ISSN-e: 2244-8276

DESIGN OF A DIGITAL REPOSITORY FOR THE SUBJECT LEARNING TO ENTREPRENEURSHIP FROM THE METROPOLITAN UNIVERSITY.

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SUMMARY

The Design of the Learning Community was carried out to strengthen the collaborative work of the teachers of the subject Learning to Entrepreneurship of the Metropolitan University. A feasible project-type research, exploratory and field documentary was developed, applying a research instrument to the group of scholars, through which their needs were identified, as well as their attitudes, dispositions and operational attributes regarding the use of a repository, as the basis of the Community. The key needs determined were: the unification of criteria, the updating and the source of consultation. To ensure a sustainable implementation, the following aspects were considered: the definition of the content typology, collections and metadata; the workflow for new content; roles, responsibilities and policies to preserve the quality and integrity of the repository, and the deployment of Community consolidation strategies (training, information, strengthening and contribution). The Repository prototype was developed on Google Sites. It was concluded that its implementation and its progressive extension to the rest of the university community contributes to strengthening collaborative work and academic and research processes. This requires the exercise of some key generic competencies, such as leadership and teamwork, and the establishment of incentives that stimulate the contributions of teachers.

Keywords: Learning Community, Collaborative Work, Repository.

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How to quote: Aguilar, M y Briceño, M. (2021) Design of a digital repository for the subject Learning to Entrepreneurship from the Metropolitan University. *Almanaque*, 38, 51-70.
https://doi.org/10.58479/almanaque.2021.35

ISSN-e: 2244-8276

CONTENIDO

1. INTRODUCTION

Information and Communication Technologies (ICTs) have made contributions in various fields by enabling the massive management of information. In the educational field, their impact on the design of strategies, the adoption of new training and content management schemes, as well as the development of collaborative projects and the generation and preservation of knowledge is undeniable.

The research contemplates the development of a repository as a source of consultation and updating, based on uniform criteria of the academic community of the Aprendiendo a Emprender (AE) subject, which constitutes an example of the application of ICT, through collaborative work among teachers. Additionally, it is necessary to investigate the context of entrepreneurship in universities and how entrepreneurship is stimulated through cognitive processes and their relationship with learning theories, since they have an impact on the design of didactic content and on the generation and preservation of knowledge.

The general objective of the research is to design a digital repository for the subject Aprendiendo a Emprender, of the Universidad Metropolitana. For this research work, the partial goals that are closely related to the general objective and lead to its achievement are:

- Select the types of content to be addressed in the digital repository, in order to strengthen the academic and research capacity of teachers of the subject Learning to Entrepreneurship through collaborative work.
- Identify the functional (operability, resources, quality, policies, etc.) and technical (software) requirements of the digital repository that will serve as specifications in its development.
- Define strategies to successfully implement the repository.
- Develop the prototype of the digital repository.

2. THEORETICAL FRAMEWORK

2.1 Digital Repository

A digital repository is the "web structure that allows the organization, storage, preservation and open dissemination of the intellectual production of the academic and research activity of an institution" (Universidad Nacional de La Plata, 2019, n.p).

Martínez (2017) emphasizes that having a repository implies having materials with their proper organization in digital format, to be used, retrieved, shared and preserved. Sánchez and Melero (2006) refer that the effective content of a repository must have an institutional policy, management procedures and be endorsed by the actors involved.

It can be stated that repositories are spaces for collecting, gathering, preserving, disseminating and providing access to contents selected by a specific community. For their conceptualization, the scope, mission, objectives, operability, quality level, content and metadata with their functionalities (search, etc.) must be defined.

Bustos and Fernández (2008) point out the benefits of creating and sharing knowledge, recording the work done, accessing scientific and academic information, developing knowledge management skills, among others.

2.2 The influence of ICT on university education

Candía (2018) points out that ICT in the classroom has generated a series of changes in narratives and aesthetics, ways of relating, strategies and practices in the educational process, which impacts the role of the teacher and the performance of students.

UNESCO (2013) points out that technology has generated innovations in the educational field, and has been key in the collaborative construction of knowledge within a community, which allows discovering, developing new learning and improving results in educational processes, either for teachers, students or both.

Pulido and Najar (2014) refer that ICTs have contributed to promote knowledge management in people from different professions and places, which has enriched the acquisition of new knowledge and the improvement of existing knowledge. However, resources have been generated in digital format, without having a physical backup, being necessary digital preservation to ensure access to virtual resources in the long term through a set of practices to be managed by the institution or organization (Alvarez, 2017).

2.3 Knowledge Management

De Freitas and Yaber (2015) refer that Knowledge Management (KM) comprises how knowledge is identified, codified, stored, used and created and exchanged among collaborators at different levels of the organization.

The most elementary unit in QA is data. University of La Laguna (2013) refers that by themselves they do not generate action, and that when processed as a whole they generate meaning (information) and when applied they become knowledge.

Aranda (2018) defines two types of knowledge. The explicit, which is the articulated, is expressed and recorded with words, numbers, images, etc., is stored in procedures, programs, manuals, tutorials, etc.. It is easy to share and communicate since it is systematic, structured and schematized. Tacit knowledge cannot be structured, stored, distributed or managed because it is the product of experiences, habits involving intuition, beliefs, customs and values.

Luna, Figueroa and Maldonado (2016) point out that the type of knowledge to be collected, stored, organized and distributed is explicit knowledge, where databases and document management systems facilitate its implementation.

Bolívar (2013) points out that one of the ways to improve educational practice is to learn collectively. In educational institutions, in general, Professional Learning Communities (PLCs) are not encouraged, being common for teachers to work individually, which prevents critical and constructive reflection on educational practice. Globalization and technology require that knowledge flows and is disseminated through learning communities, generating a sense of belonging. Vaillant (2016) points out that teachers learn from formal and informal processes where they interact with their peers, etc., and they need mechanisms that encourage this and this requires time, resources, monitoring, evaluation and recognition. It is convenient to support collaborative networks to enhance their professional development and that of their students.

2.4 Entrepreneurship

Vasquez (2017) refers to entrepreneurship as the integration of competencies to manage, sustain, implement and validate proposals aimed at satisfying human, organizational, political and economic development needs.

Majmud (2013) defines entrepreneurship as the ability to conduct oneself with initiative and perseverance, to act as an agent of change and modify the existing reality, providing innovative solutions.

Cavero, Ruiz and López (2017) point out that the promotion of entrepreneurship and innovation are key elements of competitiveness and growth of the economy, and their development will depend on the degree of social, economic and technological progress of each country.

For their part, Sánchez García, Ward, Hernández and Florez (2017) agree in pointing out the use of strategies that enhance meaningful learning in real contexts, focused on the experiential and experiential, through practices and the development of reflective and critical skills, which constitute competencies inherent to an entrepreneur.

Entrepreneurship at UNIMET, according to Lombao (2017) from 2010, on the occasion of a curricular reform of the curricula at the undergraduate level, agreed to materialize the profile of unimetano graduate through seven transversal axes (Linguistic expression in native and foreign language, Cultivation of personal dimensions and management of relationships with others, Mastery of cultural context, Information management, Social responsibility, Development of thinking and instrumental skills, Entrepreneurship), which "permeate the training in all disciplines and create favorable conditions for the permanent development of integral individuals" (Lombao, 2017, p. 29).

Competencies in Action, Learning to Entrepreneur and Entrepreneurship are some of the compulsory subjects of UNIMET's basic training, which promote various events where students interact with entrepreneurs, and participate in the Ideas for Entrepreneurship Fair before an evaluation jury, which recognizes the best initiatives.

Table 1

Compulsory subjects of UNIMET's basic training.

Materias	Competencia para la acción	Aprendiendo a emprender	Iniciativa emprendedora
Propósito	Propiciar ambientes de aprendizaje donde el estudiante identifique y ponga en práctica de forma efectiva elementos esenciales de la competencias emprendedoras.	Promover la generación de ideas innovadoras que resuelven necesidades reales mediante el desarrollo de proyectos emprendedores.	Facilitar el desarrollo de las competencias relacionadas con la acción emprendedora, a través de propuestas pertinentes e innovadoras que permiten valorarla desde el punto de vista de una oportunidad.
Ejes	Desarrollo del pensamiento y destrezas instrumentales y Emprendimiento		
Competencias	Gestión de la información	Gestión de la información	Gestión de la información
	Aptitud para emprender	Innovación	Aptitud para emprender
	Solución de problemas	Trabajo en equipo	Innovación
	Toma de decisiones	Solución de problemas	

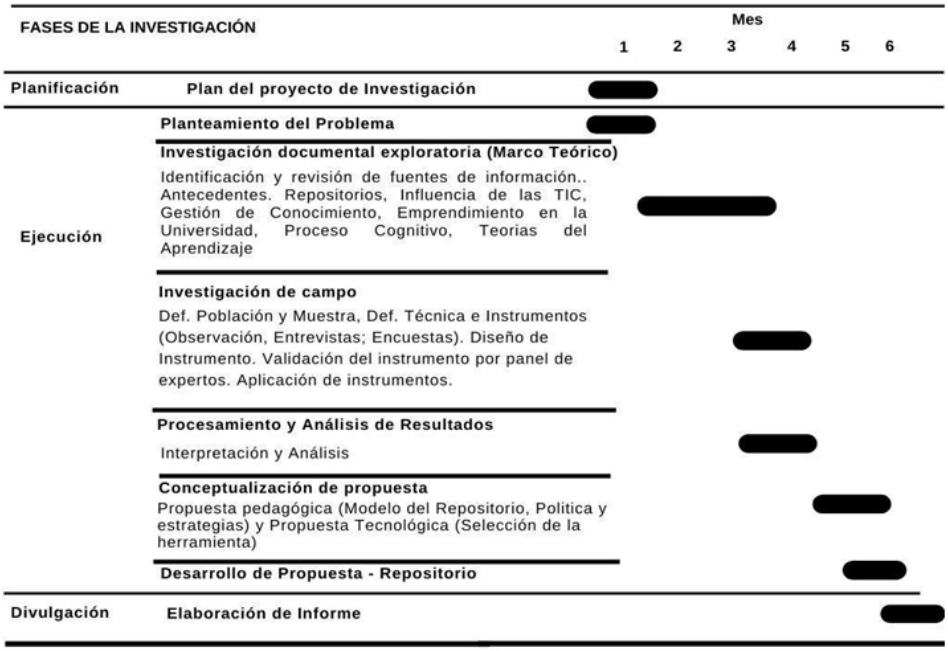
Source: Own elaboration based on the syllabus of the subjects.

By linking the competencies with the cognitive processes that activate the development of entrepreneurial capacity, questions arise such as: What is the nature of entrepreneurial thinking; how does one develop entrepreneurial capacity; how does the entrepreneur learn to identify opportunities; and how does the entrepreneur learn to identify opportunities? These questions are the basis for the development of the digital learning repository.

3. METHODOLOGY

The present research is of the exploratory documentary type with field research. Figure 1 shows the scope of the research.

Figure 1
Gantt Chart of Research Phases



Source: Own elaboration

The research design is the context created to find answers to emerging concerns. The Universidad Pedagógica Experimental Libertador (2016) considers that the feasible project "consists of the research, elaboration and development of a proposal for a viable operational model to solve problems, requirements or needs of organizations or social groups; it can refer to the formulation of policies, programs, technologies, methods or processes" (p. 21).

The population is composed of 20 professors of the Department of Entrepreneurial Initiatives of UNIMET, who manage a series of competencies related to the subjects of Competencies in Action, Learning to Entrepreneurship and Entrepreneurial Initiative. The sample is made up of 17 teachers. By involving teachers from the entire Department, it is expected to obtain broader information.

Techniques and instruments were applied such as the unstructured observation record, in meetings of the Competences in Action and Learning to Entrepreneurship courses in the 1920-1 academic period; interviews with the coordinator of the Learning to Entrepreneurship course, with specialists on the operation of Google Sites and the application of the survey (Google form), validated by a panel of experts, to Professors of the Department of Entrepreneurial Initiatives. The form can be found at the following link http://bit.ly/maformulariorepositorio. The responses obtained were anonymous as it considered the vision of the group of teachers instead of individual responses.

The 85% of the population is a representative sample of the population, which means a non-probabilistic sampling, which is "a selection procedure in which the probability that the elements of the population have to integrate the sample is unknown" (Arias, 2012, p. 82).

4. PRESENTATION AND ANALYSIS OF RESULTS

The results are presented in two tables for easier reading. Table 2 shows the results that explore the Teachers' Data, Repository Content and Perception of the need, importance and relevance.

Table 2

Results 1 of the questionnaire

Dimensiones	Categorías e Items			Resultados
Datos generales sobre docentes	**Materias que dicta el docente**			Reflejó la distribución de los docentes por asignaturas, el tiempo y su dedicación como docentes en la UNIMET, y la experiencia en repositorios. La distribución porcentual supera el 100% debido a que algunos de los docentes dictan más de una materia.
	Competencias en acción: 29,40%	Aprendiendo a Emprender: 41,20%	Iniciativas emprendedoras: 47,10%	
	Tiempo como docente			
	Menos de 2 años: 43,6%	Entre 2 a 5 años: 25%	Más de 5 años: 31,3%	
	Dedicación como docente			
	Tiempo completo: 25%		Tiempo parcial: 75%	
	Experiencia en el uso de repositorios			
	Mucha: 6,20%	Poca: 56,30%	Ninguna: 37,50%	
Contenido del repositorio	**Tipo de contenido que le gustaría disponer**			Evidenció la preferencia del tipo de contenido a considerar en el repositorio y las opciones de formato.
	Presentaciones: 58,8%	Ejercicios o dinámicas: 70,6%	Experiencias con entornos: 52,9%	
	Ponencias en Congresos: 23,5%	Libros electrónicos: 58,8%	Artículos de revistas electrónicas: 58,8%	
	Trabajos de grado: 16,2%	Referencias bibliográficas: 35,3%	Videos: 64,7%	
	Simuladores XLS: 35,3%		Todas las anteriores: 47,1%	
	Formato de los contenidos del repositorio			
Percepción de la necesidad, importancia y pertinencia	Documentos PDF: 29,4%	Audios: 11,8%	Videos: 29,4%	Mostró la identificación de la necesidad actual en la práctica educativa así como también la precepción sobre la contribución del repositorio al ser implantado.
	Enlaces: 11,8%	Multimedia interactivo: 5,9%	Todas las anteriores:82,4%	
	Necesidades actuales en el desarrollo de la práctica docente			
	Actualización: 47,1%	Fuente de consulta: 23,6%	Investigación: 17,8%	
	Unificación de criterios: 47,1%	Modelo educativo: 5,9%	Todas las anteriores: 41,2%	
	Contribuciones de un repositorio para los docentes de Aprendiendo a Emprender			
	Estimula el aprendizaje docente: 35,3%	Fomenta el pensamiento divergente: 29,4%	Incentiva el ámbito de la investigación 17,6%	
	Información organizada: 41,2%	Información actualizada: 47,1%	Todas las anteriores: 58,8%	

Source: Own elaboration

Table 3 reflects the results of the functional and technical requirements, inputs, actions and readiness to implement Knowledge Management and the repository.

Table 3
Results 2 of the questionnaire

Dimensiones	Categorías e Items			Resultados
Requerimientos funcionales y técnicos	**Tipos de políticas a implementar para el uso y mantenimiento del repositorio**			Reveló las políticas a considerar en el diseño del repositorio así como explorar el conocimiento de los docentes en Google Site y Google Drive,
	Tipo de contenido: 52,9%	Evaluación de la calidad del repositorio 23,5%	Control de acceso del repositorio: 36,6%	
	Protección al Derecho de Autor: 17,6%	Actualización, preservación y retiro de la información: 41,2%	Metadatos: 11,8%	
	Requisitos Coordinador del repositorio: 5,9%		Todas las anteriores: 41,2%	
	Necesidad de contar con un manual de usuario			
	Si: 80%		No: 11,80%	
	Conocimiento de los docentes y las opciones de Google Sites			
	Si: 29,4%		No: 70,6%	
	Conocimiento del Drive como herramienta colaborativa			
	Si: 88,20%		No: 11,80%	
Gestión del conocimiento	**Aportes en la Gestión del Conocimiento**			Reflejó los aportes que pueden derivarse de la Gestión de Conocimiento así como también acciones sugeridas como contribución de la comunidad y del repertorio.
	Unificación de criterios: 23,5%	Identificación de mejores prácticas: 41,2%	Registro de lecciones aprendidas: 35,3%	
	Contribución a líneas de investigación: 17,5%		Todas las anteriores: 52,9%	
	Acciones sugeridas como contribución de la comunidad y repositorio			
	Boletín electrónico trimestral: 35,3%	Jornadas anuales de emprendimiento: 29,4%	Aportes a las líneas de investigación: 35,3%	
	Participación con ponencias en eventos: 41,2%	Insumos a las redes de UNIMET: 5,9%	Videoconferencias con docentes de otras universidades: 29,4%	
	Observatorio de expertos en emprendimiento: 5,9%		Todas las anteriores: 41,20%	
Actividades a realizar para lograr la implementación del repositorio	Aprender a manejar las herramientas de Google: 52,9%	Realizar trabajo colaborativo entre docentes: 76,5%	Realizar investigación individual: 23,5%	Permitió conocer aspectos actitudinales de los docentes sobre la necesidad de su aprendizaje, participación e interés con el fin de lograr la implementación exitosa del repositorio.
	Realizar investigación con otros: 29,4%	Incorporar el contenido al repositorio: 58,3%	Formar colegas en el uso del repositorio: 58,3%	
	Para la materia de Iniciativa Emprendedora: 5,9%		Todas las anteriores: 29,4%	

Source: Own elaboration

Even when the program of the subject is established, the fact that many teachers have less than 2 years at UNIMET, is a cause to establish mechanisms to facilitate the unification of criteria in the management of entrepreneurship projects.

Secondly, the results provide information on the attributes to be considered in the Content and format type in the repository. From the Functional Requirements are derived the policies for the use and maintenance of the repository, where some options (Content, Update, Preservation and removal, Access control) reach the highest level of acceptance. The policies referring to quality assessment, copyright and metadata achieved 53%, and are key to ensure the quality and operability of the repository. The technical requirements were explored in Google Sites and Google Drive, in order to strengthen their management.

Thirdly, the Expectations generated by the establishment of the Repository with the support of a CPA among teachers, are recognized for their contribution to the identification of best practices and recording of lessons learned, unification of criteria and contribution to UNIMET's lines of research. Finally, the attitudinal aspects of the teachers reflect their willingness to carry out activities that contribute to the formation of the CPA and the use of the repository.

The above results confirm that the proposal to design a repository for the subject Learning to Undertake at the Metropolitan University is feasible and satisfies the needs of the teachers of the subject. For this purpose, it was necessary to know the operation of different types of repositories, which has allowed adjusting the vision of the repository to be developed to the identified need, defining the scope and the elements to be considered.

5. PROPOSAL DEVELOPMENT

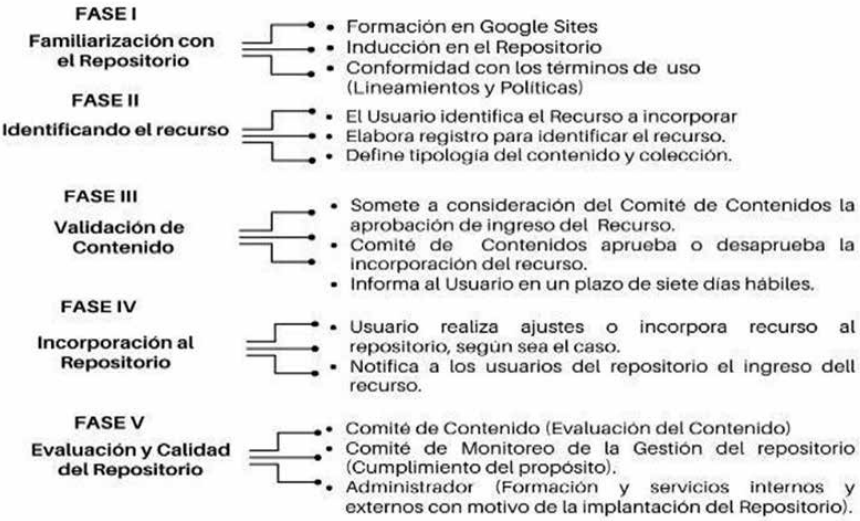
The Pedagogical Proposal contemplates defining the repository model, strategies and policies to be implemented. Within the repository model, the service model, workflow, roles, responsibilities and content to be offered are defined.

For the definition of the service model, its mission has been contemplated as that of offering an organized and updated source of consultation on the topics of the Aprendiendo a Emprender subject, in order to manage knowledge and facilitate learning experiences with a practical sense of application, in accordance with the country's context.

Among the services to be offered are: Forming a learning community in the repository environment with Aprendiendo a Emprender teachers; managing teaching materials; hosting documents related to entrepreneurship, etc., as well as extending the services in the medium term to the rest of the academic community of the Department of Entrepreneurial Initiatives.

Figure 2 shows the workflow with five phases and their activities.

Figure 2
Workflow in the Repository



Source: Own elaboration

The first four phases contemplate the user from access to the incorporation of the resource, the last phase refers to the management and administration of the repository.

Roles and Responsibilities include: Users (teachers) who will be able to incorporate content following defined guidelines and policies; *Content Committee* with a quarterly rotating frequency, in the period of one year, made up of three teachers, who will oversee compliance with guidelines and policies; *Management Monitoring Committee* made up of two teachers, rotating in each academic term (quarter), who will be attentive to the evaluation of the repository; *Administrator* with responsibilities related to the updating of the technological solution, coordination of processes and operation, training of users and services.

This repository will contain Digital Educational Materials (DEM) that "are resources that facilitate the teaching-learning process in digital support, following pedagogical and technological criteria, that integrate diverse media incorporated in an instructional design" (Pianucci, Chiarani, and Tapia, 2010, p. 1) and Reference Materials (CM) that facilitate updating. Both types of materials will be grouped into collections to facilitate browsing, searching, and locating materials. See Table 5.

Table 5
Materials Collections

Materiales Educativos Digitales (MED)	
Colecciones (Unidad de Contenido)	**Descripción**
Unidad I: Necesidades de emprendimiento	Necesidades de emprendimiento. Detección de necesidades, tipos y jerarquización de necesidades.
Unidad I: Solución de problemas	Solución de problemas. Definición y estructura de un problema. Estrategias heurísticas de solución de problemas.
Unidad III: Toma de decisiones	Toma de decisiones. Definición, escenarios, factores o variables y estrategias.
Unidad IV: Proyecto de Emprendimiento.	Planteamiento de etapas y acciones para solucionar problemas o necesidades detectadas

Materiales de Consulta (MC)
Colecciones
Artículos,
Libros electrónicos,
Presentaciones,
Vídeos,
Ponencias en congresos,
Trabajos de Grado

Source: Own elaboration

The repository content will be registered through metadata based on the Dublin Core to facilitate the description of the resources to be entered in the repository (see Table 5). Méndez and Senso (2004) refer to the ISO 15836 standard, which defines the set of Dublin elements, consisting of 15 basic elements that describe the type of material.

Table 6
Classification and elements for resource identification (Metadata)

Grupo	Item	Descripción
Características del contenido	**Título**	El nombre dado a un recurso, habitualmente por el autor.
	Temas	Los temas del recurso. Expresado en palabras claves o frases que describen el título o el contenido del recurso.
	Descripción	Descripción textual del recurso. Puede ser un resumen en el caso de un documento o una descripción del contenido en el caso de un video.
	Fuente.	Secuencia de caracteres usados para identificar un trabajo a partir del cual proviene el recurso actual
	Tipo del Recurso	Categoría del recurso. Por ejemplo, Material didáctico (Unidades de Contenido) o Material de consulta (Artículos, Libros electrónicos, Presentaciones, Vídeos, Ponencias en congresos, Trabajos de Grado, etc.)
	Relación	Facilita identificar la relación del material con un segundo recurso. Este elemento permite enlazar los recursos relacionados y las descripciones de los recursos.
	Cobertura	La extensión o ámbito del contenido del recurso
	Autor o Creador	Persona u organización responsable de la creación del contenido intelectual del recurso.

Grupo	Item	Descripción
Propiedad Intelectual	**Editor**	Entidad responsable de hacer que el recurso se encuentre disponible en la red en su formato actual
	Otros Colaboradores	Una persona u organización que haya tenido una contribución intelectual significativa, pero que esta sea secundaria en comparación con las de las personas u organizaciones especificadas en el elemento Creator. (por ejemplo: editor, ilustrador y traductor).
	Derechos	Son una referencia (por ejemplo, una URL) para una nota sobre derechos de autor, para un servicio de gestión de derechos o para un servicio que dará información sobre términos y condiciones de acceso a un recurso
	Fecha	Una fecha asociada con un evento en el ciclo de vida del recurso. Típicamente, la fecha será asociada con la creación o disponibilidad del recurso.
Instanciación	**Formato**	Es el formato de datos de un recurso, usado para identificar el software y, posiblemente, el hardware que se necesitaría para mostrar el recurso
	Identificador del Recurso	Secuencia de caracteres utilizados para identificar unívocamente un recurso. Ejemplos: ISBN si el contenido fue publicado como libro o como parte de un libro. ISSN si el contenido fue publicado en una revista. URI si el contenido se publicó como un recurso electrónico en la web.
	Idioma	Idiomas del contenido intelectual

Source: Own elaboration based on Lamarca (2013).

The Policies define the guidelines to be followed to achieve proper functioning and are defined according to their objective, scope, roles and responsibilities of the actors involved. The following policies were considered: Services, Content, Metadata, Quality Control, Management, Data Access, Deposit, Digital Preservation, Author's Rights, copyright and use of licenses (Creative Commons), Removal and Privacy. It is worth mentioning that the policies may undergo modifications over time, according to the repository's operation. In the Welcome page of the repository the Guidelines and Policies are contemplated at a detailed level, as well as the user's registration for its conformity with the indicated terms.

As strategies for the successful implementation of the repository, it is worth mentioning those of Training users in the skills required to use, maintain and preserve the repository; Permanent management information that reflects its use (operability) and usefulness (quality); Strengthening of the *Learning Community*, which requires commitment and agreements among users to facilitate its operability and achievements; Contribution to identify the added value of the repository in the academic community, extending to the UNIMETANA community as a whole.

The repository model together with the policies and strategies allow outlining the vision of the pedagogical proposal that serves as the basis for the design of the technological proposal. For the development of the repository, Google Sites was selected because of its ease of use, which favors administration and use by its own users; it does not require downloading, installation or maintenance of any software or hardware, nor does it require knowledge or application of programming languages such as HTML. It has predetermined templates that facilitate personalized design and content organization through the creation of sub-pages. It also allows sharing the materials with an unlimited number of people by assigning roles of editor or reader or restricting their access; allowing the downloading of materials in different formats with easy access from any device connected to the Internet. In addition, it is free of charge and its design and construction is friendly and enjoyable.

Google Sites allows you to use Google Suites applications such as Google Drive and integrate Google Docs, Google Slides and Google Sheet documents or other formats such as PDF. Similarly, you can insert Google Calendar, videos from Google Video or YouTube, or links to other websites. It can be edited with the latest version of Google Chrome and Firefox. It is compatible with Google Groups and is integrated into the repository on the Welcome page to facilitate interactions with the Learning to Be an Entrepreneur CPA.

Since 71% of the teachers said that they were not familiar with the editing options of Google Sites, it was decided to prepare and teach a practical workshop to facilitate the use of the repository, which is part of the actions of the user training strategy.

The address of the Aprendiendo a emprender Repository is https://sites.google.com/unimet.edu.ve/repositorioaprendiendoaemprend/bienvenida.

6. CONCLUSIONS

The conclusions of the research are the product of premises, reflections as a result of the work of thought and analysis, which translates into findings that yield new knowledge. The conclusions referred to each specific objective are expressed below.

Select the types of content to be addressed in the digital repository, in order to strengthen the academic and research capacity of teachers of the subject Learning to be an Entrepreneur through collaborative work.

The selection of the types of content to be addressed in the digital repository made it possible to define its scope and nature according to the needs of the academic community. The inclusion in the contents of collections and metadata favored the incorporation of a way to identify and retrieve information, determine trends, explore the hidden value of the information, which facilitates and makes collaborative work more effective by having an organized, updated source of consultation with uniform criteria.

Identify the functional (operability, services, roles, policies, etc.) and technical (technological tool) requirements of the digital repository that will serve as specifications in its development.

The identification of the repository's functional and technical (technological) specifications not only allowed its development, but also made it necessary to include management criteria and mechanisms to ensure the consistency of the contents with the purpose for which it was created. This makes it possible for users to be satisfied with the validity and quality of the contents.

Define strategies to successfully implement the repository.

The definition of strategies for the successful implementation of the repository required the use of different types of consolidation strategies (training, information, community strengthening and contribution), in order to motivate its users to use it and discover its value as a work methodology.

To develop the prototype of the digital repository.

The development of the prototype of the digital repository, in the Google Sites application, represents a tool that does not generate resistance to change on the part of the user, and makes possible its extension to other areas of the university, given its intuitive nature and ease of immediate use. This allows the development of digital competencies in teachers, which will result in the improvement of teaching and learning processes.

The scope of the specific objectives allows to demonstrate the achievement of the general objective: To design a digital repository for the subject *Aprendiendo a Emprender, of the Universidad Metropolitana.*

The design and development of the digital repository for the Aprendiendo a Emprender subject area contemplated the needs of the academic community so that it can be considered as a working tool that preserves knowledge and generates a sense of community to innovate and adjust according to the best practices identified in the teaching and learning processes.

The use of the Professional Learning Community (PLA) in an application such as Google Sites, Google Groups and Google Drive facilitates the integration of teachers in the development of face-to-face or distance collaborative work either to define educational practices or research development.

In closing, it can be mentioned that repositories are resources that can be used at a broad or restricted level to share and generate knowledge, being key their organization and the mechanisms that allow preserving their quality, as well as the measurement of the value they add. Otherwise, they run the risk of becoming a repository of information. Hence the importance of the practical learning community, materialized in collaborative work.

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