A Report about the Activities done in the RERE Project

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Sinai University (SU)

Table of Contents

Appendices

September 2020

1] Introduction

This document reports the activities performed within the framework of the running Erasmus+ project. Its data is:

ICU-Knowledge Triangle, Innovation: Reinforcing of Education- Research E-Health & Medical Links *ICU-RERE*

Erasmus+ Project *609506-EPP-1-2019-1-SE-EPPKA2-CBHE-JP*

Although the previous period was full of dramatic issues like Covid-19, we managed to do some work in different work packages as shown in this report.

Sinai University (SU) has two campuses. The original one is in Arish while the new one is in Kantara East. Both campuses are in the Sinai Peninsula. There are now 13 Faculties, 5 of them fall within the category of medical schools.

2] Dissemination Activities

A request was raised to the university president to allow me to present the project to the university council (see appendix A). He was kind enough to approve the request and during the university council meeting no. 68 of SU on Tuesday 17/3/2020 a brief about the project was given. The council set a decision in its minutes (item number 5-6) expressing their pleasure with the project and the willingness to be supported by all the Faculties in the university (Appendix A).

Before this, an awareness meeting was held in the Faculty of Information Technology and Computer Science (FIT) where Prof. Sharaf Eldin presented the project to the staff of the Faculty and the expected outcomes of which.

This was followed by a university-wide lecture about the project. It took place on 17/2/2020 in Arish (see Appendix B). This lecture was attended by 40 persons (see Appendix C). The presented material is given in Appendix D. Some photos of the meeting are also given in Appendix E. There were a lot of discussions concerning the project and the expected outcomes. The attendees also showed their willingness to actively participate in the project.

A short description of the project also appeared in the local newsletter of SU (Appendix F). The project brief was also posted on the website of the university. However, since the site is now being re-designed, it will be reposted after the new site being established.

In short, the dissemination activities done in the previous period can be summarized in:

- Workshop about the project in FIT

- Workshop about the project in SU

- A brief about the project to the University Council

- A decision by the University council supporting the project

- Announcement about the project in SU newsletter.

- Announcement about the project in SU web site.

3] Academic Program Development

It is thought that having a professional diploma will be more useful to the community and practitioners rather than a classical academic master program. This diploma may be taught in the afternoon and using a blended mode of delivery. Its duration will be around 1 year. This will encourage more staff working in the health sector to enroll.

A suggested preliminary list of the thought courses is as follows.

Group 1: Introductory

- Introduction to ICT

- Introduction to HI, MI, and BI

- Soft Skills: Communication/ Leadership/ Interpersonal Skills/ People Management

Group 2: Specialized

- Health Business Process Analysis and Redesign

- Standards & Interoperability

- Evidence-based Healthcare Practice

- MIS and HER

- Telemedicine and Remote Health Care

The description of these modules is also drafted but not included in this report.

4- Quality Control and Management (QCM) (WP 8)

The proposed QCM is based on the principle of the Plan-Do-Check-Act (PDCA) cycle as follows:

- PLAN means establishing the objectives we want to achieve and the processes needed to deliver results bearing in mind our target and goal. By planning our short/mid/long term objectives and results we would need to achieve, we can better allocate efforts and resources and establish a working methodology.

- DO means to implement the foreseen activities (the plan), execute the activities, and thus produce the desired results. In our case examples of results could be a workshop delivered, a brain storm session, a report on needs analysis prepared, etc.

- CHECK means analyze the results achieved in comparison to the expected outcomes detailed in the description of the work document. In this phase, it is important to detect any deviation or area for improving next similar activity, but also strong points to replicate.

- ACT/ADJUST: In the case of detecting weaknesses, crucial would be the formulation of corrective measures to come back to the project path, requirements towards the achievement of the expected outcomes.

It is worth mentioning to study the probable risks and have a contingency plan. Especially in the crisis of Covid-19, risk analysis should never be overlooked.

5- University-Enterprise Center of e-health (WP 1)

No other place in Egypt needs the center more than SU. North Sinai is considered as a remote area in Egypt which is typically underdeveloped, particularly in health care. Talks with SU president affirm that SU will take the necessary actions and avail the required support to this center. Contacts with probable stakeholders took place in order to assure their active participation and contribution.

A candidate place for the center is chosen within SU campus in Arish.

6- Preliminary list of Equipment

The equipment needed in this project are essentially those required for the center. A preliminary list is as follows.

- A medium size server together with 15 PC's . They are networked together. In addition to this, working software is required. Two types of software are needed. The first one is the operating software like the operating system and utility programs like adobe family. The other type of software is the application software. In this regard, MATLAB is proposed and a video conferencing license is granted.

- A set of specialized books.

7- Conclusions and plan of the next 6 months

The implemented activities, despite Covid-19, may be considered as a good step in the right way. In short we can list the most important achievements as follows.

- A good and diversity methods of dissemination.

- A draft of the courses to be delivered is proposed together with course description.

- A preliminary list of the required equipment for the project is prepared.

Recommendations:

- Enhancing and completion of the Web site.

- Start the first steps in establishing the Center in Arish

- Study and perform risk analysis and prepare a contingency plan.

- Completion of the diploma structure and course contents.

- Developing of course and teaching materials.

BAU Progress 2020

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Dear colleagues,
Wishing our email finds you well and safe, and hoping you passed a good vacation.
Within the framework of the ICU- KTERE Erasmus+ project reference, we gladly share with you the surveys to be filled by relevant personnel in response to the Project entitled ICU-RER.
We wish the links will be shared in Universities and Stakeholders in **LEBANON and EGYPT**
Following are the links to the surveys that were prepared and amended according to coleaders suggestions.
These surveys are three folds:

- **Stakeholders** Questionnaire: https://bau.bluera.com/bau/a.aspx?l=142_1_AAAAAAAABKc
This link shall be shared with relevant stakeholders / National Authorities [(ministry of public health, ministry of social Affairs, ……), Health Care centers, Medical clinics, Hospitals, and E-health industry institutions]

- **Student** Questionnaire: https://bau.bluera.com/bau/a.aspx?l=141_1_AAAAAAAABJ8
This link shall be shared with relevant health related students including but not limited to Faculties of Medicine, Dentistry, Pharmacy, health sciences, etc……

- **Faculty/ Staff** Questionnaire: https://bau.bluera.com/bau/a.aspx?l=140_1_AAAAAAAABJc
This link shall be shared with relevant faculty / staff including but not limited to Faculties of Medicine, Dentistry, Pharmacy, health sciences, etc……

The main purpose of these surveys is to identify gaps and needs regarding E-Health and telemedicine according to the objectives of the project and to help us draw a road map for further actions and policies.
We thank all coleaders for their valuable feedback throughout the process of building the surveys and hope to distribute it and filled it accordingly by the end of september , so that response can be analysed before the monitoring visit and results shared with you.

Best regards,

Beirut Arab University Team
Prof. Sobhi Abou Chahine
Dr Rami Abbas

Linnæus University

Co-funded by the Erasmus+ Programme of the European Union

Erasmus+ project. www.icurere.com
ICU - Knowledge triangle, Innovation, Reinforcing of Education, Research, E-Health and Medical Links
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Progress report: ICU-Knowledge Triangle, Innovation: Reinforcing of Education- Research EHealth & Medical Links /609506-EPP-1-2019-1-SEEPPKA2-CBHE-JP

AL-Azhar University

September /8/2020

Meetings

- **participation in the Kick off Meeting. 10- 11 February 2020 at 6 October University, Cairo,Egypt**
- **Attend Zoom meeting,16 April 2020 15.00 – 16.45**
- **Attend Zoom meeting 9/9/2020**

WP6 Dissemination

- **Newsletter 1 /e-learning**
- **Newsletter 3/COVID-19 and e health**
- **Blog: ICU project and COVID 19 challenges Implementing the activities during time of social distancing**
- **on-line academic meetings /webinar 10/May /2020 /awareness by e- health (43 attendees)**
- **on-line academic meetings /webinar 17/May /2020 /awareness by e- health (21 attendees)**
- **Activity with Assiut University/ Messages to the Egyptian Families from project ICU-Knowledge Triangle, Innovation: Reinforcing of Education- Research EHealth & Medical Links /609506-EPP-1-2019-1-SEEPPKA2-CBHE-JP. It is Movies that will be disseminated to the Society regarding COVOID-19 prevention and awareness. It is in process of montage.**

WP1

- **Formation of team for SWOT analysis for needs**
- **Prepared the list of equipment and software needed for Al-Azhar University**

WP4

- **Search for the scientific content for the Graduate Diploma in e-Healthcare.**

WP8

- **Review the project website**
- **Participate in quality evaluation of Kick Off Meeting**
- **Review the questioners prepared by WP1**

Summary report of Lebanese University activities

Just after the kick off meeting Held in Cairo, and In order to study the implementation of e-health in Lebanon and its impact on the community in general and on the relationship between patients and physicians, we have conducted a survey in north Lebanon hospitals. We have choose a sample of 14 hospitals (which represent around 50 percent of the total population of healthcare institutions), including 13 private hospitals and one public in which the bed number range from 71 to 200.

In another hand, we have meet the coordinator of e-health program in Ministry of Public Health, The Head of Health Directorate in North Lebanon and the President of the Order of Physicians in Tripoli to discuss who we can implement e-health in Lebanese healthcare institutions and trends of future cooperation especially in training.

September 8th, 2020

Jalal HALWANI, Professor

TalTech reporting for the period of January 2020 until August 2020

EU/Erasmus+ Capacity building project 609506-EPP-1-2019-1-SE-EPPKA2-CBHE-JP ICU_RERE,

During this period TalTech conducted dissemination and arranged information sessions, debates and days for colleagues and stakeholders related to the TalTech Health Care Technology programs.

1.Institute of Law organised 3 project meeting sessions with lecturers, students and staff to give overview of the running project, partners and developments at TalTech.

Expert contact person from TalTech were appointed:

Melita Sogomonjan, melita.sogomonjan@taltech.ee,

https://www.etis.ee/CV/Melita_Sogomonjan/est?lang=ENG

Please contact her in 2-health questions in Estonia

Katrin Merike Nyman-Metcalf <katrin.nyman-metcalf@taltech.ee

https://www.etis.ee/CV/Katrin_Nyman%20Metcalf/est?lang=ENG

Please contact her in e-learning related issues in Estonia

They consult and participate in the project and deal with expert info on https://old.taltech.ee/health-care-technology related topics

2.Archimedes Foundation in Estonia https://archimedes.ee/en/archimedes-foundation/ was informed of the project by the contact person Madli Krispin who made one presentation about the ICU project, its aims and developments.

National level information exchange is most important as Estonia is a small country and does not have enough projects in curricula development and it is agreed that Archimedes Foundation is the main information centre for best case demonstration, problem solving and know –how exchange between HE institutions and stakeholders.

3.Another meeting was held at our Engineering Faculty for delivering information about the ICU project to attract attention and find possible PhD students interested https://old.taltech.ee/projects/taltechdigital-2/

TalTech has the desire and readiness to change first itself in a global turnaround, and thus show the way to others. It is based on our ambition and determination to use and develop the latest technologies in the best possible way, and to be at the forefront of creating strategic partnerships both at home and abroad. We are doing so not only in the interests of our academic community, but also in the interests of society in particular.

We envisage the future of TalTech as a university that uses the most advanced technologies to better organise its daily activities – learning, teaching and research. **Everything that intelligent artificial systems do better than humans is left to the systems and humans can show their abilities in the design and development of new solutions.**

This has triggered the **TalTechDigital initiative** in TalTech University. It is not a program with specific time and financial limits, but a promotion of activities that support the vision-based approach.

See also a short movie, how we would not have such a convenient and innovative e-Estonia without TalTech.

Information about admission, continuing education, PhD studies, exchange studies, summer and winter schools with practical information you can find:

https://www.taltech.ee/

A vision of today's society is innovative, entrepreneurial, technologically advanced, and open to the world, and this is what Tallinn Unversity of Technology (TalTech) is applying for through internationally high-level studies and research.
At TalTech, you can experience the future without stepping into a time machine. Here, education meets all things digital!
Founded in 1918, TalTech is the only university of technology and is currently **the most international university in Estonia**. About 10 300 students study at TalTech from which around 16% are international **students from over 100 different countries**.
You can find a suitable programme for your career with internationally recognised programmes in:

- School of Information Technologies
- School of Business and Governance
- School of Engineering
- School of Science

https://old.taltech.ee/health-care-technology
At present more that ever Health Care delivery is changing rapidly. Digital technologies are having an enormous impact on individual health and society's well-being. New innovations are needed to solve the future challenges of health care delivery.

Health Care Technology master's programme gives you the skills and interdisciplinary knowledge to implement new technologies in health care and provides practical examples of health care innovation and digitalization.

You get skills and knowledge for implementing new innovative technologies in health care

The studies include best practices of e-health implementation from Estonia and abroad and provide you the relevant change management skills to contribute to health care systems' improvement.

There are many great examples, where digital and e-health services operate well and bring value. For example, the Estonian digital prescribing system provides seamless prescription management to the whole population and the country-wide EHR connects 100% of all health care providers for efficient patient data sharing. There are also growing digital health start-ups, of which a number have been founded by previous students of Health Care Technology master's programme.

Experience and examples of countrywide e-Health implementation in Estonia

There are a lot of possibilities for better use of new technologies in health care. Human society is only doing its first steps in implementation of digital technologies and AI in health care. Secondary data use is at a low level and new services for better personalization, prevention and earlier detection of diseases are needed fast.

This is the reason why this curriculum exists. You will be the one to help to change healthcare! You will acquire the knowledge about health systems, managing change and digitalizing health care for better value. You might co-found new digital health start-up, continue to do a PhD, start working as a hospital Chief Innovation Officer or start leading a nationwide health-tech cluster. These are a few examples of what are alumni are doing.

Study Programmes in English

School of Information Technologies

Bachelor's programmes:

- **Cyber Security Engineering (BSc)**

Master's programmes:

- **Cyber Security (MSc)** (joint programme with University of Tartu)
- **Communicative Electronics (MSc)**
- **Computer and Systems Engineering (MSc)**
- **e-Governance Technologies and Services (MSc)**
- **Health Care Technology (MSc)**
- **Software Engineering (MSc)** (joint programme with University of Tartu)

1. ISM1: Information, Communication and Engineering Technology in medicl and healthcare
2. ISM2: Computerization of Mecdial records and E.Health services,
3. ISM3: Medical Erros, Malppractice and risk Management
4. ISM4: Through integrated e-Helath system and visions into the future of healthcare,
5. BM1: Clincial e.health applications
6. BM2: Indpendent Project work

https://old.taltech.ee/studying/continuing-education/

Continuing education

Tallinn University of Technology (TalTech) provides opportunities for continuing education in all subjects taught at the university and in the related fields.

Continuing education includes:

- Continuing professional education - refresher courses and seminars evaluated with university credit points.

- Individual self-improvement programmes - great opportunity for self-education and requalification.

- Tailor-made courses - training programmes that take into account client's individual background and specific needs. Great opportunity to develop your staff.

- Continuing education based on requirements for professional qualifications in the field of technology - training courses serving as a prerequisite to apply for professional recognition.

Continuing education activities are coordinated by the **Open University of Tallinn Univesity of Technology**.

For stakeholders:

https://old.taltech.ee/faculties/school-of-information-technologies/

TalTech opened the the doors of our labs to introduce you scientific product and service development and discuss what the future of your company's product development might look like. In order to create something new and valuable, we are ready to carry out various tests in our laboratories, create new system components, construct different prototypes, systems simulation environments and many other things.

More than thirty labs will be open at TalTech campus in Mustamäe, the Estonian Maritime Academy in Kopli and Kuressaare and the Oil Shale Competence Center of TalTech Virumaa College in Kohtla-Järve.

You will have a unique opportunity to get acquainted with the technical and scientific capacity of TalTech laboratories and find a reliable partner from among suitable TalTech labs. We help you realize the wildest ideas – come join us on the road to the innovative future!

'In a science-based economy, scholarships are the bridge to new ideas and talents reaching companies and the wider economy. I am very pleased that the TalTech Development Fund has been able to build so many bridges from the present to the future that today's students will use to promote Estonian companies and the country as a whole in the future,' said **Robert Kitt**, Chairman of the TalTech Alumni Association.

Through the Development Fund, the efforts of TalTech students are recognised by over 60 individuals, organisations, and companies. A total of 766 students, young researchers, and lecturers applied for the autumn round.
Utilitas Energy Group grants scholarships for the first time through the Development Fund. This time, students of the School of Engineering will receive a total of five Clean Energy scholarships from Utilitas for a total of €8,600.
'The next generation of engineers is very important in the field of energy, and due to the rapid development of new renewable energy technologies, good education and extensive knowledge are essential. Utilitas naturally welcomes the new generation of engineers to allow them to contribute to the development of Estonian energy,' said **Priit Koit**, CEO of Utilitas Group.
The purpose of the TalTech Development Fund is to collect and mediate grants to Tallinn University of Technology and to involve Estonian entrepreneurs in cooperation with the university. The Development Fund annually announces scholarship competitions for students of all levels of study, as well as for young researchers and lecturers, to contribute to the students' motivation to study and to foster the progeny of the academic staff at Tallinn University of Technology.
The scholarship competitions are held twice a year, with the Spring 2020 competition started already.

Almost two-thirds of TalTech foreign IT students have found professional work in Estonia

According to the latest statistics from the Tax and Customs Board, 65% of the foreign students of the School of Information Technologies of the Tallinn University of Technology (TalTech) have found a job in Estonia.

'We are pleased to note that graduates of all study programmes of TalTech's School of Information Technologies, regardless of their origin, can easily find employment in Estonia. It gives us assurance that our programmes are in line with the requirements of the labour market,' said **Gert Jervan**, Dean of TalTech's School of Information Technologies. He explained that the entrepreneurs themselves, with whom the university works closely and who themselves contribute to the development of curricula through programme councils, also have a role to play.

According to the Tax and Customs Board, the highest number of foreign students who have found jobs in Estonia have graduated from TalTech's Cyber Security and Communicative Electronics programmes, with 79 and 73 per cent, respectively.

The majority (88%) of the foreign students found a job in Estonia within one month after graduation or even during their studies. 'The fact that foreign students can find a professional job so quickly confirms the need for IT experts and encourages future students to choose the specialty required in the job market,' said Jervan.

Comparing the salary levels of 2016 and 2019, the average salary of foreign graduates has increased from €1,187 to €1,902 (60%). The salary level of foreign students who graduated more than over half a year ago has increased by 28%, from €1,475 to €1,882.

Almost 1,700 foreign students from 100 different countries started their studies at TalTech this academic year, accounting for 16% of all students of TalTech.

The data comes from Information Technology Foundation for Education's analysis based on data from the Tax and Customs Board.

https://old.taltech.ee/innovation/services-3/

Our values are openness, professionalism and innovativeness. Our university is a reliable partner for both local and international companies, networks, public sector, different universities over the world, embassies. In our TalTech Innovation and Business Centre Mektory, science and market demand meet to realize innovation projects. These projects provide business advantages for companies, work experience for students and R&D opportunities for the university.

You will find good solutions here!
Your Innovation and Business Centre MEKTORY

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