Erasmus +: BLISS

Blended Learning Implementation for reSilient, acceSsible and efficient higher education

Project 2021-1-SE01-KA220-HED-000023166

Dissemination Plan / Report

Co-funded by the European Union

2022-2025

Edited By: Sandi Ljubić, UNIRI

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Education and Culture Executive Agency (EACEA). Neither the European Union nor EACEA can be held responsible for them.

Table of Contents

Dissemination Plan

Goals.

Dissemination activities should focus on the main promotional objectives of the project. These objectives should ensure that the project results are effectively communicated to the intended target groups and stakeholders. Specific objectives include:

- **Raising awareness:** Informing stakeholders about project objectives, milestones, progress and outcomes.
- **Engaging stakeholders:** Creating interest and active participation among relevant groups.
- **Knowledge transfer:** Sharing findings and results with academic, industrial and public communities.
- **Fostering further collaboration:** encouraging (new) partnerships and synergies with related projects and initiatives.

The project is structured to stimulate both a strong and direct European exploitation of educational materials / project results through the extensive network of project participants and active dissemination to a wider network of stakeholders. All dissemination activities are bundled in a networked system to ensure coherent and effective dissemination efforts.

Key dissemination groups.

Effective dissemination requires a clear understanding of the target groups to be reached by the project. By identifying these groups, the project can tailor its communication strategies to maximize impact, drive engagement and ensure that results reach the right stakeholders. The following four key dissemination groups have been identified as central to the project's outreach activities:

1. **Students:** Through the educational (i.e. partner) institutions involved in the project in Northern, Central and Southern Europe. The results will also be disseminated to other teaching sectors to extend the direct impact on students and teachers.
2. **Educational institutions and staff:** Including universities and schools with a focus on engineering, sustainability, digitalization and knowledge management.
3. **Companies / domain experts**: Companies and domain experts looking to integrate project outcomes into sustainable engineering practices.
4. **Scientific communities:** Dissemination of results through academic channels, including scientific publications, international conferences and workshops.

Dissemination activities.

Dissemination is at the heart of the project's communication strategy and includes a range of planned activities to ensure wide reach and impact. Dissemination activities include a mix of internal, external and international strategies aimed at reaching the identified target groups:

- **Internal dissemination:** Leveraging the educational (partner) institutions involved in the project, to ensure widespread benefit and integration of project outputs across EU.

- **External Dissemination:** Targeting educational institutions (outside the partners' scope), public institutions, and enterprises (here including engineering-based companies) in each participating country.

- **International Dissemination:** Using traditional academic channels such as journal publications, conference presentations, workshops, and multiplier events organized by the project partners. Social media will also play a role in reaching international networks linked to blended learning.

Dissemination modalities and tools.

To achieve the project's dissemination objectives, a combination of online and offline strategies has been planned, supported by a range of customized dissemination tools. These modalities ensure comprehensive coverage and outreach to different target groups.

- **Online strategies:** The project leverages the power of digital platforms to reach a global audience and enable dynamic interactions. Key online strategies include:

    - Project website: A one-stop shop for (predominantly static) information, including data on the project objectives, the methodology used, as well as institutions and individuals involved in the project.

    - Social media engagement: A kind of "blogging activity", with dynamic updates, articles, and (re)posts on blended learning, sustainability, and related project topics. The *LinkedIn* platform will be utilized as the main channel, as all partners / researchers involved actively use it. The *ResearchGate* platform will also be used, mainly for the online dissemination of scientific results (published journal and conference papers).

- **Offline strategies:** In addition to the online approach, direct and personal communication methods are also used to encourage meaningful interactions. The most important offline strategies include:

    - Stakeholder engagement: Direct communication with local and regional stakeholders. This includes, but is not limited to, company visits, promotional exhibitions (job fairs, university project presentations), presentations at summer schools, targeted university events (e.g. E–learning days at UNIRI), and similar.

- Events and conferences: Participation in dissemination workshops and international conferences, as well as hosting multiplier events, to present project results and gather valuable feedback.

The partners will also actively use the international and national consortia and alliances in which they are involved to promote the results of the project to their closer partners and encourage them to use them. In other words, the previously acquired community networks of each project participant represent a great potential for increasing outreach and fine-tuning dissemination activities. Namely, all project partners will participate in reaching out to their regional and national stakeholders as they work very closely with them. Each partner has an excellent knowledge of the stakeholders in their region: universities and academic networks, educational institutions, public administrations, socio-economic and innovation networks.

Within the project scope, the following dissemination tools are envisaged:

1. **Printed Materials:**
    a. Leaflet (a simple brochure)
    b. Promotional poster
2. **Electronic Tools:**
    a. Project website (predominantly *static information*)
    b. Social media (re)posts and articles (*dynamic information*) – following transnational partnership meetings, conference attendances, etc., to promote online discussions and to update on current project activities.
3. **Events:**
    a. Local dissemination activities targeting scientific, educational and industry communities, in each of the partner countries.
    b. Participation in international conferences, through special sessions or dedicated workshops (goal: at least 3 different conferences)
    c. Hosting multiplier events (goal: 3 MEs)
4. **Scientific publications:**
    a. International conference papers (goal: at least 3 conference papers)
    b. International journal papers (goal: at least 1 international journal paper)

Results availability / sustainability and further collaboration.

The outputs of the project include, among the other, part of the study programs, i.e. selected educational units for engineering courses (descriptions of intended learning outcomes, descriptions of teaching and learning activities and assessment tasks). The material documentation and learning material, as well as all deliverables, will be made available on the project website and the EU web portal upon completion of the project, once all materials have

been adequately reviewed (according to the quality plan). This repository will ensure long-term accessibility of the project outcomes.

All materials produced may also be available from the institutions that are members of the BLISS consortium and listed on their websites, especially in cases where specific educational units are implemented and delivered as part of domiciliary study programs. This measure alone can ensure the use of the results beyond the timeframe of the project. In addition, the materials will be open for consultation and use by other interested institutions.

By the end of the project, BLISS partners will have a deep understanding of each other's expertise. This mutual understanding will allow them to formulate future cooperation and joint activities. In this context, expected long-term outcomes may include:

- Exchange of teaching staff,
- Exchange of students,
- New project proposals.

Visuals

Within the first months of the project, a Corporate Design (CD) resources were developed to standardize the visual appearance of all materials. This initiative aimed to establish a consistent and professional identity for the project, ensuring that all communication and dissemination efforts conveyed a cohesive brand image.

Key elements of the CD include:

- **Project logo:** A distinctive logo was created to symbolize the project's vision and mission (Fig. 1). This logo serves as a recognizable emblem across all materials and platforms, reinforcing the project's identity.

Figure 1. Logo of the BLISS project

- **Project poster:** A visually engaging poster was designed to provide an overview of the project (Fig. 2). This poster is intended to be displayed at events, conferences, and partner institutions, ensuring visibility and attracting interest from diverse audiences.

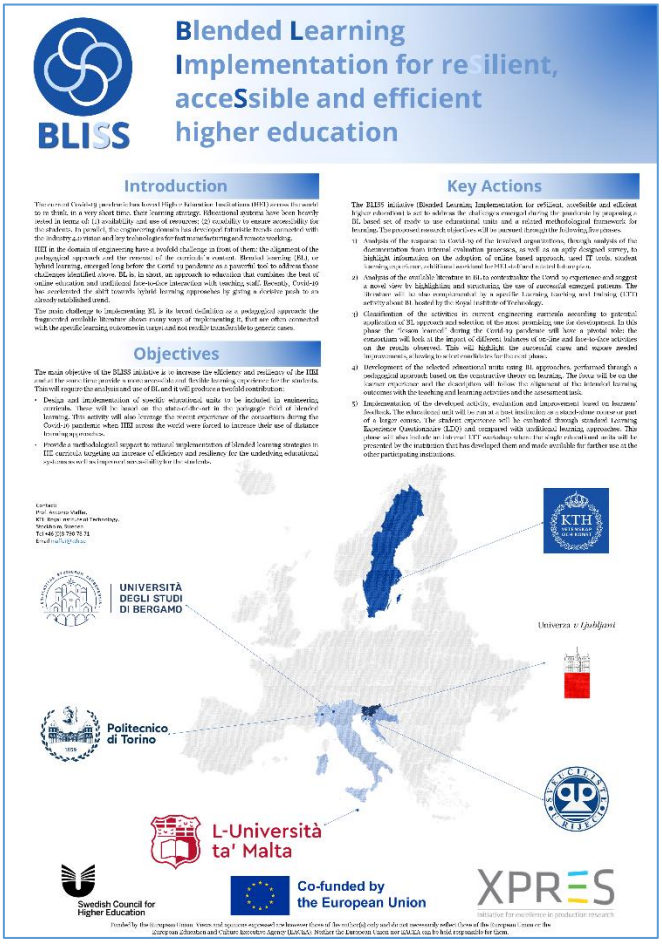

Figure 2. The main poster of the BLISS project

- **Standardized templates:** Templates for *Word* documents and *PowerPoint* presentations were developed to ensure uniformity in reports, presentations, and other official communications. These templates incorporate the project's branding elements.

- **Brochure / Leaflet:** A versatile brochure / leaflet was designed for distribution at various events (Fig. 3). This material provides a concise and visually appealing summary of the project, its objectives, and its key actions, making it an effective tool for engaging stakeholders.

Figure 3. A leaflet as promotional material for the BLISS project. The images shown are printed on both sides, after which a simple brochure is obtained by folding.

The importance of this visual branding cannot be overstated. A strong and consistent corporate design enhances the project's professional image, facilitates recognition, and fosters trust among stakeholders. By adhering to the CD, all partners and collaborators can ensure that their communications align with the project's overarching branding strategy, thereby maximizing the impact of dissemination efforts.

According to the rules of implementation of ERASMUS+ HED projects, all communication / dissemination activities, here including the abovementioned visuals, are accompanied by an acknowledgment of EU support, a display of the European flag emblem, and a funding statement (Fig. 4).

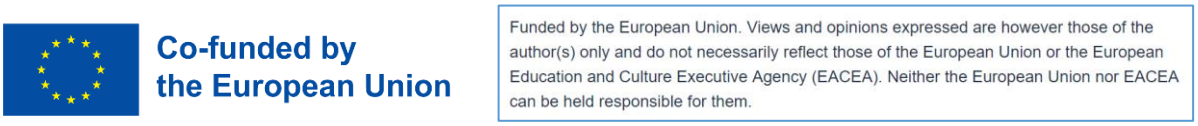

Figure 4. European flag emblem and a disclaimer for beneficiaries of EU funding, utilized in the BLISS project dissemination activities.

Online presence

To maximize visibility and engagement, the project established a robust online presence through two primary channels: the project website and social media platforms. These channels complement each other by addressing different types of information dissemination and engagement.

- **Project website:** The project website (Fig. 5) serves as a static repository for essential project information. It provides a central location for stakeholders to access the project's objectives, key actions, and data about partners' institutions and persons involved. The content remained consistent throughout the project, offering:
    - Project overview: Summarizing the goals and scope of the BLISS initiative;
    - Description about main objectives and key actions;
    - Partners' info and contact information;
    - Resources: links to selected downloadable materials / deliverables (to be added upon the end of the project, after document review).

  This static approach ensures the website functions as a reliable reference point for visitors seeking foundational insights into the project. An internet domain with a representative name has been purchased.

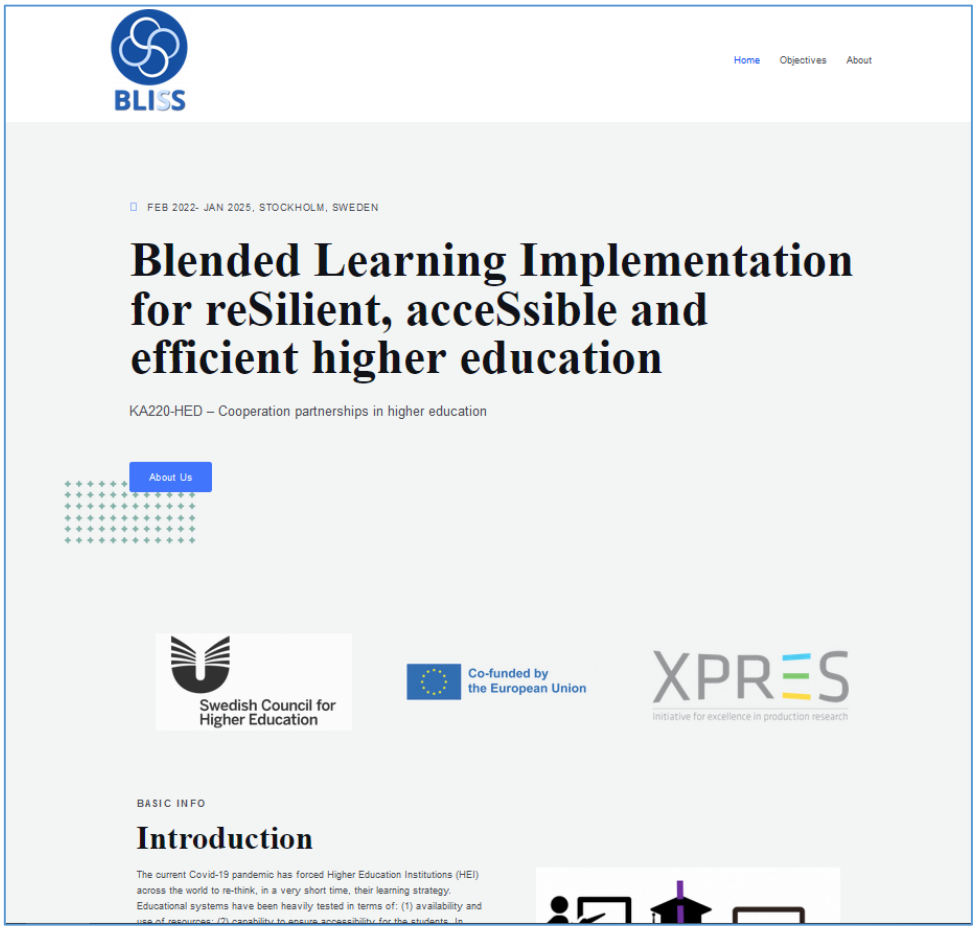

Figure 5. The landing page of the project website (https://bliss-erasmus.eu/)

- Social networks: The BLISS partners predominantly utilized *LinkedIn* and *ResearchGate* platforms, and their respective profiles, for social media based communication. These platforms were strategically selected to engage with a professional and academic audience, fostering discussions and sharing updates related to project activities. Key activities included:
    - Posts and articles: Sharing news and insights aligned with the project's focus areas, including info about paper publications;
    - Event coverage: (Re)posting updates and highlights from transnational partnership meetings, conferences, and local events;
    - Networking opportunities: Engaging with professionals and researchers through comments, collaborations, and shared content.

The use of these platforms ensured a professional and targeted approach to dissemination, enabling the project to reach relevant stakeholders effectively and foster meaningful interactions. Combined with the project website, these online tools created a comprehensive digital presence that supported the project's dissemination goals efficiently.

The following snapshots show some of the BLISS-related posts on the *LinkedIn* platform: after the publication of the joint journal article as a result of the collaborative work (Fig. 6), after the project meeting and LTT activity in Stockholm, Sweden (Fig. 7, left), after the participation in the project presentation at the local UNIRI event, followed by a transnational meeting in Rijeka, Croatia (Fig. 7, right), and after the project meeting in Sweden involving a visit at the Space Campus of Luleå University in Kiruna (Fig. 8).

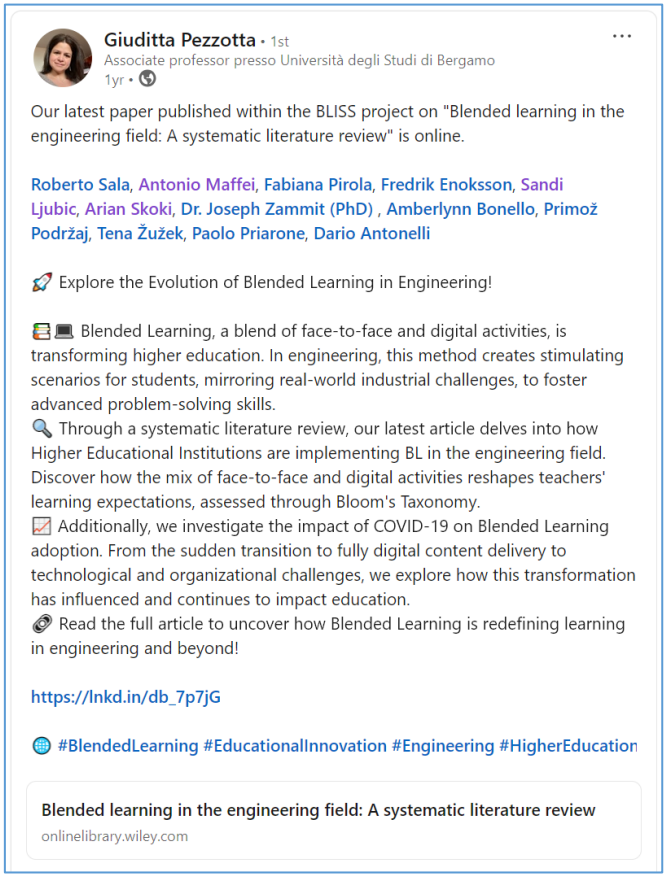

Figure 6. LinkedIn post about published journal paper

Figure 7. LinkedIn posts about: project meeting and LTT workshop in Stockholm, Sweden (left); BLISS presentation at the UNIRI E-Learning Days followed by a transnational project meeting in Rijeka, Croatia (right)

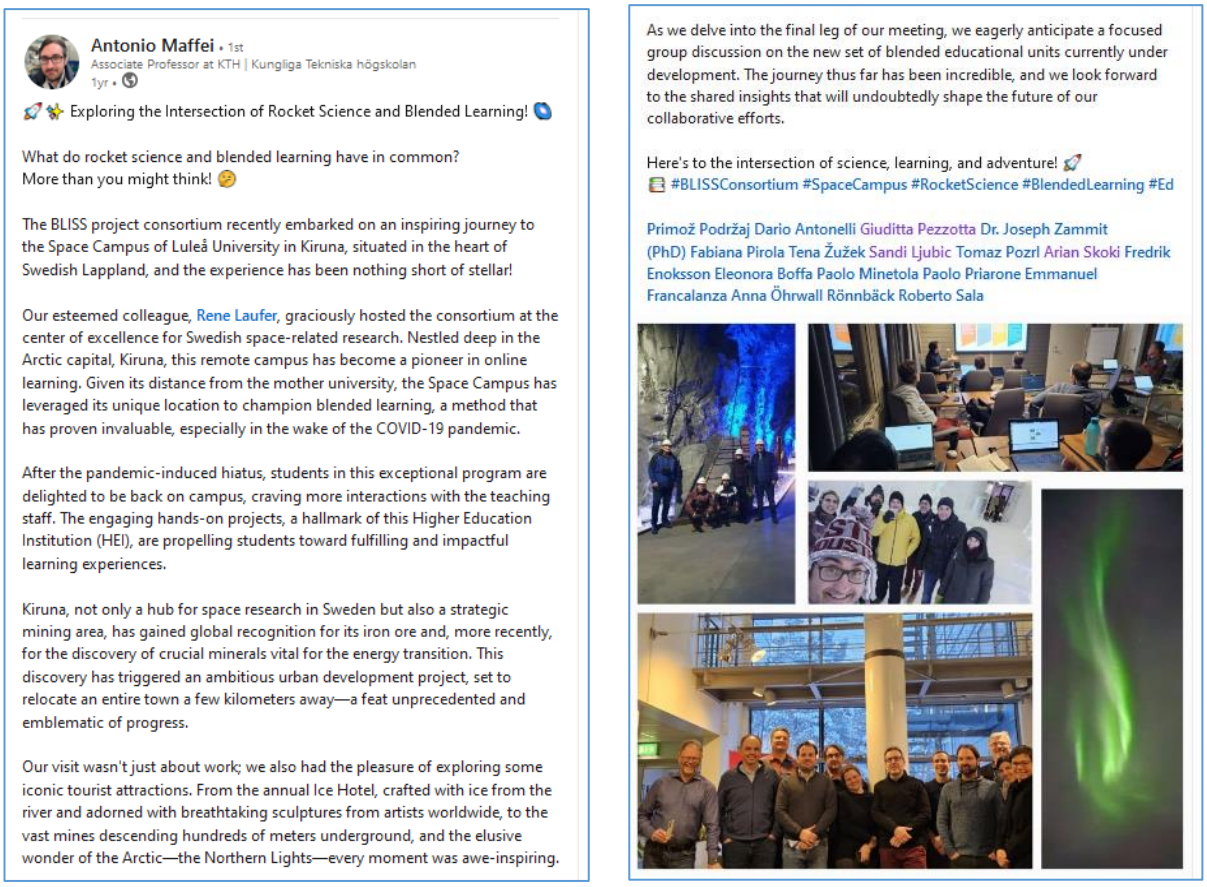

Figure 8. LinkedIn post about project meeting in Sweden, involving a visit at the Space Campus of Luleå University in Kiruna

As far as the dissemination of scientific outputs (journal articles and contributions from international conferences) is concerned, the project initially used the *Projects* function on the *ResearchGate* (RG) platform to gather all contributions into a logical section. However, as *RG Projects* have been discontinued in 2023, all papers published in connection with BLISS are currently available as separate resources. Nevertheless, they are easily searchable by topic, title and, perhaps more importantly, by the (co)authors involved in the BLISS initiative.

Examples of existing records on the RG platform can be found in Fig. 9 (a record about published conference paper) and in Fig. 10 (a record about published journal paper).

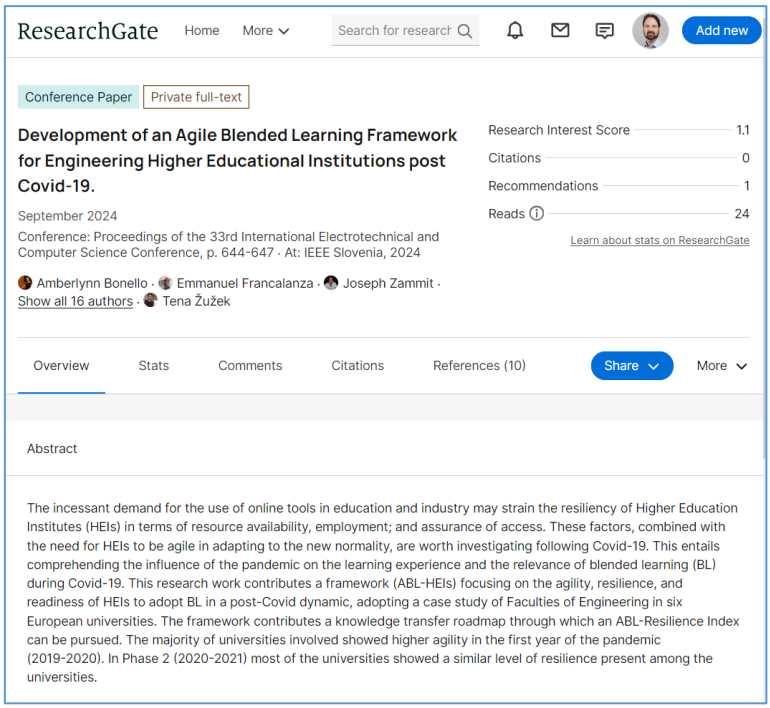

Figure 9. ResearchGate entry about published conference paper (33rd International Electrotechnical and Computer Science Conference - ERK 2024; Portorož, Slovenia)

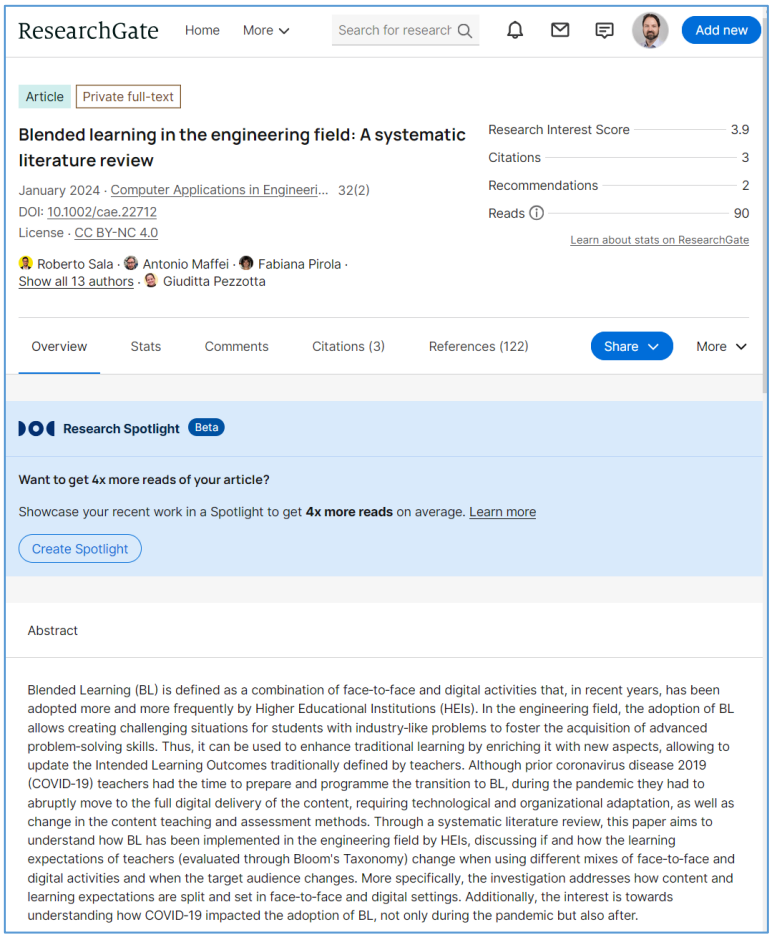

Figure 10. ResearchGate entry about published paper in Computer Applications in Engineering Education journal (doi: http://dx.doi.org/10.1002/cae.22712)

Dissemination events

All dissemination events planned as part of the project were successfully carried out in accordance with the strategy outlined. These events were aimed at reaching different target groups and maximizing the impact of the project outcomes. The main types of dissemination events that were employed included:

- **Local dissemination events:** These were aimed at the scientific, educational and industrial communities in the partner countries. These activities ensured local commitment and promoted cooperation at regional level. This includes all events organized or attended by BLISS partners in their countries, as well as in other related project initiatives. Some examples of events where information about the BLISS project and its activities were disseminated are the following:
    - *University of Rijeka E-Learning days* (Rijeka, Croatia, June 2023) – Presentations of university, national and European projects that deal (directly or indirectly) with the topic of e-learning
    - Pilot course in E+ project TSAAI: Transversal Skills on Applied Artificial Intelligence (Malaga, Spain, March 2024) – an example of inter-project dissemination activity
    - Various company / university visits, like the one in IRF – The Swedish Institute of Space Physics (Kiruna, Sweden, December 2023), organized during the project meeting in Sweden.

Below (Fig. 11) are selected photos from the events mentioned above.

Figure 11. BLISS dissemination at University of Rijeka E-Learning days (top), at the Swedish Institute of Space Physics in Kiruna (bottom, left), and in Malaga, during the pilot course within another E+ project (bottom, right)

- **Participation in international conferences:** The project team actively participated in relevant international conferences, contributing through paper presentation and special sessions. These platforms provided opportunities to present findings, share knowledge, and network with a global audience. BLISS activities were thus presented at the following conferences:

    - **ISM 2022:** 4th International Conference on Industry 4.0 and Smart (Linz, Austria, November 2–4, 2022)

    - **HELMeTO 2023:** 5th International Conference on Higher Education Learning Methodologies and Technologies Online (Foggia, Italy, September 13–15, 2023)

    - **ERK 2024:** 33rd International Electrotechnical and Computer Science Conference (Portorož, Slovenia, September 26−27, 2024)

It is worth mentioning that the project coordinator, Prof. Antonio Maffei, gave a keynote speech at the HELMeTO'23 conference in Foggia, which sparked an interesting discussion among the numerous participants. Some photos and cover sheets of the conference presentations are shown in Fig. 12.

Figure 12. BLISS project at the international conferences: presentation cover slides for HELMeTO'23 and ERK'24 (top), keynote speech at HELMeTO'23 (bottom, left), special session organized at IEEE ERK'24 (bottom, right)

- **Hosting multiplier events:** Special events were organized to present the results of the project and reach a wider audience. These multiplier events served as a platform to disseminate the results, gather feedback and explore possible collaborations. In addition to the general presentation of the BLISS project, its key actions and working methodology, two objectives were pursued in particular: (1) to disseminate the impact

of the Covid-19 pandemic on the organizations involved in BLISS and the lessons learned for an efficient, accessible and resilient higher education system based on blended learning, and (2) to disseminate the educational units developed and tested by the organizations involved in BLISS. The multiplier events are organized by UNIRI, UNILJ, and UNIMA and successfully implemented in Croatia, Slovenia and Malta as planned:

- **Multiplier event(s) in Croatia:** Rijeka (March 2024), Pula (January 2025)
- **Multiplier event(s) in Slovenia:** Portorož (September 2024), Ljubljana (September 2024), Maribor (October 2024)
- **Multiplier event(s) / final conference in Malta:** ST Microelectronics, Kirkop (July 2024), Engineering Research and Innovation Labs – UNIMA, Msida (October 2024), Lecture Theatre – UNIMA, Msida (November 2024)

Below are photos from three multiplier events (Fig. 13, Fig. 14, and Fig. 15):

Figure 13. BLISS multiplier event held in Rijeka, Croatia

Figure 14. BLISS multiplier event held in Maribor, Slovenia

Figure 15. BLISS multiplier event held at UNIMA (Lecture Theatre), Malta

Scientific publications

The project has successfully produced a number of scientific publications, including conference papers and journal articles. These publications are crucial to the visibility and reach of the project in the academic and scientific landscape. These efforts have not only increased the project's impact, but have also laid the groundwork for continued academic engagement and exploration beyond the project's duration.

In the following, the list of published papers is given.

- **Journal papers**
    - R. Sala, A. Maffei, F. Pirola, F. Enoksson, S. Ljubic, A. Skoki, J.P. Zammit, A. Bonello, P. Podrzaj, T. Žužek, P.C. Priarone, D. Antonelli, G. Pezzotta: *Blended learning in the engineering field: A systematic literature review*. Computer Applications in Engineering Education, 2024, e22712.
      doi: https://doi.org/10.1002/cae.22712

- **Conference papers / abstracts**
    - A. Bonello, E. Francalanza, J.P. Zammit, F. Pirola, G. Pezzotta, R. Sala, A. Skoki, S. Ljubic, P. Podržaj, D. Antonelli, P. Minetola, F. Enoksson, A. Maffei: *Beyond the pandemic: How has Covid-19 shaped the capability to adopt an Agile Blended Learning in HEI?*. In: 5th International Conference on Higher Education Learning Methodologies and Technologies Online (HELMeTO 2023 Book of Abstracts), pp. 29–30.
      url: http://www.helmeto2023.it/wp-content/uploads/2023/12/HELMeTO_2023_Book-of-abstracts.pdf
    - R. Sala, F. Pirola, G. Pezzotta, F. Enoksson, S. Ljubic, A. Skoki, E. Francalanza, J.P. Zammit, A. Bonello, P. Podržaj, P.C. Priarone, D. Antonelli, P. Minetola, A. Maffei, E. Boffa: *Examining the implementation of Blended Learning in the Engineering field*. In: 5th International Conference on Higher Education Learning Methodologies and Technologies Online (HELMeTO 2023 Book of Abstracts), pp. 83–84.
      url: http://www.helmeto2023.it/wp-content/uploads/2023/12/HELMeTO_2023_Book-of-abstracts.pdf
    - S. Ljubic, A. Skoki, F. Hrzic, A. Salkanovic: *Empowering Computer Engineering Education: Leveraging Cloud-Based Programming Platforms and Online Assessment Tools*. In: 5th International Conference on Higher Education Learning Methodologies and Technologies Online (HELMeTO 2023 Book of Abstracts), pp. 43–45.
      url: http://www.helmeto2023.it/wp-content/uploads/2023/12/HELMeTO_2023_Book-of-abstracts.pdf
    - P. Podrzaj, T. Pozrl, T. Zuzek: *The role of Chat GPT in education*. In: 5th International Conference on Higher Education Learning Methodologies and Technologies Online (HELMeTO 2023 Book of Abstracts), pp. 143–144.
      url: http://www.helmeto2023.it/wp-content/uploads/2023/12/HELMeTO_2023_Book-of-abstracts.pdf
    - S. Ljubic, A. Skoki, F. Hrzic, A. Salkanovic: *Automated Online Assessment and Cloud-Based Programming: Advancing Computer Engineering Education*. In: 5th International Conference on Higher Education Learning Methodologies and Technologies Online (HELMeTO 2023), Communications in Computer and Information Science 2076 (2024), pp. 78–94.
      doi: https://doi.org/10.1007/978-3-031-67351-1_6

- A. Bonello, E. Francalanza, J.P. Zammit, A. Maffei, F. Enoksson, E. Boffa, F. Pirola, G. Pezzotta, R. Sala, P.C. Priarone, D. Antonelli, P. Minetola, S. Ljubic, A. Skoki, P. Podržaj, T. Zuzek: *Development of an Agile Blended Learning Framework for Engineering Higher Educational Instutions post Covid-19*. In: Proc. 33rd International Electrotechnical and Computer Science Conference (ERK 2024), IEEE Slovenia (2024), pp. 644–647.
  url: https://erk.fe.uni-lj.si/2024/program.php

It is worth mentioning that in addition to the published journal paper on PR2 (project result #2), an article on PR1 (project result #1) was also prepared and finalized under the guidance of UNIMA. The search for a suitable journal is underway. Since the number of publications on the topic of Covid-19 and the impact of the pandemic on the learning and teaching process in the scientific community has recently decreased, the main criterion for finding a suitable journal is ”still accepting papers related to Covid-19”. The current target is *Heliyon* of Cell Press, Elsevier.

In the following snapshots (Fig. 16), it can be seen that the BLISS project is mentioned as the backbone of the research in the Acknowledgements section of the published papers.

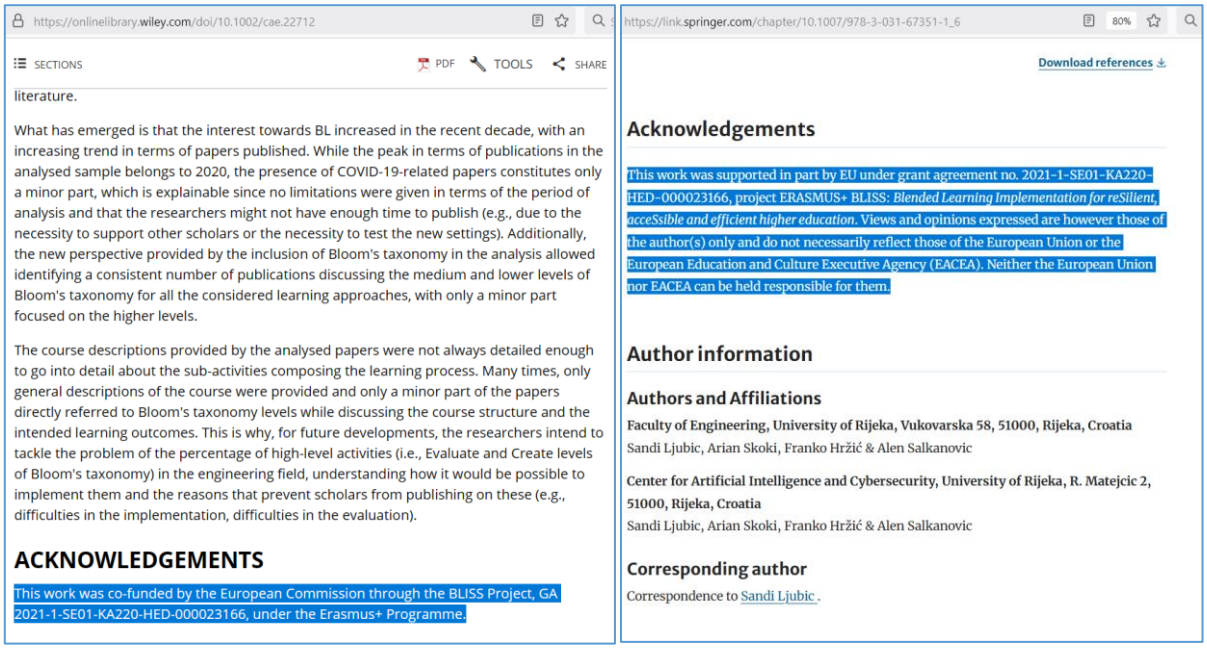

Figure 16. EU support / BLISS project mentioning in the Acknoledgements section of the journal paper (left) and a conference paper (right)

New initiatives

The joint work carried out as part of the BLISS project, combined with the lessons learned and experience gained from the theory of constructive alignment and the blended learning concept, has inspired new ideas for further collaboration. As evidence of the impact of the project, the partners have formed new consortia and submitted proposals for further EU funding opportunities.

Notably, two of these proposals were successfully awarded EU funding, demonstrating the strength of the partnerships formed.

- **Submitted**
    - **Skills and cAPabIlities for future ENgineers working with Sharing and circular economy (SAPIENS)**, ERASMUS+ KA220-HED, 2023, Applicant Organization: UNIRI
    - **Empowering Future Engineers with Skills for the Sharing and Circular Economy (ENGINES)**, ERASMUS+ KA220-HED, 2023, Applicant Organization: University College of Northern Denmark
    - **Fostering Acceptable Use and Responsible Integration of Generative AI in Higher Education (FORESIGHT)**, ERASMUS+ KA220-HED, 2023, Applicant Organization: KTH
- **Granted for funding**
    - **Teaching Artificial Intelligence (TAI)**, ERASMUS+ 2024-1-SI01-KA220-HED-000252673, Coordinator: UNILJ, Slovenia, 2024–2027
    - **Advanced MR Training foR HumAn-Centric ProductIon EmpoweriNg Engineering TalEnt (TRAINEE)**, ERASMUS+ 2024-1-MT01-KA220-HED-000246701, Coordinator: UNIMA, Malta, 2024–2027

These new initiatives promise to build on some of the foundations laid by BLISS and ensure the continuation of innovative research and development efforts, while fostering a culture of collaboration and excellence among the partners.

Hence, BLISS partners will continue to consider new and different forms of collaboration.