

W-STEM: Building the future of Latin America: engaging women into STEM

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W-STEM Sustainability Plan

TUD / UTB / USAL

Amendment History

Version	Revision	Date	Author	Modification
1		11/12/2020	TUD and UTB	First draft
2		16/04/2021	TUD and UTB	Version including the comments from the partners
3		12/07/2022	USAL	W-STEM network definition
3	1	12/12/2022	USAL	Final version 10.5281/zenodo.7188921

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Introduction

This is the sustainability plan of the W-STEM project [1-6].

Media

Key Principle A: Content should not go out of date.

Key Principle B: All content to be made available with Creative Commons license.

Key Principle C: Content should continue to be actively used.

Item	Description	Partner Responsibilities	Timeline
1.1 Video Content	Plan required for the long term management and use of the video content on YouTube.	Partners encourage the use of resources. USAL responsible for management.	
1.2 App	Plan required for the long term management and use of the app.	Partners encourage the use of resources. USAL responsible for management.	
1.3 Profiling Tool	Plan required for the long term management and use of the profiling tool.	Partners encourage the use of resources. USAL responsible for management.	
1.4 Website	Plan required for the long term management and use of the website.	Partners encourage the use of resources. USAL responsible for management.	
1.5 Social Media	Plan required for the long term management and use of the social media accounts.	Partners encourage the use of resources. USAL responsible for management.	

Feedback from Partners in January Meeting

What responsibilities should each of the partners have for the continued management and use of the W-STEM videos, app and social media platforms, following the completion of the project?

- Establishment of a Committee of the W-STEM Network to give continuity and follow-up to the administration of the media. Considering institutional representation (by partner). Periodic functions (for example, annual).
- Committee in charge of uploading material and official channel to report what has been done (local ambassadors)

- Sustainability resources.
- Consider student groups, international, similar to the IEEE. A committee at the level of each country. They are the ones who would manage it, initially with our support, then they would be in charge.
- Share content with other groups such as girls-in-tech

Institutional Plans

Key Principle D: W-STEM to have continued impact on LA institutional policy and practice.

Item	Description	Partner Responsibilities
2.1 Policy and Practice	LA Partner institutions to ensure that W-STEM project outputs continue to influence local policies and practices.	For LA partners. This is a key commitment of the project.
2.2 Attraction activities	Attraction activities, including attraction campaigns, to continue in LA partners.	For LA partners. This is a key commitment of the project.
2.3 Access activities	Access activities to continue in LA partners.	For LA partners. This is a key commitment of the project.
2.4 Guidance activities	Guidance activities, including mentoring programmes, to continue in LA partners.	For LA partners. This is a key commitment of the project.

Feedback from Partners in January Meeting

What responsibilities should each of the partners have for long term implementation of the policies and practices arising from the project, following the completion of the project?

- Achieving the continuity of the project's policies is a great challenge in our institutions due to the pandemic crisis
- Seek support in organizations such as ACOFI, UNESCO, so that the directors of the institutions can continue training in gender equality practices in STEM
- Create, strengthen student groups, generate nodes of these inter-institutional and international groups, as the student branches of the IEEE are managed. Obtain an endorsement from an international organization (UNESCO, Columbus)
- Evaluate the maturity level of each institution in terms of institutional policies related to the participation of women in STEM and continue to strengthen, or create with the support of international organizations.
- Make alliances with government institutions such as the Ministry of Education of each country, to carry out dissemination and access activities in STEM careers.

Online Modules

Key Principle E: All outputs and learnings from the project to be made accessible as e-learning resources.

Key Principle F: There will be different modes of use e.g. validated CPD programme, reference and exploration.

Item	Description	Action Owner	Timeline
3.1 Outputs	Review of outputs from the project, including data, lessons learned and artefacts (e.g. videos, app) to be undertaken.	Attraction - complete. COL, Alicia, Sonia	April - June 2021
3.2 Design of Pilot and Evaluation	Design the approach to piloting, implementation and evaluation across all partners.	Overall team to inform this action.	April - June 2021
3.3 Design	High level design of module to be undertaken (learning outcomes, assessment, learning and teaching methods, modes) according to the three themes of: attraction; access and guidance.	Project Team	April - June 2021
3.4 Attraction	Detailed design of the attraction module to be undertaken. History of Women in STEM. Lots.	Project Team	June - August 2021
3.5 Access	Detailed design of the access module to be undertaken. Policy	Project Team	June - August 2021
3.6 Guidance	Detailed design of the guidance module to be undertaken. Policy	Project Team	June - August 2021
3.7 Digital Development	Three modules to be developed into a set of digital artefacts, including PDFs and Videos. Include translation. Develop in both languages.	Project Team	September and October 2021

	Possible to move funding for training.		
3.8 Validation	Module to be validated as a CPD programme in some partners.	Various partners	November and December 2021
3.9 Guidance	Documentation to be developed to guide institutions on how to use the module in the different modes.	Project Team	November and December 2021
3.10 Implementation of Piloting and Evaluation	Module to be piloted and evaluated in different partners according to different modes.	Various Partners	January to June 2022
3.11 Publication	Output of the evaluation to be published in peer reviewed journal.	Project Team	Following completion of pilot.

Feedback from Partners in January Meeting

What responsibilities should each of the partners have for the piloting and evaluation of the online modules?

List of responsibilities that should be assigned:

1. Syllabus of the module (course content and script)
2. Storyboard for the online module
3. Graphics (design frame) for the module (web, videos, stationary)
4. Rules for content development
5. Content development by sections (one or two partners per section): videos, texts, slides
6. Integration of content into online platform and pilot run
7. Design of evaluation rubric for: syllabus/storyboard, online module design, module pilot

Dissemination

Item	Description	Partner Responsibilities	Timeline
4.1 Book	Two books and other publications to be published.	Encourage submissions of proposals.	Alicia will contact partners re: English book.

		USAL responsible for the English book; ITESM responsible for Spanish book.	Spanish book to follow Likely to be required for late summer.
4.2 Press Releases	Press releases to be issued at appropriate points in the project.	COL and Sonia to work on this.	Press release - closing of attraction campaigns.

Follow On Projects

Item	Description	Partner Responsibilities	Timeline
5.1 Attracting Funding	Seek funding for the continuation of the work in the project.	LA partners are preparing a proposal in response to this call . Partners encouraged to develop proposals and invite partners from W-STEM.	Currently ongoing.

Feedback from Partners in January Meeting

What responsibilities should each of the partners have for the dissemination of project outputs and the attraction of funding for follow-on projects?

Attraction funding:

- Capacity building projects to continue collaboration between EU-LA, there is no information. The call is stopped until next year, depending on the COVID-19 crisis.
- Searching fundings to continue collaboration among EU partners.
- LA partners should lead the engagement of their leaders and prepare mechanisms for continuing.
- Explore ways to engage local/national governments, other key organisms in LA.
- Establish collaboration with the institutions through projects, studies, research. Searching ways to establish exchange activities, collaborations with the LA-EU institutions.

Dissemination responsibility:

- Continue using the materials created during the project after the end of the project. Continue using the training modules.
- Spread the work about the project with other institutions, in conferences, in other events, in collaborations with other researchers, after the end of the project.

W-STEM Network

The Network will continue based on a signed agreement between the partner institutions. Each partner has defined a contact person for the W-STEM Network:

- P1 USAL – Contact: Alicia García Holgado – Coordinator.
- P2 UNINORTE – Contact: Rita Peñabaena.
- P3 OULU – Contact: Sari Harmoinen
- P4 POLITO – Contact: Anita Tabacco
- P5 TUD – Contact: Mary / Liz Heffernan
- P6 NRC – Contact: -
- P7 ITESM – Contact: Ángeles Domínguez
- P8 UDG – Contact: Verónica Rodríguez
- P9 UTSM – Contact: Irene Ortega
- P10 PUCV – Contact: Carolina Vidal
- P11 UTB – Contact: Sonia Contreras / Vilma Ojeda
- P12 ITCR – Contact: Laura Queralt
- P13 UCR – Contact: Rosaura Romero
- P14 UTPL – Contact: Samanta Cueva / Jorge Jaramillo
- P15 UTN – Contact: Luz María Tovar

Moreover, the Network can involve other institutions as collaborators, at least in the beginning: <https://wstemproject.eu/collaborators/>. The network will collaborate with other network, in particular, there is a strong link with CLEI Community about Latin American Women in Computing <https://www.clei.org/comunidad-lawc/>. CLEI is the Latin American Studies Center of Informatics (Centro Latinoamericano de Estudios de Informática).

The W-STEM Network will also maintain a community in which other participants and institutions can connect with the network. The community is based on a Google Group in which participants from W-STEM courses can join: <https://groups.google.com/g/redwstem>.

The W-STEM Network will be in charge of the exploitation of the W-STEM course and continuing the collaboration with UNESCO.

References

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