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Volume 7, Issue 13: January-June 2026
ISSN: 2683-328X
Sociedad de Investigación sobre Estudios Digitales S. C.

*Transdigital* Scientific Journal is a biannual publication under a continuous publication model, edited by the Sociedad de Investigación sobre Estudios Digitales S.C. So far, the journal has been indexed in: *Latindex, Dialnet, ERIHPLUS, REDIB, EuroPub, LivRe, AURA, Academic Resource Index (ResearchBib), MIAR, OpenAire-Explore, Refseek, Sherpa Romeo, Elektronische Zeitschriftenbibliothek, ZDB Zeitschriften Datenbank, WorldCat, Dimensions, The University of Liverpool, Discovery, Erasmus University Rotterdam, Mir@bel, REBIUN, DARDO, UOCI, LatinRev, ROAD, Google Scholar, Crossref, Scite, Lens, Internet Archive, BASE, OpenAlex, Semantic Scholar, and ScienceOpen*. Official address: Circuito Altos Juriquilla 1132, C.P. 76230, Querétaro, Mexico. Tel. +52 (442) 301-3238. Official website: www.revista.transdigital.mx. Email: revista@transdigital.mx. Editor-in-Chief: Alexandro Escudero-Nahón (ORCID: 0000-0001-8245-0838). Exclusive Use Rights Registration No. 04-2022-020912091600-102. International Standard Serial Number (ISSN): 2683-328X — both granted by the Instituto Nacional del Derecho de Autor (Mexico). Responsible for the latest update: Editor-in-Chief Alexandro Escudero-Nahón. 

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# *Micro Competences Design*: An instructional proposal for research project management course

# *Micro Competences Design*: Propuesta instruccional para un curso de gestión de proyectos investigativos

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Section: Reseach article

Received : 05/09/2025

Accepted: 15/04/2026

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# *Micro Competences Design:*
# An instructional proposal for research project management education course

# *Micro Competences Design:*
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## Abstract

The development of research skills, particularly in project management, has been little explored in higher education and graduate settings, despite its importance within the *ResearchComp* framework. At the School of Computer Science at the Autonomous University of Querétaro, Mexico, an assessment was conducted that revealed a low level of proficiency in these competencies (M = 2.22/5), which led to the creation of a micro-course based on the *Micro Competences Design* methodology, titled *Research Project Management*. Following the micro-course experience, an exploratory correlational quantitative study was conducted with 42 undergraduate and graduate students. A 20-item satisfaction survey was administered, and descriptive statistical data were analyzed; additionally, Spearman's correlation was examined to evaluate the user experience and the perceived impact of the micro-course. Participants reported high acceptance of *microlearning*, highlighting ease of use (84%) and content relevance (85%). Positive correlations were observed between ease of use and content comprehension. However, the topic that caused difficulty within the proposal was negotiation skills, which showed low self-perception (39% negative). The results confirm the viability of *microlearning* for developing investigative micro-competencies and suggest strengthening practical aspects, especially in negotiation and financing, through future iterations of the model.

Keywords: **research competencies, instructional design, competency-based education, research project management, microlearning**

## Resumen

El desarrollo de competencias investigativas, particularmente en la gestión de proyectos, ha sido poco explorado en contextos de educación superior y posgrado, pese a su importancia en el marco *ResearchComp*. En la Facultad de Informática de la Universidad Autónoma de Querétaro, México, se aplicó un diagnóstico que evidenció un bajo dominio de estas competencias (M = 2.22/5), lo que motivó la creación de un microcurso basado en la metodología *Micro Competences Design*, titulado *Gestión de Proyectos Investigativos*. Después de la experiencia del microcurso se realizó un estudio cuantitativo correlacional exploratorio con 42 participantes de licenciatura y posgrado. Se aplicó una encuesta de satisfacción con 20 ítems, y se analizaron los datos estadísticos descriptivos; además, se examinó la correlación de Spearman, con el fin de evaluar la experiencia del usuario y el impacto percibido del microcurso. Los participantes reportaron alta aceptación del *microlearning*, destacando la facilidad de uso (84%) y la relevancia de contenidos (85%). Se observaron correlaciones positivas entre la facilidad de uso y la comprensión del contenido. Sin embargo, el tema que causó dificultad dentro de la propuesta fueron las habilidades de negociación, que demostraron baja autopercepción (39% negativa). Los resultados confirman la viabilidad del *microlearning* para desarrollar microcompetencias investigativas y sugieren fortalecer aspectos prácticos, especialmente en negociación y financiamiento, mediante futuras iteraciones del modelo.

**Palabras clave:** competencias investigativas, diseño instruccional, educación basada en competencias, gestión de proyectos de investigación, microaprendizaje

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## 1. Introduction

In 2023, the European framework for research competencies was published, comprising seven areas and 38 indicators. Among its key competencies, research project management was highlighted. The development of these competencies in higher education and graduate programs has been largely unexplored, as these skills are more focused on the production of rigorous knowledge (Mendioroz-Lacabra et al., 2022). Research competencies are a set of skills, knowledge, and attitudes that encompass the formulation of relevant research questions, data analysis, the application of appropriate methodologies, and the effective dissemination of scientific findings. These competencies are crucial for academic careers, as well as for professional practice across multiple fields (Cruz-Pallares, 2019).

Since the beginning of the 21st century, special attention has been paid to research skills at the undergraduate and graduate levels, focusing on how these can be strengthened through summer courses, workshops on scientific dissemination and outreach, participation in conferences, and thesis projects (Sánchez-García et al., 2016; Arroyo & Cáceres, 2018; Ganga et al., 2016; Goyanes & Rodríguez-Gómez, 2018). At the undergraduate level, some of the academic activities in which student participation is highest highlight the importance of critical thinking during research, as they emphasize the cognitive processes involved in constructing their theses (Huddleston et al., 2020; Nunez Lira et al., 2020).

The Science, Technology, Engineering, and Mathematics (STEM) field sees the greatest number of research studies and interventions at the higher education level. In this regard, a key feature is the development of research skills through the use of laboratories and physical materials (Cheng et al., 2023). In addition to the above, it is important to strengthen the management of STEM-focused education across undergraduate programs through lessons in technology, communication, social skills, responsibility, and leadership, with a significant increase in analytical skills (Poonputta, 2021). Furthermore, it is important to create scenarios that facilitate competitive exercises for making strategic decisions regarding projects (Salgado Soto & Lara-Rosano, 2020).

These skills are essential for identifying research problems and seeking innovative solutions. As Ain et al. (2019) point out, critical thinking, employability skills, communication, teamwork, and lifelong learning are necessary for the workforce and can be developed through research processes; therefore, a closer partnership between academia and the labor market is required. Similarly, some of the other competencies highlighted in higher education are those related to simple inquiries about a subject. Others are fostered by curiosity or the study of the sciences that underpin the degree program, but there is a lack of more specific training in inquiry-based science education (Alarcón Orozco et al., 2022; Gretton et al., 2022).

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Specifically, at the graduate level, the acquisition of research competencies is strongly linked to the educational and practical experiences students encounter throughout their academic careers (Garay-Argandona et al., 2021). However, assessing these competencies presents significant challenges due to their multidimensional nature and the various variables that influence their development. Some analyses have examined the factors influencing students' decision to pursue a career as research professors. These studies seek to understand the environment in which future projects unfold within educational settings (Šorgo & Heric, 2020). A researcher is a trained user and co-producer of the interaction among various actors; their aim is to transform reality and position scientific knowledge from various angles in a discursive and historical manner (Fontaines-Ruiz et al., 2019).

There are studies related to the development of research processes in graduate programs that focus on the high rejection rate for publications, a lack of awareness regarding the criteria used to measure the quality of the publication process, and the identification of national and international *rankings* based on metrics (Sánchez-García et al., 2016; Arroyo & Cáceres, 2018; Ganga et al., 2016; Goyanes & Rodríguez-Gómez, 2018). In the study by Suárez-Amaya et al. (2019), a quantitative analysis was conducted based on the scores assigned by editorial board members, reviewers, and editorial committees. In addition, a compilation was made of the errors that lead to high rejection rates.

As a result of these circumstances, both at the undergraduate and graduate levels, research project management is not a priority, as it is only briefly touched upon in a few cross-cutting areas. Specifically, the European *ResearchComp* framework identifies it as the first of the core competencies essential for research training. Consequently, and given the lack of attention to this topic, the School of Computer Science at the Autonomous University of Querétaro, Mexico, was selected as a case study, specifically two graduate programs (master's and doctoral programs in educational technology) and two undergraduate programs.

Consequently, a general assessment of the indicators defined at the core level of *ResearchComp* was conducted to determine the status of the research management area. The results showed that, on a Likert scale of one to five (where one represented a complete lack of competence and five represented full mastery), the score was 2.22, indicating a low level of mastery of research competencies in project management.

The averages for each competency area were reviewed (Figure 1). In this regard, it was found that research management had the lowest score. This refers to resource mobilization, negotiation skills, the evaluation of research outputs and results, and the promotion of open-access publications.

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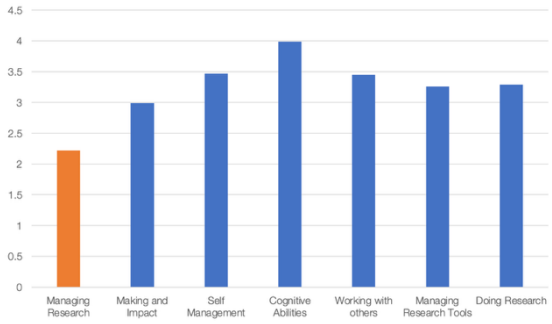
Figure 1

*ResearchComp Diagnostic Results*




*Note.* An assessment was conducted using a 38-item Likert scale, developed and translated based on the indicators from *ResearchComp* at the basic level. This assessment is part of another research article; therefore, the information collected is intended solely to justify the topic of the microcourse.

### 1.1. Instructional Proposal *Micro Competences Design*

The instructional design (ID) models that have been implemented using the microlearning format are ADDIE, ASSURE, and SAM. According to various authors (Ali et al., 2021; Ponce Martínez et al., 2021; Vergara Avalos et al., 2024), these three models have been developed for digital projects. Microlearning involves the delivery of educational content in short-duration digital projects; it is delivered in brief modules or lessons, and its learning objectives are specific (Alias & Abdul Razak, 2023). Among the instructional models for microcourses, no proposals have been found regarding research competencies. Meanwhile, the ResearchComp catalog is distributed through micro-credentials certified with blockchain technology for digital curricula.

Based on both educational and theoretical contexts, it is argued that a specific instructional methodology is required to promote the research competencies model, which is called *Micro Competences Design*. This methodology is based on the ADDIE, ASSURE, and SAM instructional models but is specifically designed to foster training in micro-competencies (Figure 2).

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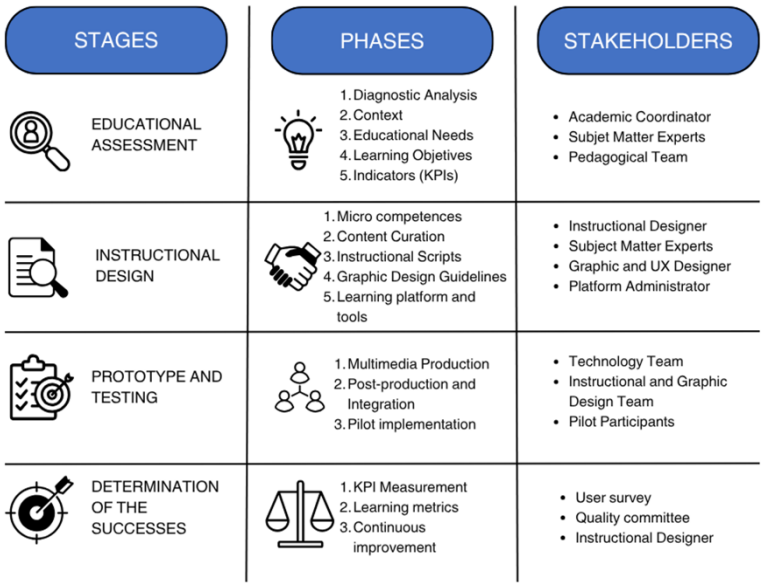
Figure 2

*Structure of the Micro Competences Design Methodology*




*Note.* Proposed instructional methodology for developing research micro-skills. This was applied to a course on project management.

Combining various elements, the new framework is divided into 16 phases that outline the steps to be taken by those involved in the process of developing competency-based micro-courses. Its four main stages allow for returning to a previous phase if a project element has not yet been fully defined. Meanwhile, classic instructional design models such as ADDIE, ASSURE, and SAM share at least four fundamental phases (Allen, 2024; Sánchez-García et al., 2016; Sarmiento Vásquez, 2020; Zambrano-Leal et al., 2023).

To ensure the content is as accessible as possible, the structure is based on an agile or linear instructional design. For this reason, ADDIE, ASSURE, and SAM have all proven effective for defining digital microlearning projects, as their most common resources include short videos, infographic-style diagrams, animations, case studies, and practical examples. All of this allows users to access the content anytime and anywhere, provided they have an internet connection or access to downloadable versions of the material. Derived from the characteristics of *microlearning* and in response to the lack of a framework for research competencies, *Micro Competences Design* emerged. This is an instructional methodology adapted to the graduate-level context and implementable in a digital prototype (Table 1).

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Table 1
*Work Phases in Micro Competences Design*

| | Phase Name | Description |
|---|---|---|
| 1 | *Educational assessment* | Se realiza el diagnóstico, en esta fase se desarrolla el análisis de las necesidades educativas, descripción del contexto y definición de objetivos, la propuesta se construye en micro contenidos, así que, se requiere un catálogo de los indicadores de conocimientos, habilidades y actitudes a desarrollar. |
| 2 | *Instructional design* | Con referencia a la definición de las microcompetencias, como unidad de aprendizaje, dentro de ellas los objetivos que se van a medir; se procede a curar el contenido, diseñar guiones instruccionales y generar línea gráfica, selección de las herramientas tecnológicas y gestión de recursos económicos, humanos y digitales. |
| 3 | *Prototype and testing* | Al contar con los guiones instruccionales, después de haber elegido la identidad del curso, y no olvidar que la propuesta está basada en *microlearning*, un modelo particularmente específico en estructura. La implementación debe considerar la generación de un prototipo, una plataforma educativa que sea apta a diferentes formatos y versiones de consulta (computadora y portátil). En esta fase, además del desarrollo, se evalúa el diseño y realizan ajustes al prototipo. |
| 4 | *Determination of the successes* | Al pretender que las competencias sigan los referentes de pensamiento complejo, aplicación de conocimientos y evaluación del impacto, la última fase consiste en el establecimiento de logros de aprendizaje. De esta manera, se pretende evaluar los resultados del testeo, analizar el impacto en el aprendizaje, realizar retroalimentación al diseño instruccional y, con base en los aprendizajes adquiridos, definir nuevas versiones de los microcontenidos. |

*Microlearning* promotes learner autonomy. This is achieved through short informational modules, reinforcement exercises, immediate feedback, and the assimilation of specific knowledge (Machado Fiuza Fialho et al., 2024). It also offers a precise and condensed content structure. Virtual learning environments are designed to achieve specific, measurable, and attainable goals in a short period of time. This translates to microlearning, which means delivering information in small doses (Durán Alcalá & Escudero Nahón, 2023).

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## 2. METHOD OF RESEARCH

This study employed an exploratory correlational quantitative design and utilized Spearman's correlation coefficient. The objective was to analyze the statistical relationships between variables and relevant indicators of research competencies in project management following the implementation of a micro-course. A satisfaction survey was conducted among participants in the instructional prototype titled *Research Project Management*. It is important to note that variables related to research project management have been little studied at the undergraduate and graduate levels. Therefore, it was necessary to develop an instructional methodology for the application of the European *ResearchComp* framework.

Correlational studies interpret the association between variables without intervention or causation, as they examine adjacent conditions or connections (Haro Sarango et al., 2024), which, in the context of this study, refers to abilities and learning. On the other hand, an exploratory study seeks to collect and analyze numerical data that allows for the identification of trends and patterns that have not yet been widely studied (Cueva Luza et al., 2023), such as research competencies in project management.

This type of approach is useful when researchers are interested in identifying preliminary relationships between variables and generating new hypotheses that can be explored in future, more controlled, non-randomized studies (Polit & Beck, 2024; Wellington Sousa, 2021). Based on the ResearchComp competency framework, which has not been examined in depth, the fundamental level of indicators in the area of project management was used (Table 2).

Table 2
*Project management variables and indicators*

| Variable | Indicators |
|---|---|
| Research management | Project mManagement |
| | Negotiation processes |
| | Agile methodologies |
| | Funding |
| | Budget management |
| Research process | Innovation in research |
| | Self-directed research |
| | Critical and analytical thinking |

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The correlational study was based on measuring the direction and strength of the interaction between the indicators of the variables to identify a phenomenon within the specific context (Hernández-Sampieri and Mendoza-Torres, 2023; Haro Sarango et al., 2024). In addition, a new field of study was explored by educational level, as the phenomenon under study was analyzed using a classification of eight indicators derived from the catalog provided by *ResearchComp*.

### 2.1. Population and sample

The target sample for the field of educational technology (ET) was defined as comprising two graduate programs. Within the context of the School of Computer Science at the Autonomous University of Querétaro, Mexico, the population consists of approximately 1,388 students enrolled for the 2023–2024 academic year. Of the total, approximately 144 are ET graduate students, divided between master's and doctoral programs. Two ET programs—one master's and one doctoral—were selected using convenience sampling. However, since the population was small, students from two undergraduate programs were also invited. Participants in the project management course came from the programs:

- Bachelor's Degree in Computer Science (LI, by its Spanish acronym).
- Bachelor's Degree in Information Technology Management (LATI, by its Spanish acronym).
- Master's Degree in Innovation in Virtual Teaching and Learning Environments (MIEVEA, by its Spanish acronym).
- Doctorate in Educational Technology (DTE, by its Spanish acronym).

The sample consisted of 42 participants enrolled in the short course *Research Project Management*, designed using the *Micro Competences Design* methodology. Forty-six percent were from MIEVEA; 23% were from LI; 19% represented LATI; and 12% belonged to DTE (Figure 3).

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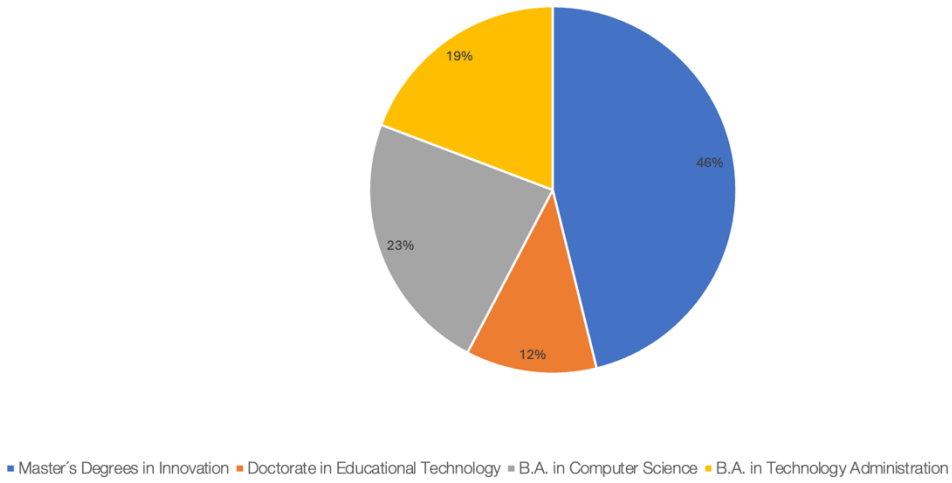
Figure 3
*Porcentajes de los programas participantes*




### 2.1.1. Data collection techniques and tools

This document presents a descriptive correlational analysis of the findings from an exit survey conducted following a micro-course in project management, using the *Micro Competences Design* instructional methodology. To this end, a 20-question questionnaire was administered, covering the relevant variables and indicators (Appendix 1). The reliability and validity of the instrument were ensured using Cronbach's alpha. In this regard, the collected data were analyzed using Spearman's correlation test. The collected data underwent a descriptive analysis, including measures of central tendency and dispersion. Subsequently, this was supplemented with a correlational analysis of nonparametric variables (Polit & Beck, 2024).

## 3. Results

This section presents the results of the first digital educational initiative, which was conducted as a micro-course and delivered on the *SafetyCulture*® platform using a 30-day personal license. The course was titled *Research Project Management*, with a sample of 42 registered participants and a completion rate of 63%.

### 3.1. Pilot course in *Research Project Management*

The course was delivered entirely online via a learning platform, combining digital resources, hands-on activities, and formative assessment to foster the development of research skills. Due to intellectual property rights

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held by the Autonomous University of Querétaro, Mexico, the full instructional design cannot be made public. Therefore, the online recording is available for viewing (https://bit.ly/4rfVrB7).

*SafetyCulture*® emerged as the best choice, as it met the pedagogical, technological, and assessment needs of the *Micro Competences Design* initiative. Its ability to structure micro-content, collect data in real time, support various devices, and streamline the learning tracking process were decisive factors (Table 4).

Table 4
*Comparison of microlearning platforms*

| Plataforma | Características | Ventajas | Desventajas |
|---|---|---|---|
| *SafetyCulture*® | It allows to create short video clips, interactive quizzes, and real-time tracking. | Intuitive interface, detailed analytics, seamless integration with other tools, and certification options. | Limited customization and reliance on a constant connection. |
| *Moodle*® | It offers short courses and multimedia resources. | A free and highly customizable platform with extensive community support. | Implementing it within an organization can be costly if you do not have your own domain. |
| *EdApp*® | Includes templates for interactive capsules with gamification. | High engagement and ease of creating attractive modules. | Limited free version and reduced access to advanced analytics. |

### 3.2. Course participants' satisfaction levels

Regarding the question measuring ease of use and navigation, 84% of users rated the experience positively on a scale ranging from “strongly agree” to “agree”; meanwhile, 12% were neutral and 4% strongly disagreed (Figure 4). This means that the selected platform facilitated access, navigation, and independent use, effectively validating the *microlearning* methodology.

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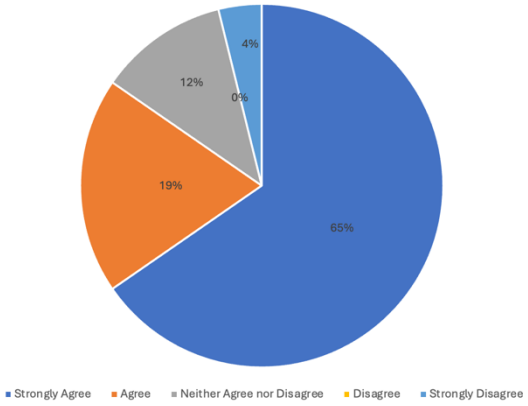
Figurea 4
*Ease of use of the educational platform*




In addition, a correlation was analyzed between ease of use and the *microlearning* format (Appendix 1) using Spearman's *rho* test. The results yielded a *rho* of 0.82, meaning that the easier users perceive the platform to be, the more the *microlearning* methodology helps them better understand the topics. Furthermore, this score indicates that the platform also directly influences learning, as it had a positive impact on content comprehension.

It should be noted that the platform's ease of use was also cross-validated against participants' perceptions of the topics (Appendix 1), yielding a correlation coefficient of 0.71. Consequently, participants who find the platform easy to use report a higher perception of the topics' applicability, relevance, and the potential to integrate the content into their research practice. Since the topics covered (management fundamentals, agile methodologies, negotiations, and budgeting) are relevant for transfer to real-world contexts.

### 3.3. Course structure and duration

Regarding the instructional proposal, the item on course duration showed that 81% of participants (Figure 5) were either strongly in agreement or in agreement. This suggests that a one-hour course is appealing, as its purpose, aligned with the fundamentals of microlearning (Alias & Abdul Razak, 2023), is structured around specific activities, short lessons, interactive resources, and educational bite-sized modules that deliver microlearning in a balanced manner.

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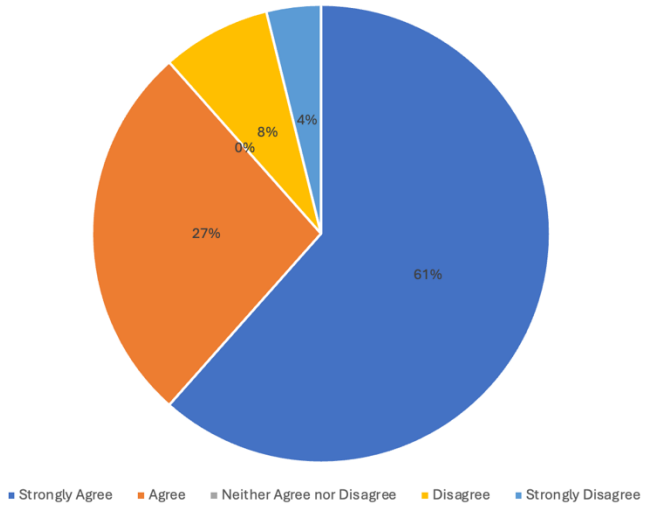
Figure 5

*Perceptions of duration and content*




It should be noted that a correlation analysis was conducted between items two and four (Appendix 1). Specifically, regarding the duration and structure of the topics, the resulting coefficient was a *rho* of 0.79, indicating a high positive perception. This suggests that users consider the one-hour study time appropriate for the project management content being offered. However, this perception suggests that while the course has a good structure, the relevance of the instructional design needs to be strengthened to address substantive and more concise topics, as 12% of respondents disagree.

### 3.4. Topics related to project management

Regarding the suggested topics, the users who participated in the course are involved in the field of educational technology, and one of their areas of focus is the development of projects or research proposals. With this in mind, a list of basic topics was provided on how to combine thesis projects, funding calls, and budget preparation.

To reinforce the content's stance and, in particular, the perspective on financial management, a correlation was calculated between question four (content) and question seven (funding). The result was 1 rho = 0.16, a positive but weak correlation (Figure 6). This suggests that user perceptions cannot be generalized, as attention must be paid to instructional design in this area, since students generally identify the resource management process. However, it cannot be guaranteed that this knowledge was acquired in the course. Therefore, since the relationship

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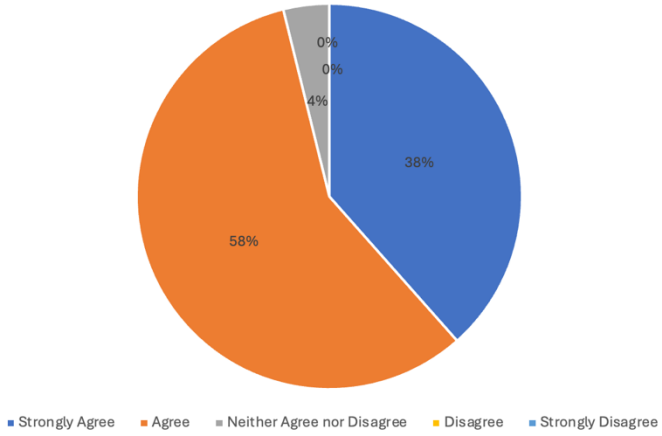
is very weak, it must be strengthened through practical exercises, real-world cases, or examples. This is one of the areas for improvement in the instructional design and development of digital resources.

**Figure 6**
*Perceptions of financing skills*




### 3.5. Content on negotiations in research projects

One of the indicators in *ResearchComp*, within the area of management, related to negotiation skills. These differ from financial resource management, as they focus on the discursive aspect and on the agreements that enable deals to be closed or funding and authorizations to be secured. Module three of the *microlearning* proposal was based on providing an example of a call for proposals from the Secretariat of Science, Humanities, Technology, and Innovation (SECIHTI) that offered an overview of seeking funding. In addition, a series of cases involving agreements and negotiations were addressed. Thus, despite the short duration of the course, a special syllabus was developed.

The results for Question 10 (Figure 7), regarding the use of negotiation skills in research projects—specifically as a mediator—showed that 53% of respondents responded positively, choosing between *strongly agree* and *agree*. However, 8% of participants remained neutral; 8% *disagreed*; and 31% *strongly disagreed*. This indicated that 39% perceived these skills negatively.

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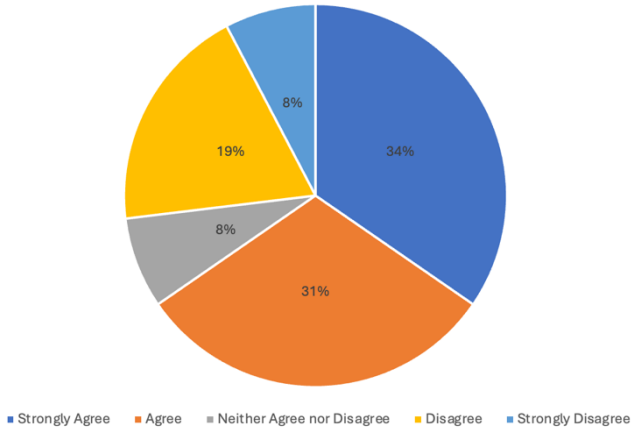
Figure 7
*Perceptions of negotiation skills*




To better understand negotiations and be able to apply them in mediation processes within research projects, a correlation analysis was conducted using Spearman's rho. This analysis focused on question four (content) and question 10 (negotiations). The result was a *rho* of 0.35, indicating a positive, albeit weak, relationship. Therefore, it suggests that students who consider the course content relevant also tend to have slightly higher levels of participation or self-perceived mediation in negotiations within research projects.

Nevertheless, the correlation was not strong enough to indicate that the course content had a significant impact on learning. Therefore, this is an area for improvement where negotiation exercises or simulations could be developed and incorporated to further enhance the course.

## 4. Discussion and Conclusions

The feasibility analysis of *microlearning* made it possible to assess the relevance, functionality, and acceptance of this training modality within the context of higher education and graduate studies. The results showed that the short-form learning format, structured around micro-content, was well-received by students, as it facilitated their understanding of the topics by adapting to their schedules and learning styles. In light of the European framework, this section compared the findings with the contributions of authors such as Ali et al. (2021); Ponce Martínez et al. (2021); and Vergara Avalos et al. (2024), who highlighted the adaptability of *microlearning* and its ability to promote meaningful learning in digital environments.

Furthermore, the analysis of results—which included a comparison among users—allowed us to identify the transferable components of the instructional methodology (modular organization, sequencing of micro-

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competencies, integration of agile methodologies) and the aspects that require optimization (time commitment, thematic depth, and audiovisual production). These findings constitute key inputs for the second phase of development, in which the microcourses are expected to be classified according to the fundamental level of the *ResearchComp* framework: research management and the research competencies that comprise it.

The average score for question three, regarding the *microlearning* format as perceived by students, indicated that 81% believed it facilitated their understanding of the content. The brevity and sequencing of the content in the applied methodology promoted sustained attention and student autonomy by allowing for gradual progress in short intervals with clear goals. Following Ali et al. (2021) and Ponce Martínez et al. (2021), *microlearning* enhances self-regulation and intrinsic motivation by presenting information in bite-sized chunks focused on specific tasks.

Vergara Ávalos et al. (2024) noted that the SAM model is geared toward an iterative and collaborative process that allows for adaptation to the needs of students and the design team during course development, making it particularly well-suited for digital education projects that require flexibility and rapid evolution. Consequently, the SAM model was adopted for the instructional proposal in a *microlearning* format. This was confirmed based on the opinions of instructional experts, who demonstrated high acceptance rates, indicating that a project has been proposed that is subject to constant review and modification and features iterations.

Meanwhile, Machado Fiuza Fialho et al. (2024) emphasized that the progressive sequencing of microcontent enhances knowledge transfer and retention. From a methodological perspective, the application of strategies based on the ADDIE and SAM models allowed for the iterative design, testing, and refinement of each microcomponent. This ensured alignment between objectives, activities, and assessment, creating a flexible learning environment that fostered autonomy, reflection, and consistent practice, in line with recent literature on the effectiveness of *microlearning* in higher and graduate education.

In addition, Machado Fiuza Fialho et al. (2024) and Vergara Ávalos et al. (2024) emphasize that agile models such as SAM foster iterative cycles of continuous improvement, in which feedback from users and experts becomes an essential input for optimizing the educational program.

In this regard, the feedback from low-scoring participants indicated that, although the course was well-received for its thematic relevance and structural clarity, adjustments are needed in terms of its duration, sequencing, and audiovisual resources. These aspects are essential for strengthening future implementations of the *Micro Competences Design* model, maintaining consistency with the *microlearning* approach, and ensuring a more balanced, immersive, and contextualized learning experience.

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### 4.1. Future areas of research

The results obtained in the first iteration of *Micro Competences Design* revealed significant progress in the development of the research competencies defined by the *ResearchComp* framework. However, differences were observed across the various performance areas. In particular, the indicators for budget and funding management showed the lowest levels of development. This highlighted the need to continue with new phases of design and implementation of digital microcourses focused on strengthening these competencies. Based on this assessment, two future lines of research are proposed that will expand the model's scope and consolidate its pedagogical structure.

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## Appendix

### Appendix 1

*Course Participant Satisfaction Survey*

1. The SafetyCulture® platform was easy to use and navigate.
2. The course duration (1 hour) was appropriate for the content.
3. The *microlearning* format helped me understand the topic.
4. The content (negotiation, quotes, estimates, agile methodologies) was relevant to my research practice.
5. I believe I will be able to apply what I have learned to my research projects.
6. Do I have a clear understanding of the phases involved in a research project to ensure its feasibility?
7. Do I understand the process of managing financial resources for the development of educational research projects?
8. Do I collaborate effectively with other researchers on group projects?
9. Do I have experience with human resources management and planning procedures and tools in any educational research projects?
10. Have I served as a mediator in negotiations for educational research projects?
11. Am I capable of sharing my research findings with a wider audience (e.g., at conferences or workshops)?
12. Am I able to carry out research projects under pressure without any problems?
13. Do I collaborate with colleagues in fields related to my research projects?
14. Do I promote inclusion and diversity in my research projects?
15. Do I have the ability to come up with new ideas or innovative approaches within my field of study?
16. Do I have the ability to work independently without needing constant supervision?
17. Do I apply self-organization to my educational research projects?
18. Do I have the ability and interest to seek out additional courses, opportunities, programs, or materials that will strengthen my research skills?
19. Do I encourage the use or creation of open-access publications in my educational community?
20. Do I apply critical and creative skills to develop innovative proposals that address the needs of an educational setting?

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