DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Project description

(Source Sans Pro, font size 10)

Funding programme:	Ukraine digital: Ensuring academic success in times of crisis (2023)
Programme objective(s) Programme objectives are pre-specified and must not be changed	
Programme objective 1	Virtual courses for students are expanded, offered, and used by students of the partnering Ukrainian higher education institutions.
Programme objective 2	Lecturers of the partnering Ukrainian higher education institutions, especially those who have fled, are involved in the courses.
Programme objective 3	The expertise for further digitalisation of the participating German and Ukrainian higher education institutions and the professionalisation of digital teaching are available and can be used for the development of further (joint) virtual courses.

General Information

Project name	UA-MEDSAT: Ukraine MEDical SAtellite Teaching 2023		
Applicant institution	Julius-Maximilians-University Würzburg, Faculty of Medicine		
Organisational area	Office of the Dean of Studies, Faculty of Medicine		
Project manager (PV)	Sarah König (Chair of Medical Education, Dean of Studies)		
Requested approval period	From: 01.01.2023 To: 31.12.2023	For follow-up application[1]: Previous approval period	From: 01.09.2022 To: 31.12.2022
Cooperation partners/partner institutions (within and outside Germany)	I. Horbachevsky Ternopil National Medical University (TNMU)	Oksana Shevchuk	Ukraine
	National Pirogov Memorial Medical University, Vinnytsya (VNMU)	Nataliia Gorbenko	
	Luhansk State Medical University	Yuliia Lukash	
	Uzhhorod National University	Oleksandr Pulyk	
	Danylo Halytsky Lviv National Medical University	Alexandre Nadagra	
	V.N.Karazin Kharkiv National University	Olha Konstantynovska	

---

[1] Follow-up application: Application for a project which immediately follows on from funding in the same funding programme.

Are there parallel funding streams and/or applications under other DAAD programmes in the context of this project application?	Yes ☐	No ☒
If yes, under which?	Please specify	
Are there parallel funding streams and/or applications under any other funding programme provided by another funding organisation in the context of this project application?	Yes ☐	No ☒
If yes, under which?	Please specify	

Previous project progress

1. Please describe the previous project progress (implementation of measures and achievement of objectives).
2. If an **evaluation** has already been carried out, describe its results and, if relevant, their implementation in the further course of the project. If applicable, describe any implementation steps which have begun and/or are planned *(at most one A4 page)*.

The Faculty of Medicine, University of Würzburg successfully implemented the project "UA-MEDSAT" to provide online teaching to medical students in the Ukraine from 01. September to 31 December 2022. Teaching is held in the national language Ukrainian. The Faculty of Medicine, University of Würzburg offers study materials and online classes for medical students, so they can continue and complete their degree courses. The online courses also aim to compensate for the lack of practical training.

Lecturers with prior teaching experience from medical universities and hospitals in the Ukraine, those who have fled to Germany, are involved in the courses as well as simulated patients of Ukrainian origin. All staff were trained accordingly (content and didactics). They use teaching materials and didactic concepts from the Würzburg Faculty of Medicine, thus reflecting best practices of German higher education and the healthcare system. The following areas of medical education were developed and successfully implemented as deliverables:

Module 1: Medical communication and counselling skills are fundamental to clinical competence. In the asynchronous phase of blended learning, general information on communication, pratical guides, role play scripts, and videos with best practice examples are provided, which were all translated or primarily produced in Ukrainian language. The focus lies on the principles of communication in medical practice, taking the case and medical history, and breaking bad news. For online teaching as practical training, students train standard techniques in feedback, role-plays performed by peers and reflected in small-group discussions. Aiming to transfer communication, counselling, and assessment skills in realistic scenarios, simulated patients (SP) in a telemedicine setting are also employed (two teaching hours). To our knowledge, this elaborated teaching method using simulated patients is the first ever implemented for medical education in the Ukraine. This total module requires 6 sessions of practical training as real-time online (2 teaching hours per session, 12 teaching hours in total per student). Groups are organised of approx. 12 students. The study load is calculated as 1 ECTS.

Module 2: Clinical reasoning and case-based discussions encompass the application of knowledge to collect and integrate information from various sources to arrive at a diagnosis and management plan for patients in a shared decision-making process. Following preparative material, case-based discussions are implemented, so that students can apply their acquired knowledge. Five major medical disciplines, such as surgery (4 sessions), internal medicine/therapy (2 sessions), gynaecology and obstetrics (2 sessions), paediatrics (2 sessions), and neurology (2 sessions) are covered. The presentation slides originated from the university hospitals of Würzburg and Erlangen and were provided by experienced teaching staff using the material for their regular classes. Translation into Ukranian language was performed by immatriculated medical students of Ukrainian mother tongue. In total, 12 patient-based discussion sessions are carried out in interactive online seminars (2 teaching hours per session as real-time online, 24 teaching hours in total per students). Groups are organised of approx. 22-25 students. The study load is calculated as 1 ECTS.

The following online teaching was performed with our two partners:

Partner	Module	Period	Groups/ students	Teaching hours of lecturers	Simulated patient hours
Ternopil	1 Communication skills	01/09/2022 - 14/11/2022	18/ 216	216	36
Ternopil	2 Clinical cases	19/09/2022 - 02/11/2022	16/ 384	384	not applicable
Vinnytsya	1 Communication skills	05/09/2022 - 24/12/2022	29/ 348	348	58
Vinnytsya	2 Clinical cases	19/09/2022 - 10/12/2022	16/ 385	384	not applicable

The quality of teaching will be assessed by the students. We request feedback on how they experienced the teaching opportunities and its benefits for their degree programme. Thus, a questionnaire - covering characteristics of participants and technical conditions, structure and content of teaching, didactics of teachers and students' learning outcome - has been developed and will be accessabele via the EvaSys® electronic survey system. All information the students provide will be anonymous and on a voluntary basis. The survey will be implemented from November 2022 onwards until the end of teaching activities.

The fowolling personal was recruited to work on the teaching project:

Position	Origin	Number	Payment
Project coordination and lecturer (employment contract with the university)	Ukrainian refugee	1	100% E13 –level 4
Lecturer *	Ukrainian refugee	11	Hourly basis 65 Euro
Coordination of simulated patients and material for illustration (e.g. guides, videos) *	German employees of University Hospital Würzburg	5	
Simulated patients *	Ukrainian refugees	8	Hourly basis 20 Euro
Student assistants, contract with the university	Ukrainian origin, immatriculated at the University of Würzburg	3	Hourly basis 12 Euro

*) persons working on an hourly basis signed a fee-based contract with the University of Würzburg. In this contract, the framing conditions such as the subject matter, renumeration, responsibilities, liability and confidentiality were stated.

All IT hardware and infrastructure was available on site of the University of Würzburg and no equipment was necessary to realize the project other than headsets for the lecturers. All funding is for personnel expenditure and travel costs within Germany exclusively.

Brief description of the project

Describe the planned project (at most half a page A4).

Medical students in Ukraine have been massively impaired in their studies, through damaged or even destroyed infrastructure, and the loss of teaching staff who have had to flee the country or relocate to front lines as medical staff. The war has also displaced medical students, either within the country or as refugees across Europe and beyond. Thus, physical teaching on campus is either increasingly difficult or now completely impossible. Online teaching seems to be the only solution to garantuee any progress for students during their undergraduate medical education.

The objective of this follow-on proposal is to provide focussed assistance to Ukrainian medical students, still matriculated at their home institutions, by providing selected online teaching in relevant subjects and to compensate for curricular gaps. The following curricular elements implemented as two modules of online teaching also aim to reduce the workload of lecturers in medical universities in the Ukraine and to stimulate their repertoire.

1. Module 1: Training of communication and feedback skills (taking history, breaking bad news, and counselling), predominantly aimed at the second year of medical school, equivalent to semesters 3-4 of the German curriculum (**Measure 2**)
2. Module 2: Training of clinical reasoning through case-based discussion in central subjects (surgery, internal medicine/therapy, gynaecology and obstetrics, paediatrics, and neurology) predominantly aimed at the fourth year of medical school, equivalent to semesters 7-8 of the German curriculum (**Measure 3**)

The two online modules will take place as blended learning: asynchronous digital material and specific online tasks prepare students for subsequent synchronous meetings online. Communication skills will be trained by involving live simulated patients (SP). The authentic case-based discussions are based on real patient data, adapted and anonymized for teaching purposes. The SARS-CoV2 pandemic and the necessity of online teaching clearly demonstrated the feasibility and success of digital alternatives in faculties of medicine everywhere. We would like to pass on our validated materials and teachings concepts. Additionally, students as well as lecturers from our Ukrainian partners may profit from the valuable insight gained into the German healthcare system including communication standards with patients and technicially driven treatment strategies.

Project objectives and substantive description of the project

1. State your project objectives, which must be consistent with the programme objectives mentioned above, and describe the specialised content of the project.
2. Touch upon the relevance of your project and ensure that you address all selection criteria in the 'Förderrahmen' (funding framework), which are listed again here:
   (1) plausibility of the proposed project
      o Project objectives relate to programme objectives
      o Correlation of the measures to the project objectives and the proposed progress over time
      o Necessity of expenditures for implementation of the measures
   (2) Technological requirements (existing digital infrastructure)
   (3) Involvement of lecturers of the Ukrainian higher education institution
   (4) Commitment of the partnering Ukrainian higher education institution
   (5) Expected relevance and broader impact
   (6) Project progress achieved so far *(At most one A4 page)*

The war in Ukraine has seriously disrupted clinical teaching and displaced medical students and lecturers from medical universities and hospitals, rendering clinical teaching in person on campus increasingly difficult to impossible. This project aims to provide focused online teaching for Ukrainian medical students as assistance to medical universities by filling some of the gaps in clinical training that the war has created. Deficits now clearly exist in the delivery of practical courses, professional attitudes, as well as communication skills with clinical clerkships no longer possible in any locations.

The Faculty of Medicine in Würzburg wishes to continue and expand its teaching activities as **"satellite location"** to support Ukrainian universities, with our two pilot partners Ternopil and Vinnytsya and with new partners such as Kharkiv, Lviv, Luhansk, and Uzhhorod (Programme Objective (PO) 1). The aim of the online teaching project comprising two modules is to further augment students' communication and case-based clinical reasoning skills in specialties of medicine. We target new student cohorts of our two pilot partners and want to expand the online teaching to more Ukrainian medical universities (PO 1).

For the original project, we were able to recruit a Ukrainian coordinator and professional lecturer from the medical field (from NMU Vinnytsya, now living in Nuremberg) (PO 2). As she has already confirmed that she wishes to continue her work on successful follow-up funding, we will profit from her strong network and expertise. Thus, it is now far more easy and faster to contact especially the universities in the Eastern part of Ukraine and those who could not cooperate with us so far owing to language difficulties. Addionally, the project foresees continuation of our collaboration with our sucessfully recruited and qualified medical lecturers and simulated patients, who are refugees in Germany (PO 2). They are now settled to a greater extent in our country with respect to social integration and working infrastructure.

Our two developed, tested, and established modules (communication skills and case-based discussions) including the elaborated teaching contents and concepts will be employed and further adapted to the needs (please refer to previous project progress) (PO 3). The two pilot project partners have already given us overwhelming and positive feedback. The challenge is now to expand it to further Ukrainian State Medical Universities and to intergrate the online teaching into their schedules. Lecturers as refugees in Germany will cover the online teaching, as they were/are specially trained and instructed by the project leader Prof. Dr. med. Sarah König (Dean of Studies, Faculty of Medicine Würzburg, Director of the Institute of Medical Teaching and Medical Education Research, University Hospital Würzburg). However, Ukrainian lecturers from our partners in deed assist the online teaching and therefore may serve as local multipliers for the knowledge transfer (PO 3). To add to the concept of blended learning, asynchronous teaching material to prepare for the online teaching will be further expanded (teaching deliverables). New Ukrainian lecturers and simulated patients may be recruited owing to fluctuation. They will also benefit through the implemented preparatory training in didactics (administrative and didactic deliverables).
As we stated in the first proposal, the modular nature of the project now allows its expansion to other institutions.

The technical requirements (e.g. PCs equipped for web conferencing / online meetings) and IT infrastructure for online learning (WueCampus and its open variant OpenWueCampus as a learning platform) are already fulfilled and fully established. Würzburg Faculty of Medicine is highly experienced in virtual teaching, digital administration, didactic qualification, and skills training including SP. Of note, the Würzburg project leader is also heads the Institute of Medical Teaching and Medical Education Research.

Please note: We planned on expanding to one or two additional partners (including the existing Ukrainian ERASMUS+ partner Lviv and Karazin in Kharkiv) and were a little surprised how quickly the information spread throughout Ukraine. In a very short space of time, we had two extra partners Luhansk and Uzhhorod. The potential numbers of students are not clear given the dynamic circumstances on the ground, but are greater than the capacity we can currently provide. In order to accommodate these rather unprecendented numbers, we can adjust the group sizes and divide the resources available as fairly as possible. This is clearly possible, as each university location identifies which student cohorts it wishes to serve with our module(s) and has differing needs and yeargroups.

Measures planning

a. Description of the measures
Describe the measures planned (please note the 'eligible measures' section in the 'Förderrahmen' (funding framework) and explain any required material and personnel expenditure. Briefly assign the measures to the project objectives indicated above. State any risks with regard to implementation. *(No more than one half A4 page per measure described).*

Insert new rows in the table for further planned measures.

Title of measure 1:	Projet coordinator and clinical expert lecuturer
Description:	The coordinator plans and oversees the day-to-day running of the teaching and harmonises the online meetings with the schedules of the partner universities. She assists in documenting the teaching hours for financial administration. She also helps with identifying and recruiting Ukrainian staff (lecturers, simulated patients). The coordinator is the central contact person for all matters of the educational offices of the partners and the lecturers in particular for short-term changes to the teaching sessions in case of unwanted events (e.g. interruptions by air raids, failure of technical systems). As a clinical specialist in psychiatry and neurology (academic and doctor degree), she has longstanding clinical and educational experience. Thus, she also coordinates the subjects and materials in both modules. She further develops the concept of Module 1 and teaches in all sessions. Additionally, she trains the lecturers for distance teaching that requires specific technical and didactic tools to compensate for loss of direct activation and students' lack of social interaction. With her help, quality assurance matters will be carried out (e.g.

	evaluation by students, interview of lecturers and simulated patient). She also analyses the results of the project for medical education research. Coordinator at E13- level 4 (100%) for 12 months: EUR 83.452
Assignment to project objective(s)	Central programme objectives: PO1, PO2, PO3
Title of measure 2:	<u>Module 1</u>: Medical communication and counselling skills
Description:	It is fundamentally important to teach basic communication, counselling, and assessment skills to undergraduate students to increase their clinical competence. Improving these skills also requires self-awareness, interpersonal sensitivity, and willingness to be self-reflective. The already implemented module will be taught to new student cohorts. Aiming to transfer communication, counselling, and assessment skills in realistic scenarios, we also employ simulated patients (SP). Teaching material such as videos of patient interviews need to be further developed and travel costs of lecturers within Germany need to be reimbursed. This module contains a variety of digital formats to deliver theory and practice, all making up to 1 ECTS. Synchronous online teaching will be held in the form of 6 sessions of each 2 teaching hours, group size is didactically limited to 12 students to enable practical communication training. Please be aware that currently, our partners are physically unable to oversee the time schedules and student numbers enrolled in their medical degree programmes for the year 2023. Thus, scaling the module to exact student numbers and teaching hours is not possible. A clear risk lies in the devastating effects of the war involving aerial attacks, bombardment, and the targeted destruction of critical civilian infrastructure. • Lecturers delivering teaching at 65 EUR hourly rate, x 300h = total EUR 19.500, effecting 399 teaching hours. • *Of note, the coordinator and clinical expert teacher (Measure 1) also delivers approx. 600 teaching hours in this module.* • Simulated patients at 20 EUR hourly rate, x 166h = total EUR 3.320 • Coordinator and trainer of simulated patients at 60 Euro hourly rate, x 50 hours = total EUR 3.000 • Technical consumables such as headsets: EUR 265 • Travel costs of lecturers within Germany: EUR 600
Assignment to project objective(s)	Central programme objectives: PO1, PO2, PO3
Title of measure 3:	<u>Module 2</u>: Clinical reasoning and case-based discussions
Description:	Clinical reasoning encompasses the application of knowledge to collect and integrate information from various sources to arrive at a diagnosis and management plan for patients. Module 2 is already implemented and comprises case-based discussions based on real patients in major medical disciplines. Students learn how to apply theoretical knowledge to problem solving and treatment of patients. The module comprises 1 ECTS and will be taught to new student cohorts. Synchronous online teaching will be held in the form of 12 sessions comprising 2 teaching hours each, group size is set to 22-25 students to enable interaction and discussion. Please be aware that currently, our partners are physically unable to oversee the time schedules and student numbers enrolled in their medical degree programmes for the year 2023. Thus, scaling the module to exact student numbers and teaching hours is not possible. A clear risk lies in the devastating effects of the war involving aerial attacks, bombardment, and the targeted destruction of critical civilian infrastructure.

	• Lecturers delivering teaching at 65 EUR hourly rate, x 547 hours, total EUR 35.555, effecting 723 teaching hours. • Technical consumables such as headsets: EUR 300
Assignment to project objective(s)	Central programme objectives: PO1, PO2, PO3
Title of measure 4:	Teaching materials provision
Description:	Translation and proofreading into Ukrainian of selected established guides, handbooks and teaching material produced in German by the Faculty of Medicine in Würzburg. We aim to involve Ukrainian student assistants and technical staff of the university hospital Würzburg in the creation of the Ukrainian versions , including video material. • Student assistants at 12 EUR hourly rate, x 160 hours = total EUR 1.920 • Media technician at 50 Euro hourly rate, x 40 hours = total EUR 2.000
Assignment to project objective(s)	PO1

b. Scheduling the measures for the project year 2023

The schedule and event plan assists in planning and describing the objectives as specifically as possible. Enter the planned measures chronologically in the table using bullet points.

Funding measure	J	F	M	A	M	J	J	A	S	O	N	D
Measure 1	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒
Measure 2+3	☐	☐	☒	☒	☒	☒	☐	☐	☒	☒	☒	☒
Measure 4	☒	☒	☒	☐	☐	☐	☐	☒	☒	☐	☐	☐
Measure 5	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

Explanations of the financing plan (optional)

Specify revenue and/or expenditure/items in the financing plan where clarification is necessary (at most *half a page A4).*

Ukrainian refugees in Germany with medical training and/or full qualification as doctors from Ukraine are unable to practice medicine in Germany without accreditation, but may act as lecturers in online teaching on an honorary contract basis. Of note, foreign medical graduates require German language certification and formal recognition of their training before they can legally practice as physicians in Germany, a process that takes many months up to two years.

Our proposal only requires funding of personnel for training and teaching purposes, as well as preparation of the materials for online teaching. No mobility funding is required at all for the modes of teaching proposed and students from Ukraine are not required to be physically present in Würzburg, so no scholarships are required.

Sustainable effects and future prospects

Describe, how you plan to achieve sustainable effects that last beyond the funding period, as well as the project's future prospects. Please also address risk factors and responsibility and possible strategies for handling these.

Ukrainian medical teaching facilities need to maintain their ability to train the next generation of medical personnel and guarantee their country's future. The risk is very great that critical infrastructure such as energy and water supply as well as the healthcare system will totally collapse as a victim of the war. This is a fundamental humanitarian project aimed at supporting Ukraine's ability to rebuild the capacity of its healthcare

system in the long term, after the hostilities have ended. The project also contributes to the psychological wellbeing of refugee doctors displaced from Ukraine and currently unable to practice or as a potential means of actively assisting in support of Ukraine.

Beyond the immediate response to bridge the gaps in clinical skills teaching so fundamentally important to medical education, we regard this project as the onset of a long-term partnership in digital teaching, in which the respective teaching facilities (Faculty of Medicine and Clinical Skills Lab) exchange ideas and pool resources and knowledge online. Future physical exchange and interaction will play a key role in the rebuilding of Ukraine's academic medical infrastructure in the medium to long term, which clearly depends on the cessation of hostilities.

Further information

Roles of the project partners/cooperation partners in the **project**

List the project partners in Germany and outside Germany and state the tasks for which they are responsible in the project.

- Universitätsklinikum Würzburg (UKW), Josef-Schneider-Straße 2, 97080 Würzburg:
  Doctors from UKW contribute to the development and implementation of clinical teaching and training
- Ukrainian partner universities assist in finding time slots for the project related online teaching in their schedule, for data protection reasons they need to communicate and share information with their students. They have to work with theirs lists and group devisions.

Fees

Explain the envisaged purpose and recipient of the fees (including their professional/academic function).

Please Note: In exceptions, a fee contract may be concluded with permanent staff. In this case, the form "Confirmation of project-specific payment of fees to employed personnel" must be submitted, see **form templates** *(signature of the higher education institution's management required) (only in German).*
When submitting an application, please consult your higher education institution's administration to determine if awarding fees to your own staff is possible.

Medically trained Ukrainian citizens as refugees in Germany have been identified to a large extent, who will receive fees for their work as trainers teaching on an hourly basis. Additional people will be identified and recruited as necessary to cover fluctuation.

Doctors as lecturers from the University Hospital are considered as external personnel who are able to receive honorary fees on an hourls basis for additional income. Internal personnel of the University are not envisaged as recipients of fee payments.

Selection procedure for scholarship candidates and participants
Please describe the selection process for scholarships or participants in line with the 'Förderrahmen' (funding framework).

Please note the obligatory selection criterion: Scholarships may only be awarded to persons who need the financial support to secure their subsidence in order to be able to continue their studies. The need has to be confirmed individually towards the higher education institution by the students/doctoral candidates via self-disclosure as part of the scholarship selection procedure. For scholarships in Germany, other financial benefits to secure their subsidence must also be taken into account.

Lecturers and student assistants will be recruited according to their language capabilities and subject-related knowledge and skills in the specialties on which we are focusing. Previous experience in teaching, either face to face or online is desired, although we are providing targeted skills training beforehand to all lecturers and SP.

Participating students from Ukrainian medical teaching institutions are automatically selected through their enrolment in the Ukrainian medical school. We do not envisage any selection process beyond that to ensure online access to UA-MEDSAT for as many Ukrainian students at our partners as we can accommodate.

Do you plan to **forward the grant**? If so, and if the forwarding recipient is known, please explain why and name the recipient.			yes ☐	no ☒
Explanation:	Please specify			
Forwarding recipient (WL-E)	Name of the institution	Name of the PV		Specify country