

## Plan Overview

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*A Data Management Plan created using DMP Tool*

**DMP ID:** <https://doi.org/10.48321/D16S7D>

**Title:** DMSP for "RCN: Trans-Disciplinary Communication to Disseminate, Divulge, and Discuss (TDC3D) Network."

**Creator:** Cristo Yanez leon - **ORCID:** [0000-0002-0930-0179](https://orcid.org/0000-0002-0930-0179)

**Affiliation:** New Jersey Institute of Technology

**Principal Investigator:** Leon, Cristo , Lipuma, James , Bukiet, Bruce , Cowin, Jasmin , Oberer, Birgit , Cabobianco, Marcos O., Agudelo-Velásquez, Olga Lucía , Amaya-Fernández, Ferney Orlando, Ángel-Uribe, Isabel Cristina, Cano-Vásquez, Lina María, Xavier Oviedo Torres

**Data Manager:** Wolf, John , Williams, Keta

**Project Administrator:** Leon, Cristo

**Contributor:** Cabobianco, Marcos O., Ferdkin, Pedro , Morris-Pearson, Quinn I, Reich, Jeremy P. , Meng, Yi , Cabrera, Agustina , Meritano, Edgar , Callaos, Nagib , Pathikonda, Sirimuvva , Williams, Keta

**Funder:** National Science Foundation (nsf.gov)

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**Grant:** [https://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf23529](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23529)

**Template:** NSF-SBE: Social, Behavioral, Economic Sciences

### Project abstract:

This data management plan outlines the strategies for collecting and managing data for the "Trans-Disciplinary Communication to Disseminate, Divulge, and Discuss (TDC3D)" project. The data collection will include peer-reviewed open-access articles, creative commons digital resources, Systematic Literature Reviews (SLR) reports, researcher communications, protocols, and templates. The collected documents will be used for academic discussions, educational dissemination, and academic divulgation. The data will be collected electronically using various tools such as Microsoft Word, PDF Adobe, Microsoft Excel, ChatGPT, and Zotero. The data will be stored in a hierarchical folder and file structure on Google Drive, with proper metadata labeling. Quality assurance processes will be implemented to ensure data accuracy and validity. The project aims to develop articles for academic journals and divulgation materials to facilitate discussions on Trans-Disciplinary Communication.

**Start date:** 06-01-2023

**End date:** 05-31-2026

**Last modified:** 04-28-2025

### Copyright information:

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## DMSP for "RCN: Trans-Disciplinary Communication to Disseminate, Divulge, and Discuss (TDC3D) Network."

### Roles and responsibilities

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**The DMP should outline the rights and obligations of all parties as to their roles and responsibilities in the management and retention of research data. It should also consider changes to roles and responsibilities that will occur should a principal investigator or co-PI leave the institution or project. Any costs should be explained in the Budget Justification pages.**

The Data Management Plan (DMP) for the project "Trans-Disciplinary Communication to Disseminate, Divulge, and Discuss (TDC3D)" aims to facilitate collaboration among a Trans-Disciplinary, international group of collaborators to create articles on Trans-Disciplinary Communication. The DMP outlines the roles and responsibilities of different collaborators in the data management process.

- The project administrator will coordinate the curation of the data, serving as a central point of contact and ensuring the smooth flow of information among collaborators.
- The principal investigators will oversee the allocation of resources, coordinate activities, conduct research, and perform evaluation and assessment tasks.
- The data managers will be responsible for cleaning and organizing the data and assisting in its codification. In addition, they will ensure that the data is properly structured and formatted for analysis and further use.

If a collaborator changes institutions, appropriate steps will be taken to transfer their access and responsibilities to the new institution. Depending on the specific circumstances, this may involve transitioning from a principal investigator (PI) role to a co-PI or key person role.

It is important to note that no costs are associated with the DMP, indicating that the project will leverage open access and creative commons resources without incurring additional expenses.

Dr. Cristo Leon will implement the DMP, management activities, and responsibilities.

All participants will be responsible for following the DMP guidelines and managing their activities inside the repository.

If organizations require a consortium agreement or contract to be signed, we will consider it individually.

Overall, the DMP outlines the collaborative nature of the project, the specific roles of different collaborators, and the measures to accommodate changes in institutional affiliations while ensuring effective data management practices.

### Expected data

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**The DMP should describe the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project. It should then describe the expected types of data to be retained.**

The data collected for the project will include the following:

- Peer-reviewed open-access articles: The project will produce scholarly articles retained in digital format.
- Creative Commons digital resources: Various digital resources, such as videos, video recordings, images, infographics, posters, presentations, etc., will be used or created during the project and retained.
- Systematic Literature Reviews (SLR) reports: The project may involve conducting SLRs; the reports generated from these reviews will be retained as part of the project's data.
- Readme files: These files will provide information and citations for the project's open-source or Creative Commons materials.
- Transcripts of researcher communications and discussions: Communications and discussions among the researchers, including emails, video chats, etc., will be retained as transcripts.
- Protocols and templates: The project will generate protocols and templates as part of the research methodology, which will be retained.

The data collected will inform the theoretical framework and academic discussions within the Trans-Disciplinary research group, aiming to create new knowledge. The documents will be collected in informal and formal formats for educational dissemination purposes, including peer-reviewed articles, books, group discussions, conferences, and presentations. The volume of data collected will depend on the number of research articles and participating researchers. At the initiation stage, six researchers are involved in creating three papers.

The data will be collected through email communication and uploaded to a Google Drive provided by the project coordinator. Any copyrighted material added to the drive will require a Creative Commons license from the collaborative researchers. Open-source and Creative Commons materials will be properly cited in the readme files. The data will also be organized in a Zotero database, with metadata and data stored in folders, readme files, and bibliographic reports. The methodology for identifying and writing outcomes and the supporting materials will be documented, ensuring proper article credit and citations.

Microsoft Word, Adobe PDF, Microsoft Excel, ChatGPT, and Zotero will be used to collect data electronically. Google Drive will serve as the storage platform for the project's documents, allowing interested stakeholders long-term access and sharing capabilities. Additionally, existing data, such as Excel files or infographics created by the group, can be reused. All data will be shared under a Creative Commons license through the Bepress Digital Commons platform.

During the annual public report group meeting, an MP4 video recording, a computer-generated transcript (.TXT), and a metatext file for the chatbox entries (.TXT) will be created and uploaded to Google Drive. The project aims to develop articles disseminated via academic journals and divulgation materials to foster discussions around Trans-Disciplinary Communication.

Documentation and Metadata:

The accompanying documentation and metadata for the data will include:

- Description of the data: Detailed information about the data, including its representation, collection method, and relevant contextual details.

- Data format: Information about the file format and software used for creating and viewing the data.
- File naming convention: Consistent and descriptive file naming conventions to aid in identifying and locating specific files.
- Data structure: Information about the structure of the data, including data dictionaries or codebooks used.
- Variable descriptions: Detailed descriptions of the variables included in the data.
- Methodology: Information about the methods used for data collection and analysis.
- Quality assurance processes: Information about the processes to ensure data accuracy and validity.
- Ethics and privacy considerations: Information about any ethical or privacy considerations associated with the data.

To capture this documentation and metadata, various methods will be utilized:

- Digital Asset Network (DAN): A network will be created to share media files.
- Data Management Plan (DMP): A DMP will be developed to outline data collection, management, and sharing processes.
- Codebook: A codebook will be created to describe variables and their values in the data.
- README files: Brief descriptions of file contents will be provided in README files.
- Metadata tags: Metadata tags will be included in videos and documents to capture relevant information.

The choice of metadata standards will depend on the data collection type, with standards such as Dublin Core, ISO15836-1:2017, Data Documentation Initiative (DDI), and Metadata Encoding and Transmission Standard (METS) being used appropriately. The selected standards will ensure interoperability and easy discoverability of the metadata by other researchers. Zotero software will assist in collecting, organizing, annotating, citing, and sharing the research.

## Period of data retention

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**SBE is committed to timely and rapid data distribution. However, it recognizes that types of data can vary widely and that acceptable norms also vary by scientific discipline. It is strongly committed, however, to the underlying principle of timely access, and applicants should address how this will be met in their DMP statement.**

The data will be stored using NJIT's digital services, specifically through Google Education, which provides infinite storage capacity. Minimal data will be generated, and duplicate copies will be stored offline on an external hard drive for added safety. Responsibility for data backup and recovery will be shared among the research team. Each team member will regularly back up their data and store it securely. Automated and manual backup processes will ensure data security and accessibility in case of any incidents.

Access to the data will be managed through permissions and access controls. Only authorized personnel, including the project team and approved collaborators, will have access. Collaborators must sign a data-sharing agreement outlining their data management and security responsibilities. Admission will be reviewed annually to add or remove members as needed.

Rubrics, codebooks, and notebooks containing raw or hand-recorded data will be considered of long-term value and will be retained. In addition, notebooks will be scanned annually and electronically archived on the university server for additional backup protection. The data retention and preservation period will depend on contractual, legal, and regulatory requirements. Consultation with legal and regulatory experts is essential to determine appropriate retention periods. Data that hold value beyond the current project, such as for future research, replication studies, or meta-analyses, should be retained. Expenses associated with storing and preserving the data should be considered, and a plan for long-term preservation, including storage formats, metadata, and access controls, should be developed.

The long-term preservation plan involves permanently maintaining all raw and analyzed data, reports, books, and publications for at least three years from the end of the NSF award period or public release date. Reputable and secure data repositories or archives should be selected for storing the data, considering accessibility and compatibility with future technologies. Data deposition, curation, and long-term storage costs should be evaluated and budgeted accordingly.

Preparing the data for sharing and preservation requires cleaning, documenting, and formatting it according to standard guidelines, along with including relevant metadata. Sufficient resources and time should be allocated for this process to ensure proper preservation and accessibility of the data.

## Data format and dissemination

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**The DMP should describe data formats, media, and dissemination approaches that will be used to make data and metadata available to others. Policies for public access and sharing should be described, including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements. Research centers and major partnerships with industry or other user communities must also address how data are to be shared and managed with partners, center members, and other major stakeholders.**

### 4.1.1 What data will you collect or create?

The data collected for this project include peer-review open-access articles and creative commons digital resources (video, video recordings, images, infographics, posters, presentations, etc.) used by the researchers and or found in the Systematic Literature Reviews (SLR) reports, readme files, and transcripts of researchers communications and discussions (emails, video chats, etc.) as well as the protocols and templates generated during the project. The data will inform the theoretical framework and academic discussion amongst a Trans-Disciplinary research group to create new knowledge. The documents will be collected in informal and formal formats for various educational dissemination uses (e.i. peer-review articles, books, etc.) and for academic divulgation, such as group discussions and video recordings (e.i. conferences, presentations, etc.). The volume of data collected will depend on the number of research articles and participating researchers. Six researchers are involved in creating three papers at the time of initiation.

The documents will be collected through email or uploaded to a Google Drive provided by the coordinator of the "Trans-Disciplinary Communication to Disseminate, Divulge, and Discouss (TDC3D)" group, a Creative Commons license will have to be given by any of the collaborative researchers before any copyrighted material can be added to the drive. All additional open-source or Creative Commons materials will be properly cited on the readme files. The Documents will be added to a Zotero database, and all the meta-data and data will be stored in the folders with a read-me text and the bibliographic reports. The methodology developed to identify and write outcomes and the supporting materials will also be documented, ensuring proper credit is given to the participants and citations to articles provided.

Data will be collected electronically using Microsoft Word, PDF Adobe, Microsoft Excel, ChatGPT, and Zotero. The documents used in the project will be stored in Google Drive, allowing interested stakeholders to access and share the data in the long term. Additionally, we can reuse any existing data, such as Excel files or infographics created by the group. Everything will be shared as a Creative Commons file under the Bepress Digital Commons platform.

During the annual public report group meeting, an MP4 video recording, a computer-generated transcript (.TXT), and a metatext file for the chatbox entries (.TXT) will be created and uploaded to Google Drive. The project aims to develop articles disseminated via academic journals and divulgation materials to increase the discussions around Trans-Disciplinary Communication.

#### 4.1.2 How will the data be collected or created?

The project will create a small amount of data in documents (MS WORD). In addition, annual group WebEx videos as MP4s will also be made, and (.TXT) transcripts will be generated.

Eventually, a Zotero collection will be produced to gather documents and accompanying contextual items like keywords and attachments. That database, infographics, images, articles, and the subsequent spreadsheets will be data generated by the project.

Folder and file structure: To ensure efficient and effective data management, a hierarchical structure containing the following will be used:

- The main folder for the project
- 01 Codebook and DMP
  - 01.1 Collaborators' information (Bioksetch, CV, relevant certifications, etc.)
- 02 Data collected (e.g., Articles, video recordings, text transcripts, media files)
  - 02.1 Sources for the article
    - 02.1.1 Sub-folders for sources for the SLR
    - 02.1.2 Original Expert Resources
    - 02.1.3 Final Bibliography
  - 02.2 Focus Group: Video Recordings and Text Transcripts
  - 02.3 Media
    - Sub-folders for any additional contextual information (e.g., images, ppt)
  - 02.2.1 WebEx Videos
  - 02.2.2 Emails
- 02.4 AI Prompts
- 02.5 Excel SLR
- 03 Protocol documents
  - 03.1 Methods and models
  - 03.2 IRB Documents
- 04 Versions
  - 04.1 Abstract
    - 04.1.1 Submission information and requirements
      - Sub-folders for requirements
      - Communications
      - Guidelines and Format Templates
  - 04.2 Presentation
    - 04.2.1 Submission information and requirements
      - Sub-folders for requirements
      - Communications
      - Guidelines and Format Templates
    - 04.2.2 Presentation Versions
    - 04.2.3 Proofing and Final Publication
      - Presentation
      - Videos
      - Certificates
  - 04.3 Conference Paper
    - 04.3.1 Submission information and requirements
      - Sub-folders for requirements
      - Communications
      - Guidelines and Format Templates
    - 04.3.2 Conference Paper Versions
    - 04.3.3 Proofing and Final Publication
      - Presentation
      - Videos
      - Certificates
  - 04.4 Article Peer Review
    - 04.4.1 Submission information and requirements
      - Sub-folders for requirements
      - Communications
      - Guidelines and Format Templates
    - 04.4.2 Article Versions
    - 04.4.3 Proofing and Final Publication
      - Presentation
      - Videos
      - Certificates
    - 04.4.4 Additional Article Media

- 04.5 Book
  - 04.5.1 Submission information editorial and requirements
  - 04.5.2 Book Versions
  - 04.5.3 Proofing and Final Publication
    - Presentation
    - Videos
    - ISBN
  - 04.5.4 Additional Book Media
- 04.6 News and Additional Media
  - Press Release
  - Blogs post
  - LinkedIn Post
  - NSF Includes Calendar
  - Digital Commons
- 05. Contextual materials
  - 05.1 Glossary
  - 05.2 Reports

Naming convention:

The folders will be named with clear and descriptive titles and labeled with metadata to indicate important information, such as:

Date (YY-MM-DD)\_Channel\_Title

The files will be named with clear and descriptive titles and labeled with metadata to indicate important information, such as

Date (YY-MM-DD)\_Channel\_Title\_Item name (if needed)\_versioning.

Versioning: Version control is an essential aspect of data management to keep track of changes made to files over time.

- One approach is to adopt a naming convention that includes version numbers or dates in the file name.

4.1.3 Quality assurance processes: To ensure the accuracy and validity of the data, quality assurance processes may include checking for completeness and accuracy of the data during collection, performing data cleaning and validation, and conducting quality checks before analysis.

Guidelines for the quality check will be:

- Accessibility
- Correctness
- Validity check
- Correction notification
- Segregated
- Merging of repeated files

## 4.2. Documentation and Metadata

### 4.2.1 What documentation and metadata will accompany the data?

The videos will be created with standard metadata tags. The documents submitted by participants will be an uncontrolled sample. After data reduction and aggregation, the documents will be labeled and tagged with the study protocol information, date, time, and Zotero standard data.

- Description of the data: A detailed description, including what it represents, how it was collected, and any relevant contextual information.
- Data format: Information on the file format, including the software used to create and view the data.
- File naming convention: A consistent naming convention will help users identify and locate specific files.
- Data structure: Information on the data structure, including any data dictionaries or codebooks used.
- Variable descriptions: Detailed descriptions of the variables included in the data.
- Methodology: Information on the methods used to collect and analyze the data.
- Quality assurance processes: Information on the quality assurance processes used to ensure the accuracy and validity of the data.
- Ethics and privacy: Information on any ethical or privacy considerations related to the data.

To capture this documentation and metadata, a variety of methods will be used, including:

- Create a Digital Asset Network (DAN) to share media files.
- Creating a Data Management Plan (DMP) that outlines the data collection, management, and sharing processes.
- Developing a Codebook that describes the variables and their values in the data.
- Creating a README file that provides a brief description of the contents of each file.
- Including metadata tags in the videos and documents to capture relevant information.

The metadata standards will depend on the data collection type and the relevant metadata standards. Various standards, such as the Dublin Core, ISO15836-1:2017, Data Documentation Initiative (DDI), and Metadata Encoding and Transmission Standard (METS), will be used for appropriate research data. The chosen standards will ensure that the metadata is interoperable and easily discoverable by other researchers. We will use Zotero software to assist us in collecting, organizing, annotating, citing, and sharing our research.

## 4.3. Ethics and Legal Compliance

### 4.3.1 How will you manage any ethical issues?

To ensure that our study adheres to the ethical guidelines of the New Jersey Institute of Technology, the College of Science and Liberal Arts, and the State of New Jersey, if necessary additional ethical guidelines for collaborators will be added to the share folders we will take the following steps:

- Informed consent (if necessary for IRB): Before collecting any data, we will obtain informed consent from participants to ensure they understand the study's nature, purpose, and rights concerning their participation. Participants will be informed of the potential risks and benefits of the analysis, the data collection and storage methods, and any possible data sharing. They will also be informed of their right to withdraw from the study at any time.
- Protecting participant identity (if necessary for IRB): We will safeguard participant identity by anonymizing their data. Any identifiable information, such as names, email addresses, or student identification numbers, will be removed from the data before analysis. In cases where participants cannot be fully anonymized, such as in video recordings, we will obtain their consent for using and storing the recordings. All authors are required to share their academic information like position, email, etc. We will only share this information if it is contained in the scholarly articles created and disseminated via a Creative Commons license.
- Secure data storage and transfer: We will ensure secure data storage and transfer to prevent unauthorized access or disclosure. We will store the data using Google Drive, an encrypted platform with appropriate access controls. Access to the data will be restricted to authorized personnel, and we will use passwords and/or encryption to protect the data during transfer.
- Compliance with relevant regulations: Our project will comply with all applicable laws and regulations, such as the General Data Protection Regulation (GDPR) or the Health Insurance Portability and Accountability Act (HIPAA), depending on the data collection type. We will ensure we obtain necessary approvals, such as Institutional Review Board (IRB) approval, before commencing data collection. Any additional regulations or procedures for all collaborators will be added to the shared folders if necessary.

#### 4.3.2 How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

The participants in this study will hold the IP and Copyright on their academic papers. No other IP or copyrighted material will be generated within the study.

- The relevant individual employer's guidelines for IP ownership will be applied to each collaborator to be licensed for reuse under the Creative Commons (CC) license. This license will allow interested stakeholders to access and use the data generated in the study for non-commercial purposes.
- For any third-party data used in this study, copies of open-access materials or full citations with working hyperlinks will be included. The researchers will ensure that any restrictions on data reuse are respected according to the licenses, or permission will be sought if needed.
- In this study, we will not delay or limit data sharing. Nonetheless, any publication or patent-seeking activities will only occur after the data has been thoroughly analyzed and interpreted. This approach will guarantee that the conclusions drawn from the data are precise and dependable before they are disseminated to the public.

### Data storage and preservation of access

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**The DMP should describe physical and cyber resources and facilities that will be used for the effective preservation and storage of research data. These can include third party facilities and repositories.**

The DMP will utilize physical and cyber resources to preserve and store research data effectively. Here are the critical aspects of the plan:

**Physical storage:** Project personnel will maintain notebooks for raw or hand-recorded data in their respective offices. These notebooks and included data will be supported by specific personnel and stored securely. Additionally, department staff will electronically scan the notebooks annually for electronic archiving on the university server, providing an additional layer of backup protection.

**Data retention assessment:** The DMP recognizes the importance of identifying data that must be retained or destroyed for contractual, legal, or regulatory purposes. Consulting with legal and regulatory experts is essential to determine the appropriate retention period for different data types, considering the specific project requirements and applicable regulations.

**Value assessment:** The DMP acknowledges the need to assess the value of data beyond the current project. Data with potential uses in future research, follow-up studies, replication studies, or meta-analyses should be considered for long-term retention. In addition, the worth of data to the project and other researchers or institutions should be evaluated to inform decisions about managing and sharing the data.

**Long-term preservation plan:** The DMP outlines a plan for long-term preservation, aiming to maintain all raw data, analyzed data, reports, books, and publications. The data will be preserved permanently, adhering to the minimum retention period of three years from the end of any NSF award period or three years from the date of public release, as NSF policies require.

**Selection of data repositories or archives:** The DMP emphasizes the importance of selecting reputable and secure data repositories or archives capable of preserving the data for the required duration. The chosen repository or archive should also be accessible and compatible with future technologies. Consideration of associated costs, such as data deposition, curation, or long-term storage fees, will be factored into the decision-making process.

**Preparation for sharing and preservation:** The DMP recognizes the need for proper data preparation to facilitate sharing and protection. This involves data cleaning, documentation, formatting to conform to standard guidelines, and including relevant metadata. In addition, adequate allocation of resources and time will be ensured to ensure the data is properly preserved and accessible to those who need it.

By addressing these aspects, the DMP outlines the physical and cyber resources and facilities used for data storage and preservation and the strategies for long-term retention and accessibility of the research data.

### Additional possible data management requirements

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**More stringent data management requirements may be specified in particular NSF solicitations or result from local policies and best practices at the PI's home institution. Additional requirements will be specified in the program solicitation and award conditions. Principal Investigators to be supported by such programs must discuss how they will meet these additional requirements in their Data Management Plans.**

The project group and external educational and research community can access the data. To facilitate internal dissemination, project personnel will be encouraged to share data openly and store data needed by multiple stakeholders in appropriate folders. Shared data needs will be identified at project team meetings and through peer-to-peer interactions. Significant results will be disseminated externally through peer-reviewed journals, national and international conferences, and depositing data onto globally accessible databases where appropriate. Regular reports to NSF or sponsors may also be required. All data,

supporting information, and messages from the project funded by NSF will be made available to requesters within one month, subject to NJIT intellectual property requirements and NSF policies. A persistent identifier will be pursued to make data citation and retrieval easier (e.i. DOI). There is no mention of a separate plan for sharing the data.

Additional questions to consider:

How will potential users find out about your data?

- Collaborators identified in the code book and the DMP will have access to all the data.
- Potential additional users will be informed about data availability through peer-reviewed publications, conference presentations, and regular reports. In addition, any individual soliciting access will be reviewed and added to the collaborators if appropriate.

With whom will you share the data, and under what conditions?

- Data will be shared with external educational and research communities and project team members. Sharing will be subject to any restrictions imposed by NJIT intellectual property requirements and NSF policies. If necessary, we will add any additional conditions imposed by collaborators will also be followed.

Will you transfer data via a repository, handle requests directly or use another mechanism?

- Data will be transferred via globally accessible databases, direct requests, or another suitable mechanism.

When will you make the data available?

- Data will be available within one month of the request, subject to applicable restrictions.

Will you pursue getting a persistent identifier for your data?

- A persistent identifier will be pursued to facilitate data citation and retrieval. (e.g., DOI, ISBN, etc.)

Do you have any plan for divulgation separate from dissemination?

- A separate plan for divulgation will be created after the first year of the project to lunch the Trans-Disciplinary Communication annual convening to be held virtually via Digital Commons at NJIT
  - Conference videos will be shared with event participants.
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## Planned Research Outputs

### Text - "[003] Trans-Disciplinary Communication and Persuasion in Convergence Research Approach [Conference paper]"

Title: "Trans-Disciplinary Communication and Persuasion in Convergence Research Approach"

The paper explores persuasion in research, emphasizes the Trans-Disciplinary approach, studies communication types, & suggests future TD research.

It will be presented in [WMSCI 2023](#)

Date: 09-12-2023 12:00 to 12:30 pm

Meeting ID: 784 5627 2376

Passcode 0912

Via Zoom: <https://us04web.zoom.us/j/78456272376?pwd=fNOuiXO6FddVSkr0v2yaMhkza1UBR.1>

#### APA:

León, C., Lipuma, J., & Cabobianco, M. O. (2023). Trans-Disciplinary Communication and Persuasion in Convergence Research Approach. En N. Callaos, E. Gaile-Sarkane, S. Hashimoto, N. Lace, B. Sánchez, & M. Savoie (Eds.), International Institute of Informatics and Systemics 2023 Summer Conferences Proceedings (CLDM\_Ds; pp. 312-319). International Institute of Informatics and Cybernetics; /Research/Collaboration & Convergence. <https://doi.org/10.54808/WMSCI2023.01.312>

### Text - "[005] Trans-Disciplinary Communication in the ChatGPT Age [Conference paper]"

Title: "Trans-Disciplinary Communication in the ChatGPT Age: A systems perspective"

**Short abstract:** Trans-disciplinarity in the metaverse is pivotal yet elusive; research is needed to define its application and connection to systems thinking.

**Publisher:** It will be presented at [WMSCI2023](#)

**Date:** 09/12/2023

**Additional links:** none

#### APA Citation:

Cowin, J., Oberer, B., & León, C. (2023). Trans-Disciplinary Communication in the ChatGPT Age: A Systems Perspective. En N. Callaos, J. Horne, B. Sánchez, & M. Savoie (Eds.), Proceedings of the 17th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2023 (CLDM\_Ds; pp. 138-144). International Institute of Informatics and Cybernetics; /Research/Collaboration & Convergence. <https://doi.org/10.54808/IMSCI2023.01.138>

### Text - "[004] Disclosure of Support Statement: Increasing Student Transparency About Support from Software Like ChatGPT [Conference paper]"

The article introduces a Disclosure of Support Statement (DSS) tool to foster transparency and student engagement in writing by reflecting on human and software supports, exploring ethical implications, and enhancing critical thinking, integrity, and writing skills through a pilot study.

It was presented at [IMSCI 2023](#)

APA Citation:

- Lipuma, J., & León, C. (2023a). Disclosure of Support Statement: Increasing Student Transparency About Support from Software Like ChatGPT [Conference paper]. En N. Callaos, J. Horne, B. Sánchez, & M. Savoie (Eds.), Proceedings of the 17th International Multi-Conference on Society, Cybernetics and Informatics: IMSCI 2023 (CLDM\_Ds; pp. 51-55). International Institute of Informatics and Cybernetics; /Research/Education. <https://doi.org/10.54808/IMSCI2023.01.51>
- Lipuma, J., & León, C. (2023b, mayo 21). Disclosure of Support Statement (DSS): Reflection Tool for Students [Document] (CLDM\_Dv). STEM for Success; /Research/Education. <https://digitalcommons.njit.edu/stemresources/38>
- Lipuma, J., & León, C. (2023c, septiembre 9). Disclosure of Support Statement (DSS) Template [Document] (CLDM\_Dv). STEM for Success; /Research/Education. <https://doi.org/10.13140/RG.2.2.13652.37766>
- Lipuma, J., & León, C. (2024). Disclosure of Support Statement: Increasing Student Transparency About Support from Software Like ChatGPT [Peer-reviewed journal]. Journal of Engineering Research, 4(7), 11. /Research/Education. <https://doi.org/10.22533/at.ed.317472426025>

### Text - "[002] Data Management Sharing Plan: Fostering Effective Trans-Disciplinary Communication in Collaborative Research [Keynote]"

DMSPs ensure effective research data handling and preservation; this paper explores federal guidelines, formats, roles, and standards involved.

A key note to be presented at [WMSCI 2023](#)

Meeting id: 943 2061 6861

Passcode: 0912

Via Zoom: <https://njit-edu.zoom.us/j/94320616861?pwd=N0pkbnZGQjNaS2N4aVgzUUxvSmJyUT09>

NSF INCLUDES a calendar [link](#)

APA Citation:



Leon, C., & Lipuma, J. (2023, September 12). Data Management Sharing Plan: Fostering Effective Trans-Disciplinary Communication in Collaborative Research [Keynote] [Keynote]. Proceedings of the 27th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2023, Online. <https://www.iiis2023.org/wmsci/website/keynotespeakers.asp?vc=1>

### Text - "[014] The (Algorithmic) Cage [Presentation]"

**Title:** "The (Algorithmic) Cage"

**Short abstract:** The paper explores the new generation of communication technologies, AI's impact on employment, the digitization of language, and the challenges of the digital divide. It emphasizes the need for interdisciplinary efforts to navigate evolving trends.

**Publisher:** This will be presented at [European Cultures in Business and Corporate Communication \(EUCCO\) 2023](#).

**Date:** 10-19-2023

**Additional links:** none

#### APA Citation:

Cowin, J., Leon, C., & Oberer, B. (2023, October 19). The (Algorithmic) Cage [Presentation] [Power Point]. European Cultures in Business and Corporate Communication (EUCCO) 2023, Lucerne. <https://www.linkedin.com/pulse/euco-2023-mandy-hommel-zkque/>

### Text - "[007] Exploring Student Self-Assessment in General Education [eBook]"

**Title:** "Exploring Student Self-Assessment in General Education: A Pilot Study Using Surveying Tools"

**Short abstract:** The study links MSCHE accreditation with institutional effectiveness in GER, examining student self-awareness and assessment tools using a Likert scale survey. The Spring 2023 pilot confirmed the feasibility and promoted educational connections, intertwining GER coursework with student capabilities.

**Publisher:** An article to be presented in Academia Journals Tlahuac Mexico September 2023

**Date:** 09/12/2023

**Additional links:** [YouTube presentation \(Español\)](#)

#### APA Citation:

León, C. (Director). (2023, September 11). Explorando la Autoevaluación de Estudiantes en Educación General [Video presentacion TLA040] (CLDM\_Dv) [YouTube]. /Research/Education. <https://www.youtube.com/watch?v=uFoX7tBzXvA>

Yáñez León, C. E., Lipuma, J., Meng, Y., & Reich, J. (2023a). Exploring Student Self-Assessment in General Education: A Pilot Study Using Surveying Tools [Conference article]. Congreso Internacional de Investigación Academia Journals Tláhuac 2023, 15(7), 125–132. /Research/Education.

Yáñez León, C. E., Lipuma, J., Meng, Y., & Reich, J. (2023b). Exploring Student Self-Assessment in General Education: A Pilot Study Using Surveying Tools [eBook]. In Las Ciencias de la Educación y los Adelantos en Tecnología, Desarrollo e Industria 4.0—Tláhuac 2023 [eBook] (CLDM\_Ds; 1st ed., Vol. 15, pp. 125–132). Academia Journals; /Research/Education. <https://static1.squarespace.com/static/55564587e4b0d1d3fb1eda6b/t/6513000b9e6bd55442c339f7/1695744018615/Las+Ciencias+de+la+Educación+y+los+A+Tláhuac+2023+-+Academia+Journals.pdf>

### Event - "[006] A Brave New World: AI as a Nascent Regime? [JSCI] "

**Title:** "A Brave New World: AI as a Nascent Regime?"

Huxley's 'Brave New World' mirrors today's AI tech; the article warns of losing humanity through uniformity, urging ethical, trans-disciplinary care. A key note to be presented at [WMSCI2023](#)

**Date:** 09/12/2023 8:40 AM to 9:15 AM

**Meeting id:** 765 611 3536

**Passcode:** none

**Via Zoom:** <https://zoom.us/j/7656113536>

#### APA Citation:

Cowin, J., Oberer, B., & León, C. (2023, September 12). A Brave New World: AI as a Nascent Regime [Keynote]. Proceedings of the 27th World Multi-Conference on Systemics, Cybernetics and Informatics: WMSCI 2023, Online. <https://www.iiis2023.org/wmsci/website/keynotespeakers.asp?vc=1>

Cowin, J., Oberer, B., & León, C. (2023). A Brave New World: AI as a Nascent Regime? [JSCI]. Journal of Systemics, Cybernetics and Informatics, 21(4), 58–66. /Research/Collaboration & Convergence. <https://doi.org/10.54808/JSCI.21.04.58>

### Text - "[008] Using Trans-Disciplinary Communication in the Design of General Education Program Assessment [Conference paper] "

**Title:** "Using Trans-Disciplinary Communication in the Design of General Education Program Assessment: A case study"

**Short abstract:** This paper on NJIT's GER program assessment details TDC's role in design, implementation, collaboration, and challenges and offers co-design tips, which will be presented at the [WMSCI 2023](#)

**Publisher:** It will be presented at the WMSCI EISTA CISCi 2023

**Date:** Sep 14, 2023 10:00 AM Eastern Time (US and Canada)

Meeting ID: 918 9633 2278

Passcode: 345769

Via Zoom: <https://njit-edu.zoom.us/j/91896332278?pwd=V21GWkVBM0oxcFIBMVZqZkUvNnNvQT09>

APA Citation:

- Reich, J. P., Lipuma, J., & León, C. (2023). Using Trans-Disciplinary Communication in the Design of General Education Program Assessment: A Case Study [Conference paper]. In E. Gaile-Sarkane, S. Hashimoto, N. Lace, B. Sánchez, M. Savoie, & N. Callaos (Eds.), International Institute of Informatics and Systemics 2023 Summer Conferences Proceedings (CLDM\_Ds; pp. 122–128). International Institute of Informatics and Cybernetics; /Research/Collaboration & Convergence. <https://doi.org/10.54808/WMSCI2023.01.122>
- Reich, J. P., Lipuma, J., & León, C. (2024). Using Trans-Disciplinary Communication in the Design of General Education Program Assessment: A Case Study [Peer-reviewed journal]. International Journal of Human Sciences Research, 4(10), 1-13. /Research/Collaboration & Convergence. <https://doi.org/10.22533/at.ed.5584102414034>

### Text - "[009] Desafíos y Oportunidades en la Alfabetización STEM [Artículo en conferencia]"

**Título:** "Desafíos y Oportunidades en la Alfabetización STEM: Una mirada desde la perspectiva de los jóvenes en América Latina"

**Short abstract:** La falta de educación en STEM limita la contribución social y laboral juvenil; la pandemia exacerbó el problema. La alfabetización en STEM, enfocada en colaboración e interdisciplina, es vital para una educación equitativa.

**Publisher:** La cual será presentada por Agustina Cabrera en [CISCi 2023](#)

**Date:** Sep 14, 2023 03:30 PM Eastern Time (US and Canada)

Meeting ID: 755 2540 5594

Passcode 0914

Via Zoom: <https://us04web.zoom.us/j/75525405594?pwd=3bmo0ue37WXb1GEgWeN7Cfb6a11VOX.1>

APA Citation:

Cabrera, A., Cabobianco, M. O., & León, C. (2023). Desafíos y Oportunidades en la Alfabetización STEM: Una Mirada desde la Perspectiva de los Jóvenes en América Latina [Artículo en conferencia] (CLDM\_Ds). 226–232. /Research/Education. <https://doi.org/10.54808/CISCi2023.01.226>

### Text - "24/05/12 [C] New"

Title: ""

Short abstract: lore ipsum

Publisher: [link]

Date: MM/DD/YYYY

Additional links:

APA Citation:

### Text - "[013] Accelerating Higher Education Transformation: Simulation-Based Training and AI Coaching for Educators-in-Training [ICL]"

**Title:** "Accelerating Higher Education Transformation: Simulation-Based Training and AI Coaching for Educators-in-Training"

**Short abstract:** AI and simulation-based training empower educators-in-training to navigate 21st-century classrooms, aligning with SDG 4 Quality Education goals.

**Publisher:** This will be presented at [ICL 2023](#), Springer Nature Switzerland

Date: September 26, 2023

Additional links: None

**APA Citation:**

Cowin, J., Oberer, B., Lipuma, J., Leon, C., & Erkollar, A. (2023, September 26). Accelerating Higher Education Transformation: Simulation-Based Training and AI Coaching for Educators-in-Training [Presentation] [Conference]. International Conference on Interactive Collaborative Learning (ICL 2023), Madrid, Spain. <http://icl-conference.org/icl2023/>

Cowin, J., Oberer, B., Lipuma, J., Leon, C., & Erkollar, A. (2024). Accelerating Higher Education Transformation: Simulation-Based Training and AI Coaching for Educators-in-Training [ICL]. In M. E. Auer, U. R. Cukierman, E. Vendrell Vidal, & E. Tovar Caro (Eds.), Towards a Hybrid, Flexible and Socially Engaged Higher Education (CLDM\_Dv; Vol. 899, pp. 532–541). Springer Nature Switzerland; /Research/Education. [https://doi.org/10.1007/978-3-031-51979-6\\_55](https://doi.org/10.1007/978-3-031-51979-6_55)

### Text - "[001] Supporting Correctional Educators Through Online Coaching Using a Video Communications Platform [Conference Paper]"

Title: "Supporting Correctional Educators Through Online Coaching Using a Video Communications Platform"

**Short abstract:** Teaching leads to burnout, but virtual training can help. Challenges are unique in juvenile correctional facilities, where technology offers low-cost, rarely used professional development opportunities; online coaching is beneficial during isolation.

**Publisher:** This was presented at SITE Interactive.

**Date:** August 07, 2023

**Additional links:** None

**APA Citation:**

Clark, J., Lipuma, J., & Leon, C. (2023, August 7). Supporting Correctional Educators Through Online Coaching Using a Video Communications Platform [Conference presentation]. Proceedings of SITE Interactive Conference. SITE Interactive 2023 Online Conference, Waynesville, NC, USA. /Research/Education. <https://academicexperts.org/conf/interactive/2023/papers/62720/>

## **Event - "[010] Leveraging Trans-Disciplinary Communication for Policy Making [Abstract] "**

**Title:** "Leveraging Trans-Disciplinary Communication for Policy Making"

**Short abstract:** At the 2023 NSF Convening, the author used TDC to foster inclusivity and knowledge sharing, emphasizing dissemination needs.

**Publisher:** A virtual presentation to be presented at WMSCI AFTC 2023

**Date:** Sep 15, 2023 03:30 PM Eastern Time (US and Canada)

**Additional links:**

Meeting id: 985 2148 1295

Passcode: 0915

Via Zoom: <https://njit-edu.zoom.us/j/98521481295?pwd=TnNYZkoybkRaMnhSS3l6aldudEp3Zz09>

**APA Citation:**

- León, C. (2023a). Leveraging Trans-Disciplinary Communication for Policy Making [Abstract]. Abstracts Proceedings of The Virtual Second Meeting of The International Association FOR Trans-Disciplinary Communication, 35. /Research/Collaboration & Convergence. [https://www.academia.edu/107745793/WMSCI\\_2023\\_Abstracts\\_Prceedings?email\\_work\\_card=title](https://www.academia.edu/107745793/WMSCI_2023_Abstracts_Prceedings?email_work_card=title)
- León, C. (2023b, September 15). Leveraging Trans-Disciplinary Communication for Policy Making [Virtual Presentation] [Virtual Presentation via Zoom]. The First Meeting of the International Association FOR Trans-Disciplinary Communications (AFTC), Virtual Conference. <https://njit-edu.zoom.us/j/98521481295?pwd=TnNYZkoybkRaMnhSS3l6aldudEp3Zz09>

## **Event - "[011] Trans-Disciplinary Communication in Collaborative Co-Design for Knowledge Sharing [Abstract] "**

**Title:** "Trans-Disciplinary Communication in Collaborative Co-Design for Knowledge Sharing"

**Short abstract:** TDC in CCD for knowledge sharing focuses on listening, translation, facilitation. Offers real-world examples, vital for academics & policy-makers

**Publisher:** A virtual presentation to be presented at WMSCI AFTC 2023

**Date:** Sep 15, 2023 01:30 PM Eastern Time (US and Canada)

**Additional links:**

Meeting id: 915 2213 8102

Passcode: 0915

Via Zoom: <https://njit-edu.zoom.us/j/91522138102?pwd=VmphSzVtNFdrV3NCWEhLK0JlWXE3UT09>

**APA Citation:**

Lipuma, J., & León, C. (2023a). Trans-Disciplinary Communication in Collaborative Co-Design for Knowledge Sharing [Abstract]. Abstracts Proceedings of The Virtual Second Meeting of The International Association FOR Trans-Disciplinary Communication, 35. /Research/Collaboration & Convergence. [https://www.academia.edu/107745793/WMSCI\\_2023\\_Abstracts\\_Prceedings?email\\_work\\_card=title](https://www.academia.edu/107745793/WMSCI_2023_Abstracts_Prceedings?email_work_card=title)

Lipuma, J., & León, C. (2023b, September 15). Trans-Disciplinary Communication in Collaborative Co-Design for Knowledge Sharing [Virtual Presentation] [Virtual Presentation via Zoom]. The First Meeting of the International Association FOR Trans-Disciplinary Communications (AFTC), Virtual Conference. <https://njit-edu.zoom.us/j/91522138102?pwd=VmphSzVtNFdrV3NCWEhLK0JlWXE3UT09>

## **Event - "[015] 1st meeting of the American Association for Trans-Disciplinary Communication (AFTDC)"**

**Title:** "1st meeting of the American Association for Trans-Disciplinary Communication (AFTDC)"

**Short abstract:** In an era where interdisciplinary collaboration is key to innovation, the American Association for Trans-Disciplinary Communication (AFTDC) fosters dynamic dialogues and partnerships. Our virtual meeting is not just an event; it's a collective journey toward redefining the boundaries of collaborative and social innovation.

Our mission extends beyond the mere establishment of new chapters. We are committed to nurturing a vibrant, inclusive community where diverse voices and ideas converge. This gathering is an open invitation to all who are passionate about trans-disciplinary communication. Whether you are an academic, practitioner, student, or enthusiast, your unique perspectives are vital in shaping an organization that truly reflects the multifaceted nature of TDC.

**Publisher:** New Jersey Institute of Technology

**Date:** 01/03/2024

**Additional links:** <https://digitalcommons.njit.edu/tdc/>

**APA Citation:**

- León, C. (2024, enero 3). AFTDC 2024 Session II Español—Open Science Framework (OSF) como Herramienta para la Colaboración Transdisciplinaria [Presentación] [Conferencia académica virtual]. Clarifying Trans-Disciplinary Approaches, New Jersey Institute of Technology. <https://digitalcommons.njit.edu/tdc/2024AFTDC/Kickoff/2/>
- León, C., Lipuma, J., Meritano Corrales, E., Cabobianco, M., Callaos, N., & Cowin, J. (2024, enero 3). AFTDC 2024 Open Discussion on the Association's Vision: An Opportunity for All Members to Share and Shape the Future Direction of AFTDC [Presentation] [Panel Discussion]. Clarifying Trans-Disciplinary Approaches, New Jersey Institute of Technology. <https://digitalcommons.njit.edu/tdc/2024AFTDC/Kickoff/3/>
- Lipuma, J., & León, C. (2024a, enero 3). AFTDC 2024 Roundtable I - Collaborative Convergence Pyramid: A Framework for TDC [Presentation] [Roundtable]. Clarifying Trans-Disciplinary Approaches, New Jersey Institute of Technology. <https://digitalcommons.njit.edu/tdc/2024AFTDC/Kickoff/5/>
- Lipuma, J., & León, C. (2024b, enero 3). AFTDC 2024 Welcome and Opening Remarks [Presentation] [Virtual]. Clarifying Trans-Disciplinary Approaches, New Jersey Institute of Technology. <https://digitalcommons.njit.edu/tdc/2024AFTDC/Kickoff/6/>

**Text - "[012] WMSCI 2023 - Abstracts Proceedings [JSCI]"**

**Title:** "WMSCI 2023 - Abstracts Proceedings [JSCI]"

**Short abstract:** These abstracts and proceedings are related to the virtual presentation made at the Second Meeting of the International Association FOR Trans-Disciplinary Communication (AFTC).

**Publisher:** The International Institute of Informatics and Systemics (IIIS)

**Date:** 09/15/2023

**Additional links:** None

**APA Citation:**

Leon, C., & Lipuma, J. (2023). WMSCI 2023—Abstracts Proceedings [JSCI]. WMSCI 2023 - Abstracts Proceedings, 35. /Research/Collaboration & Convergence. [https://www.academia.edu/107745793/WMSCI\\_2023\\_Abstracts\\_Proceedings](https://www.academia.edu/107745793/WMSCI_2023_Abstracts_Proceedings)

**Text - "[016] Reflections on Communication, Collaboration, and Convergence: Strategic Models for STEM Education and Research [First Edition, Print]"**

This book explores over five years of research experience and practice around learning and education systems especially related to Science, Technology, Engineering, and Math (STEM). It is a collection of ideas on how to Communicate with stakeholders to increase Collaboration and impact Convergence. The following collection of articles is based on primary empirical research, which, taken together, spans several years and numerous sponsored research endeavors, presents frameworks for thinking about STEM knowledge transfer and student character building as well as practical suggestions for everyday praxis. Through its pages, the reader will explore strategic models for STEM education and research, analyzing the communication processes and their relationship with language while considering their impact on Trans-Disciplinary Collaboration for innovation.

Lipuma, J., León, C., & Guzmán Zarate, V. H. (with Wolf, J.). (2023). Reflections on Communication, Collaboration, and Convergence: Strategic Models for STEM Education and Research [First Edition, Print] (CLDM\_LDO; 1st ed.). Mito; /Research/Collaboration & Convergence. <https://digitalcommons.njit.edu/stemresources/37/>

**Text - "[017] Towards a Hybrid, Flexible and Socially Engaged Higher Education: Proceedings of the 26th International Conference on Interactive Collaborative Learning, ICL2023"**

We are currently witnessing a significant transformation in the development of education on all levels and especially in post-secondary education. To face these challenges, higher education must find innovative and effective ways to respond in a proper way. The pandemic period left us with profound changes in the way we teach and learn, including the massive use of new means of communication, such as videoconferencing and other technological tools. Moreover, the current explosion of artificial intelligence tools, mainly used by students, is challenging teaching practices maintained for centuries. Scientifically based statements as well as excellent best practice examples are absolutely necessary. The 26th International Conference on Interactive Collaborative Learning (ICL2023), which will take place in Madrid, Spain, between 26th and 30th September 2023, will be the perfect place where to present and discuss current trends in Higher Education.

Since its beginning in 1998 this conference is devoted to new approaches in learning with a focus on collaborative learning in Higher Education. Nowadays the ICL conferences are a forum of the exchange of relevant trends and research results as well as the presentation of practical experiences in Learning and Engineering Pedagogy. In this way we try to bridge the gap between 'pure' scientific research and the everyday work of educators.

**APA Citations:**

- Auer, M. E., Cukierman, U. R., Vendrell Vidal, E., Tovar Caro, E., & León (Eds.). (2024). Towards a Hybrid, Flexible and Socially Engaged Higher Education: Proceedings of the 26th International Conference on Interactive Collaborative Learning, ICL2023 [First Edition, Softcover] (CLDM\_Ds; 1.a ed., Vol. 1). Springer Cham; /Research/Education. <https://link.springer.com/book/9783031533815>
- León, C. (2024). Towards a Hybrid, Flexible and Socially Engaged Higher Education: Proceedings of the 26th International Conference on Interactive Collaborative Learning, ICL2023 [First Edition, eBook] (M. E. Auer, U. R. Cukierman, E. Vendrell Vidal, & E. Tovar Caro, Eds.; CLDM\_Ds; 1.a ed., Vol. 1). Springer Cham; /Research/Education. <https://link.springer.com/book/9783031533815>

**Event - "[018] Overcoming Obstacles to Interdisciplinary Research: Empirical Insights and Strategies for Transdisciplinary Communication [Presentation]"**

This research paper presented the significant obstacles to effective interdisciplinary research and discussed strategies to enhance transdisciplinary communication necessary to overcome them. Recognizing the pivotal role of interdisciplinary collaboration in tackling complex global issues, this study examined the importance of overcoming communicative barriers to foster innovation and progress. The researchers employed a systematic literature review with a grounded theory approach to navigate the empirical landscape surrounding interdisciplinary research barriers and communication strategies. The findings identified critical barriers, including diverse disciplinary jargon, methodological differences, and a prevailing culture of disciplinary silos. Notably, the researchers identified effective strategies for surmounting these challenges, such as the promotion of inclusive research environments, the establishment of a common language for interdisciplinary dialogue, and the importance of creating opportunities for cross-disciplinary training and collaboration. The implications of this research suggested that strategic transdisciplinary communication can significantly mitigate barriers to interdisciplinary research, thereby enhancing collaborative outcomes. The authors included two practical examples of the application of transdisciplinary communication to the research collaboration. Moreover, the paper examined specific, actionable strategies that institutions and researchers can implement to foster a more conducive environment for interdisciplinary endeavors. Future directions highlighted in this paper included the need for further empirical research to refine the identified strategies and explore new methodologies for facilitating interdisciplinary collaboration. Additionally, the researchers emphasized the importance of institutional support in implementing these strategies, suggesting a holistic approach to encouraging transdisciplinary communication and collaboration.

Apa Citation:

- León, C., & Lipuma, J. (2024, marzo 29). Overcoming Obstacles to Interdisciplinary Research: Empirical Insights and Strategies for Transdisciplinary Communication [Presentation] [Virtual]. Third Meeting of the International Association FOR Trans-Disciplinary Communications (AFTC), Online. <https://digitalcommons.njit.edu/stemresources/72/>

### Text - "[019] Comunicación Transdisciplinaria [Artículo corto en conferencia]"

Resumen El artículo es relativo a la importancia de la Comunicación Transdisciplinaria y sus beneficios tanto a nivel personal 1 , i como colectivo. Se destaca que este tipo de comunicación implica un esfuerzo intelectual que contribuye al desarrollo de habilidades cognitivas, al pensamiento crítico y a la creatividad. La traducción a un lenguaje transdisciplinario se considera valiosa, ya que crea 2 , ii nuevas redes neurales, debido a la plasticidad del cerebro, y mejora la eficiencia 3 , iii de las existentes. La comunicación transdisciplinaria es un medio para crear bien personal y bien común 4. iv Hay dos enfoques, en general, para lograrla: utilizando un traductor o realizando un esfuerzo intelectual propio. En cualquiera de los dos casos hay que tener presente que una disciplina es un medio no un fin en sí misma. Tomarla como fin en sí misma sería una falacia lógica en el contexto de la lógica de medios y fines. Por otro lado, un trabajo disciplinario revisado y aprobado por sus pares en la misma disciplina, aumento su rigor intelectual al ser traducido a otro sistema semiótico que es el transdisciplinario. Con ello se cumple otro objetivo y en el contexto de más restricciones, el del sistema semiótico transdisciplinario. Mientras objetivos se logran y/o con más restricciones es mayor el rigor. Igual sucede con el rigor deportivo, musical, espiritual, etc. Este es el significado de rigor en general. 1 Es de notar que estamos usando el término "personal" en lugar de "individual" y es porque queremos enfatizar en el individuo relacionado, ya que se trata de Comunicación Transdisciplinaria, y la comunicación se basa en individuos relacionados, es decir "personas". 2 Usamos el término "crea" porque requiere nuevas neuronas o nuevas sinapsis entre las ya existentes. La traducción a un lenguaje transdisciplinario requiere un profundo entendimiento de la disciplina en cuestión y la capacidad de comunicarla de manera clara y accesible. La cita atribuida Einstein ["si no se lo puedes explicar a tu abuela es porque no lo has entendido" ] resalta la importancia de esta claridad en la comunicación del conocimiento. Si bien la neurogénesis es un proceso biológico, el esfuerzo intelectual y la comprensión profunda pueden estar relacionados con procesos cognitivos que influyen en la plasticidad cerebral y el aprendizaje. 3 No referimos a la eficiencia y no a la efectividad (ya que esa depende de crear nuevas redes neurológicas) y la eficacia depende tanto de la efectividad como de la eficiencia. 4 El "bien" es una noción integral y holística; abarca tanto al bien-estar como al bien-ser, es decir: lo tangible(material) y lo intangible (desarrollo intelectual y/o espiritual)

Apa

- Callaos, N., & León, C. (2024a). Comunicación Transdisciplinaria [Artículo corto en conferencia]. Memorias: Artículos Cortos, 32-37. /Research/Collaboration & Convergence. <https://www.academia.edu/118380764/>
- Callaos, N., & León, C. (2024b). Comunicación Transdisciplinaria (Versión 3/2/2024) [Preprint] (CLDM\_Dv). Academia; /Research/Collaboration & Convergence. <https://www.researchgate.net/publication/378681635>

### Text - "[020] Collaborative Convergence: Finding the Language for Trans-Disciplinary Communication to Occur [Peer-reviewed journal]"

The proper study of communication from existing models opens the doors to scientific research that allows exploring language and coding as an integral part of effective communication to generate new models that include Trans-Disciplinary Collaboration. The authors analyze the communication factors to describe the application of Trans-Disciplinary Communication.

This paper aims to define communication processes and their relationship with language, considering their impact on trans-disciplinary collaboration and innovation.

After conducting a systematic literature review, the article explored the concepts of communication, functions, language, and Trans-Disciplinary Communication. This led to its application in the convergence research approach presented in the Collaborative Convergence Pyramid.

Apa

- León, C., & Lipuma, J. (2022a). Collaborative Convergence: Finding the Language for Trans-Disciplinary Communication to Occur [Invited conference paper]. WMSCI 2022, 1, 147-150. /Research/Collaboration & Convergence. <https://doi.org/10.54808/WMSCI2022.01.147>
- León, C., & Lipuma, J. (2022b, junio 20). Collaborative Convergence: Finding the Language for Trans-Disciplinary Communication to Occur [Presentation] [Keynote]. EISTA 2022 Synchronous Presentations, Orlando, Florida, United States. [https://www.iis2022.org/imsci/program/prog\\_synch.asp?vc=5#/](https://www.iis2022.org/imsci/program/prog_synch.asp?vc=5#/)
- León, C., & Lipuma, J. (2024). Collaborative Convergence: Finding the Language for Trans-Disciplinary Communication to Occur [Peer-reviewed journal]. Brazilian Journal of Business, 6(2), 1-5. /Research/Collaboration & Convergence. <https://doi.org/10.34140/bjbv6n2-008>

### Event - "[022] Empowering STEM Through Inclusive Grants and Engagement: A Path Forward [Presentation]"

Duration: 1 Hour

Objective: This keynote intends to provide STEM faculty and researchers with a comprehensive understanding of inclusive grant opportunities and effective grant-writing techniques. It aims to empower participants with strategies to enhance diversity, equity, and inclusion in STEM education, particularly focusing on engaging underrepresented groups such as Latinx and Spanish-speaking students. By the end of the session, attendees will be equipped with the knowledge and tools necessary to leverage grant funding and implement initiatives that foster broader participation and inclusivity in STEM fields.

Guiding questions

Why is it imperative for educators and researchers to prioritize diversity and inclusion in STEM initiatives, and how can targeted grant opportunities and engagement practices serve as catalysts for meaningful change in this regard?

How can educators and researchers navigate the complex landscape of federal grants to secure funding for STEM initiatives?

What specific methods and approaches can be employed to broaden the participation of underrepresented groups, such as Latinx and Spanish-speaking students, in STEM research and learning opportunities?

<https://www.cristoleon.com/project/empowering-stem-through-inclusive-grants-and-engagement-keynote/>

**Text - "[021] Colaboración Interdisciplinaria: Tablero de Control para una Institución Politécnica R01 en los EE. UU. [Tesis]"**

León, C. (2024). Colaboración Interdisciplinaria: Tablero de Control para una Institución Politécnica R01 en los EE. UU. [Tesis] (CLDM\_LDO) [PhD Thesis, IEU Universidad]. /Research/Academic Qualifications.

**Text - "[023] ¿Son las Disciplinas Necesarias y/o Suficientes para el Bien Personal? [Artículo corto en conferencia]"**

Liendo, P., Cadile, M. S., Callaos, N., & León, C. (2024). ¿Son las Disciplinas Necesarias y/o Suficientes para el Bien Personal? [Artículo corto en conferencia]. Memorias: Artículos Cortos, 26-31. <https://www.academia.edu/118380764>

**Event - "[024] Beyond Status Quo: Why is Transdisciplinary Communication Instrumental in Disruptive Innovation? [Presentation]"**

Lipuma, J., & León, C. (2024, marzo 28). Beyond Status Quo: Why is Transdisciplinary Communication Instrumental in Disruptive Innovation? [Presentation] [Keynote]. The 15th International Multi-Conference on Complexity, Informatics and Cybernetics: IMCIC 2024, Online. <https://njit-edu.zoom.us/j/98608577928?pwd=MElvRlZUMVMzb1g2Y3o3MmdacTh1UT09>

**Event - "[025] Academic Presentation 'Navigating Transdisciplinary Communication: A Graduate Student's Perspective on Collaborative Research'"**

Pathikonda, S., Lipuma, J., & Leon, C. (2024, septiembre 13). Academic Presentation «Navigating Transdisciplinary Communication: A Graduate Student's Perspective on Collaborative Research» [PPT]. 28th World Multi-Conference on Systemics, Cybernetics, and Informatics (WMSCI 2024), Online. <https://digitalcommons.njit.edu/stemresources/92>

**Text - "[026] Minorities and the AI Revolution: An Expanded Study of Equity, Workforce Preparedness, and the Digital Divide in STEM Education "**

Title: "Minorities and the AI Revolution: An Expanded Study of Equity, Workforce Preparedness, and the Digital Divide in STEM Education "

**Short abstract:**

This study builds upon research conducted six months ago to examine equitable access to Artificial Intelligence (AI) tools for minority groups in STEM education and workforce preparation. This extension underscores the importance of inclusive access while expanding the focus to explore the challenges and opportunities presented by emerging AI technologies from 2020 to 2024. The primary objective is to investigate how these tools can help bridge disparities faced by underrepresented minorities, thereby fostering more significant inclusion in the evolving STEM workforce. This study's fundamental research question is: "How can equitable access to AI tools be ensured for minority students while preparing them for the STEM workforce?"

**Publisher:** <https://doi.org/10.22533/at.ed.153132423102>

**Date:** 01/21/2025

**Additional links:** Database

Leon, C. (2025). Zotero Database with 612 items for Minorities and the AI Revolution (Version 1.0.0) [Zotero CSV; Excel]. OSF. <https://doi.org/10.17605/OSF.IO/GKWRE>

**APA Citation:**

León, C., & Lipuma, J. (2025). Minorities and the AI Revolution: An Expanded Study of Equity, Workforce Preparedness, and the Digital Divide in STEM Education [Peer-review journal]. International Journal of Exact Sciences, 1(3), 1–16. /Research/Education. <https://doi.org/10.22533/at.ed.153132423102>

**Text - "[027] Reflexiones en Comunicación, Colaboración y Convergencia, Primera Edición: Modelos Estratégicos para Educación e Investigación STEM"**

Book Title: "Reflexiones en Comunicación, Colaboración y Convergencia, Primera Edición: Modelos Estratégicos para Educación e Investigación STEM"

**Short abstract:**

Este libro explora más de cinco años de experiencia en investigación y práctica en torno a sistemas de aprendizaje y educación, especialmente relacionados con Ciencia, Tecnología, Ingeniería y Matemáticas (STEM). Es una recopilación de ideas sobre cómo comunicarse con las partes interesadas para aumentar la colaboración e impactar en la convergencia. La siguiente colección de artículos se basa en una sinergia investigativa primaria, que en conjunto abarca varios años y numerosos esfuerzos de investigación y práctica, particularmente no solo para pensar en la transferencia de conocimiento STEM y la formación del carácter del estudiante, así como también en la oportunidad de establecer marcos y herramientas que puedan servir de base para la producción de innovación en STEM, analizando los procesos de enseñanza y aprendizaje con un enfoque transdisciplinario, aportando herramientas para impactar la convergencia y la práctica de la educación como un fenómeno humano.

**Publisher:** Mito Editorial

**Date:** 02/15/2025

**Additional links:** N/A

**APA Citation:**

Lipuma, J., León, C., & Guzmán Zarate, V. H. (with Wolf, J.). (2025). Reflexiones en Comunicación, Colaboración y Convergencia, Primera Edición: Modelos Estratégicos para Educación e Investigación STEM [Digital] (M. Van Houtte, J. Serret, & M. O. Cabobianco, Eds.; CLDM\_LDO; 1ra Edición en Español). Mito Editorial; /Research/Collaboration & Convergence.

**Event - "[028] Presentación del libro: Reflexiones en Comunicación, Colaboración y Convergencia, Primera Edición"**

Presentación del libro dentro de las actividades del Departamento de Cultura Nacional del Claustro Doctoral Honoris Causa.

**Date:** 02/21/2025

**Via:** Zoom

**Link for video:** <https://fb.watch/xUwOaKBybP/>

**Apa Citation:**

Leon, C., & Cabobianco, M. O. (2025, February 21). Presentación del libro: Reflexiones en Comunicación, Colaboración y Convergencia, Primera Edición [Zoom]. Departamento de Cultura Nacional del Claustro Doctoral Honoris Causa, Online. <https://fb.watch/xUwOaKBybP/>

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**Planned research output details**

Title	Type	Anticipated release date	Initial access level	Intended repository(ies)	Anticipated file size	License	Metadata standard(s)	May contain sensitive data?	May contain PII?
[003] Trans-Disciplinary Communication and Persuas ...	Text	2023-09-30	Open	STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial Share Alike 4.0 International	Dublin Core PREMIS	No	No
[005] Trans-Disciplinary Communication in the Chat ...	Text	2024-06-30	Open	STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial Share Alike 4.0 International	Dublin Core PREMIS	No	No
[004] Disclosure of Support Statement: Increasing ...	Text	2023-09-30	Open	STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial Share Alike 4.0 International	Dublin Core PREMIS	No	No
[002] Data Management Sharing Plan: Fostering Effe ...	Text	2023-09-30	Open	STEM FOR SUCCESS RESOURCES Open Science Framework	1 MB	Creative Commons Attribution Non Commercial Share Alike 4.0 International	Dublin Core PREMIS	No	No
[014] The (Algorithmic) Cage [Presentation]	Text	2023-10-31	Open	STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial Share Alike 4.0 International	Dublin Core PREMIS	No	No
[007] Exploring Student Self-Assessment in General ...	Text	2023-09-30	Open	Open Science Framework	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[006] A Brave New World: AI as a Nascent Regime? [ ...	Event	2023-09-30	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Custom Data Use Agreements/Terms of Use	Dublin Core	No	No
[008] Using Trans-Disciplinary Communication in th ...	Text	2023-09-30	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[009] Desafíos y Oportunidades en la Alfabetizació ...	Text	2023-09-30	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
24/05/12 [C] New	Text	2023-09-30	Open	None specified	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	None specified	No	No
[013] Accelerating Higher Education Transformation ...	Text	2023-09-30	Closed	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Custom Data Use Agreements/Terms of Use	Dublin Core	No	No
[001] Supporting Correctional Educators Through O ...	Text	2023-08-06	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[010] Leveraging Trans-Disciplinary Communication ...	Event	2023-09-30	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[011] Trans-Disciplinary Communication in Collabor ...	Event	2023-09-30	Open	Open Science Framework STEM FOR SUCCESS RESOURCES	1 MB	Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No



Title	Type	Anticipated release date	Initial access level	Intended repository(ies)	Anticipated file size	License	Metadata standard(s)	May contain sensitive data?	May contain PII?
[015] 1st meeting of the American Association for ...	Event	2024-01-02	Open	Open Science Framework Open Science Framework NJIT Digital Commons		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[012] WMSCI 2023 - Abstracts Proceedings [JSCI]	Text	2024-01-20	Open	JMU Open Science Framework (OSF)	1 MB	Custom Data Use Agreements/Terms of Use	Dublin Core	No	No
[016] Reflections on Communication, Collaboration, ...	Text	2023-02-28	Open	Digital Commons NJIT		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[017] Towards a Hybrid, Flexible and Socially Enga ...	Text	2024-01-31	Open	None specified		None specified	None specified	No	No
[018] Overcoming Obstacles to Interdisciplinary Re ...	Event	2024-03-28	Open	STEM for Success		None specified	Dublin Core	No	No
[019] Comunicación Transdisciplinaria [Artículo c ...	Text	2024-04-30	Open	Academia.edu		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[020] Collaborative Convergence: Finding the Langu ...	Text	2024-04-28	Open	STEM for Success		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[022] Empowering STEM Through Inclusive Grants and ...	Event	2024-06-05	Open	None specified		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[021] Colaboración Interdisciplinaria: Tablero de ...	Text	2024-06-06	Restricted	None specified		None specified	Dublin Core	No	No
[023] ¿Son las Disciplinas Necesarias y/o Suficien ...	Text	2024-03-28	Open	None specified		None specified	Dublin Core	No	No
[024] Beyond Status Quo: Why is Transdisciplinary ...	Event	2024-03-27	Open	None specified		None specified	None specified	No	No
[025] Academic Presentation 'Navigating Transdisci ...	Event	2024-09-12	Open	STEM for Success		None specified	Dublin Core	No	No
[026] Minorities and the AI Revolution: An Expande ...	Text	2025-01-20	Open	STEM FOR SUCCESS RESOURCES		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[027] Reflexiones en Comunicación, Colaboración y ...	Text	2025-02-14	Open	STEM FOR SUCCESS RESOURCES		Creative Commons Attribution Non Commercial No Derivatives 4.0 International	Dublin Core	No	No
[028] Presentación del libro: Reflexiones en Comun ...	Event	2025-02-20	Open	None specified		None specified	None specified	No	No