



Development and Implementation

- **Keep it short:** Considering the mobile learners will probably be moving, it is better to keep individual modules up to 5-10 minutes maximum. It might also be a good idea to allow the learner to continue where he left off, as for instance using an automated bookmarking technique that tracks the users' actions.
- **Keep it simple:** Considering the screen size is smaller, there should be restrictions on the number of options and interactions to a minimum. It is recommended to have no more than 1-2 options at any one time available to the user.
- **Make the most of media:** Even though media can be useful for supporting learning objectives, attention needs to be paid to associated downloading costs.
- **Use the features:** Most devices also allow for features like geo location, photos, audio, text, upload information, so the trainers and the learners should take advantage of this.
- **Include Elements of Collaboration:** It might be a good idea to use it as a part of a blended program and to facilitate interaction between peers, experts, mentors.
- **Get support with content design:** If relevant, learners could support with this practice by providing some ideas, as it encourages the learning to be open and collaborative and ensures it meets their needs.

Benefits of Mobile Learning:

General

- Conveys smaller pieces of information which might enhance retention as there is less chance of cognitive overload.
- It could be utilized as part of a blended learning approach.
- It can be a useful add-on tool for students with special needs, depending on the learners' disabilities.

Device

- The user is able to double-tap into a paragraph or piece of information and it will become full-screen, focusing the user's attention on that item.
- Mobile devices can be used anywhere, at anytime.
- This kind of learning allows for more light weight devices in comparison to books and PCs. It is also much easier to accommodate mobile devices than desktop computers in a classroom.



unitar

United Nations Institute for Training and Research



- As the devices used are already being used by them for other purposes, the learners do not have to adapt to it and can start the learning process straight away.

IT

- Location specific opportunities to access information including use of QR codes (which is a kind of matrix barcode to store text information such as URL's, phone numbers or messages)
- New technology would be a good way to keep the learner interested and motivated.

Challenges:

General

- There are some issues with cheating and making sure it is the learner that is using the application.
- If using this approach in a classroom, it is necessary to have enough devices.
- It might be difficult to measure learning in a mobile learning environment, the same way it might be difficult to track results and do follow-up.
- There might be some cost issues, despite these kind of devices being cheaper than a personal computer.
- There might be a need to adapt the existing e-Learning materials or even create new content for mobile platforms.

Device

- There might be issues with security, in terms of the device being lost or stolen and also security related issues with the software of the device.
- Connectivity and battery life of the mobile device should also be considered as they can limit access.
- The device might not be able to support the format of the content of the mobile learning.
- The size of the screen and keyboard could interfere with certain activities, as there should be some restriction on the number of options and interactions on the screen for usability.
- There might be difficulties to meet required bandwidth streaming.

IT

- Technology is usually being updated and there are frequent changes in device models and functionalities.
- In case the learner needs IT support, there will be an issue of how this can be provided.
- There might some issues with regards to access to and use of the technology in developing countries.



unitar

United Nations Institute for Training and Research