



**Capacity building for Modernizing TVET Pedagogy in Ethiopia (MOPEDE) HEI -ICI project  
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**Baseline Research, Summary about Crucial perceptions**

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**Introduction**

Pedagogical and technological development of e-learning is one of the strategic developmental area in vocational teacher education and training in Ethiopia. With questionnaire, our aim was to map the current situation of e-learning in Federal Technical and Vocational Education and Training Institute (FTI) and reach the strategic services and support needed for the future. Most of the main perceptions were already considered beforehand, but with this Baseline Research we made a common understanding of the situation in Ethiopia and FTI with the Ethiopian cooperators. It was a fruitful way to start new development project and to create cooperation in all developmental sectors.

The information was collected between Nov.- Dec. 2020. It was delivered by email to FTI and 12 Satellites. Some (3) of the satellites were not reachable by e-mail due the cut in communication lines. Respondents were reminded with few repeated e-mails during the data collection period.

**1. Statistics**

The research reached 52 respondents, 47 male, 4 female and 1 anonymous. 26 of them were managers or Administrative ICT managers, 19 teachers and 7 from other positions such as ICT personnel or researcher (Table 1).

Questionnaire was not for the students, due lockdown of schools during the pandemic of Covid 19. Three of the satellites were not able to join the questionnaire due the cuts in the connections.

Table 1. Organizations of respondents

	<b>n</b>	<b>Percent</b>
FTI, Addis Ababa	25	48,08%
Adama Poly Technic College	0	0%
Adigrat Poly Technic College	0	0%
Ambo Poly Technic College	2	3,84%
Arba Minch Poly Technic College	2	3,85%
Athelet Kenenisa Poly Technic College	5	9,61%
Bahir Dar Poly Technic College	4	7,69%
Dire Dawa Poly Technic College	2	3,85%
Ethio-Italy Poly Technic College	1	1,92%
General Wingate Poly Technic College	2	3,85%
Holeta Poly Technic College	0	0%
Kombolcha Poly Technic College	7	13,46%
Maichew Poly Technic College	0	0%
Tegbare Id Poly Technic College	0	0%
Wolkite Poly Technic College	2	3,85%
Wukro Poly Technic College	0	0%

## 2. Pedagogical approach

The answers pointed, that there are only few purely e-learning programs existing so far. About one fourth (26%) don't use e-learning at all. Some of the answerer's were sending materials via Telegram or e-mail or they were presenting their courses in e-learning platforms (76%). Despite of that, there were teachers who had already interaction in online teaching in Zoom or Teams (26%).

Some of the answerers commented that face to face teaching is more advantage than e-learning. It's related of course to the faculty, under-or graduate students or is a statement about persons attitude towards new methodologies or ways of teaching and learning.

Pedagogical improvement by e-learning pedagogical models and principles must be sealed like in general or concentrating on e-learning, concentrating on face to face learning or e-learning, theoretical or practical, one way or interaction approach, theoretical concept or practical application and pedagogy or andragogy.

Some of the answerer were wondering as well, what kind of general pedagogical models or principles are existing for e-learning.

## 3. Support and digital environment and tools

In the area of digital tools and -environments, service and support, the most needed support was to access and use technology and different e-learning tools. Answerer's thought, they would need support most when accessing and using technology and different e-learning tools. Most challenging

would be designing learning content and teaching materials as well as designing whole courses and pedagogical activities. At the moment, most of the support to develop personal e-learning skills is coming from internet, FTI ICT department and from other colleagues.

The most needed facilities and applications or devices were for example fast network, some kind of e-learning or video studios, video recorder, cameras and ICT experts to support the work. It seems that these needs are pointing the necessity to create a suitable e-Lab. It is very important that the users of the future e-Lab are well informed, mentored and they are assimilated all the pedagogical possibilities which e-Lab is offering.

#### **4. Interest and attitude towards e-learning**

About the topic and what kind of instructions or general guidelines for e- learning are available now for answerer's, shows their interest towards e-learning. Most of them (68%) were already having some kind of instructions for e-learning or guidelines from FTI. 36% had seen instructions general guidelines on the internet but there were 20% of the answerer's who did not know any kind of instructions been available. The answerer's had possibility to choose several options.

Table 2. What kind of instructions or general guidelines for e-learning are available for you?

	n	percent
Instructions or guidelines from FTI	34	68%
Instructions or guidelines from government or ministry	2	4%
Open source tutoring, tips or instructions on the Internet	18	36%
Voluntary peer tutoring or advice from colleagues	3	6%
Organized tutoring or training from organization	3	6%
Other sources (specify)	3	6%
I don't know	10	20%

The answerers were asked if e-learning was integrated already in FTI's curriculum.

Table 3. Is e-learning integrated in FTI curriculum at present?

	n	percent
Yes	15	28,3%
No	21	39,62%
I don't know.	17	32,08%

Distribution of the answers is understandable but the situation is good, while 71% of the answerer's were very interested in developing their e-learning skills, as a teacher. They were evaluating their skills in e-learning very low, but the recognized positive and keen attitude is a fruitful starting point for learning new skills.

The answerer's were pointing, that biggest barriers towards e-learning were lack of skills or skill gaps, lack of knowledge how to use the technology, internet infrastructure and internet connection

problems, lack of computers and e-learning accessories and how to do ICT support or how to conduct practical sessions. The comments were very specified and professional which indicates answerer's positive attitude towards e-learning development and learning new skills.

## **5. Inclusion and accessibility**

Inclusion and accessibility are considered in e-learning. Open question, how does e-learning support inclusion of students with various disabilities, got lots of topics. It was seen that inclusion can be promoted by e-learning technology designing it in user friendly way. Disabilities and those, who need special support, e-learning offers great opportunities if we have practitioners knowing how to make learning accessible. It means specialized ICT help, software, platforms and possibilities to produce audiovisual materials. E-learning is offering learning equality by minimizing the movement, which is very important for disabled students with problems due all kind of movement.

At the moment e-learning content was used by computer in the campus or institution. The second alternative was mobile phone. It shows that if teachers are using mobile phones for their teaching, for students the e-learning content is problematic. The barriers are bounded to internet connections, computer accessibility, a bit to the electricity and availability of applications and tools.

## **6. Future of e-learning**

About the future of e-learning answerers expect that e-learning would be part of their daily work in the future. For start, they are waiting formal direction given from institutional level. They were presuming that in the future most of the teaching processes will be supported by e-learning, if it's designed student friendly and more interactive mode. The change towards e-learning is giving freedom and flexibility to teach or study wherever and allows more opportunities of learning. In the future, e-learning is challenging commitment, motivation, new skills learning and readiness using it properly. Integrating e-learning as a qualified part of curricula is seen as one of teaching approaches. For integration it's needed more skills and competence for e-learning, workshops for curricula revision and appropriate licensed software as well as tools to conduct practical classes remoted.

In the future it would be useful to get information or data especially from undergraduate or graduate student's point of view. These groups have different kind of studies and teachers a using different methods in their education.

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