

Work Package 2 – Development

Report on EduTech Implementation

*Covering the Situation at University of
Cambodia*

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1. Introduction

This report is part of the project **CONTESSA–Contemporary Skills for South Asia**. CONTESSA is a three-year project (11/2018-10/21) funded by the European Union’s Erasmus+ Programme covering four countries in Europe and Asia.

The aim of CONTESSA is to establish a teacher education program that supports current teachers, future teachers and teacher educators developing a wide range of contemporary teaching and learning skills which, in turns, help engaging, empowering and educating their students. The project thus contributes to high-quality schooling in primary education in the project partner countries Austria, Cambodia, Germany, and Sri Lanka. It addresses three target groups all of them involved with teacher education at primary level:

- **pre-service teachers**, also called future teachers or trainee teachers, i.e. students who will become teachers and currently pursue a University degree to become fully qualified teachers;
- **in-service teachers**, i.e. those teachers who are fully qualified professionals and who teach in primary schools;
- **teacher educators**, also called **teacher trainers**, i.e. those professionals who educate and train future teachers at tertiary levels.

CONTESSA is run by a consortium of six project partner institutions and seven associated partner institutions across four countries:

Project Partner Institutions	Associated Partner Institutions
<ul style="list-style-type: none"> – University of Graz (Graz, Austria), Project Coordinator – University of Cambodia (Phnom Penh, Cambodia) – Pannasastra University of Cambodia (Phnom Penh, Cambodia) – Technische Universitaet Dresden, (Dresden, Germany) – University of Colombo (Colombo Western Province, Sri Lanka) – The Open University of Sri Lanka (Colombo Western Province, Sri Lanka) 	<ul style="list-style-type: none"> – University of Jaffna (Jaffna, Sri Lanka) – University College of Teacher Education Styria (Graz, Austria) – National Institute of Education (Phnom Penh, Cambodia) – National Institute of Education (Maharagama, Sri Lanka) – Ministry of Education, Youth and Sport (Phnom Penh, Cambodia) – University Grants Commission (Colombo, Sri Lanka) – Little Smile Association (Koslanda, Sri Lanka)

2. Methodology of the report presented

The report is based on qualitative and structural data collected in four separate focus group discussion with representatives from the four partnering Universities in South Asia.

Focus group procedure not only allows to capture the opinions of participants, but also to promote the interaction between other participants. Through social interaction, participants will share and compare their knowledge and understanding. (Cousin, 2009). Through social interaction, participants will share and compare their knowledge and understanding. As a result, researchers are able to address current issues not only from discussions with researchers, but also through interaction between participants. (Liamputtong, 2011). In this report, a focus group was conducted with the program coordinator, lecturers and students in the pre-implementation stage.

Focus group discussions were conducted in the pre-implementation phase as part of the context and needs analysis of the project. The focus group looked at needs and context from the professors, lecturers' and student's perspective. Choosing this procedure was to get to know the professors, faculty and students, and to identify their intentions about ICT introduction and online learning environments. Liamputtong (2011) considered a focus group as a "useful research tool when the researcher does not have a depth of knowledge about the participants" (p. 6).



Meeting with lecturers at University of Cambodia

The professors, lecturers and students were invited to participate in the focus groups discussions. The focus groups were conducted in an informal, participatory, and interactive environment with the aim of exploring the needs and issues surrounding the context of the study. Questions asked during these focus group meetings included inquiring about the professors', lecturers' and students experience in using web-based technologies for teaching and learning purposes, what they thought were the challenges in their teaching and learning, and how the use of technology could help address these challenges.

3. Main findings

The following tables summarize the results of discussions according to current status and needs of ICT and online learning environment in the respective university:



Place for smart classroom at University of Cambodia

Table 1. Summarized key issues of focus group discussions at University of Cambodia

Categories	Status	Needs
<i>Internet access and ICT Infrastructure</i>	<ul style="list-style-type: none"> – Most of the students using internet at home – Low speed of internet connection (Wi-Fi and WLAN) at the university 	<ul style="list-style-type: none"> – Large bandwidth internet connection – Separate line for smart classroom – Wi-Fi router: 1 pc.
<i>Electricity supply</i>	<ul style="list-style-type: none"> – Lack of electricity supply: in case of electricity down, it is possible to use electricity generator 	./.
<i>Mobile/digital devices</i>	<ul style="list-style-type: none"> – Use of ICT at school mostly for entertainment, not for education – Few students has own laptops – Use of smartphones in household 	<ul style="list-style-type: none"> – Laptops (Core i7): 2 pcs. – Desktop computers (Core i7): 23 pcs. – All-in-One colour printer: 1 pc. (3-4 package of toner) – Professional digital camera for video production: 1 pc.
<i>Presentation & communication technology</i>	<ul style="list-style-type: none"> – Use of Moodle and Skype by teachers – Motorized Projector Screens are already used at the classrooms – Videoconference system at the university is not available 	<ul style="list-style-type: none"> – Video conference system for smart classroom: 1 pc. – Headphones: 1 pc. – Interactive whiteboard projector screen: 1 pc.

<i>Learning / Teaching Lab</i>	<ul style="list-style-type: none"> – Lack of digital technologies (also E-Learning) at school, teachers use internet or Google as a source for course preparation at home – Classrooms are equipped with the air conditioners and available for equipping of the smart classrooms 	<ul style="list-style-type: none"> – Separate workplace for teacher for producing media – Separate classroom for students
<i>Online Platform</i>	<ul style="list-style-type: none"> – LMS is not available – Use of Facebook, WhatsApp, Gmail, Google Drive etc. for course activities, sharing of information and communication 	<ul style="list-style-type: none"> – Blended Learning
<i>Software packages</i>	<ul style="list-style-type: none"> – Unlicensed copy of Microsoft Office and other programs are available 	<ul style="list-style-type: none"> – Licensed copy of software programs: Microsoft Office, Windows OS, Antivirus, Adobe Premier, Sony Vegas, Adobe Photoshop, Adobe Illustrator, CorelDraw – 2 licensed copy of video editing programs for 2 laptops
<i>Digital printing materials</i>	<ul style="list-style-type: none"> – Lack of teaching materials in public schools – Old fashioned paper textbooks are preferred 	./.

4. Open issues and next steps

Subsequently to the discussions, which had been completed and recorded carefully the following next steps are planned:

- 1) Confirmation of the protocol by the partner universities
- 2) Exchange with the project management in Graz
- 3) Confirmation by the PO

References

- Cousin, G. (2009). *Researching learning in higher education: An introduction to contemporary methods and approaches*. New York, NY: Routledge.
- Liamputtong, P. (2011). *Focus group methodology: Principle and practice*. Thousand Oaks, CA: Sage.

Appendix

Appendix 1. Meeting protocol with lecturers at University of Cambodia

Date: 17.12.2019 09:00

Place: University of Cambodia, Phnom Penh, Cambodia

Participants: Thomas Köhler, Orkhan Jalilov, Travis Mitchell, +6 persons

Notices:

1. Which equipment to be purchased?
 - It should be installed locally
 - 3 offers from local dealers needed
 2. Exempt of tax
 - They will go for specific documents
 3. Local dealer
 - We will specify equipment plan
 4. Depreciation
 - Full amount giving
 5. Inventory
 - Labelled stickers, protocols
 6. Power supply
 - Not invest for generator
 - Education technology
 7. Air conditioning
 - Not 24 hours air conditioning
 - every rooms are supplied with air cond
-
- Specification of components
1. Internet access:
 - Few students has laptops
 - 95% has smartphones
 - Internet: large bandwidth?
 - Yes, will be better
 - Because wifi is slow
 - More than 1000 USD (3 lines) + 50 USD for CCTV
 - Separate line for comp. Room + wifi router

2. Computers:
 - Separate workplace for teachers for producing media
 - Amount of computers - 25
 - Price for desktop: 700 USD (i5)/1000 USD (i7)
 - OS i 7 preferred
 - Students per class 25
 - 2 laptops 23 desktops
 - Ask for increasing the amount of students
 - media design, journalism: better desktop with design programmes, multimedia software
3. Videoconferencing:
 - 1 digital professional camera for video production
 - For smart classroom: video conferencing tool
 - Headphones for 1 person
 - Separate room for Elearning production room, e learning producing room
 - 1 room for CR and 1 room for teachers
 - Using Moodle and Skype
4. LCD Screen projection
 - Interactive touchable screen
 - Smartboard is expensive
 - Smartboard is better: flexibility
5. Software:
 - Licensed Windows, Msoffice, **Adobe Premier, Sony Vegas, Adobe Photoshop, Illustrator, CorelDraw**
 - 2 license for special laptops: Video editing software, video producing, video design software
6. Printer
 - To add amount to computing
 - Rest of the budget must to go computing
 - 1 colour printer All-in One
7. Booking and pedagogical
 - Digital or paper?
 - Discuss later

Next steps: We will send the partners list for feedback (for RFP