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## 6. Discussion

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In this chapter, we reflect on the accomplishments of the DigiCare project, the success of its outputs, and the various stages of our project journey. The project involved a multicultural consortium connecting European and Asian higher education institutions from Finland, Portugal, Bangladesh, and Vietnam. Throughout the course of the DigiCare project, we encountered exceptional and challenging situations that impacted everyone involved. The pandemic notably slowed down our project work, and the reliance on online meetings over a period of two years had an impact on the intensity of our collaboration. Some Asian partner universities had to allocate their resources to clinical pandemic care, further affecting our progress. Nevertheless, the post-pandemic phase of the project provided a genuine sense of accomplishment for the entire team. It fostered innovative collaboration and facilitated the development of all project specialists involved.

Erasmus+ Capacity Building in Higher Education projects are collaborative initiatives involving higher education institutions from EU Member States and third countries outside the programme. These projects have various objectives, including the development and modernization of the quality and accessibility of higher education in partner countries, addressing challenges within their educational systems, and fostering people-to-people contacts, intercultural awareness, and understanding. The projects hold the potential to enhance the skills level of partner country higher education institutions through educational programs, curriculum development, strengthening innovation and internationalization capacity, and promoting cooperation at local, regional, and international levels. The DigiCare project specifically focused on curriculum development within the partner universities, which involved the creation of the DigiCare Model, development of teaching materials for healthcare education, and expertise in utilizing teaching and research methods (Read more in Chapter 2.1).



The necessity for the DigiCare project in Bangladesh and Vietnam was evident, as these countries face similar global challenges related to chronic diseases, just like developed nations. Over the past few decades, Asia has witnessed a substantial rise in chronic diseases, including diabetes and cardiovascular diseases, placing immense pressure on the healthcare system. The existing healthcare capacity is strained to its limits, demanding a diverse range of solutions to alleviate this situation.



Moreover, societies worldwide have experienced significant advancements in digitalization, and Asian countries are no exception. This digital transformation opens up numerous opportunities for the advancement of healthcare education and service delivery. However, the widespread integration of digitalization in healthcare education and care provision necessitates the development of teaching content and methods, as well as a shift in mindset from traditional to modern teaching approaches.

The project's objectives and goals were achieved through various means, including the development of the DigiCare Model tailored to the Asian context (Read more in Chapter 2.2). Additionally, teaching materials for healthcare education were created (Read more in Chapter 4.2), and the competences of healthcare teachers were enhanced through the implementation of new teaching and research methods. The project also generated research articles based on the outcomes collected during the pilot phases and published e-book.



**The competences of healthcare teachers were enhanced through the implementation of new teaching and research methods.**

An essential task of the project involved integrating curriculum development into existing curricula. Consequently, this e-book presents the project's outcomes, evaluates their success and effectiveness, and explores strategies for incorporating them into the curricula of higher education institutions in the partner countries.

## **The DigiCare Model**

The main outcome of this project is the DigiCare Model, described in Chapter 3, which explains the content and connections of various concepts related to chronic disease self-management in the digital era. Enhancing competence in managing chronic diseases involves integrating different societal levels, from individuals to families, communities, and society as a whole. Coaching, both in-person and online,

plays a crucial role in developing this competence. Person-centered care, professional relationships, and health technologies provide support for individuals to effectively manage their conditions.

At the family level, family-centered care involves involving and supporting family members in decision-making processes and creating an environment of understanding. The community level offers essential support systems, reduces stigma, and promotes awareness through education. Broader societal factors, such as policies and technological infrastructure, have an impact on chronic disease management.

The spinning wheel illustration of the DigiCare Model demonstrates the interdependence and interconnectedness of these levels. While the individual level is vital, a holistic approach that considers all levels is necessary to empower individuals with chronic diseases effectively. Regular updates to the model should incorporate new technologies and understand their implications. Recognizing the multidimensional nature of chronic disease management is crucial when designing educational programs and interventions.

In conclusion, the interaction between individuals, their families, communities, and broader societal structures creates an environment conducive to effective self-management of chronic diseases. Adapting the model to advancements in digital health is important, and a multidimensional approach should be adopted when designing interventions.

## The Learning Packages

In addition to the DigiCare Model, this project developed relevant learning packages (Read more in Chapter 4.1) to facilitate the teaching of the model concepts and their interconnectivity. These packages also integrate easily adaptable active learning methods into healthcare education.

The themes of the learning packages were derived from the concepts of the DigiCare Model, expert opinions, needs analysis provided by the partners, and feedback from the pilots. The inclusion of professional communication in the learning packages is noteworthy, as its need was specifically identified by the Bangladeshi project experts. The development of professional communication skills emphasizes the central role of the patient encounter in the care relationship (Read more in Chapter 5.4). The learning package presentations are designed to provide an overview of the themes covered in all packages. Each user of the learning packages will acquire a foundational understanding of the various themes and can adapt the content to meet the specific needs of their institution or teaching group. Additionally, the notes accompanying the learning packages offer suggestions for active teaching methods and provide ideas for further reading material. Each learning package also includes a reference list.



## Pilots and Evaluation



In the DigiCare project, six pilots were conducted at partner universities, with the first two pilots involving healthcare teachers and the remaining pilots including nursing and medical students. One of the pilots also had participants from European universities.

The content and structure of the pilots (Read more in Chapter 4.1) challenged the teachers and students in our partner countries, as we introduced new educational content and methods to them. Integrating digital coaching competence into education and healthcare evoked conflicting feelings. Some of the participants believed that digitalization could solve several healthcare challenges, while others felt that integrating it into healthcare was not yet achievable. Students also had similar conflicting experiences (Read more in Chapter 5.6). On one hand, fostering students' self-directed learning and emphasizing ownership of their learning posed challenges for them. Additionally, students were not accustomed to providing feedback on their education, which made



it difficult to critically refine the project outcomes based on feedback. However, we received new themes for the content of the learning packages from student and teacher feedback. According to our project experts in Bangladesh and Vietnam, their students had a strong desire to please the teachers, respond to questions in a way they assumed was expected, and provide desired feedback. This raises critical reflection on our evaluation data.

## The Project Consortium Achievements

The achievements of the DigiCare project are remarkable considering the structure of the project consortium and the global circumstances during the project period. Our consortium comprised members from Europe and Asia, representing four different countries with diverse teaching and working cultures. These cultural differences influenced aspects such as power dynamics (deriving from low and high-power cultures), hierarchies in project work activities, levels of initiative, and approaches to common project work. Additionally, the teaching paradigms varied significantly among the participating higher education institutions, necessitating an understanding of different teaching methods and facilities.

One area of project work that we continuously developed throughout the project period was communication and task allocation among the project team members. To ensure that partners responded and acted in a manner conducive to the project, it was necessary to delegate communication effectively. This involved determining what information needed to be communicated directly by the project manager and what could be delegated to other team members. By delegating communication and tasks, partners were empowered to take ownership of their respective tasks and contribute to the project's progress. Delegation allowed for timely responses, coordinated actions, and a collaborative approach among the consortium members, ultimately supporting the success of the project. However, in this area, we can always strive to improve our skills and knowledge even further.

Furthermore, the pandemic significantly disrupted our project's transnational meetings, hindering team building and the opportunity to fully understand each other's working styles. On-site and in-person meetings play a crucial role in project planning, innovation, lively debates, and justifying viewpoints. However, online activities, while present throughout the project, cannot fully replace in-person interactions. In-person meetings are pivotal for building trust among consortium members, fostering transparency, enabling direct communication, and facilitating bold innovative work. Despite the challenges, consortium members have reached a high level of expertise. They have improved their digital skills, teaching methodologies, and experienced active working styles in transnational meetings. The incorporation of active methods like world cafe and small group workshops in transnational meetings has introduced consortium members to active teaching methods. These methods have allowed members to personally experience and experiment with active teaching approaches, leading to further enhancement of their skills and knowledge.





The project work skills of the consortium members developed throughout the project period, particularly for higher education institutions with no prior experience in international project work. Project management intricacies were unfamiliar, requiring guidance from the coordinator. As the project progressed, bilateral meetings and discussions on challenging matters played a crucial role in resolving issues or, at the very least, contributed to helping the partners cope with the challenges they faced. These challenges encompassed various aspects, including reporting, resource allocation, and transnational meetings. The result was the development of more streamlined working methods, enhancing the overall efficiency and effectiveness of the project.

The use of a common online working platform proved to be a successful solution, albeit with substantial technical support from the coordinator. The platform increased everyone's capacity, facilitating collaboration, communication, file sharing, and authentication of meeting

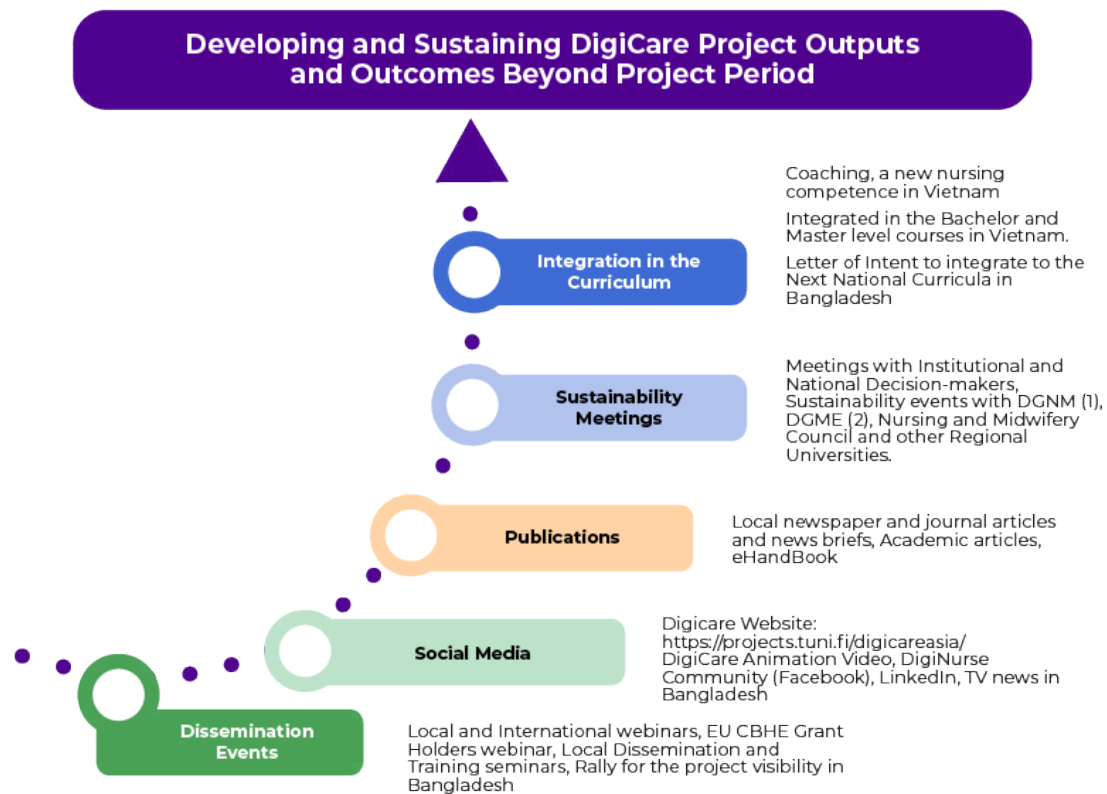
activities through written notes and video files. This ensured that everyone had an opportunity to stay updated with project work, even when unable to attend online meetings. Networking with consortium members and regular online and in-person meetings were essential for maintaining flexibility and efficiency in project work. Building trust within the consortium involved having the courage to ask questions, seek clarification, and foster open communication.



**Networking with consortium members and regular online and in-person meetings were essential for maintaining flexibility and efficiency in project work.**



Disseminating activities and events as well as sustaining project results have required significant effort from the consortium (Figure 30). Experts from partner countries have organized various events to present the project and its outcomes. Additionally, substantial work has been done in terms of disseminating results through various media channels. Several journal articles have been published in Bangladesh and Vietnam, and efforts have been made to publish scientific publications in relevant journals. We have even participated in a rally in Bangladesh to increase the project's visibility. The project is also showcased on a Facebook group and the LinkedIn profiles of project members. In addition, the coordinator has had several meetings with decision-makers, with the representatives from partner countries. These meetings have provided an exceptional opportunity to enhance the integration of project outputs into curricula and ensure the long-term sustainability of project outcomes beyond the project's duration.



1 = Directorate General of Nursing and Midwifery  
 2 = Directorate General of Medical Education



**Figure 30.** Dissemination and Sustainability Activities