1007
Debunking the Mobile Myth: A South African Perspective

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What is mobile learning?

Learning that takes place on a mobile device, and can take place in an unfixed or undetermined location.

Learning that was designed and developed for consumption on a mobile device.
Agenda: Common arguments that debunk mobile learning

1. We can't learn on a device that conditions the user to have a short attention span.

2. Learning takes place more effectively within the parameters of a dedicated learning event.

3. Teachers, trainers and facilitators do not believe in mobile learning, and do not have the skills to use it.

4. The learner does not necessarily have a compatible mobile device.

5. South Africa has extremely high data costs, which makes learners data-sensitive.

6. The technology to author and track effective, engaging mobile learning is not there yet.

7. Too soon to say whether microlearning is an effective strategy.
Mobile learning and attention span

Can we learn on a device that conditions us to pay (divided) attention for short periods?

Which device

Of South Africans with internet access, 35% use mobile phones, 29% use laptops, 18% use desktops, 13% use tablets.
**What**

**What are they doing online through their mobile phones?**

Email 75%, Searches 68%, Banking 63%, Social Media 56%, Weather 53%, Maps 49%

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**When**

**When do South Africans use internet on their mobile phones?**

83% while watching TV, 71% as soon as they wake up, 68% when in wifi zones, 61% when in bed, 54% during a meal, 39% when in the bathroom, 12% while driving.

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*Sources: E-commerce Industry Report 2016 | 2016 report by PEW Research Centre | 2016 report by Business Tech | We Are Social: Digital in 2016 report*
Completion rates

An online survey was sent to learners upon completing an e-learning course. Below are the completion rates for the students who opened the survey on the following devices:

<table>
<thead>
<tr>
<th>Device</th>
<th>Completion Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>96% Completed</td>
</tr>
<tr>
<td>Tablet</td>
<td>43% Completed</td>
</tr>
<tr>
<td>Mobile</td>
<td>49% Completed</td>
</tr>
</tbody>
</table>

Can mobile learning be a designated learning event?

It is possible that a planned, dedicated learning event can generate more effective learning than a short, incidental and possibly multitasked one.

A dedicated learning event:

1. Is scheduled in advance
2. Is a designated amount of time
3. Accomplishes an outcome
4. Limits distracting contextual factors
5. Inspires a concerted effort to focus
Can we expect learners to supply their own devices?

Although our common experience is that South Africa has a high mobile saturation rate, this is not necessarily the case for your audience.

South Africa has the highest saturation rate of smartphones on the African Continent.

This is still only 37% of the population – more than half of your learners may not be able to access their learning on a smartphone.

A further 52% percent do use feature phones.
Device neutrality: are we there yet?

1. Ownership of and familiarity with the device.
2. Battery life is a concern to learners who own only one device.
3. Particular mobile devices condition us to think in a specific way.
4. A small interface can be less immersive and can impact engagement.
5. Fundamental trade-off between data-hungriness and level of engagement.
6. Many South African mobile devices are feature phones, which have different design requirements.

How can we circumvent these constraints?

- Feature-phone friendly design
- Free sites
- Raspberry Pi
- Kiosks
Can we author effective mobile learning?

HTML5 course development authoring tools are finally reaching a stage where they are becoming useful to the industry.

1. Highly templated: can deliver a limited range of content types and interactions.

2. This makes them potentially useful when designing for feature phones, but potentially disappointing for smartphones.

3. App development is too expensive for most learning interventions, and app authoring or adaptation tools are still too flawed.

4. We can track mobile learning as effectively as e-learning with Tin Can xAPI, but this technology has a higher learning curve than current technology.

5. Do mobile courses that are not highly engaging defeat the purpose of mobile learning?
Why they're not there yet

These problems can be attributed to many factors, which include teachers’ lack of expertise and the lack of appropriate technology and infrastructure to enable an integrated electronic learning environment, while in some contexts the teacher’s everyday life is characterised by a lack of technology use. (Jantjies & Joy 1)

Breaking the ice with blended learning

Blended learning can be introduced in phases as supplementary resources.

Teachers and facilitators can be onboarded by using mobile courses to:

1. Introduce learning
2. Reinforce learning
3. Offer translation
What is our best bet for successful mobile course design?

**Good uses for mobile learning**

**Job aids**

These are valuable on-the-job refreshers that supplement existing learning by combatting the ‘forgetting curve’. They can also serve as just-in-time provisions in cases where preparatory learning was not available, such as in cases of urgent change management.

**Games**

Interactive, immersive content such as case studies. This will usually serve as an add-on to a facilitated, blended or traditional e-learning course.

**Repetition**

Content that requires learning mostly on the levels of recall and understanding, such as languages, can be taught well through small, repetitive chunks.

**Creating awareness**

A short, informative course is useful for change management or creating hype around a learning programme.
When is mobile learning not a good idea?

**Urgent learning**

Mobile learning has a long learning curve, as the nuggets of learning are small and take a while to complete. The learner also has to reimmerse themselves into the content for each nugget, which has an associated task-switching cost. Therefore, mobile learning is one of the least efficient approaches to training.

**Depth of knowledge**

If the learning requires depth of engagement with a subject - rather than a general overview - the learner will be unlikely to achieve the required level of concentration on a mobile device.

**Complex subject matter**

Similarly, it is also unlikely that complex content will make sense in small units, as concepts will take longer to explain, and their interrelation may be lost in the gaps between nuggets.

**Infrastructure**

When the technology is not consistently available to all your learners, and you cannot provide it, it's best to avoid mobile learning until you are sure you are not excluding anyone.
Conclusion

Recap: what to consider when deciding on mobile

1. Make sure your learning design approach will promote a designated learning event to counter the conditioned mobile device usage patterns.

2. The majority of South African learners do not have access to smartphones - you may need to install kiosks.

3. Data is expensive and may impact your project's success - it's a good idea to investigate free sites or offline distribution.

4. Teachers and facilitators are unlikely to be trained, and need to be onboarded carefully to ensure their support.

5. Make sure that mobile learning is appropriate for the kind of content you are teaching.

Questions?

Thank you!