

## **ICT-skills workshops**

Location: online + Phnom Penh

**Duration:** 5 May 2022 – 24 June 2022 (online) + 9 January 2023 – 12 January 2023 (Phnom Penh)

Present: 63 participants - 34 from Health Science Institute of Royal Cambodian Armed Forces (HSI

RCAF) and 29 from University of Health Sciences (UHS)

## Online workshop

Due to COVID-19 restrictions and particularities of WP4 (related to ICT use in training and education) we performed part of the ICT workshops (WP4) with UHS and HIS RCAF online in agreement with the project principal. Table 1 presents the list of tasks, their duration, short descriptions and number of planned hours. In the continuation there are longer descriptions of the performed tasks.

Table 1: List of tasks, their duration, short descriptions and number of planned hours performed online by participants from UHS and HSI RCAF

Task	From	То	Description	No. of hours
Task 01	5 May 2022	26 May 2022	Learn about learning management systems and	r
Task U1	5 IVIAY 2022	20 IVIAY 2022	Moodle. Edit your Moodle profile.	2
Tack 02	27 May 2022	9 June 2022	Get to know your course as a teacher and add	1
Task 02	27 May 2022	9 June 2022	some simple information.	2
Task 02	10 June 2022	24 June 2022	Get to know your course as a teacher and add	2
Task 03	10 June 2022	24 June 2022	different resources to your course.	2

#### Task 1

In this task the participants had to watch and study the interactive contents *What's a learning management system and what's Moodle?* and *First steps in Moodle* developed by Patrik Pucer and Boštjan Žvanut. After that the participants had to (Figure 1):

- find the course where they were enrolled as a teacher by navigating around and getting familiar with our Moodle:
- edit their Moodle profile by changing the city and country where they are living, adding a short description about their self and adding a profile picture.

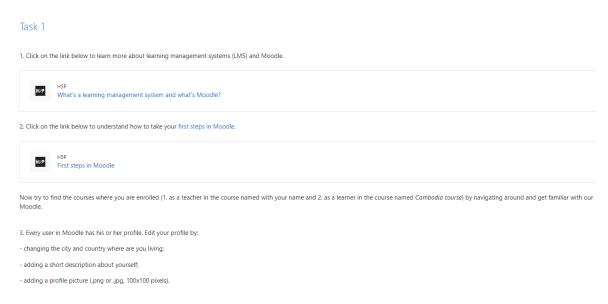


Figure 1: Task 1



### Task 2

In this task the participants had to watch and study the interactive content *Edit course sections, add files, ...* and do some practical work in their course (e.g. change the names of some course topics, add some information about them and their picture in a section, add a short summary of the course, ...). Figure 2 shows Task 2.

#### Task 2

1. Click on the link below and find out, how to edit your course, add text, images, files, etc.

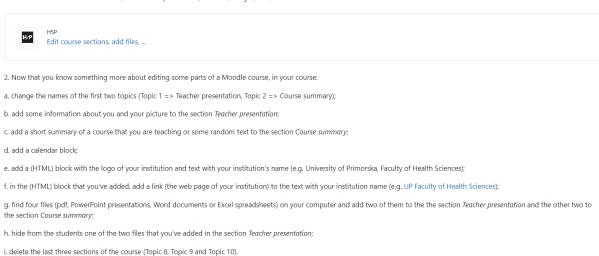


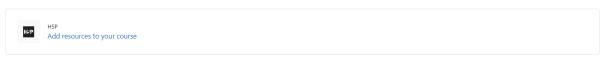
Figure 2: Task 2

## Task 3

In this task the participants had to watch and study the interactive content *Add resources to your course* and do some practical work in their course (e.g. in any topic upload a file and change some settings, add an external URL and change some settings, ...). Figure 3 shows Task 3.

#### Task 3

1. Click on the link below and find out, how to add different kinds of resources to your course  $\frac{1}{2}$ 



2. Now that you know something more about what resources are and how to add them to your course, do the following:

a. in any topic that you like, upload a file (e.g. pdf, powerpoint, ...), add to it a description, which is visible on the course page, show the file's size and type and force the file download (in the file resource settings go to Appearance – Display – choose Force download);

b. in any topic that you like, add a link to an external URL that opens in a new pop-up window, which is 1000 pixels in width and 800 pixels in height (in the URL link resource settings go to check the Appearance – Display settings);

c. in any topic that you like, add a label resource, add to it some text and a video (from YouTube, another web-based video service or your own);

d. in the same topic where you've put the aforementioned label, add a page resource titled "My first page resource". On the page resource add:

- i. some text;
- ii. an image;
- iii. some other text;
- iv. a video (from YouTube, another web-based video service or your own).

Figure 3: Task 3



## Workshops in Phnom Penh

Due to very big groups of participants in both Cambodian institutions, the project principal suggested to perform two separate workshops in Phnom Penh. Thus, two 2-day workshops were performed: 1. 9 January 2023 - 10 January 2023 in UHS and 2. 11 January 2023 - 12 January 2023 in HIS RCAF.

# Monday, 9 January 2023 - Technical School for Medical Care University of Health Sciences

According to the program, we:

- performed a pre-workshop survey,
- presented expected workshop results,
- introduced e-learning and the Learning Management System (LMS) where the workshop took place,
- presented the role of (ICT) in active-learning based education and the recommendations for the planning and development of LMS e-courses,
- presented the anatomy of an LMS e-course and its administration,
- performed individual counselling, ...

All participants managed to login into the LMS and tried to manage their own e-course following our directions and instructions. The majority had laptops and were able to easily follow us with a steady pace. Some of the participants were slower due to language barriers or because they were working on smartphones instead of laptops or other types of computers with bigger screens. Participants with better knowledge of English language helped by translating some parts of our presentations and instructions.



Figure 4: Photo from the workshop Technical School for Medical Care University of Health Sciences



# Tuesday, 10 January 2023 - Technical School for Medical Care University of Health Sciences

We continued the workshop according to the program:

- we showed how to add, manage, edit and customize advanced resources and activities in an LMS course (e.g. quizzes, embed video, etc.),
- we let participants to perform some individual work and provided individual counselling where required,
- we presented distance counselling protocol for e-courses optimization after the workshop,
- we performed focus groups interviews with the majority of participants,
- we performed some individual optimization and debriefing of the developed e-courses;
- we performed a post-workshop survey.

Figure 5 and **Napaka! Vira sklicevanja ni bilo mogoče najti.** show some moments during the workshop at UHS.



Figure 5: A moment during the workshop at UHS

## Wednesday, 11 January 2023 - Health Science Institute of RCAF

According to the program, we:

- performed a pre-workshop survey,
- presented expected workshop results,
- introduced e-learning and the Learning Management System (LMS) where the workshop took place,
- presented the role of (ICT) in active-learning based education and the recommendations for the planning and development of LMS e-courses,
- presented the anatomy of an LMS e-course and its administration,



- performed individual counselling, ...

All participants managed to login into the LMS and tried to manage their own e-course following our directions and instructions. All the participants had their own computers and were able to easily follow us with a steady pace. Some of the participants were slower due to language barriers but participants with better knowledge of English language helped by translating some parts of our presentations and instructions.

## Thursday, 12 January 2023 - Health Science Institute of RCAF

We continued the workshop according to the program:

- we showed how to add, manage, edit and customize advanced resources and activities in an LMS course (e.g. quizzes, chat, forums, etc.),
- we let participants to perform some individual work and provided individual counselling where required,
- we presented distance counselling protocol for e-courses optimization after the workshop,
- we performed focus groups interviews with the majority of participants,
- we performed some individual optimization and debriefing of the developed e-courses;
- we performed a post-workshop survey.

Figure 6 and Figure 7 show some moments during the workshop at RCAF.



Figure 6: A moment during the workshop at RCAF





Figure 7: Another moment during the workshop at RCAF



Figure 8: Another moment during the workshop at RCAF

# Summary and evaluation

The majority of workshop participants (19 out of 23 at UHS and 26 out of 29 at RCAF) responded to the evaluation questionnaires. The evaluation responses were rated on a 7-point Likert scale (Completely disagree = 1; Moderately disagree = 2; Slightly disagree = 3; Neither disagree nor agree = 4; Slightly agree = 5; Moderately agree = 6; Completely agree = 7). All items in Table 2 and Table 3 indicate a positive outcome of the workshop, as the responses to all items have the average value above 5.6 (4 is the middle of the scale), which indicate a good participants' attitude toward the ICT workshop.



Table 2: Evaluation of the workshop by UHS

Section Item	Min.	Max.	$\bar{x}$	SD
A. Objectives of the workshop				
A1. At the beginning of the workshop the lecturers clearly presented the objectives of the workshop.	5	7	6.4	0.4
A2. The workshop covered the topics I need for my work.	5	7	6.7	0.6
A3. The objectives of the workshop were achieved.	5	7	6.4	0.8
B. Training methods I found the different teaching methods used during the workshop to be relevant and of good quality:				
B1. Lectures	5	7	6.6	0.6
B2. Demonstrations	5	7	6.6	0.7
B3. Individual exercises or exercises in groups	5	7	6.5	0.7
C. The training atmosphere				
C1. The general atmosphere during the workshop enhanced the learning process.	4	7	6.5	0.8
C2. The workshop fostered teamwork and cooperation among participants.	5	7	6.5	0.6
C3. The language used in the workshop was easy to understand.	5	7	6.3	0.8
D. Trainers				
D1. Trainers had sufficient knowledge.	4	7	6.5	0.8
D2. Trainers performed the workshop adequately.	4	7	6.6	0.8
D3. Trainers were open, honest and fair to all.	4	7	6.5	0.8
E. Time management				
E1. Enough time was devoted to each part of the workshop.		7	5.6	1.1
E2. Enough time was spent for participants' questions and problems.		7	6.5	0.8
F. Intention to use the acquired skills and knowledge				
F1. In the future, if I have the opportunity, I will plan and implement my e-courses.	6	7	6.2	1.0
F2. In the future, if I have the opportunity, I will develop e-courses.		7	6.4	0.9



Table 3: Evaluation of the workshop by RCAF

Section Item	Min.	Max.	$\bar{x}$	SD
A. Objectives of the workshop				
A1. At the beginning of the workshop the lecturers clearly presented the objectives of the workshop.	2	7	6.7	1.1
A2. The workshop covered the topics I need for my work.	3	7	6.7	0.9
A3. The objectives of the workshop were achieved.	2	7	6.3	1.1
B. Training methods I found the different teaching methods used during the workshop to be relevant and of good quality:				
B1. Lectures	3	7	6.7	0.9
B2. Demonstrations	4	7	6.7	0.8
B3. Individual exercises or exercises in groups	4	7	6.7	0.7
C. The training atmosphere				
C1. The general atmosphere during the workshop enhanced the learning process.	4	7	6.6	0.9
C2. The workshop fostered teamwork and cooperation among participants.	3	7	6.6	1.0
C3. The language used in the workshop was easy to understand.	5	7	6.7	0.7
D. Trainers				
D1. Trainers had sufficient knowledge.	5	7	6.7	0.6
D2. Trainers performed the workshop adequately.	3	7	6.6	0.9
D3. Trainers were open, honest and fair to all.	4	7	6.8	0.7
E. Time management				
E1. Enough time was devoted to each part of the workshop.	2	7	5.8	1.6
E2. Enough time was spent for participants' questions and problems.		7	6.2	1.4
F. Intention to use the acquired skills and knowledge				
F1. In the future, if I have the opportunity, I will plan and implement my e-courses.	4	7	6.6	0.8
F2. In the future, if I have the opportunity, I will develop e-courses.	4	7	6.8	0.7



### Table 4 and

Table 5 show the results of responses about the participants' self-confidence in e-course development and the meaningfulness of e-courses for their profession.

Table 4: UHS differences in pre- and- post workshop results of self-confidence and meaningfulness of e-courses

Section Item	Beginning of workshop		End of workshop	
	$\bar{x}$	SD	$\bar{x}$	SD
S. Self-confidence in the development of e-courses				
S2. I am able to implement e-courses.	5.8	1.3	5.3	0.9
S3. I know how to use a learning management system for the development of e-courses.	5.5	1.7	5.3	0.9
S4. I'm frustrated when I plan and implement e-courses.	5.3	2.9	5.1	1.1
T. Meaningfulness of e-courses for your profession				
T1. It is important for my profession to have available ecourses.	6.4	0.8	6.0	0.8
T2. It makes sense that we are trained to develop e-courses.	6.2	0.8	6.1	0.7
T3. It is important to invest resources in the development of e-courses.	6.1	0.9	6.2	0.8
T4. The use of e-courses can improve my work.	6.2	0.7	6.3	0.8
T5. I can transfer more knowledge to students/users with the use of e-courses.	6.1	1.0	6.1	0.9

Table 5: RCAF differences in pre- and- post workshop results of self-confidence and meaningfulness of e-courses

Section Item	Beginning of workshop		End of workshop	
	$\bar{x}$	SD	$\bar{x}$	SD
S. Self-confidence in the development of e-courses				
S2. I am able to Implement e-courses.	3.4	2.0	5.8	1.3
S3. I know how to use a learning management system for the development of e-courses.	3.2	1.9	6.0	1.1
S4. I'm frustrated when I plan and implement e-courses.	4.2	2.3	4.5	1.7
T. Meaningfulness of e-courses for your profession				
T1. It is important for my profession to have available ecourses.	5.8	2.1	6.6	0.7
T2. It makes sense that we are trained to develop e-courses.	5.7	2.2	6.4	0.8
T3. It is important to invest resources in the development of e-courses.	4.8	2.2	6.5	0.9
T4. The use of e-courses can improve my work.	5.0	2.2	6.7	0.9
T5. I can transfer more knowledge to students/users with the use of e-courses.	3.4	2.1	5.8	0.8

From the results (Table 4) it looks like at the beginning of the workshop there was some misunderstanding or language barrier with the participants from UHS because averages at the beginning are higher than the averages at the end of the workshop. From the results (Table 5) it looks



like participants from RCAF, at the end of the workshop, were more self-confident in the development of e-courses and a boost in the meaningfulness of e-courses for their profession was perceived.

Overall, the participants rated the workshop on a scale from 1 (very bad) to 10 (excellent). Participants from UHS rated the workshop with an average value of 8.9 (SD = 0.43). Participants from RCAF rated the workshop with an average value of 8.6 (SD = 1.71).