

Reference:

Escamilla, J.G., Ramírez-Montoya M. S. & Zavala, G. (2021). Community STEAM-OER-LATAM Progress Report Q1. Retrieved from: <https://repositorio.tec.mx/handle/11285/643280>

COMMUNITY STEAM-OER-LATAM
PROGRESS REPORT FORM

Title of the Project/Network:	Community STEAM-OER-LATAM
Host Institution:	Tecnológico de Monterrey
Date of establishment of Project/Network: <i>(mm, yyyy)</i>	09, 2021
Period of activity under report: <i>(mm, yyyy - mm, yyyy)</i>	09, 2021 - 12, 2021
Report established by: <i>(name, position)</i>	José Escamilla de los Santos (project manager) María Soledad Ramírez-Montoya (responsible for objectives 1 and 2) Genaro Zavala Enríquez (responsible for objectives 3 and 4)

1. Executive Summary:

Major outcomes, results and impact of the Project team

The general **objective of the project** is to cooperate and facilitate the transition of the STEAM Latam Network towards the STEAM-OER-LATAM Community, with the collaboration of Siemens Stiftung, TEC (Distrito Tec and Institute for the Future of Education) and UNESCO Chair OER Latam, aimed at promoting open education in STEAM Territories. Work was carried out based on the specific objectives, where the following results were achieved:

- **Objective 1:** Disseminate in the target groups the concept of open educational resource to improve their knowledge and promote its use, through Awareness Raising (making known what OER is, making visible advantages).

Results:

1.1 Outlined the general ideas for the co-design to be carried out with INNOVEC, Siemens, Tec de Monterrey and UNESCO where we will deliver two workshops for teachers, teachers of training institutions and decision makers on OER and OER STEAM (**Appendix 1: oe-STEAM training plan**).

1.2 The basis for curating OER content in STEAM (first selection) for the Siemens Stiftung portal was established (**Appendix 2: Metadata for OER STEAM**).

1.3 OER and OEP of STEAM education in LATAM were identified in order to know and monitor OER and OEP of STEAM education in LATAM with identification by territory (know what is there and where) (observatory) (**Appendix 3: OER and OEP STEAM**).

1.4 The preparation of a theoretical dossier on the subject of OER was initiated in the observatory and with crossposting on social networks (OER Edutrends) (**Appendix 4: OER and STEAM OER**).

- **Objective 2:** Develop Capacities for the use of OER (teach how to work and to convene with OER).

Results:

2.1 Training needs were diagnosed for the training plan proposal to deliver two workshops for teachers, teachers from training institutions and decision-makers in OER and STEAM OER, in order to develop capacities for the use of OER (**Appendix 5: diagnosis of needs OER-STEAM OER**).

2.2 Started with training for OER licensing training topics for STEM LATAM NETWORK (**Appendix 6: Licensing slide presented in seminar 1**).

2.3 Two seminars were held for the Latin American educational community on OER with the participation of 11 experts from the academic community, the oe-STEAM project team and Siemens (**Appendix 7: Flyers and photos of the seminars**).

2.4 Training for writing project papers and articles was initiated through the seminars (**Appendix 8: Motivation to write for conferences and journals at seminar 2**).

2.5 Develop and implement platform and materials for project communication. This objective was advanced (contemplated in Q3) because of the importance of communicating the project and its training events through a website (**Appendix 9: Project website**).

- **Objective 3:** Creation of a Community of STEAM Latam territories.

Results:

3.1 Session in the 8th International Conference on Educational Innovation, "Designing the Future of Education" with the session "Comunidades de la Red STEM Latinoamérica" where there will be an invitation to teachers and faculty members of universities to join the STEM LATAM territories.

3.2 We are in the process of hiring assistants. The first webinar will take place at the end of January 2022. It will be a webinar on the work of SOI-STEM, Socially Oriented Interdisciplinary STEM Education and its relationship with STEM LATAM territories. The next five seminars will be distributed February through August to meet the schedule.

- **Objective 4:** Deploy in vulnerable communities in Monterrey (La Campana - Altamira) the impact of a STEAM Territory (later it could be extended to DistritoTec and Distrito Tlalpan in CDMX).

Results:

4.1 There were no activities in the second semester of 2021 as schools are not fully operational due to the pandemic. However, in the first semester of 2022, schools are expected to function more normally. We will then have face-to-face STEM activities for high school students.

4.2 We are in the process of purchasing the necessary equipment for face-to-face activities at the STEM center (funds from another project). In addition, in the first semester of 2022, schools are expected to function more normally, so we will be allowed to invite schools from the Monterrey metropolitan area to activities.

2) Activities:

Overview of activities undertaken by the Project Team during the reporting period

Research activities:

Application of an instrument to seminar participants that will form the basis for the first research and publication activities.

Training activities:

Seminar on educational innovation with STEAM open educational resources (part 1 and 2)
 Organization of the session "Comunidades de la Red STEM Latinoamérica"
 Preparing activities for on-site STEM activities in the Cerro de la Campana
 Preparing activities for STEM center

a) Education/Training/Research

(key education programmes and training delivered and research undertaken by the project team during the reporting period, target group and geographical coverage)

i) Education (leading to certificate)	128 participants with seminar certificates
ii) Training (short term)	Seminar on educational innovation with STEAM open educational resources
iii) Research	Diagnostic instrument applied to seminar participants

b) Conferences/Meetings

(key conferences and meetings organized by the Project Team)

i) Key conferences and workshops hosted by the Project Team

Seminar on educational innovation with STEAM open educational resources (part 1)

- Marina Vicario marina.vicario@gmail.com
- Genaro Zavala genaro.zavala@tec.mx
- Dinka Acevedo. dinka.acevedo@siemens-stiftung.org
- Alexandro Escudero alexandro.escudero@uaq.mx
- Janeth Juvera. janett.juvera@uaq.mx
- José Vladimir Burgos Aguilar vburgos@tec.mx
- Laura Icela Gonzalez Perez lauraicela25@hotmail.com

Recording:

<https://www.youtube.com/watch?v=G9Yk3OVq79s&list=TLGGO6iJmxPJytEwNjEyMjAyMQ>

Supporters: <https://hdl.handle.net/11285/642935>

Seminar on educational innovation with STEAM open educational resources (part 2)

- José Vladimir Burgos Aguilar vburgos@tec.mx
- Tere Rodríguez tereroji@gmail.com
- Guillermo Pech I.q.guillermopech@gmail.com
- Ángeles Solórzano. angelesolorzano@inire.edu.mx
- Laura Icela González Pérez lauraicela25@hotmail.com

Recording:

https://www.youtube.com/watch?v=9GLIX8JddDQ&list=TLGGiSoMs_3lx0lwNzEyMjAyMQ&t=1296s

Supporters: <https://hdl.handle.net/11285/643060>

ii) Other conferences/organizational activities undertaken by the Project Team

International Stay UNESCO 2021 Open Educational Movement

iii) A selection of conference presentations by the Project Team and other colleagues

Co-creación de horizontes abiertos para contribuir con los objetivos de la UNESCO 2030 (Co-creating open horizons to contribute to UNESCO 2030 goals)

María Soledad Ramírez-Montoya

solramirez@tec.mx

Grabación:

<https://drive.google.com/file/d/1ZQgksrBI7zTCQQJCyqSyZAI03118Q5Y0/view?usp=sharing>

Aposos:

<https://hdl.handle.net/11285/642973>

c) Interuniversity Exchanges/Partnerships

(principal exchanges/partnerships between the by the Project Team and other institutions)

UNESCO Open Education Chairs

d) Publications/Multimedia Materials

(major publications and teaching/learning materials)

Please tick relevant fields of output and indicate volume of output:

Books

[tick]

[no.]

Books (edited)

Books (chapters)

Monographs

	Research Reports <input type="checkbox"/> Journal Articles (refereed) <input type="checkbox"/> Conference Proceedings <input type="checkbox"/> Occasional Papers <input type="checkbox"/> Teaching/Learning Materials <input checked="" type="checkbox"/> 2 Multimedia Materials (CD-Rom) <input type="checkbox"/> Multimedia Materials (Video) <input checked="" type="checkbox"/> 2 Multimedia Materials (Other) <input type="checkbox"/>
<p>Give details of major publications and materials including full citations.</p> <p>i) WebPage</p> <p>https://www.oer-steam.world</p> <p>ii) Publications</p> <p>Ramírez-Montoya, M.S., Marina Vicario, M. Zavala, G., Acevedo, D., Escudero, A., Juvera, J., Vladimir Burgos, J.V., Gonzalez-Perez, L.I. (2021). Seminar on educational innovation with STEAM open educational resources (part 1). Recording: https://www.youtube.com/watch?v=G9Yk3OVq79s&list=TLGGO6iJmxPJyEwNjEyMjAyMQ Supporters: https://hdl.handle.net/11285/642935</p> <p>Ramírez-Montoya, M.S., Vladimir Burgos, J.V., Gonzalez-Perez, L.I., Rodríguez, T., Pech, R., Solórzano, A. (2021). Seminar on educational innovation with STEAM open educational resources (part 2). Recording: https://www.youtube.com/watch?v=9GLIX8JddDQ&list=TLGGiSoMs_3lx0lwNzEyMjAyMQ&t=1296s Supporters: https://hdl.handle.net/11285/643060</p>	

f) Other

(any other activities to report)

A strategy for the collection of STEAM OER was implemented through the observatory and the company eScire, including social networks, observatory, website and open platforms (**Appendix 10: Communication strategy through networks and open platforms**)

The eScire team has implemented an effective communication strategy for event management, which prioritizes the dissemination of the various activities that comprise a project, for the case of "OER- STEAM LATAM Community" the strategy consisted of covering 3 main items

1. Email campaigns; A template is specifically created with content focused on contextualising the event, sharing links to visit the landing page and register for the project, with the aim of generating a database that will work to continue positioning the event throughout its duration. These campaigns are sent weekly or even twice a week, as required.
2. Publication in various social networks; A content calendar is generated in which the Flyers and captions that will be used to disseminate the activities of the event are programmed, one or two publications are dedicated on Facebook by the eScire page and additionally the Flyers are shared with the event organisers so that they can use them, all advertising material (art, videos, etc.) are licensed for use.
3. Real-time social media broadcasting of the activities within the project; Live broadcasts are scheduled at least two weeks in advance within the different agreed channels, in this case, Facebook of eScire, Facebook of IFE, YouTube of eScire and Youtube of the OpenEd project

(previously worked by us). Arts such as badges, entrance curtains, countdowns, etc. are used to maintain the identity of the event.

All of the above is monitored and managed by eScire's Communication and Marketing team, stressing that any graphic material generated is previously approved by the project leaders.

3. Future Plans and Development Prospects:

Outline of action plan for the next biennium and short/medium and long-term development prospects. Please do not hesitate to refer to difficulties that the Chair has experienced (Not exceeding 300 words)

Future plans and developments for the STEAM OER collection is to perform content curation of the collected information resources according to the indexing system by creating well-structured descriptions for educational resources. These descriptions should facilitate the discovery, location, evaluation and acquisition of STEAM OER by students, teachers or automatic application processes through an information platform to be developed.

In the activities to come, we envision developing educational capabilities in OER STEAM Territories to foster an open community through activities of training (web seminars).

In addition, we will have one), specific STEM activities for high school students that are inquiry-based, two) STEM activities for middle and high school students and three) open source webinars related to STEM education.

Among the opportunities for improvement that eScire finds for future project activities are the following:

- * Prepare the graphic material that will be used to disseminate the event in all communication channels of those involved, at least two weeks in advance.
- * To make an information integration channel to shorten the response times, such as Google Drive.
- * Propose a response period for approval to optimise the design time of the materials.
- * Generate dynamic content that not only includes flyers, but also short promotional videos to speed up the contextualisation of the event.

2) Financial Resources

Please tick sources of financial contribution and specify the amount in U.S. dollars

Amount (\$)

Objective 1

2097 euros (pending payment)

Objective 2

3566 euros (pending payment)

Objective 3

Objective 4

Give details of financial contributions, material resources and space.

The international stay 2021 UNESCO/ICDE Open Educational Movement for Latin America has been a support of concurrent contribution for the integration of this project in the agenda of this activity, which has allowed the participation of 105 academics from 12 countries.

End of the Form

Appendix 1: oe-STEAM training plan

DATE: December 6th, 2021

NAME: Seminar on educational innovation with Open Educational Resources STEAM

OBJECTIVE: To analyse the characteristics of Open Educational Resources (OER) in STEAM (Science, Technology, Engineering, Arts, Mathematics) education, in order to develop the capacity to search for materials with the potential to innovate educational practices.

INSTRUCTOR: Marisol Ramírez, Vladimir Burgos

DATE: February, 2022

NAME: Open Educational Resources (OER) in the Framework of the 2030 Agenda for Sustainable Development (SDG 4: Quality Education)

OBJECTIVE: The webinar will explore the importance of Open Educational Resources (OER) in the framework for action that was adopted by 184 UNESCO Member States on 4 November 2015 in Paris, recognising the important role of education in the 2030 Agenda for Sustainable Development (SDG 4).

INSTRUCTOR: Vladimir Burgos

DATE: March, 2022

NAME: Mobilising Open Educational Resources (OER) through Open Educational Practices (OEP)

OBJECTIVE: To learn about the process of adoption and implementation of Open Educational Practices (OEP) and Open Educational Resources (OER) as an open education strategy for teaching innovation.

INSTRUCTOR: Marisol Ramírez

DATE: March, 2022

NAME: Preparing an action plan for the adoption of Open Educational Resources (OER)

OBJECTIVE: To develop a proposal for the adoption of Open Educational Resources (OER) in order to identify stakeholders, benefits and potential impact to support a practical and sustainable case for open education.

INSTRUCTOR: Vladimir Burgos

DATE: April, 2022

NAME: Teaching Competences and Open Educational Practices in Distance Education

OBJECTIVE: To raise awareness of the importance of generating skills and knowledge around the use of Open Educational Resources (OER) in technology-mediated environments, as well as to support innovation in teaching practices, specifically in distance education.

INSTRUCTOR: Marisol Ramírez

DATE: June, 2022

NAME: Open licensing in STEAM educational resources

OBJECTIVE: To learn about Creative Commons (CC) licences, types of open licences, conditions of use and how to give attribution while respecting copyright.

INSTRUCTOR: "to be confirmed".

DATE: August, 2022

NAME: Development of skills for the discovery of Open Educational Resources (OER)

OBJECTIVE: Initial training strategy in the development of basic skills in the process of information discovery, copyright and open licensing.

INSTRUCTOR: Vladimir Burgos

DATE: September, 2022

NAME: Open Educational Practices (OEPs) to promote teaching innovation

OBJECTIVE: To raise awareness of the openness of practices that support the use, reuse and production of Open Educational Resources (OER) through institutional policies, promotion of innovative pedagogical models and empowerment of students as co-producers of their lifelong learning.

INSTRUCTOR: Marisol Ramírez

Appendix 2: metadata for OER STEAM

A strategy was carried out to evaluate the metadata standards to be used for the collection of STEAM OER, and thus verify the organisation of metadata information, which will play a major role to carry out the incorporation of STEAM OER in the information platform or access points that allow to locate the STEAM OER in an appropriate way. The proposed standard is LOM (Learning Object Metadata) which is an appropriate schema for learning resources.

Nombre del recurso/Rubric	Metadato	Descripción	Etiqueta	Estándar	Vocabulario controlado
Autor de la persona que sube el recurso a la plataforma (Autoregistro)	Nombre del que sube el recurso	Nombre de la persona que sugiere el recurso	Nombre	person.givenName	no
	Apellido del que sube el recurso	Apellido de la persona que sugiere el recurso	Apellido	person.familyName	no
	Dirección de correo del que sube el recurso	Dirección de correo electrónico de la persona que sugiere el recurso	Correo	person.ElectronicAddress	no
	País de residencia	País de residencia de la persona que sugiere el recurso	País de residencia	person.city	si
	Género	Género de la persona que sugiere el recurso	Género	person.gender	si
	Nivel de estudios	Nivel de estudios de la persona que sugiere el recurso	Nivel de estudios	prof:proflevel-education	si
	Área de experiencia	Área de experiencia de la persona que sugiere el recurso	Área de experiencia	person.interests	no
	Semblanza	Semblanza de la persona que sugiere el recurso	Semblanza	person.biography	no
	Perfil profesional	Perfil profesional de la persona que sugiere el recurso	Perfil profesional	person.jobTitle	si
	Institución	Institución de procedencia			
	Identificador	ORCID ID de la persona que sugiere el recurso	ORCID ID	FederatedIdentifier	no
	Nombre del recurso	Introducir el nombre asignado a este objeto educativo.	Nombre del recurso	do:title	no
	Autor del recurso	Nombre completo del autor	Autor del recurso	do:contributor.author	no
	Identificador	ORCID ID del autor del recurso	ORCID ID	FederatedIdentifier	no
Datos del recurso	Área del conocimiento STEAM	Disciplina académica del recurso	Área del conocimiento	do:subject.discipline	si
	Área de aplicación	Una descripción textual del contenido de este objeto educativo. Esta descripción se podrá resumir.	Resumen	do:description.abstract	no
	Información breve	Una descripción textual del contenido de este objeto educativo. Esta descripción se podrá resumir.	Resumen	do:description.abstract	no
	Nivel educativo de audiencia	Primaria, secundaria, media superior, superior, posgrado	Nivel educativo	do:audience.educationLevel	si
	Palabras clave	Una palabra clave o frase que describe el tema principal del objeto educativo. Este elemento selecciona el idioma o idiomas humanos predominantes en este objeto educativo para la clave.	Palabras clave	do:subject.keyword	no
	Idioma	Seleccionar el idioma o idiomas humanos predominantes en este objeto educativo para la clave.	Idioma	do:language.iso	si
	Formato del recurso	Registrar el formato principal en que se presenta en la hoja "Formato de recurso educativo".	Formato del recurso	do:format.medium	si
	Dirección electrónica del recurso	Enlace al recurso.	Enlace al recurso	do:identifier.url	si
	Ubicación geográfica del recurso	País/región donde se realizó el recurso.	Ubicación geográfica	do:subject.country	si
	Redes Sociales del recurso	Redes Sociales del recurso.	Redes Sociales	do:relation.url	no
	Organizador	Nombre del patrocinador del recurso: Educación superior, profesor, repositorio, documento estratégico, artículo de revista, OER Recurso de contenido, agencia de gobierno, empresa social, biblioteca, científico, estudiante, levez, consultor, escuela, fundación, ong	Patrocinador	do:contributor.sponsor	no
	Enfoque de OER	Composiciones, asociaciones y otros. b. Servicio: Una servicio permanente y disponible que provee de funcionalidades y valor a otros. c. Proyecto: Una iniciativa temporal que pretende cumplir con tareas bajo alcancables en el tiempo. d. Evento: Reúne personas en un cierto lugar o locación (puede ser virtual o físico) e. Historias: Historias relacionadas con los recursos educativos abiertos (OER) f. Herramientas: Son utilizadas para producir o distribuir OER o habilita la contribución o el acceso en cualquier camino. g. Publicaciones: Es un sitio web, blog, post, video, audio o cualquier otra publicación en línea relacionada con OER. h. Políticas: Regulaciones formales o estratégicas dirigidas a crear y usar OER.	Enfoque de OER	do:type.resource	si
	Categoría	El tipo específico de recurso educativo u objeto digital (ODE). Con el objetivo de facilitar la identificación del tipo de recurso, los valores del vocabulario se han organizado en 5 grupos que se diferencian entre sí en función de la complejidad estructural y la aparición o no de funcionalidad didáctica explícita (diseño instruccional), la cual aparece sólo en el grupo "Contenido didáctico". El tipo o valor predominante debe aparecer en primer lugar.	Tipo de recurso educativo	lomes.educational.learningResourceType	si
	Premio	Reconocimientos recibidos, por ejemplo: open Education	Reconocimientos	ctrip.Projects.awards	no
Licencia	Seleccionar la licencia Creative Commons que especifica cómo el recurso puede ser usado.	Tipo de Licencia	do:rights.uri	no	
Estatus	Actual, En proceso, Finalizado	Estado	lomes.lifeCycle.status	si	
Nivel de alcance	Nacional, Institucional, Estado, Multinacional, multinstitucional, departamental, regional, municipal	Nivel de alcance	do:coverage.spatial	si	
	EXCELENTE - El producto cumple con los requerimientos de contenido, e incluye				

Appendix 3: OER and OEP STEAM

Additionally, a form that collected STEAM OER was created by participants of the Seminar on Educational Innovation with STEAM Open Educational Resources and they were trained to develop open educational practices of selecting educational resources in various international indexes and information repositories.



Preguntas del seminario oe-STEAM Lab

Estimado participante, se te invita a capturar tres recursos educativos abiertos STEAM de Latinoamérica, con el objetivo de ubicar materiales valiosos para enriquecer prácticas educativas. Para contestar este formulario se requiere hacer la búsqueda de los tres recursos previamente. Los datos demográficos solicitados serán tratados con cuidado ético y trabajados con fines académicos y de investigación. Se te agradece la contribución.

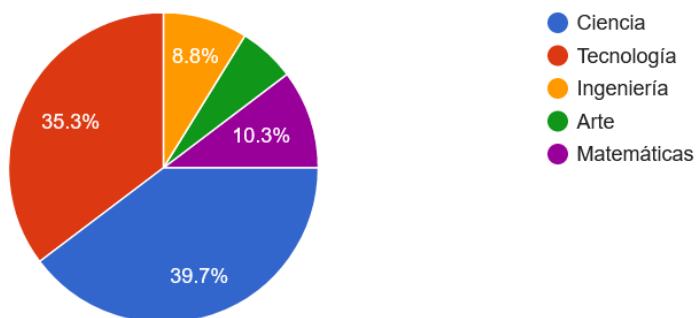
lauraicela2019@gmail.com [Cambiar cuenta](#)

*Obligatorio

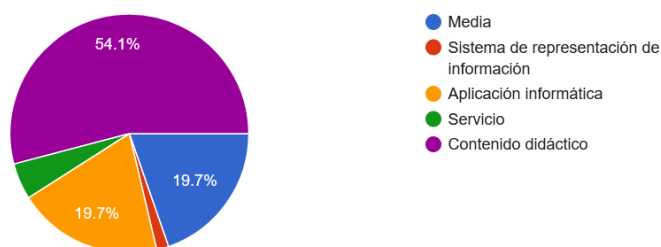
Correo electrónico *

Appendix 4: OER and STEAM OER

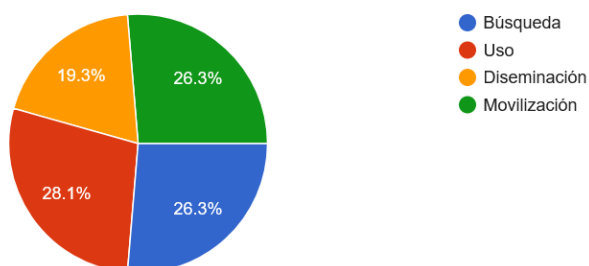
STEAM OER by subject area



REA STEAM by format



Training requirements for educational practices



Appendix 5: Diagnosis of needs OER-STEAM OER.

Areas of training opportunities

- More IT tools for education
- Formation of interdisciplinary and inter-country working groups.
- Development of web search skills, funding for the creation of networks, application of networks in the pedagogical practice of social sciences.
- Alternatives and activation in communities that facilitate the adoption by teachers of these topics, which are often seen by teachers as being in a context far removed from their own reality. Generate links of support for the academy, based on peer-to-peer participation.

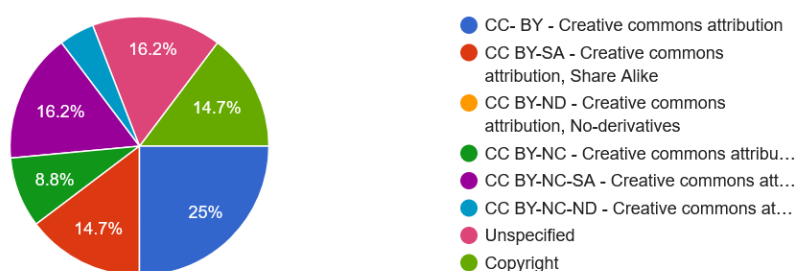
- Development of OER in Values Education
- To have a workshop in which I can be introduced to the use of open educational resources and STEAM.
- I want to learn how to search for open educational resources in Spanish
- We would like you to continue with this interesting and free initiative.
- More experiences of adapting OER
- It is necessary to have translations, but above all it is necessary to work on the development of our own priority projects for the Ibero-American region.
- How to have an impact from the seed? Which are the smallest ones (involve them, make them fall in love, apply transversality, make it interdisciplinary within the possibilities, share). But above all, and most importantly, how do I get it to my context in a real and tangible way?
- Didactics of open educational resources.
- Minorities
- Acronyms that identify the different learning disciplines.
- Materialised projects of those present in the workshop and course.
- I would like you to address the fundamental characteristics that a STEAM resource should have beyond the thematic content.
- Design of OER courses under the STEAM approach.
- THE PRODUCTION PROCESS OF THESE RESOURCES
- I would like it to be possible to work collaboratively to identify STEAM needs.
- To continue working on the subject and to be able to cooperate in networking.
- Language learning
- I would like to know the methodology for the design and development of STEM resources.
- To identify leading projects, to know what the strategy was, to implement similar projects considering our context.
- Successful experiences of STEM projects
- Cooperation groups to develop
- The management of some open resources
- I wish we could learn how to build STEAM on digital platforms in Spanish, learn more about metadata and curation.
- Projects for the development of mathematical thinking
- Application of OER in STEAM
- Greater diversity of subject areas in the search for resources.
- Everything is perfect
- More possibilities to build STEAM
- I would like to learn how to create open educational resources
- How to create and share content under Creative Commons license.
- Ideas, more resources, networking between countries
- Tools for hosting, distributing and disseminating OER
- Research, co-create OER and disseminate in the educational field
- Funding options for STEM projects
- Indigenous languages
- Tips for licensing resources
- Methodology for developing STEAM teaching material
- Sustainability and scalability of a STEAM project
- That it is truly a workshop where by doing we will learn to develop STEAM REAS that expand the possibility of improving the academic task in each of its moments.
- STEAM work in early ages and vulnerable populations.
- Practical implementation
- How to curate content, and how to build on other content for dissemination.
- HOW TO STRUCTURE AND DEVELOP STEP BY STEP A STEAM PROJECT, INTEGRATING SUBJECTS DIFFERENT FROM THESE STEAM DISCIPLINES.
- Networking, collaboration and professionalisation within STEAM projects and capacity building or training within the topic of open science.
- Implementation
- To deepen the different types of licensing and answer why there are open access Reas that are not licensed.
- The experiences shared from the projects that the speakers have carried out or are carrying out are one of the riches. They generate a lot of ideas, motivation and interest for me to

participate in the projects, to promote these types of activities in my context and to build networks to share everything I have learnt.

- Open educational resources on artificial intelligence; robotics; emotional intelligence for young people; gender equality; effective communication between educators, parents and students.
- Use of open educational resources.
- How to take into account the current methodologies of each of the areas when working on a STEAM project.
- Orientation to the structuring of STEAM projects.
- Innovation and research in the university educational field
- I would like practical workshops

Appendix 6: Licensing slide presented in seminar 1

REA STEAM by type of licensing



Appendix 7: Flyers and photos of the seminars

www.oer-steam.world/

Seminario en línea

Innovación educativa con Recursos Educativos Abiertos STEAM

06 de diciembre 2021 11 hrs (GMT-06 Monterrey)

LIVE Institute for the Future of Education
<https://www.facebook.com/EdInnovationIFE>

MARÍA SOLEDAD RAMÍREZ GENARO ZAVALA

JOSÉ VLADIMIR BURGOS JANETH JUVERA

MARINA VICARIO DINKA ACEVEDO

ALEXANDRO ESCUDERO LAURA ICELA GONZÁLEZ

Regístrate en: <https://www.oer-steam.world/registro>

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www.oer-steam.world/  oe-STEAM Lab
Community STEAM - OER - LATAM

Seminario en línea
Innovación educativa con Recursos Educativos Abiertos
STEAM
Regístrate en: <https://www.oer-steam.world/registro>
07 de diciembre 2021
11 hrs (GMT-06 Monterrey)

 **MARÍA SOLEDAD RAMÍREZ**  **GUILLERMO PECH**

 **JOSÉ VLADIMIR BURGOS**  **TERESA RODRÍGUEZ**

 **LAURA ICELA GONZÁLEZ**  **ÁNGELES SOLÓRZANO**

 **LIVE** **Institute for the Future of Education**
<https://www.facebook.com/EdInnovationIFE>

Seminar on educational innovation with STEAM open educational resources (part 1)

- Marina Vicario marina.vicario@gmail.com
- Genaro Zavala genaro.zavala@tec.mx
- Dinka Acevedo. dinka.acevedo@siemens-stiftung.org
- Alexandro Escudero alexandro.escudero@uaq.mx
- Janeth Juvera. janett.juvera@uaq.mx
- Jose Vladimir Burgos Aguilar vburgos@tec.mx
- Laura Icela Gonzalez Perez lauraicela25@hotmail.com

Recording:

<https://www.youtube.com/watch?v=G9Yk3OVq79s&list=TLGGO6iJmxPJytEwNjEyMjAyMQ>

Supporters: <https://hdl.handle.net/11285/642935>

EN VIVO 1:54:21



Karina Muñoz

¿Cómo se conecta lo avanzado en sus proyectos con la introducción de metaversos en educación?

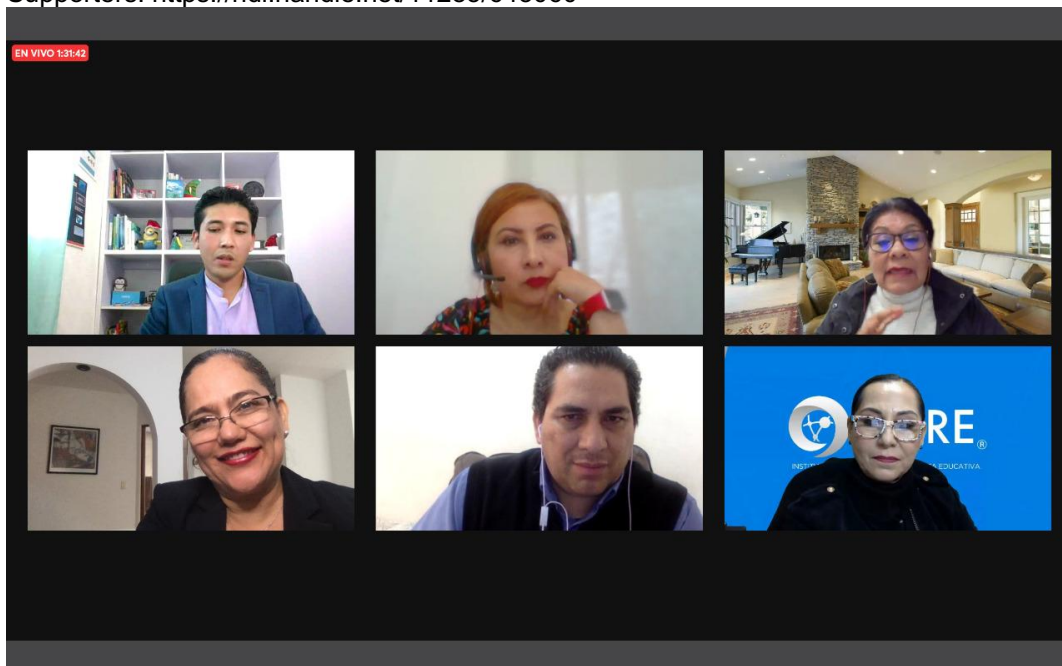
Seminar on educational innovation with STEAM open educational resources (part 2)

- Jose Vladimir Burgos Aguilar vburgos@tec.mx
- Tere Rodríguez tereroji@gmail.com
- Guillermo Pech l.q.guillermopech@gmail.com
- Ángeles Solórzano. angelesolorzano@inire.edu.mx
- Laura Icela González Pérez lauraicela25@hotmail.com

Recording:

https://www.youtube.com/watch?v=9GLIX8JddDQ&list=TLGGiSoMs_3lx0lwNzEyMjAyMQ&t=1296s

Supporters: <https://hdl.handle.net/11285/643060>



Appendix 8: Motivation to write for conferences and journals at seminar 2

Te invitamos a dejar huella de la educación abierta a través de la publicación :o)

- Frontier in Education (Q3). Special Issue "Open Education for Sustainable Development: Contributions from Emerging Technologies and Educational Innovation". Límite 31 diciembre 2021. Link:<https://www.frontiersin.org/research-topics/21472/open-education-for-sustainable-development-contributions-from-emerging-technologies-and-educational>
- Education Research International (Q3). Special Issue "Competencies for Complex Reasoning in the Framework of Education 4.0 and Open Science". Límite 04 febrero 2022. Link: <https://www.hindawi.com/journals/edri/si/672472/>

OPEN EDUCATION GLOBAL CONFERENCE 2022

May 23-26, 2022
Nantes, France

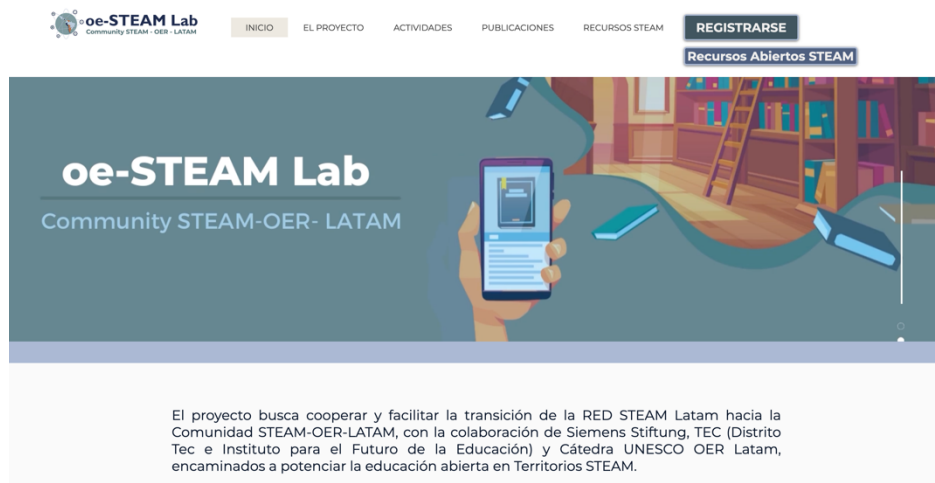
Register

Inscripción para OE Global en Nantes está abierta:
<https://conference.oeglobal.org/2021/2022-registration>

La convocatoria de propuestas se abrió ayer:
<https://conference.oeglobal.org/2021/2022-call-for-proposals>

Appendix 9: Project website

<https://www.oer-steam.world>



Appendix 10: Communication strategy through networks and open platforms

How does the Observatory support?

1. The OBS|IFE coordinates the communication between key areas of the project: ESCIRE Communication Team, Institute for the Future Of Education FE (TEC) COMMUNICATION TEAM, SIEMENS Communication Team.
2. OBS|IFE promotes everything related to this project: events, announcements, etc. in its digital distribution channels.
3. OBS|IFE supports in the development of the communication strategy: what? how? where? for what?

WEEKLY NEWSLETTER (with more than 220K subscribers):

1. Sent Tuesday 07 December

EVENTOS

DIC 07

SEMINARIO en línea | Innovación educativa con recursos abiertos STEAM

DIC 08

WEBINARS DEL OBSERVATORIO IFE | Tec Virtual Campus: Metaverso para experiencias académicas y vida estudiantil

DIC 09

SEMINARIO en línea | *How can data science assist decision-making in higher education?*

DIC 13-16

CONGRESO | 8° Congreso Internacional de Innovación Educativa - CIE 2021

DIC 15-17

TALLER | *Machine Learning-Driven Digital Technologies for Educational Innovation*

Gracias por llegar hasta acá abajo y acompañarnos una semana más, no te olvides de dejarnos tus comentarios sobre esta *newsletter*. Simplemente responde a este correo o ponte en contacto en observatorio@itesm.mx.

PROMOTION ON SOCIAL NETWORKS Observatorio|IFE (with more than 550K followers):





1. Post en Promoción FACEBOOK.

Contenido reciente ↓	Tipo	Alcance	Me gusta y reacciones	Comentarios	Veces compartida	Resultados	Costo por resultado	Clics en el enlace
En este webinar como... sábado, 4 de diciembre 1...	Publicaci	2,7 mil	18	0	6	--	--	18
Las personas con de... viernes, 3 de diciembre 1...	Publicaci	6,9 mil	43	2	11	--	--	39
¿Te interesa conocer ... viernes, 3 de diciembre 1...	Publicaci	14 mil	94	5	52	--	--	214
Bienvenidos al #webi... viernes, 3 de diciembre 9...	Publicaci	2,4 mil	25	0	0	--	--	52
Comunidad Atenea fu... viernes, 3 de diciembre 8...	Publicaci	18,5 mil	119	1	58	--	--	294

2. Re - transmisión en FB (transmisión original vía escire, qué tomamos del FB IFE)

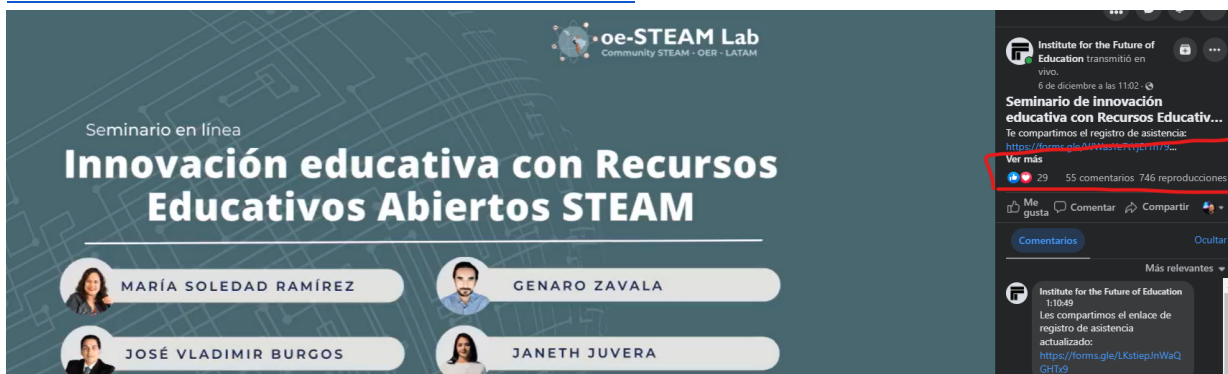
Observatorio del Instituto para el Futuro de la E... Volver a estadísticas de la página 3 dic 2021 - 8 dic 2021

Publicación de Facebook

Contenido reciente ↓	Tipo	Alcance ↑	Me gusta y reacciones ↑	Comentarios ↑	Veces compartida ↑	Resultados ↑	Costo por resultado ↑	Clics en el enlace ↑
 ¿Qué son los reactivos... martes, 7 de diciembre 8:...	Publicaci	11,4 mil	59	0	27	--	--	138
 Los algoritmos est... lunes, 6 de diciembre 14:00	Publicaci	627	15	0	4	--	--	--
 Sin título lunes, 6 de diciembre 10:07	Publicaci	1,9 mil	15	0	0	--	--	80
 Nuestro siguiente we... lunes, 6 de diciembre 8:30	Publicaci	17,7 mil	185	3	129	--	--	251

SOCIAL NETWORKS Institute for the Future

3. Post FACEBOOK TRANSMISIÓN REDES IFE



oe-STEAM Lab
Community STEAM · OER · LATAM

Seminario en línea

Innovación educativa con Recursos Educativos Abiertos STEAM

MARÍA SOLEDAD RAMÍREZ GENARO ZAVALA
JOSÉ VLADIMIR BURGOS JANETH JUVERA

Institute for the Future of Education transmitió en vivo.
6 de diciembre a las 11:02

Seminario de innovación educativa con Recursos Educativ...

Te compartimos el registro de asistencia:
<https://forms.gle/AMWwvFvYcr173...>

Ver más

29 55 comentarios 746 reproducciones

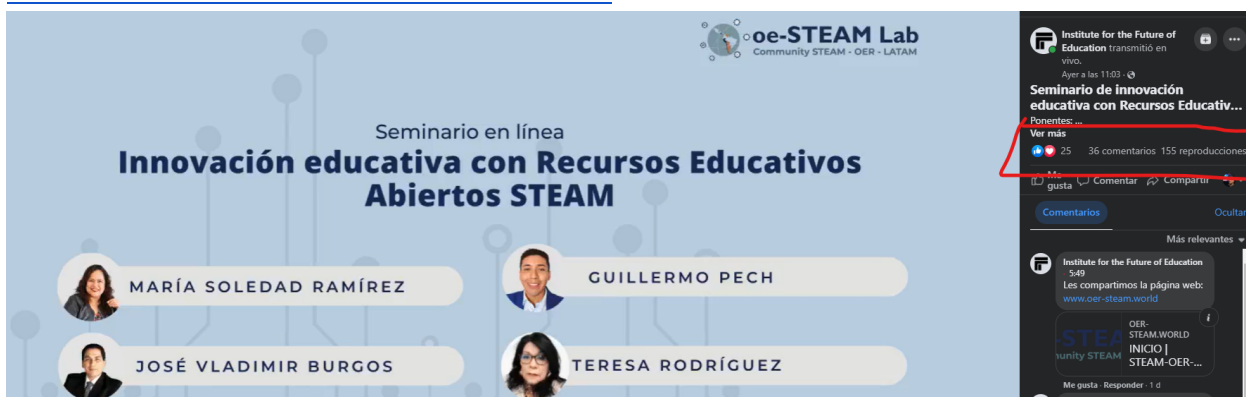
Me gusta Comentar Compartir

Comentarios Ocultar

Más relevantes

Institute for the Future of Education
1:10:49
Les compartimos el enlace de registro de asistencia actualizado:
<https://forms.gle/LKstiepJnWaQGH1x9>

4. Post FACEBOOK TRANSMISIÓN Redes IFE



oe-STEAM Lab
Community STEAM · OER · LATAM

Seminario en línea

Innovación educativa con Recursos Educativos Abiertos STEAM

MARÍA SOLEDAD RAMÍREZ GUILLERMO PECH
JOSÉ VLADIMIR BURGOS TERESA RODRÍGUEZ

Institute for the Future of Education transmitió en vivo.
Ayer a las 11:02

Seminario de innovación educativa con Recursos Educativ...

Resúmenes...

Ver más

25 36 comentarios 155 reproducciones

Me gusta Comentar Compartir

Comentarios Ocultar

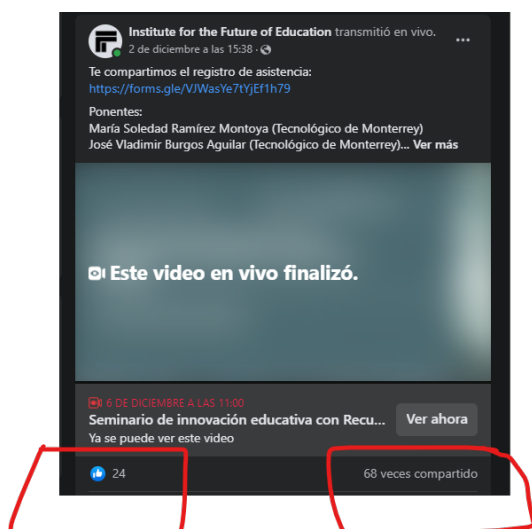
Más relevantes

Institute for the Future of Education
5:49
Les compartimos la página web:
www.oer-steam.world

STEAM WORLD INICIO | STEAM-OER...

Me gusta Responder 1 d

5. Post FACEBOOK INVITACIÓN Redes IFE



eScire Metrics

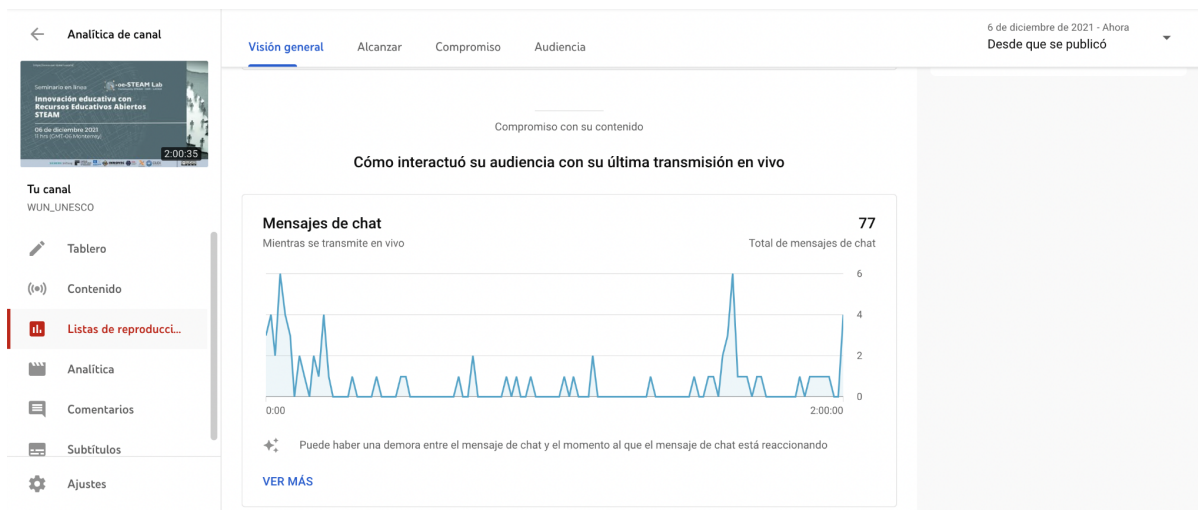
Date: 6 December

Social Network: Youtube

Link: <https://youtu.be/G9Yk3OVq79s>

Results:





Date: 7 December
Social Network: Youtube
Enlace: <https://youtu.be/9GLIX8JddDQ>
Results:





Date: 4 December

Social Network: Facebook eScire

Link: <https://www.facebook.com/esciremx/photos/a.479322675477412/4569733786436260/>

Results:



Date: 6 December

Social Network: Facebook eScire

Link: <https://www.facebook.com/esciremx/photos/a.479322675477412/4578329822243323>

Results:

eScire
Publicado por Julia Toledo · 2 d ·

¿Te interesa conocer sobre la innovación educativa con Recursos Educativos Abiertos? Hoy, 6 de diciembre a las 11 a.m. (GMT-06 Monterrey) un grupo de especialistas estarán hablando sobre cómo innovar en la educación con REA. Te compartimos los enlaces de facebook y youtube: ... [Ver más](#)

Rendimiento de tu publicación

215 Personas alcanzadas

1 Me gusta, comentarios y contenido compartido

10 Clics en publicaciones

4 Visualizaciones de fotos	4 Clics en el enlace	2 Clics de otro tipo
--------------------------------------	--------------------------------	--------------------------------

Resumen de distribución

-1.6x menos que tus otras publicaciones en 2 días y 12 horas desde la publicación.

↓1.6x menos **↑1.7x más** **↓1.8x menos**
Impresiones de publicaciones | Clics en la publicación | Reacciones

[Ver más detalles](#)

COMENTARIOS NEGATIVOS

0 Ocultar todas las publicaciones	0 Ocultar publicación
0 Reportar como spam	0 Ya no me gusta esta página

1 Me gusta, comentarios y contenido compartido

DISTRIBUCIÓN DE CONTENIDO DE MARCA

215	215	0
------------	------------	----------

[Ver desglose](#)

Date: 7 December

Social Network: Facebook eScire

Enlace: <https://www.facebook.com/esciremx/photos/a.479322675477412/4581714525238186>

Results:

eScire
Publicado por Julia Toledo · 1 d ·

Te invitamos a participar en el segundo día del seminario de innovación educativa con Recursos Educativos Abiertos.

Les compartimos los enlaces de transmisión para los webinar de hoy, 7 de diciembre, a las 11 hrs (GMT-06 Monterrey)

Link Facebook:
<https://www.facebook.com/106444028015350/posts/303302238329527/...> Ver más

Captura de Pantalla

Rendimiento de tu publicación

115 Personas alcanzadas

4 Me gusta, comentarios y contenido compartido

2 Clics en publicaciones

1 Visualizaciones de fotos	0 Clics en el enlace	1 Clics de otro tipo
--------------------------------------	--------------------------------	--------------------------------

Resumen de distribución
-2.8x menos que tus otras publicaciones en 1 día y 9 horas desde la publicación.

↓ 2.8x menos ↓ 4.3x menos ↓ 3.7x menos

Impresiones de Clics en la Reacciones publicaciones publicación

Ver más detalles

COMENTARIOS NEGATIVOS

0 Ocultar todas las publicaciones **0** Ocultar publicación

0 Reportar como spam **0** Ya no me gusta esta página

4 Me gusta, comentarios y contenido compartido

DISTRIBUCIÓN DE CONTENIDO DE MARCA **Ver desglose**

115 Alcance	115 Alcance	0 Alcance
1 Visualizaciones de fotos	0 Clics en el enlace	1 Clics de otro tipo

Resumen de distribución
-2.8x menos que tus otras publicaciones en 1 día y 9 horas desde la publicación.

↓ 2.8x menos ↓ 4.3x menos ↓ 3.7x menos

Impresiones de Clics en la Reacciones publicaciones publicación

Ver más detalles

COMENTARIOS NEGATIVOS

0 Ocultar todas las publicaciones **0** Ocultar publicación

0 Reportar como spam **0** Ya no me gusta esta página

4 Me gusta, comentarios y contenido compartido

DISTRIBUCIÓN DE CONTENIDO DE MARCA **Ver desglose**

115 Alcance total	115 Alcance orgánico	0 Alcance pagado
115 Impresiones totales	115 Impresiones orgánicas	0 Impresiones pagadas

Date: 6 December

Social Network: Facebook eScire-transmission

Link: <https://www.facebook.com/esciremx/videos/4927300017331571>

Results:

eScire transmitió en vivo.
Publicado por StreamYard · 2 d ·

Te compartimos el registro de asistencia:
<https://forms.gle/VJWasYe7tYjEf1h79>

Ponentes:
María Soledad Ramírez Montoya (Tecnológico de Monterrey)
José Vladimir Burgos Aguilar (Tecnológico de Monterrey)... [Ver más](#)

161 Personas alcanzadas

2 Me gusta, comentarios y contenido compartido

6 Clics en publicaciones

6 Clics para reproducir | **3** Clics en el enlace | **2** Clics de otro tipo

RENDIMIENTO DEL VIDEO

76 Reproducciones de video de 3 segundos | **17** Reproducciones de video de 1 minuto | **3:09** Promedio de minutos reproducidos

Retención del público
La mayor parte de tu público dejó de ver el video en la marca de **3:01**.

COMENTARIOS NEGATIVOS
0 Ocultar todas las publicaciones | **0** Ocultar publicación

Date: 7 December

Social Network: Facebook eScire-transmission

Link: <https://www.facebook.com/esciremx/videos/4663672480346136>

Results:

eScire transmitió en vivo.
Publicado por StreamYard · 1 d ·

Ponentes:
María Soledad Ramírez Montoya (Tecnológico de Monterrey)
José Vladimir Burgos Aguilar (Tecnológico de Monterrey)
Laura Icela González Pérez (Tecnológico de Monterrey)
Guillermo Pech (Red LaTEMx)... [Ver más](#)

Rendimiento de tu publicación

61 Personas alcanzadas

1 Me gusta, comentarios y contenido compartido

7 Clics en publicaciones

4 Clics para reproducir | **0** Clics en el enlace | **3** Clics de otro tipo

RENDIMIENTO DEL VIDEO

21 Reproducciones de video de 3 segundos | **5** Reproducciones de video de 1 minutos | **1:57** Promedio de minutos reproducidos

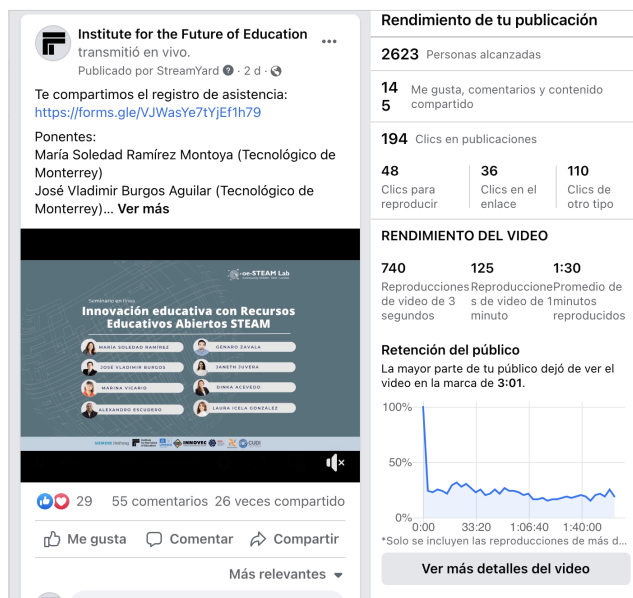
Retención del público
La mayor parte de tu público dejó de ver el video en la marca de **2:57**.

Date: 6 December

Social Network: Facebook IFE -broadcast

Enlace: <https://www.facebook.com/EdInnovationIFE/videos/3086128868282133>

Results:

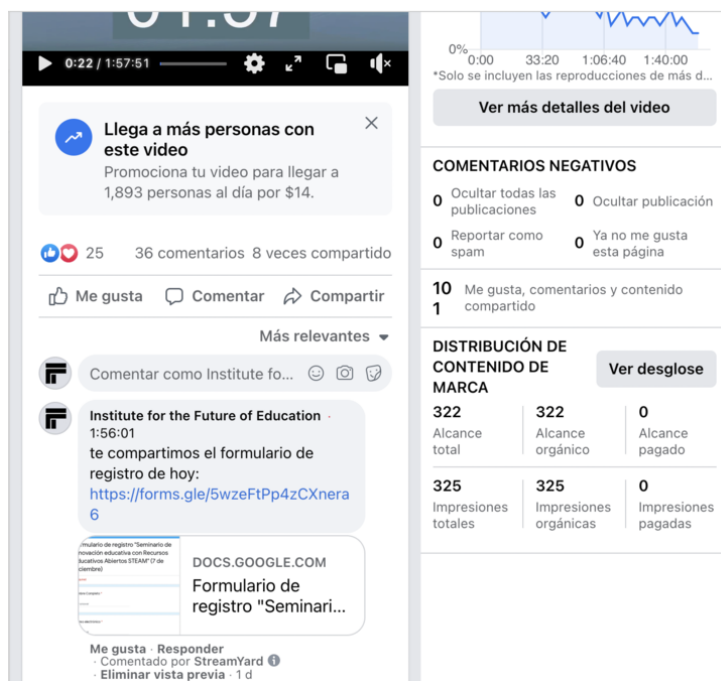


Date: 7 December

Social Network: Facebook IFE -broadcast

Link: <https://www.facebook.com/EdInnovationIFE/videos/454802399597269>

Results:



Date: 3 December

Social Network: Gmail mail campaign

Results:

Email Campaign Report		
Title:	Descubre sobre la educación STEAM y cómo impulsarla a través de Recursos Educativos Abiertos	
Delivery Date/Time:	Fri, Dec 3, 2021 1:48 pm	
Overall Stats		
Total Recipients:		891
Successful Deliveries:		889
Bounces:	2 (0.2%)	
Times Forwarded:		0
Forwarded Opens:		0
Recipients Who Opened:	266 (29.9%)	
Total Opens:		327
Last Open Date:	12/7/21 5:03PM	
Recipients Who Clicked:	51 (5.7%)	
Total Clicks:		94
Last Click Date:	12/6/21 10:19PM	
Total Unsubs:		0
Total Abuse Complaints:		0
Times Liked on Facebook:		0
Clicks by URL		
URL	Total Clicks	Unique Clicks
https://www.oer-steam.world/registro	83	44
https://www.oer-steam.world/calendario	10	8

Date: 6 December
Social Network: Gmail mail campaign
Results:

Email Campaign Report		
Title:	Aprende sobre los Recursos Educativos Abiertos para la innovación educativa	
Delivery Date/Time:	Mon, Dec 6, 2021 10:42 am	
Overall Stats		
Total Recipients:		891
Successful Deliveries:		889
Bounces:	2 (0.2%)	
Times Forwarded:		0
Forwarded Opens:		0
Recipients Who Opened:	117 (13.2%)	
Total Opens:		142
Last Open Date:	12/8/21 5:39PM	
Recipients Who Clicked:	6 (0.7%)	
Total Clicks:		12
Last Click Date:	12/7/21 9:37AM	
Total Unsubs:		0
Total Abuse Complaints:		0
Times Liked on Facebook:		0
Clicks by URL		
URL	Total Clicks	Unique Clicks
https://www.youtube.com/watch?v=G9Yk3OVq79s	4	3
https://www.oer-steam.world/registro	4	3
https://www.oer-steam.world/calendario	3	3

Date: 7 December

Social Network: Gmail mail campaign

Results:

Email Campaign Report		
Title:	¿Te gustaría aprender a utilizar los Recursos Educativos Abiertos para la innovación educativa?	
Delivery Date/Time:	Tue, Dec 7, 2021 10:09 am	
Overall Stats		
Total Recipients:		891
Successful Deliveries:		890
Bounces:	1 (0.1%)	
Times Forwarded:		0
Forwarded Opens:		0
Recipients Who Opened:	130 (14.6%)	
Total Opens:		157
Last Open Date:	12/8/21 5:38PM	
Recipients Who Clicked:	26 (2.9%)	
Total Clicks:		82
Last Click Date:	12/7/21 12:59PM	
Total Unsubs:		0
Total Abuse Complaints:		0
Times Liked on Facebook:		0
Clicks by URL		
URL	Total Clicks	Unique Clicks
https://www.oer-steam.world/registro	39	22
https://www.youtube.com/watch?v=9GLIX8JddDQ	23	23
https://www.facebook.com/106444028015350/posts/303302238329527/	19	19
https://www.oer-steam.world/calendario	1	1