Google Forms and included 13 thematic sections, with closed and multiple-response questions, rating scales, and open-ended items. It addressed previous experience with European programmes, awareness of funding opportunities, perceived competences and training needs, digital readiness, participation barriers, and expectations concerning the main EU-BRIDGE activities, including curriculum development, the Pilot Academy, Innovation Lab, grant-management simulations, and the professional community platform. The expert questionnaire comprised 11 thematic sections and used closed and multiple-choice questions, rating scales, and open-ended items. It examined the development needs of Armenian higher education development needs, implementation of European Higher Education Area principles, internationalisation, participation in European programmes, and institutional capacity development. Experts also assessed the relevance, feasibility, and sustainability of planned EU-BRIDGE activities and outputs. The qualitative component comprised a focus-group discussion and in-depth interviews with relevant stakeholders. It explored organisational experiences, participation

barriers, and priority areas for capacity development, particularly proposal development, fundraising and financial management, international partnership building, project management, monitoring and evaluation, communication, and digital skills. Participants also discussed expectations regarding the Pilot Academy, Innovation Lab, and digital platform. Online data collection facilitated participation across institutions and geographic areas and supported systematic collection of responses. The three instruments were designed as complementary tools, enabling examination of key themes from the perspectives of potential participants, experts, and stakeholder organisations.

Data Analysis and Triangulation

We analysed quantitative survey data using descriptive statistics, primarily frequencies and percentages, to identify patterns in participants' previous experience, competencies, training needs, perceived barriers, and preferences. Given the purposive sampling approach, the analysis describes patterns within the respondent group rather than making population-level statistical inferences. The analysis thematically examined open-ended responses from the quantitative and expert questionnaires, along with focus-group and interview data. We coded recurring issues and grouped them into broader categories reflecting capacity needs, organisational challenges, and stakeholder expectations. The three sources were then integrated through thematic comparison and triangulation, examining both convergence and divergence across stakeholder groups. The analysis focused on recurring themes, including European programme experience, knowledge and skills gaps, participation barriers, training priorities, international networking, mentoring, digital collaboration, inclusion, and institutional sustainability. Triangulation enabled interpretation of quantitative patterns alongside expert assessments and the practical experiences of stakeholder organisations. Convergent findings were treated as evidence reinforcing common conclusions, while divergent findings were considered in relation to differences in institutional position, experience, or expectations. This approach supported a more nuanced assessment of capacity needs and helped distinguish individual competency gaps from broader organisational and institutional factors affecting participation in European programmes.

Ethical Considerations

Participation in all study components was voluntary and based on informed consent. Respondents and participants were informed about the study's purpose, scope, and intended use of the collected information. We maintained confidentiality and anonymity throughout data collection, analysis, and reporting. Individual participants were not identified, and findings were reported in aggregated form. Qualitative evidence was synthesised thematically to avoid attribution to identifiable individuals or organisations unless explicit identification was appropriate and consent had been provided. The collected information was used solely for the needs assessment and the development of evidence-based recommendations for the EU-BRIDGE project.

Limitations of the Study

Several methodological limitations should be considered. First, the quantitative survey used purposive rather than probability sampling; therefore, its findings are not statistically representative of the Armenian higher education sector and primarily reflect participating stakeholders' experiences and perceptions. Second, the expert survey provided informed professional and contextual assessment rather than population-level estimates and should not be interpreted as representative of all higher education experts or institutions in Armenia. Third, the qualitative component was designed to provide contextual depth rather than measure the prevalence of particular views. The focus group and interviews therefore complemented the quantitative findings by exploring the experiences and organisational conditions underlying identified needs and challenges. Despite these limitations, the combination of 180 survey respondents, 14 experts, and representatives of 29 stakeholder organisations provided a broad multi-stakeholder evidence base. The mixed-methods design strengthened the analysis by integrating quantitative patterns with expert perspectives and organisational experiences, enabling a more comprehensive understanding of the individual, organisational, and institutional conditions shaping participation in European programmes.

Research Findings

Overall Pattern: Strong Interest in European Programmes but Limited Practical Experience

The combined findings from the three EU-BRIDGE needs-assessment components reveal a consistent pattern: Armenian stakeholders demonstrate strong interest in European educational, research, and grant programmes, but this interest has not yet translated into sustained practical participation and institutional capacity. The quantitative survey of 180 respondents, including students, doctoral candidates, early-career researchers, academic staff, and other stakeholders, illustrates this gap. Only 32.2% reported previous participation in an EU-funded educational, research, exchange, or grant programme, while 67.8% had no such experience. Direct involvement in grant development or management was even more limited, with only 22.8% reporting such experience. At the same time, motivation to overcome this gap is substantial. Almost 69% of respondents expressed clear interest in training on European grant applications and project management, while a further 29% indicated possible interest. Limited participation therefore appears to reflect a capacity and opportunity gap rather than a lack of motivation, particularly in access to knowledge, practical experience, international networks, and support mechanisms. Qualitative evidence reinforces this interpretation. Focus-group participants reported that access to European programmes often depended on individual initiative, informal professional networks, and support from experienced colleagues rather than systematic institutional mechanisms. Such reliance on individual capacities may create uneven participation opportunities,

particularly for smaller or less experienced organisations. Overall, the first major finding is that interest in European cooperation is substantial, but participation remains constrained by limited practical experience and insufficient institutional support capacity. For EU-BRIDGE, this points to the need to move beyond awareness-raising toward structured learning-by-doing, mentoring, networking, and institutional capacity development.

Key Knowledge and Capacity Gaps

A second major area of convergence concerns the knowledge and skills required for effective participation in European programmes. Across all three sources, stakeholders appear more confident in their interest and motivation than in the technical and procedural competences needed to move from an initial idea to a successfully implemented project. Quantitative findings indicate important gaps in identifying relevant funding opportunities, developing competitive proposals, preparing budgets, establishing international partnerships, and planning and managing projects. Qualitative evidence adds depth by highlighting difficulties in developing project concepts, defining objectives and expected results, constructing logical frameworks, and preparing proposals aligned with European programme requirements. Participants also identified a need for practical knowledge of Erasmus+, Horizon Europe, and other funding schemes, including programme structures, evaluation criteria, Work Packages, and application procedures. Financial management emerged as another significant area of need, including fundraising, budgeting, financial planning, project finance management, and financial sustainability. Financial capacity was viewed not only as a technical competence but also as a structural condition affecting organisations' ability to participate in European programmes. International partnership development was also identified as critical. Stakeholders reported difficulty finding reliable partners, joining international consortia, and building sustainable professional relationships with European institutions. Needs therefore extend to partner identification, international communication, consortium building, negotiation, and intercultural cooperation. Capacity needs also extend beyond grant acquisition. Participants identified project implementation, monitoring and evaluation, impact assessment, reporting, and quality assurance as areas requiring further development. This points to the need for a full-project-cycle approach that covers opportunity identification and partner search, proposal development and budgeting, implementation, monitoring, reporting, impact assessment, and sustainability. Overall, the findings suggest that EU-BRIDGE should not treat proposal writing as an isolated competence. Capacity building should instead develop an interconnected set of competences enabling stakeholders to identify opportunities, build partnerships, formulate projects, secure funding, manage implementation, and demonstrate sustainable results.

Barriers to Participation: From Individual Skills to System-Level Constraints

The findings show that limited participation in European programmes cannot be attributed solely to individual knowledge or skills. Barriers operate simultaneously at individual, organisational and system levels, often reinforcing one another. The quantitative survey identified lack of information, financial constraints, limited time, insufficient English-language skills, lack of mentoring and advisory support, limited organisational support, complex administrative procedures, and lack of international partners as major barriers. In the multiple-response question, 46 respondents (25.4%) identified lack of mentoring or advisory support, 31 (17.1%) insufficient institutional support, 28 (15.5%) complex administrative procedures, and 26 (14.4%) lack of international partners. As multiple responses were allowed, these percentages are not mutually exclusive. Qualitative evidence provided further context. Respondents frequently identified the lack of reliable international partners as an obstacle to joining European consortia. At the same time, financial and co-financing requirements were particularly challenging for smaller organisations with limited financial and human resources. Information gaps, insufficient English-language capacity, staff shortages, and limited time were also recurring concerns. These barriers often interact: an organisation may identify a relevant funding opportunity but lack the time, language capacity, expertise, or institutional support to prepare a competitive application. Thus, an apparent individual skills gap may reflect a broader organisational capacity constraint. The qualitative data also revealed system-level barriers less visible in structured surveys, including difficulties with visa procedures for international mobility, extensive documentation requirements, and the absence of clear institutional mechanisms for advice, mediation, and problem resolution during project implementation or international partnerships. Overall, the evidence indicates that capacity building cannot be reduced to training alone. Effective participation requires an enabling environment that combines skills development with mentoring, accessible information, networking, institutional support, and ongoing professional guidance. For EU-BRIDGE, this supports an integrated support model that links training with practical application, expert mentoring, international networking, and accessible digital resources, rather than treating training as a stand-alone intervention.

From Theory to Practice: Demand for Experiential Learning

A clear area of convergence concerns not only what stakeholders want to learn, but how they expect to learn it. Across all three components, participants strongly preferred practical, experiential and immediately applicable learning over predominantly theoretical instruction on European programmes. In the qualitative findings, grant proposal writing and European project development were the most frequently requested areas for the Pilot Academy. Participants sought practical understanding of Erasmus+, Horizon Europe, Creative Europe

and other programmes, including evaluation criteria, Work Package structures and the development of competitive applications. Other priorities included fundraising, financial management and budgeting, international partnership development, project management, monitoring and evaluation, and impact assessment. The needs also included transversal competencies such as digital and AI tools, intercultural communication, negotiation, teamwork, strategic and critical thinking, leadership, and human-resource management. These skills are increasingly important in international, digitally mediated and multidisciplinary project environments. The learning format was considered nearly as important as the content. Participants valued working with real project ideas, proposals and practical cases that allow immediate application of knowledge. Face-to-face and blended formats were preferred, while fully online learning was generally seen as complementary. Mentoring, simulations and guided practical exercises were repeatedly identified as effective approaches. These findings directly support the design of WP2 Curriculum Development, WP3 Pilot Academy and WP5 Grant Management Simulations, while indicating that their effectiveness will depend not only on curriculum content but also on the pedagogical approach. Accordingly, the evidence supports a learning-by-doing model based on authentic calls, case studies, simulations and participants' own project ideas, combined with structured feedback from experienced practitioners. Such an approach can help bridge the gap between strong interest in European cooperation and the practical capacity required for successful and sustainable participation.

Innovation Lab: Moving from Learning to Collaborative Problem-Solving

Findings concerning the Innovation Lab show that stakeholders view it not simply as a training environment, but as a space for collaboration, experimentation, practical problem-solving and socially relevant innovation. Quantitative priorities included education and youth development, youth employability, entrepreneurship, digital innovation and social inclusion. Qualitative findings further highlighted community development, youth engagement, social innovation, local problem-solving and cross-sectoral cooperation. Participating organisations expressed willingness to contribute actively as local partners, intermediaries connecting the Lab with communities and target groups, and co-creators and implementers of project ideas. This indicates the potential for the Lab to operate as a genuinely multi-stakeholder environment rather than a conventional training facility. Participants also emphasised that idea generation should be followed by small-scale testing, supported by experienced mentors and subject-matter experts. Participants considered continuous guidance particularly important during early experimentation, enabling organisations to manage risks, learn from implementation, and gradually build independence. The findings therefore suggest a clear operational logic for WP4: idea → mentoring → pilot → learning → scaling. Under this model, the Innovation Lab can bridge capacity development

and practical implementation, helping participants transform knowledge and ideas into tested solutions with potential for further development and replication.

Digital Engagement and the Need for a Professional Community

Digital engagement is one of the more positive baseline findings of the needs assessment. More than 92% of quantitative respondents reported regular use of digital tools in their professional or academic activities, including AI-based tools such as ChatGPT and Copilot, as well as Zoom, Microsoft Teams, Google Workspace and Moodle. This high level of digital engagement creates favourable conditions for the digital component of EU-BRIDGE. However, qualitative findings indicate that stakeholders expect more than a static repository of information and training materials. A particularly strong expectation is the ability to identify international partners and establish contacts with relevant organisations, allowing the platform to support networking and consortium formation directly. Quantitative findings reinforce this expectation: respondents associated the professional and alumni platform with access to training opportunities, funding information, networking, mentoring and experience sharing. Thus, the platform is expected to facilitate not only access to information but also interaction and collaboration among professionals and organisations. The value of WP6 will therefore depend less on the existence of a digital platform than on its development into an active professional community connecting people, expertise, funding opportunities, mentoring and collaboration. Sustainability will be critical, requiring continued interaction, knowledge exchange, and professional networking beyond individual EU-BRIDGE activities.

Inclusion and Accessibility of Capacity-Building Opportunities

The findings show that the effectiveness of capacity-building depends not only on content quality and relevance but also on accessibility. Focus-group participants identified limited time and heavy workloads as major barriers to training, along with limited English proficiency, financial constraints, insufficiently practical or outdated content, and limited geographical access. Geography is particularly important for stakeholders outside Yerevan, where many professional development and networking opportunities remain concentrated. Without mechanisms for regional participation, capacity-building activities may reinforce existing inequalities in access to professional networks and development opportunities. These findings have direct implications for EU-BRIDGE. High-quality content alone is insufficient; the delivery model should incorporate flexible scheduling, blended participation, meaningful regional engagement, appropriate language support, and clear practical relevance. Inclusion should therefore be understood not only as representation but as meaningful and equitable access to capacity development. Accommodating differences in geographical location, professional background, experience, and available resources will be essential to the project's reach, sustainability, and long-term impact.

Cross-Stakeholder Synthesis: From Individual Capacity Gaps to Institutional Capacity Development

The combined analysis shows that the identified challenges are interconnected, forming a capacity chain in which individual, organisational and institutional factors reinforce one another. Limited information can hinder identification of funding opportunities; insufficient proposal-development experience can reduce application competitiveness; weak international networks can constrain consortium building; and financial-management gaps can increase implementation risks. At the organisational level, limited time and human resources may further restrict the ability to apply, retain and institutionalise new knowledge and skills. At the same time, the findings reveal considerable potential. Stakeholders show strong motivation to engage with European programmes, high demand for capacity development, widespread digital engagement, and positive attitudes toward practical, collaborative learning. The challenge is therefore not limited interest in European cooperation, but a mismatch between strong demand and still-developing practical, organisational and institutional capacity. The main EU-BRIDGE components closely match these needs: WP2 addresses knowledge and project-development gaps through a structured curriculum; WP3 translates knowledge into practical competence through experiential learning; WP4 provides a collaborative environment to test innovative ideas; WP5 enables grant-management simulation and practice; and WP6 supports ongoing networking, mentoring, and information exchange. Taken together, the findings indicate that capacity development should not be approached as a series of isolated training activities, but as a continuous capacity-building ecosystem combining knowledge, practical experience, mentoring, international networking, digital collaboration and institutional support. The central empirical implication is therefore not simply the need to teach stakeholders how to prepare EU proposals, but to create conditions in which European programme participation becomes a repeatable, collaborative and institutionally embedded practice. This implies a shift from a training-centred to an ecosystem-based capacity-development model, in which learning leads to practice, practice is supported by mentoring and networks, and individual competencies are progressively transformed into organisational and institutional capacity. This provides the overarching rationale for the integrated design of EU-BRIDGE interventions and the recommendations that follow.

Conclusions

The findings of this mixed-methods needs assessment show that participation in European educational, research, and grant programmes in Armenia is shaped by the interaction of individual competencies, organisational capacities, and institutional conditions. Across the quantitative survey, expert assessment and qualitative evidence, a consistent pattern emerged: stakeholders show strong interest in European cooperation, but effective and sustainable participation is constrained by limited practical experience in project development and

management, gaps in proposal-writing and financial-management skills, difficulties establishing international partnerships, and insufficient mentoring and institutional support.

At the same time, stakeholders demonstrate strong motivation and readiness for capacity development. They consistently favour practical, experience-based learning over theoretical training alone, particularly through real project ideas, simulations, mentoring, networking and continuing professional exchange. The findings further show that individual skills development, although necessary, is insufficient for sustainable participation. Organisations need institutional strategies, internal support mechanisms, quality assurance, professional development, and sustained international networking to apply, retain, and institutionalise newly developed capacities. Capacity development should therefore connect individual learning with organisational practice and institutional development. The evidence provides a strong empirical basis for the EU-BRIDGE approach. Its components address complementary dimensions of the identified capacity gap: WP2 strengthens the knowledge base; WP3 develops applied competencies through practical training; WP4 supports collaborative experimentation; WP5 builds confidence through grant-management simulations; and WP6 sustains networking, mentoring and knowledge exchange.

The central conclusion is that the challenge is not simply to increase awareness of European programmes, but to transform existing interest into sustained capacity for participation. This requires moving beyond isolated training towards an integrated capacity-building ecosystem in which knowledge, practice, mentoring, networking, digital collaboration and institutional support reinforce one another. Such an ecosystem can help Armenian higher education institutions and their wider stakeholder communities move from occasional or individually driven engagement towards more confident, collaborative, strategic and sustainable participation in European programmes. The needs assessment therefore serves not only as a diagnosis of existing capacity gaps but also as an evidence base for interventions addressing them at individual, organisational and institutional levels.

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* The study used data from surveys conducted by the EU-BRIDGE project teams of the International Scientific-Educational Centre of the NAS RA (<https://www.isec.am/eu-bridge-info-media>) and the NGO Centre (<https://ngoc.am/programs/eu-bridge/>).

The article has been submitted for publication: 08.09.2026
Հոդվածը ներկայացվել է տպագրության. 08.09.2026

The article is sent for review: 09.09.2026
Հոդվածն ուղարկվել է գրախոսության. 09.09.2026

The article is accepted for publication: 11.09.2026
Հոդվածն ընդունվել է տպագրության. 11.09.2026