CONTESSA
Contemporary Teaching Skills for South Asia

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

Work Package 3 – Development

Training Needs Analysis

Focused on ICT/ET in Cambodian Education

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TECHNISCHE UNIVERSITÄT DRESDEN

Content

List of Tables

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**
– 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)	– 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. ICT in the Cambodian Education – a review of official reports

The goals of Cambodian government are to create qualified workers and to modernise the current education system, based on the current needs of the global labor market. In the mid-20th century, the concept of education modernization in Cambodia revolved around creating a formal schooling system (Dy, 2004). With support of international organisations education in Cambodia focused on education for all and the implementation of modern technologies to the education reforms. Using ICT in educational institutions for improving teaching and learning practices and the quality of education (Pors, 2016; Buenafe et al.).

In 2004 the Ministry of Education, Youth, and Sport in partnership with the Japanese Funds-in-Trust and UNESCO adopt the first policy on "ICT in Education" (MoEY, 2004). This policy focused on "improving teachers' and students' access to ICT to narrow Cambodia's digital gap, using ICT for communication and access to new knowledge, using ICT to promote education for all, and using ICT for productivity improvement" (Pors, 2016):

In 2010 the MoEYS together with the Open Institute, UNESCO, and other international organizations developed a Master Plan for Information Communication Technology in Education (MoEYS, 2010). In the Master Plan shows the objectives and results of ICT implementation in education at different levels from primary to higher education. This document reviewed as more outcome-oriented than previous policy documents and the four general goals of accessibility, skill development, education for all, and efficiency and efficacy are also considered.

The Master Plan were specified five objectives for the higher education sector: improve lecturers' pedagogical skills; improve students' ICT-based professional skills; provide mechanisms for managing open and distance learning programs; improve interuniversity telecommunication; and standardize electronic documents.

Table 1 on next page shows the five objectives and their results as reported in the Master Plan document.

Table 1. Objectives and Results of ICT in Higher education in Cambodia (MoEYS, 2010)

Objectives	Results
1. Improvement of the pedagogical skills of teaching staff and the effectiveness of non-teaching staff at higher education institutions (HEIs).	• Training on ICT Skills for higher education lecturers and staff is delivered in all HEIs.
2. Systematic preparation of students graduating from Cambodian HEIs with the necessary ICT-based professional skills to join the labour market or to continue to further education.	• Training on ICT-based Professional Skills is delivered to students in all HEIs.
3. The development of feasible and effective structures and mechanisms for providing, supporting, and managing Open and Distance Learning (ODL) in Cambodia.	• Capacity of the MoEYS and HEIs is strengthened in regard to the essential principles of Open and Distance Learning (ODL) management, its development, and technology, using Khmer language tools and materials. • An Open and Distance Learning Policy Framework will be formulated. • Cambodian HEIs will offer ODL courses. • A study will be implemented to assess the feasibility and define the possible process of creating a National Open University in Cambodia.
4. Researchers and higher education lecturers share and have access to available research, teaching materials, and other educational resources, and academic and research cooperation is activated through improvement in interuniversity telecommunications.	• An electronic clearinghouse or repository for all Cambodian research, training materials, and educational resources for higher education level becomes available. • Research and academic cooperation are activated using a high-speed network that connects Cambodian Universities.
5. All research and administrative documents of HEI are standardized.	• All documents and educational resources produced by the Ministry and HEIs, and all administrative documents inside HEIs and in their communication with the Ministry, use standard encoding and formats.

Despite the important role of ICT in Cambodian education and development, government allocated only 0.12% funding on it (UNESCO report, 2013). With the development of the economy in Cambodia, many private companies show great interest in the implementation of ICT in the field of education, for the development of infrastructure of schools and universities. As mentioned in UNESCO report (2013) private telecommunication companies such as Metfone and Ezecom in cooperation with the MoEYS installed computers and provided internet in schools and universities across the country.

Next would be in addition to the political landscape, as mentioned above, to talk about social landscape. It should be noted that the statistics on this subject are very limited and only a brief overview can be captured. Despite the fact that Internet connectivity is limited in Cambodian educational institutions (MoEYS, 2014a), the trend of mobile devices and the mobile Internet is developing very rapidly. (Adler, 2014). As of March 2015, the number of mobile connections in Cambodia is 157% of the total population and had a growth rate of 27% in the past year (Kemp, 2015). These figures suggest that Cambodians have more than one mobile phone and mobile Internet connection. About 25% of the Cambodian population has active Internet connection and in the period from January 2014 to March 2015 this number has been quadrupled (Kemp, 2015). Youth between the ages of 18 and 24 use Facebook as the primary social media channel (Kemp, 2012). Web traffic data clearly shows that surfing the Internet is popular among mobile phones (47%) among Cambodians than desktops or laptops and tablets (Kemp, 2015). A snapshot of digital, social, and mobile in Cambodia is shown in Table 2.

Table 2. Snapshot of digital, social, and mobile in Cambodia (Kemp, 2015)

Categories	Percentages
Internet users	25% of the total population (as of March 2015) 414% growth (Jan 2014 – Mar 2015)
Social media users	16% of the total population (as of March 2015) 100% growth (Jan 2014 – Mar 2015) 41% growth in Facebook users (Apr – Oct 2012)
Mobile connections	157% of the total population (as of March 2015) 27% growth (Jan 2014 – Mar 2015) 20% of mobile connections are broadband
Mobile social users	14% of the total population (as of March 2015) 108% growth (Jan 2014 – Mar 2015)
Share of web traffic	Desktop/Laptop: 45%; Mobile: 47%; Tablet: 8%

3. Methodology of the report presented

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

3.1. Structure of the study

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 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 lecturers' and student's perspective. Choosing this procedure was to get to know the lectures and students,

and to identify their intentions about ICT introduction and online learning environments.

The 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 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.

3.2. Technical Questions for deepening the understanding of the focus groups

As described above the project steering team did intend to validate the data collected form those group activity researchers. In order to do so researchers form TU Dresden and Uni Graz die compile a small set of additional in-depth questions which were send by email to all 4 partnering HEIs in Sri Lanka and Cambodia on July 31st, 2019 as follows:

Dear Partners,

I wanted to pass on some technical questions that arose recently at a meeting with TU Dresden. Can you please take a look at the questions below and send us your answers within the next two weeks/by August. They are working on the technical needs and analysis for the project and this information would be very useful. If you have any follow up questions, please let us know.

1. Who is responsible for the maintenance of the ICT infrastructures at your university? Is there, for example, a team or an entire department? Or is it outsourced?

2. Who covers the fees for internet access at your university?

3. It is possible that we might have to make investments for stable electricity (including diesel for the generator) and insurance for equipment which could be damaged? If needed, who would cover investments for more stable electricity and insurance for equipment which could be damaged?

4. Is there a (national) policy to connect the rural areas with stable internet access?

5. Is there a (national) policy to provide free access to software packages for students and their lectures which are used in order to produce educational media?

6. Who is responsible for the teachers (professors) continuous skill development related to digitizing education? Is there a national policy? University policy? Both?

During summer 2019 three of the four Higher Education Institutions in South Asia did provide additional explanation, including the two Cambodian HEIs (cf. attachments).

4. Main findings

The data analysis was conducted by following a thematic analysis. The themes, which were driven by the data, were categorized and organized into table form for each of the four universities.

4.1. The Participants' Expectations of the Online Learning Environment

The data collected from respective focus group discussions with teachers and students (see Appendix A & B) were analyzed to clarify the expectations and intended uses of the online learning environment, and provide some contextual background of the participants in the study. The data revealed six common expectations of the online learning environment shared among the participants:

- Using ICT to working with clouds, apps in the classroom and learning platforms
- Using ICT and E-Learning for personal development
- Using ICT for classroom management and lesson planning
- Using ICT for developing English language skills
- Using ICT for learning and teaching
- Using ICT for increasing the motivation and self -learning

Majority of the students interviewed wanted the online learning environment to be more attractive to use and contains itself some of fun elements to activate and motivate the learning process. They expected to improve their English reading and writing skills through E-Learning courses. Students suggested that the online learning environment should be contains face-to-face contact elements, because they feel unsecure to use E-Learning alone without the support.

These characteristics were also noted by the lecturers in the focus group as they agreed that they would consider adopting the online learning environment for their classes if it assisted them with classroom preparation and management, personal development. The lecturers' responses show that their confidence and competence of ICT linked their expectations of what ICT could be used for and how that might benefit or improve their teaching pedagogy.

In the focus group meetings were mentioned that the without electricity supply in the schools it is hard to use E-Learning and introduce ICT in teaching. E-Learning is not common education art in the Cambodian schools. The concept of *new generation schools (NGS)* was introduced by the government only in some schools as a pilot project in which selected teachers have the opportunity to use modern technology for teaching. However, tuition at these schools is paid.

This section presented the analysis of student and lecturer perceptions of their needs in relation to an online learning environment. The following section analyses the local context at the micro level, as opposed to the macro analysis of the Cambodian context that was provided in Section

4.2. Understanding the Local Context

Context is important to understand the introduction of the online learning environment in this setting and at the same time it is also an essential part of the design-based research methodology framework of the report. While Section 2 shows the context at the macro-level, the contextual analysis in this section focuses on the detailed scope of context relevant to the participants of the study such as ICT infrastructure and internet access, the participants' ICT proficiency and experience, students' self –learning and lecturer-student communication.

4.2.1. ICT Infrastructure and Internet Access

An important issue discussed among the students, lecturers and professionals in the focus group related to concerns about the ICT infrastructure within the institution and internet access for lecturers and students. Many researchers (Abrahams, 2010; Bates, 2000; Bingimlas, 2009; Tearle, 2003) mentioned this as important enabling factor for ICT introduction and implementation in an institutional setting. Adequate access to computer devices and the internet by the lectures and students must be taken in attention when introducing the online learning environment in this setting.

According to the information provided by the participants, most of students and lectures had their own laptops or mobile devices, but they had no free Wi-Fi access neither in the university, nor at home.

Students reported that they used the internet in their daily life for communication and social networking. Most popular internet access points among the students were from a mobile phone. The popularity of mobile phone connection might be due the fact the average number of mobile subscriptions per person in Cambodia is 1,5 (Kemp, 2015), so that they are more accessible than computers. The reason for this, the students have shown the absence of technology in the classrooms.

These figures relating to students' internet usage show that many students had regular access to the internet from their mobile phones and laptops outside of the campus. Yet the lack of Wi-Fi on campus might have caused inconvenience for some students. The lack of Wi-Fi and electricity on campus is unlikely to be a substantial issue. Lectures and students were still able to access the internet using other sources (mobile internet or 3G modem), and from other places off campus.

4.2.2. The Participants' ICT Proficiency and Experience

In the discussions, lectures and students were asked to about their computer and generic internet skills in order to provide some information relating to their ICT proficiency and to ascertain how much training they might need prior to implementing the online learning environment.

Most of students and lecturers reported that they have no experience with E-Learning and insufficient ICT skills. The common internet activities reported by students included:

- file storage or clouds such as Google Drive and Dropbox
- social networking such as Facebook
- software and applications such as Microsoft Office programs
- search engine such as Google

These results suggest that most of the students' internet activities were related to communication, social, and leisure purposes.

In relation to using ICT for academic purposes, lecturers who participated in the focus group claimed that they also had some low knowledge and experience in using computers and the internet to support their teaching.

4.2.3. Students' Self-Learning

As graduates, students were expected to spend some time engaging in self-learning activities

beyond simply attending their normal classes. The importance of self-learning was also emphasized by the teacher educator and lecturers who hoped that the introduction of the online learning environment would enhance lecturer-student communication and encourage students to engage in more learning-related activities outside of their normal classes. The focus group discussions results show that some of students spent their time engaging in self-learning. The lectures and teacher educators considered that many students also worked either full-time or part-time in addition to studying, it is understandable that time constraints could be a significant issue for them.

The different types of self-learning activities that were reported by students in the discussions included: “Preparing to classes with searching information on Google and in internet”, “working in groups”, “reading study materials, books, and research articles (mostly in paper form)”.

The students and lecturers are in common opinion, that face-to-face contact in the study is more preferable than E-Learning only:

> they and/or their colleagues/peer students feel non yet confident enough with using e-learning only and would thus be more motivated to participate in the courses if they could benefit from both, online and ‘offline’ (face-to-face) courses; *(Bohlinger, 2019, S. 5)*

Literature related to teaching and learning approaches in the Cambodian context (for example, Ahrens & McNamara, 2013; Howes & Ford, 2011; Ngo, 2013; Pellini, 2005) has addressed the predominance of teacher-centred approaches in the education system and has suggested a need to introduce some emphasis on a student-centred approach into the system.

4.2.4. Lecturer-Student Communication

The discussion results also show that mobile phone, email, and social networking were popular types of communication medium with the lecturers and classmates outside of class hours. Mobile phones were reported as the most commonly used point of internet access, so it is logical that students prefer to use them for everyday communication as well. The popularity of mobile phones in Cambodia explains students’ preference to use them for both communication and internet access. However, although the majority preferred using mobile phone for long-distance communication, a few students mentioned that they preferred using Facebook for communicating with lectures and classmates. This shows that in addition to having access to different communication mediums, some students are also selective of the medium depending upon with whom they intend to communicate.

Meeting with professors at University of Cambodia

Meeting with students at University of Cambodia

The following table 3. summarizes the results of discussions according to current status and needs of ICT and online learning environment in Cambodia:

Table 3. Summarized key issues of focus group discussions in Cambodia

Country	**C A M B O D I A**	
Name of university	*University of Cambodia (UC)*	*Pannasastra University of Cambodia (PUC)*
Internet access	– Limited high-speed internet access in Phnom Penh city, slow or limited internet access in rural areas – Lack of internet and Wi-Fi at school and in household – Higher use of mobile internet connection via smartphone/laptop	
Electricity supply	– Lack of electricity supply, especially in rural areas	
Mobile/digital devices	– Ban of use of PC/laptops & smartphones in public schools, only at private schools – Use of ICT at school mostly for entertainment, not for education – Use of PC/Laptop & smartphones in household	
Learning / Teaching Lab	– Internet based education is mainly for international education – Lack of digital technologies (also E-Learning) at school, teachers use internet or Google as a source for course preparation at home – Lack of cooperation with between school and class management – Lack of offering of units for students “Soft Skills” & “Special Needs (for learners with handicaps”	
Online Platform	– No experience of working with online education platforms – Using Facebook, WhatsApp, Gmail, Google Drive etc. for course activities, sharing of information and communication – Online courses for teachers and pupils of primary schools – Development of online modules related with E-Learning/Digitization	
Digital printing materials	– Lack of teaching materials in public schools – Old fashioned paper textbooks are preferred	

5. Open issues and validation survey

Even though the discussions had been completed and recorded carefully the data analysis showed some aspects that had not been addressed in enough depth:

Open Questions:

1) Who is responsible for the maintenance of those ICT infrastructures?
2) Who is covering the fees for internet access both on campus and outside?
3) Who shall cover for example investments for stable electricity (including diesel for the generator) and insurance for equipment which is eventually damaged?
4) Is there a (national) policy to connect the rural areas with a stable internet access?
5) Is there a (national) policy to provide free access to software packages for students and their lectures which are used in order to produce educational media?
6) Who is responsible for the teachers (professors) continuous skill development related to digitizing education?

As described project partners did complete another empirical step but this time online by using email. Resulting, both Cambodian HEIs did provide further insight produced by their responsible technical staff.

Thus it can be concluded that:

1) Internet Access: Cambodia does have the national policy "ICT Policy 2018" by the Department of IT, Ministry of Education, Youth and Sports to:
   - to connect the rural areas with stable internet access,
   - yet the rural areas are often not connected with stable internet access
   - every year, more and more communities are becoming connected to the internet

2) Access to educational software packages:
   - to provide free access to software packages for students and their lectures which are used in order to produce educational media
   - Most universities and schools use pirated software as the cost is prohibitive

3) Maintenance of ICT infrastructures:
   - Is done by the IT department at the university itself for all aspects

4) Assurance for stable electricity:
   - There is a generator which was used a lot this year during all the electrical blackouts (yet it was the first time that Phnom Penh has experienced this level of blackouts with 5 hours per day for 10 weeks).

5) Teachers/professors continuous skill development:

- Teacher Training Department and Department of IT are responsible for the teachers/professors continuous skill development related to digitizing education
- As well there is a national policy that states in Teacher Policy Action Plan. At PUC, each faculty is responsible for the professors skill development
- Yet this policy is not yet implemented, currently university policy does not relate to digitizing education.

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Attachments

Appendix A. Protocol of the Needs Analysis Meetings with Teacher Trainers, Lecturers and Students at Pannasastra University of Cambodia

Köhler, Thomas

Betreff:	Protocol BA MA + Lecturers Workshop 2019/03/25
Ort:	Pannasastra Univ. of Cambodia, Phnom Penh
Beginn:	Mo 25.03.2019 09:00
Ende:	Mo 25.03.2019 14:00
Serientyp:	(Keine Angabe)
Organisation:	Köhler, Thomas

Group 1: BA Students from the TT Programmes Participants discussed the following issues:

1) All students are form BA level teacher training
2) no eLearning courses offered so far in the respective teacher training programme
3) would find eLearning interesting and know about Uni of Queensland offers
4) students do not expect difficulties in official acceptance of eLearning
5) students speak about their poor ability toward eLearning thus in conclusion: eLearning must be trained before offering it successfully
6) eventually there is a challenge in using eLearning with native speakers due to language difficulties
7) there is partly no Wi-Fi in private context (as well in Phnom Penh is no completely stable), and on country side there is no high speed internet access i.e. no access to eLearning
8) there is computer (laptop) plus smart phone usage as basis for eLearning in almost every household.
9) there is no digital technology inside primary school used but teachers have access and use it for their preparation at home
10) there is a wish that additional class might be offered on ... by the Contessa project shall
11) students do not read on computer as they receive printed text books for each class
12) assignments are partly done via computer, for example google drive is used to share documents (texts produced by students) with the professor
13) some students use videos firm the web for acquiring inspiration for their educational practice
14) smartphone / computer usage happened first for the students of the discussion panel when they entered college, i.e. not before due to economic reasons

Group 2: Lecturers of the TT Programmes
Participants discussed the following issues:

1) online in teacher training is related to language learning resources
2) at school ICT is only used for entertainment, no used in education
3) internet based education is mainly for international education
4) there is a consideration of future education skills mainly seen in the context of digitization which is defined by the ministry that as well selected a few so called "new generation schools" [whereas such schools are private schools, i.e. the pupils pay a fee]
5) rather conservative atmosphere compared to the students met before in relation to ideas how the school / education will look like in the future
6) there is a specific interest in offering units for the students on A) "Soft Skills" and B) "Special Needs (for learners with handicaps)".
7) Students would profit most from an interactive online resource where they may exchange with others about recent issues

1

Appendix B. Protocol of the Needs Analysis Meetings with Teacher Trainers, Lecturers and Students at University of Cambodia

Köhler, Thomas

Betreff:	Protocol BA MA Workshop 2019/03/26
Ort:	University of Cambodia @ Phnom Penh
Beginn:	Di 26.03.2019 10:00
Ende:	Di 26.03.2019 12:00
Serientyp:	(Keine Angabe)
Organisation:	Köhler, Thomas

Protocol BA MA Workshop on 2019/03/26 at University of Cambodia @ Phnom Penh Participants discussed the following issues:

1) Teaching is going to be affected heavily by digitization
2) Teacher training does take place part time
3) BA students do not so intensely demand eLearning compared to MA students
4) Both, BA and MA students confirm that eLearning is helpful and accessible
5) Teachers are able to use smartphone and computer
6) Limitations for accessing the internet are seen for rural areas
7) All secondary school pupils have smart phones (which are more often distributed as PCs/Laptops)
8) Schools often lack computers and even electricity
9) pupils in primary school are doing home work
10) pupils in primary school are not allowed to used internet @ school but use the internet via smartphone @ home
11) universities use Facebook, WhatsApp etc. for course related activities. As well teachers cooperate via their students via those channels
12) teaching online course would be fine for teachers
13) high speed internet access mainly works fine in Phnom Penh - but improves each year in the countryside
14) some students suggest that all 5 modules to be produced by the Contessa project shall dealer with eLearning / digitization
15) there is as well a need to deal with school and class management
16) eventually online teaching may be used in primary school around pupils homework in a suitable way.

1

Appendix C. Technical Questions by Pannasastra University of Cambodia

Köhler, Thomas

Von:	Meas Roth <roth2880@puc.edu.kh>
Gesendet:	Donnerstag, 8. August 2019 02:38
An:	Köhler, Thomas
Cc:	Sheehan, Bridget (bridget.sheehan@uni-graz.at); Kol Vaddhana
Betreff:	Technical Questions for CONTESSA

Dear Thomas,

Below are the answers to your questions:

1. At Pannasastra University of Cambodia, IT Department is responsible for the maintenance of the ICT infrastructures. This department has a particular team who actually work closely with all faculties and offices to deal with mainly hardware problems and only minor errors only; in case of serious maintenance, they have to ask for technical support from outside (maintenance company). For the software problems, it is outsourced.

2. PUC covers the fees for the internet, but it is usually slow.

3. Can you clarify this question? It is not clear to me.

4. We do have the national policy to connect the rural areas with stable internet access, ICT Policy 2018. Department of IT, Ministry of Education, Youth and Sports is in charge of it.

5. There is a national policy to provide free access to software packages for students and their lectures which are used in order to produce educational media (ICT Policy 2018).

6. Teacher Training Department and Department of IT are responsible for the teachers/professors continuous skill development related to digitizing education. There is a national policy that states in Teacher Policy Action Plan. At PUC, each faculty is responsible for the professors skill development.

Please clarify question 3 so that I can give you the obvious answers. For further inquiries, please let me know.

Best regards,

Roth

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Appendix D. Technical Questions by The University of Cambodia

1. Who is responsible for the maintenance of the ICT infrastructures at your university? Is there, for example, a team or an entire department? Or is it outsourced?

We have an IT department here, though it is small. They take care of everything here.

2. Who covers the fees for internet access at your university?

The university itself covers it. We do not charge students fees for this.

3. It is possible that we might have to make investments for stable electricity (including diesel for the generator) and insurance for equipment which could be damaged? If needed, who would cover investments for more stable electricity and insurance for equipment which could be damaged?

At this time, we have a generator here that we had to use a lot this year during all the electrical blackouts. This was the first time that Phnom Penh has experienced this level of blackouts (5 hours per day for 10 weeks).

4. Is there a (national) policy to connect the rural areas with stable internet access?

According to the people at the Ministry, there are policies for these (Questions 4-6) but there has been no implementation. Every year, more and more communities are becoming connected to the internet.

5. Is there a (national) policy to provide free access to software packages for students and their lectures which are used in order to produce educational media?

Most universities and schools use pirated software as the cost is prohibitive. This is not everywhere, but very widespread.

6. Who is responsible for the teachers (professors) continuous skill development related to digitizing education? Is there a national policy? University policy? Both?

As indicated above, apparently there is a policy but not yet implemented. Currently we do not have a university policy related to digitizing education, as it's very new here in Cambodia.