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Co-funded by the European Union

ICT4EDU:
Enhancing ICT Competencies of Early Childhood Educators at HEIs in MENA Countries

ERASMUS+ PROGRAMME
Project Number: 101083078

Deliverable title	**FINAL LIST OF EQUIPMENT**		
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Organisation name(s)	**Frederick University**		
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WP Leader	**Frederick University**		
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Contents

EXECUTIVE SUMMARY

All partner institutions have carried out the procurement steps to purchase the declared equipment according to the specifications, amendments, and guidelines except the Palestine College of Technology (PCT) located in the Gaza Strip due to the war. In this report (D5.1) the list of the equipment in each partner University is presented. Equipment purchase is one activity, and use, maintenance and further exploitation is another activity that is given due attention. The ICT4EDU approaches the equipment use as a dynamic process not only for the period of the project funding but also beyond that period. In addition to that, the equipment is perceived through a multipurpose exploitation that aims to enhance the quality of the project activities. To this end, an Action Plan for the institutionalization of ICT Labs in each of the partner universities was developed which serves as a biannual monitoring tool throughout the project period. The information elicited through this tool will also help to develop the final deliverable for the ICT Labs, which will provide information about the impact of the equipment across all project activities. It is thus of particular importance to stress that the quality of the biannual reports on ICT Labs will be assessed in line with their role in promoting the ICT4EDU objectives.

ICT Labs Objectives

These objectives are formulated on the conceived role of the ICT Labs in line with the ICT4EDU objectives. The following objectives should be used as a reference and criterion in the biannual activities related to the ICT Labs as depicted in the monitoring Table 3. The overriding goal is to establish a full-fledged ICT lab in each partner institution to support the implementation of the project activities during the project financial period and beyond that. The specific objectives are to:

1. Provide teacher training workshops that will contribute to teachers' professional development in the field of ICT4EDU.
2. Promote intergenerational ICT4EDU learning through the organization of university-school-community partnerships.
3. Use the equipment for developing new ICT-enabled teaching and learning methodologies, especially for the revised courses.
4. Develop a suitable capacity-building web-based toolkit on how to integrate ICTs with Education for Sustainability.
5. Develop suitable course/training materials and digital student-driven lesson plans in early childhood education.
6. Develop a policy and strategy on how to sustain and use the ICT4EDU Labs after the project funding period.

To facilitate the process of monitoring and the impact assessment of equipment purchased, the following templates were developed, which were used by all partners for reporting.

Table 1: Equipment Approved

No.	Nature, type, and specifications of the item	Amount (EUR)
1.		
2.		
3.		
4.		
5.		

Table 2: Details on equipment purchased

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC		Xxx		**xxxx**
2	Tablet		Xxx		**Xxxx**
3	Camera		xxx		**Xxxx**
4	Projector		xxx		**Xxxx**
5	Printer		xxx		Xxxx
6	…….				
Total					**Xxxxxx**

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	No of units *	Describe briefly the achieved results	No of units *	Explain and justify any discrepancies and measures taken
In-house teacher training					
Student use of ICT Labs					
Development of digital learning materials					
Other uses (state what)					
Overall (Summarize)					
Explain how the achieved results will be used to sustain the project beyond the funding period.					

*Number of units means persons, products, etc.

Provide pictures related to the use of the ICT Lab
If applicable, refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs presented on page 1.

Summing up, based on the partner reports the following results have been noticed up to the period of March 2024.

1. All partners have purchased the equipment in line with the rules and guidelines and specified the changes from the initial declaration with sufficient justification based on a needs analysis. The changes were compiled and approved by the concerned authorities.
2. The information provided regarding the use of the equipment purchased up to May 2024 shows that the equipment was used for in-house teacher training, student use, and for developing teaching and training materials. In total, more than 150 teachers benefited through the use of the equipment to develop their capacities to cope with the project needs as well as to develop digital training materials and more than 700 students have also used the equipment.
3. The main challenges/difficulties encountered largely derived from the current war situation not only in the Gaza Strip but also in the West Bank which has affected both the purchase of the equipment and its use. In particular, the situation in the Gaza Strip is uncontrollable and the effects have provided great barriers to using the equipment as contrasted with the specific objectives of the ICT Labs. This is a *force majeure* situation and especially our partner university in the Gaza Strip (PTC) asks for consultancy from EACEA - European Commission project management.

LIST OF EQUIPMENT
PARTNER REPORTS BY COUNTRY

University of Jordan

Table 1: Equipment Approved

No.	Nature, type, and specifications of the item		Amount (EUR)
1.	10 Personal Computers (processor, memory, disk, display)		10 x 792 € (594 JOD)
2.	Video editing and creation software (Camtasia)		10 x 309.33 € (232 JOD)
3.	Data Show	Data Show	1 x 1,034.67 € (776 JOD)
4.		Cables & Connectors	Included
5.		Switches & Routers	266.66 € (200 JOD)
7.	Interactive/ smart board		1 x 608.69 € (456.52 JOD)
8.	Video Conference with Discussion System	Ceiling speaker	4 x 60 € (45 JOD)
9.		Amplifier Mixer	1x 234 € (180 JOD)
10.		Delegate Unit	29 x 280 € (210 JOD)
11.		Chairman Unit	1 Free
12.		Control Unit	1x 1,546.67 € (1160 JOD)
13.		Directional Microphone	30 x 146.67 € (110 JOD)
14.		Installation	1000 € (750 JOD)

Table 2: Details on equipment purchased

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	**Lenovo ThinkCentre neo 50t.** Intel® Core™ i7 12th Generation 12700 processor speed of p-core 4.8GHz, Intel® Chipset, 16GB DDR4 Memory, 1GB Ethernet, 512 GB SSD M.2, Ports: 1xVGA, 1xHDMI, Ethernet (RJ-45), USB, Super Multi DVD Optical Drive, 21.5"LED FHD Backlit LCD Monitor with HDMI Port, Arabic & Latin Keyboard, USB Optical Mouse, Power Cable M	10	792 €	7920 €
2	Video editing and creation software	**Camtasia** (Video and Audio Authoring software). Include license and implementation and one year support for free from the vendor**).**	10	309.33 €	3,093.3 €

3	Data Show	**PL1000X1 3LCD.** 3LCD. Liquid Crystal Display. Throw Ratio 70"@2.0m;1.48~1.78:1. 4500Ansi Lumens. Philips; 225W (Infinity Lamp). Lamp Lifetime 10000H (Normal) 20000H (ECO). Native Resolution 1024x768. Maximum Support Resolution 4K (3840*2160). VGA, SVGA, XGA, SXGA, WXGA, UXGA, W UXGA, Mac. PAL, SECAM, NTSC 4.43, PAL-M, PAL-N, PAL-60,480i, 480p, 576i, 576p, 720p, 1080p and 1080i. Screen Size		1	1,034.67 €	1,301.33 €
		0.88~10.89m (30"~300"). 1.2x optics. Aspect Ratio 4:3(Standard)/16:9(Compatible)/16:10. 100- 240V @ 50/60Hz. Power Consumption 280 W.				
4		Cables & Connectors		1	Included	
5		Switches & Routers	Aruba AP-505 (RW) Unified AP	1	253.33 €	
6			AP-MNT-D AP mount bracket individual D: solid surface	1	13.33 €	
7	Interactive Whiteboard	**StarBoard FX-79E2.** 79" diagonal interactive whiteboard. USB 1.1, USB 2.0. Multi-Touch, Finger, object or electronics pen. Infrared input technology. Windows 7/10/11. Drawing & Writing Tools. Presentation Tools / Graphic Tools. Google Image Search. Video Player Screen Capture. Screen Record & Audio Record. Steel board surface. Anti-scratch and low-gloss surface. Easy clean surface and compatible with dry-erase markers. Cables and Connector Included.		1	608.69 €	608.69 €
8	Video Conference with Discussion System	Ceiling speaker	**GALA-520XW.** Speaker Type 2-Way Passive, Coaxial. Line Voltage 70V/100V. Line Transformer Built-in, 2 power taps. 100V	4	60 €	240 €

			Power 10W/20W. 70V Power 5W/10W. Frequency Response (-10dB) 80Hz-18.5kHz. Sensitivity (1w/1m) 87dB. Woofer 5.25" (135mm), PP cone. Tweeter 0.5" (13mm), Mylar dome. Housing PP, paintable. IP Rate (speaker installed) IP54. Mounting Quick mounting system with 4 screws. Grille Perforated steel with acoustic transparent foam inside, paintable. Color White. Cutout Size Ø 172 mm. Product Size (WxDxH) Ø 203 x 90 mm. Speaker Weight 1.0 kg. Packing Size (WxDxH) 205 x 95 x 205 mm. Packing Weight 1,1 kg.			
9		Amplifier Mixer	**HSMA-120DPLAY.** 1 zone**.** Rated power 120W. Freq. response 100Hz–16KHz. Power Outputs 100V for each zone; Overall @ 4-16Ω. AUX Output 1000mV. AUX 1-2 Inputs 300mV. MIC 1 Input 15mV ±3mV. MIC/Line 2/3/4	1	234 €	234 €

			Inputs 30mV ±3mV (Mic Position); 300mV (Line Position). Off-Load Consumption 8W. Full-load Consumption 138W. Auxiliary Power DC 24V - 10A max. Fuse F2AL. Unit Size (WxDxH) 482 x 300 x 88 mm. Unit Weight 6 kg. Packing Size (WxDxH) 747 x 397 x 164 mm. Packing Weight 7,5 kg.			
10		Delegate Unit	**D-CernoDSL.** Material PC/ABS & Zamak .Color Black. Size (mm) 211.4(w) x 136(h) x 48.2(d). Size packed (mm) 250(w) x 150(h) x 90(d). Weight 760 g. Weight packed 975 g.	29	280 €	8,120 €
11		Chairman Unit	**D-CernoCSL.** Material PC/ABS & Zamak**.** Color Black. Size (mm) 211.4(w) x 136(h) x 48.2(d). Size packed (mm) 250(w) x 150(h) x 90(d). Weight 760 g. Weight packed 975 g.	1	Free	Free

12		Control Unit	**D-CernoCUR.** Material PC/ABS. Color Black. Size (mm) 300 (w) x 135 (h) x 50 (d). Size packed (mm) 345 (w) x 250 (h) x 155 (d). Weight 1300. Weight packed 2600 (including D-Cerno PS, cable).	1	1,546.67 €	1,546.67 €
13		Directional Microphone	**D-Mic40 SL.** Material Brass. Color Matt black, RAL 9011. Size (mm) 405 (w) x 25 (h) x 25 (d). Size packed (mm) 480 (w) x 50 (h) x 50 (d). Weight 100g. Weight packed 175g.	30	146.67 €	4,400.1 €
14		Installation		1	1000 €	1000 €
Total						**28,464 €**

Pictures of the equipment purchased

- Video Conference with Discussion System

- Interactive Whiteboard & Data Show are purchased but still in the process of being delivered and installed.

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

The tender was officially announced, and a technical committee was formed to study the received tenders. This committee comprised Prof. Saleh Al Sharaeh, the Dean of the IT faculty, Prof. Ahmed Al Salaymeh, and Eng Dana Al Amoush. The purchase subcommittee from the Central Tenders Department at UJ was tasked with overseeing the procurement process.

Offers were submitted by three companies for the procurement of personal computers, interactive whiteboards, and data shows: General Computers & Electronics, Jordan Data Systems, and Matrix Business Technology. Following careful consideration, the committee decided to award the Data Shows, Switches & Routers tender to Jordan Data Systems, while the tender for Personal Computers and Interactive Whiteboards was granted to General Computers & Electronics. The University of Jordan managed the procurement process not only for itself but also for other Jordanian Universities, including Mutah University and Irbid National University. Subsequently, the equipment was delivered to UJ and distributed to the other Jordanian Universities as well.

Regarding the Video Conference with Discussion System, offers were received from two companies: Target Scientific Supplies and Loriana Music. After thorough evaluation, the committee opted to award the Video Conference with Discussion System tender to Target Scientific Supplies. The equipment provided by Target Scientific Supplies was delivered to UJ and successfully installed.
The documents of this process can be found by clicking here: Documents for procurement of equipment
Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The equipment was installed in the IT faculty in room 301 (7m x 6m). The team responsible for the ICT lab are Prof. Saleh Al-Sharaeh (Supervisor), Prof. Mohammad Al Shridah and Dr. Hamad Alsawalqah. The video conference was installed in a hall in the presidency building (12m x 6m). The person responsible for this hall is Amer Wraikat (supervisor).

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

- Remove Switches of PC because the computer specifications will be bought with wireless card.
- Remove server because UJ have server already in their labs.
- Add new item "Video Conference with Discussion System" To achieve the project objectives of developing new teaching and learning methodologies and ICT support tools in classrooms, including e-learning Educational Resources, to be able to use technology, in designing, producing and using ICT-based instructional materials. And with reference to the survey result for the availability and access to ICT tools and resources there was a shortage nearly 74% in the access for video conference system. So, a video conference rooms equipped with discussion systems are very effective for training sessions or educational programs where participation and interaction are crucial also it enables more effective group collaboration during virtual meetings. Participants can share ideas, provide feedback, and engage in discussions in a structured manner. And that will support the project's primary objective, which is enhancing ICT skills and competencies in the region.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	**No of units ***	**Describe briefly the achieved results**	**No of units ***	**Explain and justify any discrepancies and measures taken**
In-house teacher training	**Co-teaching sessions:** Team up Digital Skills and Social Tools instructors with ICT-trained teachers to create blended learning modules. **Project-based learning:** Design collaborative projects where students learn both digital skills and apply ICT-enabled methodologies in a real-world context. **Teacher-led workshops within Digital**	10	Improved teacher confidence and skills in using technology for teaching. More engaging and effective Learning experiences for students. Enhanced student digital literacy skills And Responsible Online behaviour. Increased Collaboration and knowledge sharing among teachers.		

	Skills classes: Allow ICT-trained teachers to lead specialized workshops within Digital Skills classes, focusing on specific ICT tools and learning activities.				
Student use of ICT Labs	Introduce students to up-to-date digital authoring tools like Camtasia (or similar options depending on budget and needs). Train students on basic functionalities of the tool, including screen recording, editing, adding audio and visual elements, and exporting content. Guide students in using these tools to create engaging learning materials specifically tailored for early childhood learning.		Students develop practical skills in using digital authoring tools. Students gain a deeper understanding of early childhood learning principles by creating age-appropriate content. The created learning materials can potentially be used in classrooms or shared online for wider benefit.		
Development of digital learning materials	**We will focus on** creating interactive lesson plans that leverage digital tools and encourage student self- exploration. **Considerations:** Age-appropriate: Tailored to the developmental needs and attention span of young learners. Play-based learning approach: Utilize		By developing comprehensive course materials, student-driven lesson plans, and a robust sustainability strategy, the ICT4EDU Labs can continue to empower teachers and equip young learners with essential digital skills well beyond the initial project		

	play and exploration as core learning strategies. Student-centred activities: Promote active participation and engagement. Integration with curriculum standards: Align with early learning standards for targeted skills and knowledge.		duration.		
Other uses (state what)					
Overall (Summarize)	Teacher Training: Develop online modules, tutorials, and resources to train teachers on integrating ICT tools into their lesson plans for various ECE domains. Digital Lesson Plans: Create interactive lesson plans that leverage digital tools and promote student-centered, play-based learning. Delivery Platform: Host these resources on a user-friendly online platform accessible for teachers.		Policy Development: Establish clear guidelines regarding access, maintenance, and staff training for the ICT4EDU Labs after project funding ends. Continued Use Strategies: Integrate resources into teacher training programs, seek partnerships for funding, and organize community outreach programs to ensure long-term use of the labs.		
Explain how the achieved results will be used to sustain the project beyond the funding period.	This revised program equips teachers with modern teaching techniques and empowers students to create engaging learning resources for young learners using cutting-edge digital tools.				

*Number of units means persons, products, etc.


acer


K301-22

If applicable, refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs presented on page 1.

The challenges are related to ongoing training and support programs to enhance teachers' skills and confidence in using technology for instruction.
Equipment Maintenance and Upgrades: Regularly assess and update equipment to ensure its compatibility, reliability, and alignment with current educational software.
Curriculum Integration Planning: Develop resources and lesson plans that integrate technology seamlessly with specific curriculum objectives across subjects.
Promoting Equity and Access: Explore strategies for flexible scheduling, consider student- to-technology ratios, and investigate solutions to bridge technology gaps outside of school.

IRBID UNIVERSITY

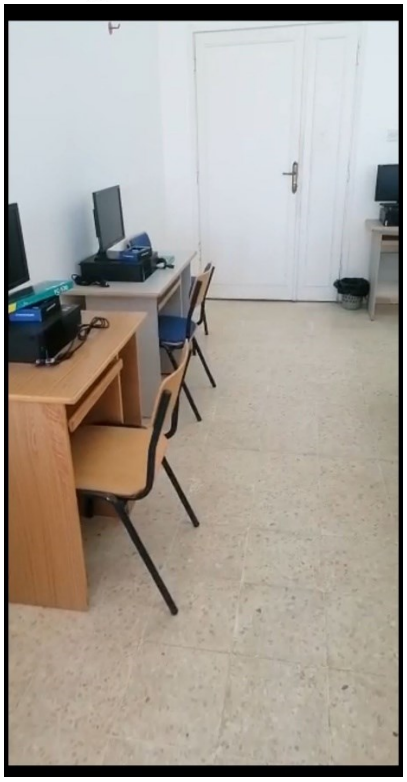
Table 1: Equipment Approved

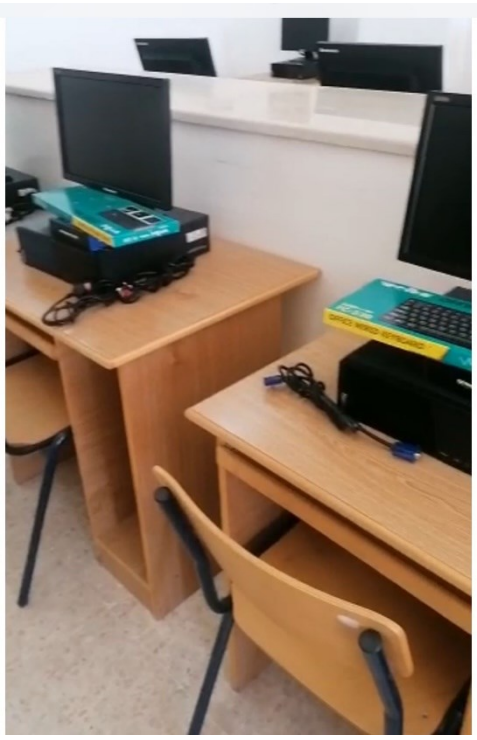
No.	Nature, type, and specifications of the item		Amount (EUR)
1.	10 Personal Computers (processor, memory, disk, display)		10 x 792 € (594 JOD)
2.	Video editing and creation software (Camtasia)		10 x 309.33 € (232 JOD)
3.	Data Show	Data Show	1 x 1,034.67 € (776 JOD)
4.		Cables & Connectors	Included
5.		Switches & Routers	266.66 € (200 JOD)
7.	Interactive/ smart board		1 x 608.69 € (456.52 JOD)

Table 2: Details on equipment purchased

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	**Lenovo ThinkCentre neo 50t.** Intel® Core™ i7 12th Generation 12700 processor speed of p-core 4.8GHz, Intel® Chipset, 16GB DDR4 Memory, 1GB Ethernet, 512 GB SSD M.2, Ports: 1xVGA, 1xHDMI, Ethernet (RJ-45), USB, Super Multi DVD Optical Drive, 21.5"LED FHD Backlit LCD Monitor with HDMI Port, Arabic & Latin Keyboard, USB Optical Mouse, Power Cable M	10	792 €	7920 €
2	Video editing and creation software	**Camtasia** (Video and Audio Authoring software). Include license and implementation and one year support for free from the vendor**).**	10	309.33 €	3,093.3 €
3	Data Show	**PL1000X1 3LCD.** 3LCD. Liquid Crystal Display. Throw Ratio 70"@2.0m;1.48~1.78:1. 4500Ansi Lumens. Philips; 225W (Infinity Lamp). Lamp Lifetime 10000H (Normal) 20000H (ECO). Native Resolution 1024x768. Maximum Support Resolution 4K (3840*2160). VGA, SVGA, XGA, SXGA, WXGA, UXGA, W UXGA, Mac. PAL, SECAM, NTSC 4.43, PAL-M, PAL-N, PAL-60,480i,	1	1,034.67 €	1,301.33 €

		480p, 576i, 576p, 720p, 1080p and 1080i. Screen Size 0.88~10.89m (30"~300"). 1.2x optics. Aspect Ratio 4:3(Standard)/16:9(Compatible)/16:10. 100-240V @ 50/60Hz. Power Consumption 280 W.			
4		Cables & Connectors	1	Included	
5		Switches & Routers — Aruba AP-505 (RW) Unified AP	1	253.33 €	
6		AP-MNT-D AP mount bracket individual D: solid surface	1	13.33 €	
7	Interactive Whiteboard	**StarBoard FX-79E2.** 79” diagonal interactive whiteboard. USB 1.1, USB 2.0. Multi-Touch, Finger, object or electronics pen. Infrared input technology. Windows 7/10/11. Drawing & Writing Tools. Presentation Tools / Graphic Tools. Google Image Search. Video Player Screen Capture. Screen Record & Audio Record. Steel board surface. Anti-scratch and low-gloss surface. Easy clean surface and compatible with dry-erase markers. Cables and Connector Included.	1	608.69 €	608.69 €
Total					**12,923 €**





Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Offers were submitted by three companies for the procurement of personal computers, interactive whiteboards, and data shows: General Computers & Electronics, Jordan Data Systems, and Matrix Business Technology. Following careful consideration, the committee decided to award the Data Shows, Switches & Routers tender to Jordan Data Systems, while the tender for Personal Computers and Interactive Whiteboards was granted to General Computers & Electronics. The University of Jordan managed the procurement process not only for itself but also for other Jordanian Universities, including Mutah University and Irbid National University. Subsequently, the equipment was delivered to UJ and distributed to the other Jordanian Universities as well.
The documents of this process can be found by clicking here: Documents for procurement of equipment

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The equipment was installed in the IT faculty in room Smart Room (7m x 6m). The team responsible for the ICT lab are Dr. Mohammad Mhawish (Supervisor), Dr. Mohammad Al Qudah and Dr. Yanal AlMohammad

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

- Omit the PC switches as computer specifications will include a wireless card.
- Omit the server since UJ already has servers in their labs.
- Introduce a new item: "Video Conference with Discussion System" to align with the project's goals of developing innovative teaching and learning methodologies and providing ICT support tools in classrooms, including e-learning Educational Resources. This addition is based on the survey findings indicating a 74% shortage in access to video conference systems. Video conference rooms equipped with discussion systems are highly effective for training sessions or educational programs requiring active participation and interaction. They facilitate more efficient group collaboration during virtual meetings, allowing participants to share ideas, give feedback, and engage in structured discussions. This addition directly supports the project's main objective of enhancing ICT skills and competencies in the region.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	No of units*	Describe briefly the achieved results	No of units *	Explain and justify any discrepancies and measures taken
In-house teacher training	Orientation Session Hands-On Workshops Skill Development Modules Collaborative Projects Evaluation and Assessment	14 teachers	ICT tools and their importance in modern education. training program and objectives Practical sessions on using various ICT tools such as interactive whiteboards, educational software, and online collaboration platforms. Training on creating digital lesson plans and incorporating multimedia elements into teaching.	14 teachers	

			Modules focused on specific ICT skills using educational apps.		
Student use of ICT Labs	Enhanced ICT Skills Innovative Teaching Methods Improved Student Engagement Collaboration and Peer Learning Ongoing Professional Development	96 Students	Student will gain practical skills in using various ICT tools and technologies. Improved confidence in integrating ICT into their teaching practices. Enhanced student participation and interest in learning through the use of technology.	96 Students	
Development of digital learning materials	Assessment Content Planning and Design Content Creation Review and Testing Implementation and Training Distribution and Access	5 courses updated	Teachers will have a foundation for continuous professional development in ICT. Creation of a supportive community of practice for ongoing ICT skill enhancement.	5 courses updated	
Other uses (state what)					
Overall (Summarize)					
Explain how the achieved results will be used to sustain the project beyond the funding period.	• Establish a network of trained teachers who can share best practices and support each other. • Encourage ongoing collaboration through regular meetings, online forums, and professional development workshops. • Develop a repository of training materials, lesson plans, and case studies created during the training. • Make these resources accessible to all teachers for future reference and use. • Formalize a mentorship program where experienced teachers provide guidance and support in ICT integration. • Offer regular refresher courses and advanced training sessions to keep teachers updated on new ICT tools and pedagogical approaches. • Partner with educational technology companies and institutions for continuous learning opportunities.				

	• Collect and analyze data on student performance and engagement to showcase the positive impact of ICT integration. • Use the initial success as a model to expand the training program to other schools and districts. • Share the program's success story with other educational institutions to encourage wider adoption of ICT training initiatives.

*Number of units means persons, products, etc.

Provide pictures related to the use of the ICT Lab

Refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs.

Frequent Malfunctions Devices such as interactive whiteboards, projectors, or tablets may frequently malfunction or require maintenance, leading to disruptions in lessons.

Equipment Shortages There might not be enough devices for all students, leading to limited hands-on experience.

High Maintenance Costs Regular maintenance and repair costs can strain the budget, reducing funds available for other educational resources.

Reluctance to Adopt New Technologies Some teachers and students may be resistant to

integrating new technologies into their routine due to a preference for traditional methods.

MUTAH UNIVERSITY

Table 1: Equipment Approved

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Table 2: Details on equipment purchased

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
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2	Video editing and	**Camtasia** (Video and Audio Authoring software). Include license and implementation and one year support for free from the vendor**).**	10	309.33 €	3,093.3 €

	creation software				
3	Data Show	**PL1000X1 3LCD.** 3LCD. Liquid Crystal Display. Throw Ratio 70"@2.0m;1.48~1.78:1. 4500Ansi Lumens. Philips; 225W (Infinity Lamp). Lamp Lifetime 10000H (Normal) 20000H (ECO). Native Resolution 1024x768. Maximum Support Resolution 4K (3840*2160). VGA, SVGA, XGA, SXGA, WXGA, UXGA, W UXGA, Mac. PAL, SECAM, NTSC 4.43, PAL-M, PAL-N, PAL-60,480i, 480p, 576i, 576p, 720p, 1080p and 1080i. Screen Size 0.88~10.89m (30"~300"). 1.2x optics. Aspect Ratio 4:3(Standard)/16:9(Compatible)/16:10. 100-240V @ 50/60Hz. Power Consumption 280 W.		1	1,034.67 €	1,301.33 €
4		Cables & Connectors		1	Included	
5		Switches & Routers	Aruba AP-505 (RW) Unified AP	1	253.33 €	
6			AP-MNT-D AP mount bracket individual D: solid surface	1	13.33 €	
7	Interactive Whiteboard	**StarBoard FX-79E2.** 79” diagonal interactive whiteboard. USB 1.1, USB 2.0. Multi-Touch, Finger, object or electronics pen. Infrared input technology. Windows 7/10/11. Drawing & Writing Tools. Presentation Tools / Graphic Tools. Google Image Search. Video Player Screen Capture. Screen Record & Audio Record. Steel board surface. Anti-scratch and low-gloss surface. Easy clean surface and compatible with dry-erase markers. Cables and Connector Included.		1	608.69 €	608.69 €
Total						**12,923 €**

- PC

- Interactive Whiteboard & Data Show are purchased but still in the process of being delivered and installed.

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Improved Version:
The tender announcement marked the official commencement of the procurement process, accompanied by the formation of a technical committee entrusted with evaluating the received tenders. This committee, chaired by Prof. Saleh Al Sharaeh, Dean of the IT Faculty, included Prof. Ahmed Al Salaymeh and Eng. Dana Al Amoush. Overseeing the procurement process was the purchase subcommittee from the Central Tenders Department at the University of Jordan (UJ). Notably, Mutah University received equipment through the central tender arrangement between Mutah University and UJ.
Three companies—General Computers & Electronics, Jordan Data Systems, and Matrix Business Technology—submitted offers for procuring personal computers, interactive whiteboards, and data projectors. After thorough deliberation, the committee awarded the tender for Data Projectors, Switches & Routers to Jordan Data Systems, while General Computers & Electronics secured the tender for Personal Computers and Interactive Whiteboards.
It's noteworthy that the University of Jordan, acting as the procurement authority, managed the process not only for its own institution but also for other Jordanian universities, including Mutah University and Irbid National University. Subsequently, the equipment procured was delivered to UJ and subsequently distributed to the other Jordanian universities involved in the procurement process.
The documents of this process can be found by clicking here: Documents for procurement of equipment

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The equipment was installed in the Education faculty in room 101 (8m x 6m). The team responsible for the ICT lab are Prof. Abduallah Aljarah (Supervisor), Prof. Hasan BenyDomah and Dr. Raed Sarayreh

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

- Remove the Switches of PC because the computer specifications will be bought with wireless card.
- Remove the server because Mutah has a server already in their labs.
- Add new item “Video Conference with Discussion System” To achieve the project objectives of developing new teaching and learning methodologies and ICT support tools in classrooms, including e-learning Educational Resources, to be able to use technology, in designing, producing, and using ICT-based instructional materials. Concerning the survey result for the availability and access to ICT tools and resources, there was a shortage of nearly 74% in the access for video conference systems. So, video conference rooms equipped with discussion systems are very effective for training sessions or educational programs where participation and interaction are crucial also it enables more effective group collaboration during virtual meetings. Participants can share ideas, provide feedback, and engage in discussions in a structured manner. And that will support the project's primary objective, which is enhancing ICT skills and competencies in the region.

Table 3: Biannual monitoring for the use of the ICT Labs

	Biannual plan (Period)	Actual Progress Achieved (Date)

Purpose of use	Describe briefly the expected activities and outcomes	No of units*	Describe briefly the achieved results	No of units*	Explain and justify any discrepancies and measures taken
In-house teacher training	**Co-teaching sessions:** Team up Digital Skills and Social Tools instructors with ICT-trained teachers to create blended learning modules. **Project-based learning:** Design collaborative projects where students learn both digital skills and apply ICT-enabled methodologies in a real-world context. **Teacher-led workshops within Digital Skills classes:** Allow ICT-trained teachers to lead specialized workshops within Digital Skills classes, focusing on specific ICT tools and learning activities.	10	Improved teacher confidence and skills in using technology for teaching. More engaging and effective learning experiences for students. Enhanced student digital literacy skills and responsible online behaviour. Increased collaboration and knowledge sharing among teachers.		
Student use of ICT Labs	Introduce students to up-to-date digital authoring tools like Camtasia (or similar options depending on budget and needs). Train students on basic functionalities of the tool, including screen recording, editing, adding audio and visual elements, and exporting content. Guide students in using these tools to create engaging learning materials specifically tailored for early childhood learning.		Students develop practical skills in using digital authoring tools. Students gain a deeper understanding of early childhood learning principles by creating age-appropriate content. The created learning materials can potentially be used in classrooms or shared online for wider benefit.		

Development of digital learning materials	**We will focus on** creating interactive lesson plans that leverage digital tools and encourage student self-exploration. **Considerations:** Age-appropriate: Tailored to the developmental needs and attention span of young learners. Play-based learning approach: Utilize play and exploration as core learning strategies. Student-centred activities: Promote active participation and engagement. Integration with curriculum standards: Align with early learning standards for targeted skills and knowledge.		By developing comprehensive course materials, student-driven lesson plans, and a robust sustainability strategy, the ICT4EDU Labs can continue to empower teachers and equip young learners with essential digital skills well beyond the initial project duration.		
Other uses (state what)					
Overall (Summarize)	Teacher Training: Develop online modules, tutorials, and resources to train teachers on integrating ICT tools into their lesson plans for various ECE domains. Digital Lesson Plans: Create interactive lesson plans that leverage digital tools and promote student-centered, play-based learning. Delivery Platform: Host these resources on a user-friendly online platform accessible for teachers.		Policy Development: Establish clear guidelines regarding access, maintenance, and staff training for the ICT4EDU Labs after project funding ends. Continued Use Strategies: Integrate resources into teacher training programs, seek partnerships for funding, and organize community outreach programs to ensure long-term use of the labs.		
Explain how the achieved results will be used to	This revised program equips teachers with modern teaching techniques and empowers students to create engaging learning resources for young learners using cutting-edge digital tools.				

sustain the project beyond the funding period.	

*Number of units means persons, products, etc.

Al Azhar University

Table (1): Details on equipment purchased

S	Item	Specification	No of units
1	**Interactive/ smart board Communication equipment, routers, switches**	**1) Size**: 86 Inch. **2) Screen Type:** D - LED **3) Aspect Ratio:** 16: 9 **4) Resolution:** 3840 (H) X 2160 (V) **5) Brightness:** 400 cd/m² **6) View Angel:** 178° (H/V) **7) Lifetime**: Long Life (100,000 hours) **8) System Version**: Android 12 **9) RAM / ROM:** 4 GB / 32 GB or higher **10) Wi-Fi:** ax (Wi-Fi 5 or 6) **11) Bluetooth:** 5.0 **12) Sensing Type:** Infrared recognition – 20 points **13) Touch Response Time:** 5 ms **14) Touch System**: Windows 10/11, Linux, Mac, Chrome, Android **15) Writing Mode**: Finger + Pen **16) Output Coordinates**: 32767 x 32767 **17) Speaker Type**: Built-in Speaker **18) Provided with Camera and MIC** **19) Warranty**: 1 year including spare parts.	1

2	**Projector (Data Show)**	1) **Technology Projection System:** LCD Technology RGB liquid crystal shutter 2) **LCD Panel:** 0,59 inch with MLA (D10) 3) **Color Light Output:** 3000 Lumen at least 4) **White light output:** 3000 Lumen at least 5) **Native Resolution:** WXGA, 1280x800 At least 6) **Throw Ratio:** 1.27 - 1.71:1. 7) **Screen Size:** 25 inches - 378 inches At least 8) **Keystone correction:** Auto vertical: ± 30 °, Manual horizontal ± 30 ° 9) **Zoom:** Digital, Factor: 1 - 1.35 10) **CONNECTIVITY Interfaces:** HDMI 1.4, USB 2.0-A, USB 2.0 Type B (Service Only) 11) **Video Color Modes:** Blackboard, Cinema, Dynamic, Presentation 12) **Lamp:** UHE, 188 W, 6,000 h durability, 12,000 h durability (economy mode) 13) **Items included:** Main unit, Power cable, Quick Start Guide, Remote control incl. batteries, User manual (CD), Warranty card. 14) **Screen:** Tripod projector screen 180*180. **Warranty:** 24 months Carry in, Lamp: 12 months or 1,000 h	1

Table (2): Details on equipment rejected. Re-call of tender is under processing

S	Item	Specification	No of units
1	**Personal Computers (PC with processor Core I5, memory, disk, display)**	1) **Processor:** Intel Core I5 Gen 12 2) **Memory:** Not less than 16 GB DDR4 3) **Hard Drive:** 1 TB HDD & 512GB SSD 4) **Monitor:** Not less than 19 Inch (Same brand) 5) **Operating System:** Windows 11 pro with license 6) **Includes:** Keyboard and Mouse (Same brand)	10

		7) **Optical Disk Drive:** 8x DVD+/-RW 9.5mm Optical Disk Drive Media Card Reader 8) **Connectivity:** Integrated Realtek RTL8111HSD-CG Ethernet LAN 10/100/1000 9) **Warranty**: 1 year including spare parts.	

Information on the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Preparation for the tender:

- By the end of the kickoff meeting, two committees had been formed by a decision of Al-Azhar university president.
- The 1st committee set the technical specifications of all equipment that were defined by name in the project.
- The 2nd committee set the estimated price for each.
- Both committees hold multiple meetings with different vendors and local agents of the needed equipment to discuss the technical specifications of each and to put the estimated price.
- The committee had taken into account that all equipment are advanced and at a very high quality level that support the staff and the student needs and that achieve the project goals
- Finally, the committees set the technical specifications for the estimated prices.

Call of tender:

- Tendering announcement was published in one of the major national daily newspapers (El-Gomhoreia newspaper), on Thursday, 25th of January 2024
- Moreover, tendering Announcement in The Public Tendering Gate, (An official website for announcing tenders for all Egyptian suppliers including all supporting documents for tender operation), on Monday, 29th of January 2024
- The booklet of conditions and specifications was available and requested from Central Administration for Purchasing and Warehouses Department, Al-Azhar University, Nasr City, Cairo.
- Four vendors and agent companies bought the booklet, however, only three out of four submitted their offers into two closed envelopes (an envelope include their products and their technical specifications and another one including the price quotes).
- The session for opening the technical offers envelopes was done on Wednesday, 14th of February 2024 at 12 PM at the Central Administration for Purchasing and Warehouses Department, Al-Azhar University, Nasr City, Cairo.

- The committee investigates all offers technically and submits a final technical report for each product.
- Then, the session for opening the financial offers envelopes (price quotes) was done on Wednesday, 18th of March, 2024 at 12 PM at the Central Administration for Purchasing and Warehouses Department, Al-Azhar University, Nasr City, Cairo.
- Finally, two items, namely, the interactive/smart board communication and the projector (Data show) were accepted both technically and financially. (Table 1)
- Purchasing orders were sent for both equipment and waiting for the vendor responses.
- However, the offers of the personal computers (PCs) were rejected financially because all price quotes from all vendors exceeded the estimated price submitted by the financial committee. (Table 2)
- This is a result of the fluctuation of the current exchange rate that occurred recently in Egypt.
- Regarding the rejected item (PCs), we are preparing for a new tender soon.

Heliopolis University

Table 1: Equipment Approved

No.	Nature, type, and specifications of the item	Amount (EUR)
1.	18 Personal Computers (processor, memory, disk, display)	15,119
2.	18 licences	HU Contribuation
3.	Smart Board & Projector	4,701

Table 2: Details on equipment purchased.

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	Optiplex 3000 Tower, 12 Generation intel Core i5-12500(6core/18M/12T/3.0GHz to 4.6GHZ/65W) 8GB DDR4	18	709,72	12,775
2	Computer	Dell Monitor E2020H	18	130	2,344

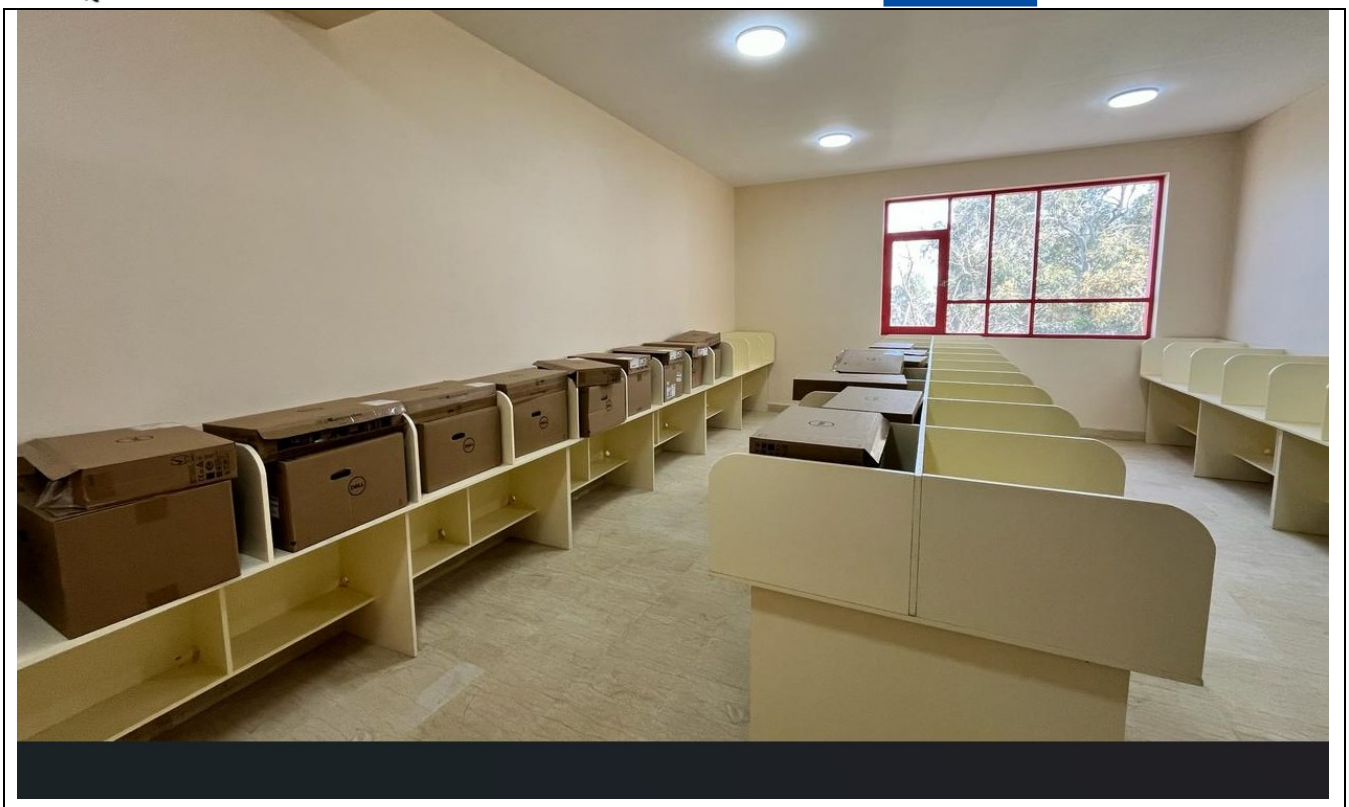
	Screens				
3	Smart Board & Projector	Smart Board with short throw 3LCD Projector Bright output 2,500 lumens, LO W TCO	1	4,701	4,701
Total					**19,190**

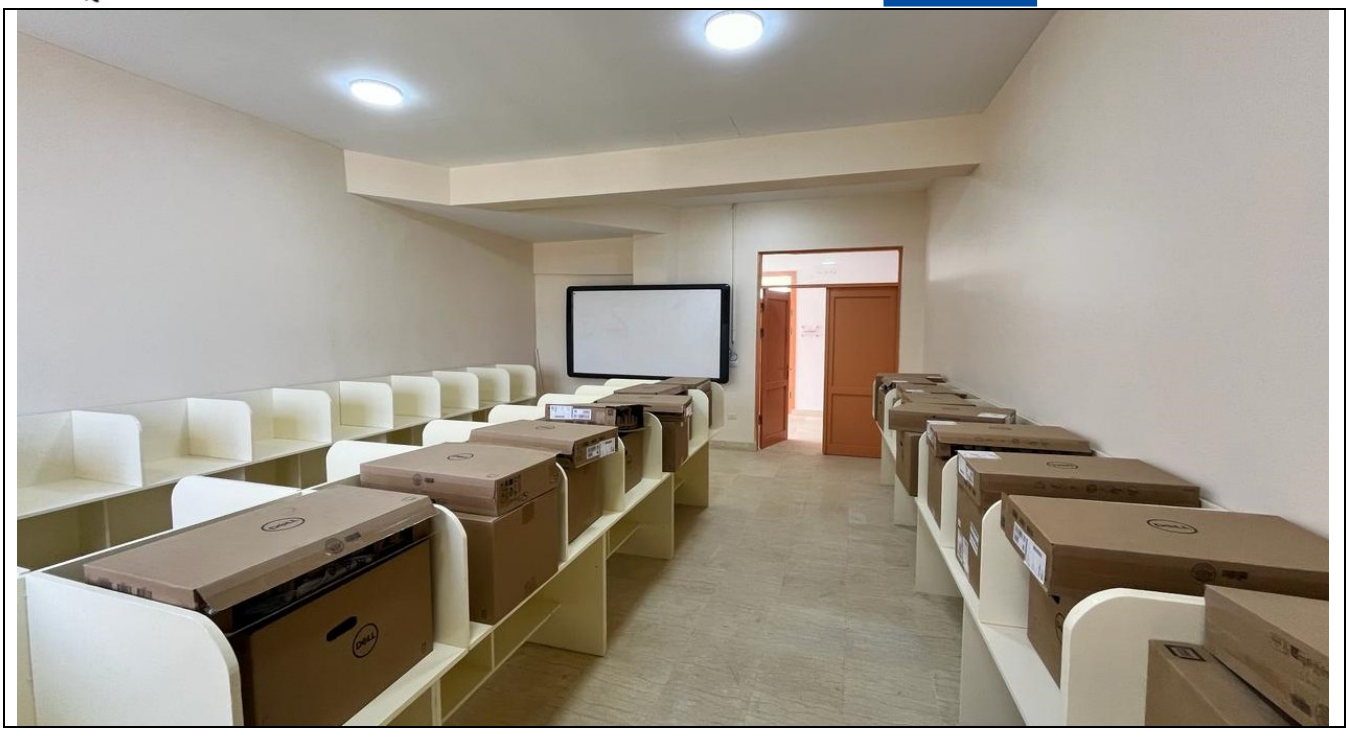
Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

- We First identified the needs of the HU ICT lab and settled on 18 Personal Computers (processor, memory, disk, display), 18 licenses, and a Smart Board & Projector.
- Then we issued a call for tenders for suppliers to submit their bids for providing the equipment
- We received three different offers from different suppliers for the purchase of the equipment.
- The three offers were presented in front of the committee responsible for the purchase of the equipment which is composed of Prof. Dr. Omar Ramzy, Project manager, and the OSP(Office of Sponsored Projects) director Dr. Ahmed El Shazly.
- The committee chose the tender that offered the least amount of money for the equipment, which was 19,190 euros, which is equivalent to 658071,26 EGP. The chosen supplier was then contacted to finalize the details of the purchase and delivery of the equipment. - The committee ensured that all necessary specifications and requirements were met before proceeding with the procurement process.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The ICT4EDU lab is established on the last floor of the physical therapy faculty and will be under the Department of AI Studies. The room size is 40 m2. The team responsible for the ICT4EDU lab is composed of Prof. Dr. Omar Ramzy who is responsible for ensuring that the lab is meeting the objectives of the project, Mr. Ahmed Bahrawy who is responsible for the technical application of the lab, Mr. Ahmed Sameh who is also responsible for the technical application of the lab and periodic checks of the lab. The team members will work collaboratively to ensure the lab achieves its intended aim and is provided with the resources needed for the educational purposes it is built for. Additionally, they will be responsible for maintaining a conducive environment for research and development within the lab.





Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

The initial plan was to purchase 18 personal computers, 18 licenses, 1 projector, and one smart board. Moreover, there was a change in the list in the Bucharest management meeting and it was decided to purchase another 18 personal computers instead of the 18 licenses which means that we would have 36 personal computers. Nevertheless, after receiving the money for the purchase of the equipment we were unable to buy the whole amount due to the Egyptian currency devaluation. As a result, we had to prioritize and purchase only the essential items, which included 18 personal computers, 1 projector, and one smart board. Despite the setback, we ensured that the necessary equipment was acquired to meet our immediate needs.

Table 3: Biannual monitoring for the use of the ICT Labs

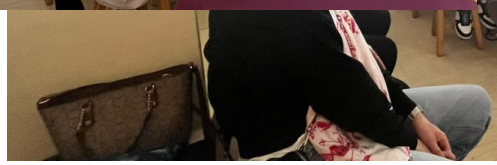
SE OF	**Biannual plan (Period)**		**Actual Progress Achieved (Date)**		
	Describe briefly the expected activities and outcomes	**No of units***	**Describe briefly the achieved results**	**No of units***	**Explain and justify any discrepancies and measures taken**
e teacher	8 teachers to convey what they have been taught in the EU workshops to their fellow teachers for the dissemination of the project. This peer-to-peer sharing of knowledge will help ensure that the project's goals and objectives are effectively communicated and implemented across a wider audience. It also promotes collaboration and a	80 teachers	NA	NA	NA

	sense of community among educators involved in the initiative				
se of ICT	Students will be engaging in practical exercises, simulations, collaborative projects, and research activities. Through hands-on experimentation with various software applications, programming languages, and hardware components. This will lead students to enhance their technical skills and foster teamwork, and leadership skills.	150 students and more	NA	NA	NA
oment of earning s	Teachers will begin with a series of essential activities to develop their digital skills, such as creating and managing online learning platforms and utilizing educational technology tools effectively. These activities will be followed by guided practice sessions and opportunities for collaboration with colleagues to further enhance their proficiency in using digital tools for teaching.	80 teachers and more	NA	NA	NA
ses (state	Provide interactive lectures and sessions for students, incorporating multimedia elements and engaging activities to enhance learning and promote active participation. Encourage students to ask questions and participate in discussions to create a dynamic and interactive learning environment.	All of the university students.	Providing an info day session about the ICT4EDU project in the newly established ITC4EDU lab. The Session elaborated on collaborative efforts with international and local partners, emphasizing the shared vision and goals that drive the project. It outlined the strategic steps taken to integrate technology into the curriculum, focusing on teacher training, infrastructure development, and creating engaging, tech-	25	NA

			enabled learning environments.		
rize)	In the biannual plan for the ICT4EDU lab, we will have 8 teachers who will disseminate knowledge gained from EU workshops to fellow educators to ensure effective communication and implementation of project goals. Peer-to-peer sharing fosters collaboration and community among educators. Furthermore, students will engage in practical exercises, simulations, and collaborative projects to enhance technical, teamwork, and leadership skills. Moreover, Teachers will develop digital skills through essential activities, guided practice, and collaboration, and students will have Interactive lectures that will incorporate multimedia elements and engaging activities to promote active participation and create dynamic learning environments.				
how the d results used to he project the funding	We will leverage the attained results strategically to sustain the ICT4EDU lab beyond the funding period. Documenting and evaluating the improvements in teachers' dissemination skills and student engagement will provide evidence of the project's success. We'll compile case studies and best practices to showcase their impact, disseminating them widely. Additionally, the expertise gained by the eight teachers will be utilized to conduct training programs for educators, while methodologies like peer-to-peer sharing and interactive lectures will be integrated into the regular curriculum. Fostering a community of practice among educators and strengthening partnerships with other organizations will ensure ongoing collaboration and support. Through these measures, the ICT4EDU lab will continue to make a meaningful impact on education long after the initial funding period				

*Number of units means persons, products, etc.

Provide pictures related to the use of the ICT Lab




Enhancing ICT Competencies of Early
Childhood Educators at HEIs in MENA
Countries / ICT4EDU Project
Heliopolis University, Egypt
Info Session
13th of June, 2024


Enhancing ICT Competencies of Early
Childhood Educators at HEIs in MENA
Countries / ICT4EDU Project

Refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs.

NA

Suez Canal University

Table 1: Equipment approved (See the example)

No.	Nature, type, and specifications of the item	Amount (EUR)
1.	30 Personal Computers (processor, memory, disk, display)	30 x 700,00 €
2.	25 tablets	25 x 500,00 €
3.	One multisystem with laser printer and scanner	1 x 600,00 €
4.	Projector	1 x 500,00 €
5.	Camera	1x 400,00 €
6.	Smart board	5000 €

Table 2: Details on equipment purchased (See the example)

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)

1	PC	**LENOVO V50a 221IMB**, Up to 10th Gen Intel Core i7 Processor, Display 21.5 Full HD, Graphics: Intel UHD Graphics 630/610,Memory: up to 32 GB DDR4-2666, Storage:Internal Storage up to 1x2.5' I TB SATA HDD M.2 SSD up to 1 x 512 GB M.M2PcleNVMe optional Intel Optane 16GBmemory, Camera 1080p 720p	10	1000	**10000**
2	Printer	**EPSON L850** Photo All in One Printer Epson Inkjet Printer Memory Card Storage Photo Print Speed Default 27 seconds per photo, Draft Photo Max 12 seconds per photo, Draft, A4 (Black/Color) 37 ppm/38ppm, Simplex A4 Black/Color) 5.0 ipm /4.8 ipm Print Resolution 5760 x 1440 dpi Scan Speed Flatbed (Black/Color) 300 dpi, 1.6msec A4 4R Borderless CD/DVD Printing 1 Bottle Ink 1800 Photos 4R USB Connectivity. 2.0 Operating System WindowsXP and Mac Os.	1	1500	1500
3	Smart board	**Vibe S1 75″ Smart Board, 75 Inch Interactive Display, 4K UHD Touch Screen All-in-One Computer for Office and Classroom with Chrome OS & OpenApp Ecosystem (Board Only)**	1	3000	**3000**
Total					**14500**

Provide pictures of the equipment purchased

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

The steps taken towards purchasing the equipment

- The project institutional contact person in SCU applied for approval for purchasing the specified equipments in the above table.
- SCU president approved the initiation of the purchase process.
- The purchase department in SCU started a limited tender with the required equipment.
- SCU now is receiving the price offers from companies in Egypt.

Also the dean of the faculty of education, where the lab will be developed dedicated aplace to host the lab once the equipment are purchased.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The dedicated location for the lab is in the faculty of education, building C the first floor.The process of purchasing the equipment is not finalized yet, so no pictures are available.

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

The items of the equipment list are not changed in the case of Suez Canal University; however, the number of items is changed due to the currency instability and the economic crisis in Egypt. The proposed number of personal computers was 20 but we will only purchase 10.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	No of units *	Describe briefly the achieved results	No of units *	Explain and justify any discrepancies and measures taken
In-house teacher training	In the regard to the use of equipment for in-house training, there are two main paths for this: first training the staff members who are involved in	30 staff members	11 staff members received an orientation about the project and its activities and		The staff members who started now are those who have courses in this academic year. The rest of the staff members will be included afterwards

	teaching different subject matters to students majoring in early childhood education, secondly training students on implementing teaching activities developed by the support of ICT. According to the project plan there will be three trainings in European Countries that are members in ICT4Edu project also, according to the project plan six members will attend the trainings in European countries. Those staff members who will attend the trainings are responsible for training their colleagues in the faculty of education after returning from their training period therefore around 40 staff members will be trained during the in-house training in Suez Canal University.		expected outcomes.		when their courses due for teaching.
Student use of ICT Labs	The students' training focuses on usages of ICT components and tools and applications in delivering different subject matters in early childhood level is presented to those students so that they can deliver it in schools while in service training or after graduation. Also as part of the project activities Students will be able to travel to EU countries to have training before their graduation	250 students	The whole group of students already finished two updated courses. Digital transformation and psychology of sustainability.	250 students	As the ICT center is not yet finished, other university premises were used while delivering those two courses. The educational technology department already has ICT labs. And also the educational psychology department has ICT lab. These labs were used until the ICT4Edu lab is finished.

	In regard to training of the students majoring in early childhood education, the lab will be used in group work and for delivering education in some subjects, especially the five subjects that have been updated during the project lifetime				
Development of digital learning materials	Students will have the opportunity to use the provided equipment to present different topics suitable for early childhood level where they can emphasize the inclusion of ICT in delivering these topics or in the content itself as skills and knowledge base It is planned throughout the project lifetime to encourage students majoring in early childhood education to develop teaching material in different subject, matters using ICT tools, applications, and Components. This developed material will be available for all students to use in their in-service training and also can be used as best practices in delivering different concepts to preschoolers in ICT supported environment.				
Other uses (state what)	ICT center can be used in teaching, presenting educational material, and evaluation of learning in small groups.				
Overall (Summarize)					

Explain how the achieved results will be used to sustain the project beyond the funding period.	This center of ICT for preschoolers will also provide training for teachers who already work in early childhood education to update their knowledge and practice in teaching preschoolers and infusing, ICT component, tools and applications in their teaching activities and assignments. This will provide the base for sustainable link between the university and the community where teachers can contact the center for guidance, for training, for usage of the developed teaching material and exchange of best practices in educating preschoolers. This kind of cooperation can lead to profit for the center, this profit can secure to continuation of the centers activities after the end of the funding period of the project.

*Number of units means persons, products, etc.

Provide pictures related to the use of the ICT Lab

- **Samples of students' work, assignment of the course "psychology of sustainability"**
- **These teaching material were shared via a facebook page named "sustainability in Suez Canal University"**

- https://www.facebook.com/share/v/cnMpunVs5uiAqZPb/?mibextid=iCjFHx&startTimeMs=19000
- https://www.facebook.com/share/v/fjjcxGqwGntQ7SeB/?mibextid=iCjFHx&startTimeMs=4000
  "consequences of excessive usage of electronic games"

Rã W Ãn ▶ سيكلوجية الاستدامة جامعة قناة السويس

1 May ·

الحيوانات المهددة بالانقراض تشمل مجموعة واسعة من الأنواع التي تواجه خطر الانقراض، سواء بسبب نشاطات بشرية أو عوامل طبيعية. هذه الأنواع تلعب أدوارًا مهمة في النظم البيئية، وبالتالي فإن فقدانها يمكن أن يكون له عواقب وخيمة على البيئة وعلى التنوع البيولوجي. فيما يلي بعض النقاط الرئيسية حول الحيوانات المهددة بالانقراض، مع التركيز على الشعاب المرجا ...See more

Haneen Hany ▶ سيكلوجية الاستدامة جامعة قناة السويس

3 May ·

تأثير الفقر على الأطفال يفوق كل التأثيرات
قد يعانون من مشاكل صحية ونفسية واجتماعية ، مما قد يجعل منهم مشروع فقر متوارث من جيل إلى آخر.
وهنا يجب أن يظهر دور الدولة فى توجيه هؤلاء الأطفال ورعايتهم .

تحت إشراف/د. نيهال لطفى

A report about poverty in Egypt.

- Awareness campaign about malnutrition among children.

Refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs.

Due to the change of currency rate in Egypt of Euro versus Egyptian pound the number of personal computers was reduced to better suit the budget allowed for the equipment. Therefore, the final list from university included personal computers, interactive, smart words and three in one printer, scanner and copier. The number of students majoring in early childhood education is big around 250, so the dedicated lab will not suit this number. To compensate other labs will be used when not used by other departments.

PALESTINE

Al Istiqclal University

Table 1: Equipment approved (See the example)

No.	Nature, type, and specifications of the item	Amount (EUR)
1.	Personal Computers (processor, memory, disk)	17 x 696,00 €
2.	Display HP P24h G5 FHD Monitor -24" Hight adjustable Screen.	17 x145,00€
3.	HP ProBook 450 G9 Notebook PC	3 x 916,00 €
4.	Smartboard	1 x (university budget)
5.	PC	10 x (university budget)

Table 2: Details on equipment purchased (See the example)

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	HP Pro Tower 400 G9 Microtower Business PC • Free Dos • Intel® Core™ i7-12700 (up to 4.9 GHz with Intel® Turbo Boost Technology, 25 MB L3 cache, 12 cores,	17	696	**11832€**

		20 threads) Processor. • Intel Q670 Chipset • 16GB DDR4 RAM • 512GB PCIe NVMe M.2 SSD • Integrated: Intel® UHD Graphics 770 • HP USB wired keyboard (A/E). • HP USB wired optical mouse. • LAN: Integrated 10/100/1000M GbE. • Three-years warranty			
2	Display	HP P24h G5 FHD Monitor -24" Hight adjustable Screen.	17	145	**2465€**
3	NoteBook	HP ProBook 450 G9 Notebook PC ➢ FreeDOS ➢ 12th Generation; Intel® Core™ i7-1255U (1.7 GHz base frequency, up to 4.7 GHz with Intel Turbo Boost Technology, 12 MB L3 cache, 10 cores, 12 threads) ➢ 16GB DDR4-3200 SDRAM ➢ 512GB PCIe NVMe SSD ➢ (15.6") diagonal, FHD (1920 x 1080), IPS, narrow bezel, anti-glare ➢ NVIDIA® GeForce® MX570 (2 GB DDR6 dedicated) ➢ Integrated 10/100/1000 GbE NIC ➢ One Year Warranty ➢ HP Laptop Carry Case	3	916	**2748€**
4	Smartboard	**SMART Board SB660 Interactive Whiteboard With short throw projector bundle** Smart board, wall mount, pen tray, pens, erasor, projector and Mount, USB cable, HDMI cable, power cables and Quick start guide Interactive, Smart Board, Multi-writing, Annotation, File saving & transfer, Image Edit, Document viewer, PowerPoint presentation, Web browsing, Screen sharing, Video conferencing, electronic whiteboard.	1	NA	**NA***
5	PC(desktop)	**Dell i5 Desktop Computer 3.20GHz 8GB RAM 500GB HD 19" LCD Windows 10 PC Wi-Fi** Processor Intel Core i5 3rd Gen. Screen Size 19 in	10	NA	**NA****

		Graphics Processing Type Integrated/On-Board Graphics RAM Size 8 GB SSD Capacity Intel HD Graphics Processor Speed 3.20 GHz Maximum RAM Capacity 16 GB Connectivity Ethernet LAN (RJ-45), USB 2.0, VGA, DisplayPort Operating System Windows 10 DVD-RW, Dual Monitor Capable, Optical Drive Hard Drive Capacity 500 GB Storage Type HDD (Hard Disk Drive)			
Total					**17045€**

* From the university budget
** From the university budget

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Bids were submitted immediately after obtaining donor approval. These offers were submitted through the relevant administration at the university. The specifications were developed by the university's computer department at our request.
The initially proposed number was 20 computers and 10 devices from the university as a contribution from the university administration. Due to the war in Palestine, prices increased, and the best price with the best specifications allowed us to buy 17 devices.
The university also donated a smart board device to the project and all technical laboratory equipment.
Due to the war, the delivery of the devices was also delayed, and until this moment we have not received the devices from the supplying company.
Due to the situation in Palestine, we expect to receive computers within the next two weeks.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The Information Technology Laboratory is located within the campus of Al-Istiqlal University, Faculty of Humanities, and it is affiliated with the Department of Psychology, and the area of the laboratory is 36 m2, and there are windows and an electronic door that opens with secret numbers.
The IT laboratory is equipped with a spider network that connects to all computer devices in it, which is supervised by the university's technical support team.
The laboratory has 20 devices from the university and 17 devices funded by the ICT.
Each device is placed on a table designated for the computer, a chair on which the student sits, as well as a desk, a chair for the teacher, and an electronic board.
The laboratory is supervised by the project team:
Dr. Amer Shehadeh as Team Leader.
Dr. Ibrahim Ashowli, Dr. Fawzia Marmash, Dr. Anwar Abu Hannoud.

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

Changes in the purchasing and supply process are a frequent reality during projects. They often arise from budget adjustments, unexpected challenges, or even the emergence of better alternatives over time. In the specific context of Al-Istiqlal University, the changes find their justification in the following circumstances:
Increase in equipment costs in Palestine by 10% due to the current crisis in the Palestinian territories, affecting all aspects.
Proactive management of budgetary impacts:
Steps have been taken to mitigate the financial impact of this increase. This includes judicious reallocation of resources, pursuit of additional subsidies, and renegotiation with suppliers.
These actions demonstrate our commitment to preserving the financial balance of the project despite unforeseen challenges.
Advantageous alternatives:
A rigorous selection process was meticulously followed, ensuring that the chosen alternatives represented the most sensible options for the success of the project. This thoughtful approach is

part of our constant desire to optimize the choices available, thus ensuring quality while taking into account budgetary requirements.
Alignment with project objectives:
The fundamental objectives of the project remain at the heart of our priorities. Despite the necessary adjustments, these changes continue to contribute to their achievement.
Our decisions are shaped by a long-term view of project success, far removed from reactive responses to unforeseen obstacles. This strategic approach guarantees the sustainability and overall success of the project.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	**No of units ***	**Describe briefly the achieved results**	**No of units ***	**Explain and justify any discrepancies and measures taken**
In-house teacher training	1- Training teachers to use information technology skills to understand, know and study the offered courses. 2- Using computers and technologies available in the computer Laboratory to solve assignments and academic assignments. 3- Training them in computerized psychological measurement (tests and experiments). 4- Achieving educational quality in the field of tests and comprehensive quality in studying subjects. 5- Increase productivity and save effort and time. 6- Material and moral motivation for teachers to enhance research productivity. 7- Providing an appropriate educational environment	20 teachers	Many students have been trained in computer skills and the application of technology in education Specialists are used to teach students new educational skills	20	
Student use of ICT Labs	1- Increasing motivation to learn	20 students			

	in a computerized environment. 2- The ability to use technology in projects, research, and visiting scientific libraries. 3- Stay connected with the virtual world. 4- Providing an appropriate educational environment. 5- Increasing educational skills such as cognitive, mental and practical skills.				
Development of digital learning materials	1- Developing new outlines. 2- Install specific software. 3- Training on programs. 4- Online libraries.	6			
Other uses (state what)	1- Students in other departments can benefit from the technologies available in the laboratory. 2- Disseminate training to other students and teachers.				
Overall (Summarize)	The entire university, with all its bodies and cadres, benefit from the resources in the laboratory				
Explain how the achieved results will be used to sustain the project beyond the funding period.	- Conducting a periodic evaluation process for teachers who have been trained to enter the mentioned courses. - Feedback for students and teachers. - Transfer of learning experience to new groups. - Transform the educational process from traditional to developed manner.				

*Number of units means persons, products, etc.

Provide pictures related to the use of the ICT Lab

OBJECTIVES

1) The lab will help achieving the ICT4EDU project Goals such as:

- influencing education policies and curriculum,
- integrating ICT teacher training to meet the needs of digitally literate youth and children.
- enhance digital literacy for teachers and students, particularly in supporting children with special educational needs or disabilities,
- ICT plays a significant role in facilitating the educational process.

2) Using computers in increasing productivity.

3) Using modern applications and software in education like psychological tests.

4) Solve assignment and homework.

5) Digitization of courses and applying electronic learning.

6) Technology keep you connected to the world.

If applicable, refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs presented on page 1.

1.No qualified teachers and students appropriately qualified to use technology in learning.
2.There are no necessary computerized programs to activate the educational training course.
3.Delay in the launch of the training course due to the conditions in Palestine.
4.The trainees were unable to reach the training place due to the difficulty of movement**.**
5- Due to the repercussions of the war in Palestine, there is a major problem in implementing the program as planned

Palestine Technical University

Table 1: Equipment approved (PTUK)

No.	Nature, type, and specifications of the item	Amount (EUR)
1.	20 Personal Computers (processor, memory, disk, display)	20 x 590.00 €
2.	Display (HP PP22v G5)	20x90 €
3.	Interactive LCD Projector	1 x 1340.00 €
4.	LCD Projector	2 x 635.00 €
5.	Video editing and creation software	20 x 60.00 €

Table 2: Details on equipment purchased (PTUK)

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	Brand Name. Business Class Min Specifications: Processor: core i7, 12th Gen Intel® Core™ Processors. Chipset: Business series Memory:16GB Hard Drive: HD 512 M.2 SSD Intel Integrated Graphics Network Adapter: Integrated Intel 10/100/1000 MB/s Keyboard: USB Brand name key Arabic/ English Mouse: USB optical Case: Tower case Ports: HDMI Output At least 4 USP3 Software: Free Dos Display:22" minimum brand name with HDMI input Warranty: Three years Warranty	20	590	**11,800**
2	Display	Display (HP PP22v G5)	20	90	**1800**
3	LCD Projector	Projection Technology:3LCD Brightness:3700ANSI Contrast Ratio: 16,000:1 Aspect ratio: 16:10 Resolution: WXGA (1280x800) Lamp life:6000Hrs Connectivity: USB 2.0, Wireless LAN. VGA in/out HDMI Microphone input Wireless card: Included Wall Mount Socket (VGA,HDMI,USB) included Warranty: 3Years	2	635	**1270**
4	Interactive LCD Projector	Projection Technology:3LCD Brightness:3500ANSI Contrast Ratio: 14,000:1 Aspect ratio: 16:10 Resolution: WXGA (1280x800) Lamp life:5000Hrs Aspect Ratio: 16:10 Connectivity: USB 2.0, Ethernet	1	1340	**1340**

		interface Wireless LAN. VGA in/out HDMI Microphone input Wireless card: Included Interactivity: Two digital pen + Two Fingers Software: Interactive Tools, Multi PC Projection, Network Projection Accessories: CD Manual, dual Interactive pens, Main unit, Pen case, Power cable, Remote control incl. batteries, USB cable, Wall hanging bracket Wall Mount Socket (VGA, HDMI, Ethernet and USB) included Warranty: 3Years			
5	Video editing and creation software	Video Editor software (licensed) Video Editing Effects Audio Editing Color Editing Supported Input Formats: video, audio and photo.	20	60	**1200**
Total					**17410**

Pictures of the equipment purchased

Co-funded by the European Union

ICT4EDU LAB

Enhancing ICT Competencies of Early Childhood Educators at HEIs in MENA Countries
ERASMUS+ PROGRAMME
Project Number: 101083078

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

PTUK has clear procedure for the purchase, procurement, and tender. The procedure is followed, documented and approved at the Supplies, Procurement and Tenders Department as per the following.
Committee: Tender committee, technical committee
Description:
The bidding and solicitation committee (tender committee) met on August 14, 2023 at PTUKs Supplies and Purchasing Department to open the solicitation (tender) for companies participating locally in the solicitation process.

After approval at the tender committee, the file was referred to the Administrative Vice President of the University to form a technical committee to study the file and submit recommendations to the Tenders Committee.
The technical committee studied the aforementioned tender by analyzing the tender from the 6

participating companies, analyzing the matching and non-conforming (non-matching) offers, and determining the reason for the non-conformity. The required analysis was included in a documented form, with the exception of software in accordance with the university and computer center's policy for purchasing software online and directly.
After approval, the Supplies and Procurement Department was instructed to complete the purchasing process in accordance with the approval of the Vice President for Administrative and Financial Affairs. The referral request for the supply of devices was notified on 10/03/2023 and the devices was received at the beginning of December, 2023.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

The ICT4EDU Lab is located at PTUK in the Applied Sciences building room number E329. The ICT Lab size 10X6 M. The lab is fully equipped and can accommodate 35 students + one Lab technical person.
The team responsible for the ICT Lab is from the College of IT/ Department of ICT Education and Information Systems (IS). The team include technical person from IS department and PTUK ICT4EDU team members.
Head of IS Department Role: administration such as ICT Lab timetabling, scheduling, and technical setting.
PTUK ICT4EDU team members role: Proving workshops and lectures to staff members and students.

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

NA

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	Biannual plan (Period)		Actual Progress Achieved (Date)		
	Describe briefly the expected activities and outcomes	No of units*	Describe briefly the achieved results	No of units *	Explain and justify any discrepancies and measures taken
In-house teacher training	In - house teacher training	15 times per sem.			
Student use of ICT Labs	Technical training for students from IS and ICT Education depts.	5 days per week			
Development of digital learning materials	The ICT Lab is expected to be fully utilized for student training and development of learning material and projects	5 days per week, 16 weeks per semester			

Explain how the achieved results will be used to sustain the project beyond the funding period.	ICT4EDU Lab shall be fully utilized and maintained. For example, ICT Education and education study program students lack the availability of open ICT lab for training and ICT education. Therefore, ICT4EDU Lab shall be the only available resource for them to utilize and develop learning materials. The trained staff add value for the running and full utilization of the ICT4EDU Lab for ICT enabled teaching and learning, professional development, capacity-building, web-based workshops on student driven lessons in early childhood education and on how to integrate ICTs with Education. In addition, ICT4EDU Lab technical person shall provide continuous on house technical and training support for student such as and not limited to 1. Availability of software such as Office Software, Typing Aid, Basic ICT Skill Modules, & Virus Protection 2. Internet Access (WiFi, Bandwidth) 3. Training on basic ICT, Email, Web Searching, Office Software, and development of digital material 4. Support and Maintenance such as Shares, Onsite, Software/Hardware Repair & Remote Troubleshooting.

*Number of units means persons, products, etc.

If applicable, refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs presented on page 1.

The main challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs is to continue teaching and communicating with our students through e-learning platforms only, which is currently imposed on us given the circumstances that Palestine is going through at the present time.
We hope that learning and teaching conditions in Palestine will be better soon and students/staff will be able to reach to the university campus safely for their face-to-face teaching and learning.

Palestine Technical College

Table 1: Equipment approved (See the example)

No.	Nature, type, and specifications of the item	Amount (EUR)
1.	30 Personal Computers (processor, memory, disk, display)	30 x 700,00 €
2.	25 tablets	25 x 500,00 €
3.	One multisystem with laser printer and scanner	1 x 600,00 €
4.	Projector	1 x 500,00 €
5.	Camera	1x 400,00 €

Table 2: Details on equipment purchased (See the example)

	Item	Specification	No of units	Price per unit (EUR)	Total (EUR)
1	PC	Laptops for ICT Lab (2 in 1	12	Xxx	**xxxx**

		convertibles or laptop with touch screen and pen)			
2	Camera	Video Conference Room Camera System with Omnidirectional Microphone	1	xxx	**xxxx**
3	Virtual Reality Headset	Meta Quest 2 — Advanced All-In-One Virtual Reality Headset — 128 GB with Active Pack	1	xxx	**xxxx**
Total					**Xxxxxx**

Provide information on all the steps taken for the procurement of the equipment, starting from the call for tenders, the committee responsible for carrying out the purchase, the quotations received, the choice of the tender, and so forth.

Currently, PTC because of the war status in the Gaza Strip which started since nearly 6 months cannot make any progress in the equipment purchase. There are no providers in the Gaza Strip who can guarantee the delivery of required equipment in the current time. This war started in October 2023 as PTC started purchase process.

Describe the place where the equipment has been installed with details about the room size, the faculty or department hosting the ICT Lab, and the team responsible for its administration by stating the role of each team member.

If possible, PTC asks for a solution to the lab purchase through a provider company in the West Bank and keeping the lab at one of the partner universities in the West bank until this war ends and normal life returns to Gaza.

Describe if any changes occurred for the purchase and procurement of the equipment as compared with the initial plan in the proposal. Explain and justify any changes and deviations.

The list of equipment is provided above in the table. According to Erasmus projects' regulations, it is allowed to conduct purchase the equipment till 12 months before the end of the project in normal cases. PTC asks kindly for consent extension in lab purchase because of the war situation.

Table 3: Biannual monitoring for the use of the ICT Labs

PURPOSE OF USE	**Biannual plan (Period)**		**Actual Progress Achieved (Date)**		
	Describe briefly the expected activities and outcomes	**No of units ***	**Describe briefly the achieved results**	**No of units ***	**Explain and justify any discrepancies and measures taken**
In-house teacher training					

Student use of ICT Labs					
Development of digital learning materials					
Other uses (state what)					
Overall (Summarize)					
Explain how the achieved results will be used to sustain the project beyond the funding period.					

*Number of units means persons, products, etc.

If applicable, refer to the challenges/difficulties encountered in using the equipment as contrasted with the specific objectives of the ICT Labs presented on page 1.

The main challenge is the ongoing war status which obstructs the purchase process. This is a *force majeure* situation and PTC asks for consultancy from EACEA - European Commission project management.