Mobile learning masterclass
Introductions

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Task requeriments

For the tasks, you will need to access our Moodle Cloud site:

https://mootmobile.moodle.school/

Self registration and Google Oauth enabled. Self enrol enabled too.

You will access it from Mobile device browser and Moodle Mobile app.

Student for Teacher course: student / moodle
Where are we?

Part 1 - Content creation for mobile
Part 2 - Communication
Part 3 - Assessment approaches
Part 4 - Mobile learning strategy
Moodle options

**Responsive theme**

Moodle ships with the Boost theme
Based on Bootstrap 4 CSS
Was brought into Core in Moodle 3.2
Reworks Moodle front-end for smartphone and tablet devices

**Mobile app**

Official native app for Moodle
v1 launched April 2013 for Moodle 2.4
v2 app launched July 2015
v3 version number aligned with Moodle
v3.4 100% course activities support
V3.5 Based on Ionic 3
PART 1

CONTENT CREATION FOR MOBILE
Content on mobile: what’s different?

let’s talk

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Content on mobile: what’s different?

Think about:

Available bandwidth

Screen size

Are you always connected?

How do you interact with your phone?
Use the built-in font styles (paragraph, small heading, medium heading, large heading) to keep your design consistent, accessible and mobile friendly.

Keep it short and succinct:

- Be clear
- Be concise
- Be useful

**Mobile App notes**

If you style your text via the theme, you’d need to apply the same styles in the Mobile app remote theme.

**Inline styles will work.**

Images

Is the image really required?

Think about file size, low bandwidth

Crop images to show area of interest

Select a universal format: GIF (animation), PNG (high res), JPEG (everything else)

Experiment with quality settings

Scale using ‘max-width’ CSS element or ‘img-responsive’ class.

**Mobile App notes**

Images are re-scaled to fit the screen.

Large image viewer available, it display the complete image with pinch zoom.

Site images are automatically downloaded to be available offline, be careful with their size.
Task 1: Create a scalable image

1. Insert a big image to your Moodle course page. Make sure to enable “Auto size” when doing it.

2. You can disable the “Auto size” to see how it looks like.

3. Compare browser vs Mobile app.
   a. There are some images already created in the Moot Mobile site.
Audio and video

Video (MP4, OGG, FLV, QT, WMV, MOV...)

Audio (MP3, AAC, WMA, RM...)

Have users got the right plugins?

Should you upload it in your Moodle or embed from external?

Should you add them as downloadable files or with inline player?

Mobile App notes

Video: MP4, OGG
Audio: MP3, OGG

Be careful with the Flash players.

Embedded Moodle videos: adapted to screen width and downloaded in some cases.

Audio works in background.

Subtitles supported.
Use ‘show size’ and ‘show type’ to help mobile users.

Consider the Reader apps users need to install to view PDF, DOC files.

Mobile App notes

File storage in the app, for offline usage. Notices about the file size.

In Android the files are opened with the right external app, in iOS with QuickView framework.

Size and type isn’t shown in course page in the app.
Task 2: Make content resources downloadable

1. Upload a file to your Moodle Cloud course
2. Set the file up so users can download it to their device
3. You can play with the *Display* mode. Is there any difference in the app?
   a. Tip: Check it with images, audio or video.

Files

- Sample PDF (View online) 7.4KB PDF document
- Sample PDF (Download to my device) 7.4KB PDF document
Is the SCORM module itself responsive?

Does the SCORM adapt to screen size, or does it simply scale down in size?

Cannot be downloaded and viewed offline in the browser.

Mobile-friendly authoring tools (always use latest versions): Gomo Learning, Captivate, Adapt, Elucidat, Claro, Lectora, PageTiger, Inkling

Mobile App notes

Mobile app can play SCORM 1.2 module offline.

SCORM 2004 is not supported.

Some authoring tools created a flash version and an HTML 5 one, always try the HTML one in browser.
Options for offline content

Important to allow content downloads.

If you embed media, provide a download link.

SCORM content cannot be downloaded in browser.

Mobile App notes

All the Moodle resources can be played offline in the app (if previously downloaded).

All activities except chat, lti and workshop are supported in offline.

Workshop supported from 3.4 onwards
Content creation tips

Consider mobile during content design, not as an afterthought

Keep descriptions short and simple

Crop images. Pixels cost bandwidth

Use the right media formats

Warn users about file type and size

Videos can be auto-downloaded by app for offline viewing

Mobile App notes

Mobile app supports content creation in all activities, in user notes and in messaging.

New Mobile app supports rich text editor
Mobile Features

Full support for **Resources:**
Browse, Download, Offline

- Book
- File
- Folder
- IMSCP
- Label
- Page
- URL

Full support for **Activities:**
Browse, Submit

- Chat
- External Tool

Browse, Submit, Download, Offline

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Questions
Where are we?

Part 1 - Content creation for mobile

Part 2 - Communication

Part 3 - Assessment approaches

Part 4 - Mobile learning strategy
PART 2

COMMUNICATION
Let’s talk

Communication on mobile

What social tools do you use on your mobile?

Do you communicate differently on a mobile?

Message length and quality?

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## Communication tools in Moodle

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<td>Social networking</td>
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<td>A bunch of apps</td>
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Synchronous (real-time)

Online chat session held in weekly slot:

- replaces old "drop-in sessions"
- mobile allows participation wherever users are located

Virtual classroom with streamed video

- Requires virtual classroom mobile app
- **Anyone used one on a mobile?**
- Warn people about plugins in advance with joining instructions

**Mobile App notes**

Chat activity doesn’t work if you are using the daemon.

User is automatically reconnected.
Task 1: Setup a chat and view on mobile

1. Access the Moodle Cloud site: https://mootmobile.moodle.school/
2. Access the Chat activity in the Communication section.
3. Use it on both mobile browser and app - which is easier to use?

Think about:
Was it easy to send a message?
Was anything confusing?
Asynchronous (across multiple sessions)

Discussion forum (e.g. general forum, support for a particular topic or tutor-led groups):

- Mobiles are very social tools, forum lends itself well to this type of communication
- Notifications to inbox, hence users alerted wherever they are
- Pinned discussions, ordering...

Mobile App notes

Users can add new discussions and reply to posts in offline.

Current forum limitations:

- No rich text editor in iOS (classic app)
- Only 1 offline reply per post
Task 2: Participate in a forum on your mobile

1. Access the forum in the Moot site.
2. Post some comments or discussion.
3. Go to an existing, well used forum Moodle on your mobile device. E.g. https://moodle.org/

Think about:

Was it easy to post a comment?

Which is better - app or browser?

How readable are large volumes of threads on a small screen? Which ordering do you prefer?
Messaging

Student may message tutor, or tutor may send bulk-message to multiple students.

Simple text, conversational and 1 to 1 nature, lends itself well to mobile users.

Notifications to inbox, hence users alerted wherever they are.

**Mobile App notes**

- Notifications (configurable)
- Improved Interface (similar to Whatsapp or Telegram)
- Better contacts management
- Offline messaging supported
- Emojis (3.3)
Task 3: Use messaging on your mobile

1. Go to the site and access your Messages
   https://mootmobile.moodle.school/

2. Try sending a message to another user.

3. You can also add and block contacts or search users.

4. You can search for messages, but the message won’t be focused (pending).

Think about:
Did you find it easy?
What differences did you find?
Social networking

Which networks are most valuable for learning?

Most social networks are predominantly used on mobile.

Value of the Twitter back channel (e.g. LearnMoodle)

Is there are danger that users would consider this an intrusion?

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Push notifications (Mobile App)

- Essential in a smartphone or tablet.
- Uses Moodle’s Airnotifier server.
- Requires configuration. Moodle site needs to be registered to be able to request an Airnotifier key.
- We’re planning to improve them in the future (more notifications, better messages).
Communication - Top tips

- Most communication tools trigger notifications - either via app notification or inbox message. Really useful for mobile users.

- Warn people about additional mobile apps they may need, well in advance of a session (e.g. virtual classroom)

- Integrate with social media to engage with mobile-savvy communities
Questions
Where are we?

Part 1 - Content creation for mobile
Part 2 - Communication
**Part 3 - Assessment approaches**
Part 4 - Mobile learning strategy
PART 3

ASSESSMENT APPROACHES
Do you have BYOD policy?

Who is using mobiles for assessment?

Is anyone using mobiles in the classroom? For assessment?

Is anyone using mobiles for revision?
Assessment/evaluation tools

Requires BYOD or supplied devices...

Choice - great for quick polls

Quiz - beware quiz length

Lesson - guided content with questions

Feedback - simple, configurable forms

Survey - student evaluation instruments

Mobile App notes

The Mobile app supports:

- Choice
- Survey
- Quiz
- Lesson (3.3)
- Feedback (3.3)
Task 1: Answer a choice activity

1. Go to the choices activities in the Moot site.
2. Access the choices on your mobile

Think about:

Is it intuitive and easy to use?

Is it easy to select answers with big fingers on a smartphone?

Is it easy to understand if it’s a single or multichoice?
Out of class quiz activities

Longer activities, less suited to classroom

Diagnostic quizzes - before training events

Formative assessments - how am I doing? Get feedback on improvements

Revision quizzes - great for mobiles, do wherever you are

Mobile App notes

- The app supports attempting quiz in online and offline.
- Student can review his attempts.
- Teacher cannot see list of student attempts yet.
Mobile friendly question types

Mobile App notes

- All the 3.1 core question types are supported.
- Essay attachments aren’t supported yet.
- Drag and drop is “tap and drop”
Task 2: Create and try out question types on mobile

1. Setup a simple quiz in your Moodle Cloud course
2. Add 2-3 questions using a range of question types.
3. Access the quiz on your mobile
4. You can play with all question types in
   https://mootmobile.moodle.school/site.
5. Which questions do you think are better in Mobile browser and Mobile app?

**Think about:**

How does the layout change on mobile?

Is it intuitive and easy to use?

Is it easy to select answers with big fingers on a smartphone?
Summative assessment on mobile

Assignments / Forum uploads - uploading files, evidence for review

SCORM - most authoring tools allow quizzes, but not as rich as Moodle Quiz

Mobile App notes
Uploading files in iOS isn’t easy.
Mobile devices are great for gathering evidence (camera, audio, video).

Assignment for private uploads, marked by tutor.

Forum for shared uploads, each person posts one discussion, can be graded.

Mobile App notes
Assignment submission (online text and attachments)
Task 3: Submit a mobile assignment

1. Go to the Moot site and access the sample assignment.
2. Gather some evidence using your mobile phone that proves you attended MoodleMoot, and submit the evidence to the assignment.
3. You can create your own assignment and play with the settings.

Think about:
- Is the upload process easy on mobile?
- Is it intuitive and easy to use?
- Is it easy to submit text and files?
Other assessment activities

Workshop, lesson, glossary, database, ...

Which other activities do you use for assessment?

Mobile App notes

3rd party plugins can be supported using:

- “Site plugins” on the new app
- “remote add-ons” on the old classic app
Assessment on mobile - top tips

Choice is great for quick in-class polls (if you allow BYOD)

Revision / formative quizzes are well suited to out-of-class testing on mobiles

Quiz can be configured to allow offline usage (questions are downloaded in the device)

Mobiles are perfect for evidence gathering and submission
Mobile Features

Full support for **Resources**: 
Browse, Download, Offline

- Book, File, Folder, IMSCP, Label, Page, URL

Full support for **Activities**: 
Browse, Submit

- Chat, External Tool

Browse, Submit, Download, Offline

Assignment, Choice, Database, Feedback, Forum, Glossary, Lesson, Quiz, SCORM, Survey, Wiki, Workshop

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PART 4

MOBILE LEARNING STRATEGY
Recap: what are mobile devices actually used for?
How much time do you spend on devices?
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*Rank is shown first in bold, followed by the minutes in each bar. The box to the left of the country name shows the color corresponding to the highest usage type in that country.*
How much time do you spend on devices?

![Pie chart showing daily distribution of screen minutes in the United States.](image)

- **Television**: 147 min, 33%
- **Tablet**: 43 min, 10%
- **Laptop & PC**: 103 min, 23%
- **Smartphone**: 151 min, 34%
How much time do you spend on devices?
...and for how long in each session?
...and for how long in each session?
Micro-Moments

- Smartphones are mostly used for micro-moments.
- When you create your content for smartphone keep in mind:
  - It can be useful to create small chunks of content.
  - User can be interrupted while using the phone.
Device screen size strategies

Small screens (feature phones) - text messaging, taking photos

Medium screens (smartphones) - content creation, web browsing

Larger screens (tablets) - akin to desktop computer, typing may be harder, camera clumsier, great for video and assessment

Mobile App notes

The Mobile app supports split view in tablet.

In some cases, like the gradebook, additional information is displayed in tablet view.
How do you hold your mobile devices?
How do you hold your mobile devices?

Image: Steven Hoober, UXmatters, US, Feb 2013
How do you hold your mobile devices?

Images: Steven Hoober, UXmatters, US, Feb 2013
Mobile isn’t just a smaller screen

- Different input.
- Mobility and connectivity.
- All kind of sensors.
- Emotional connection with the device.
- Platform design.
- Mobile is disrupting: Notifications, sounds, games...
Logging and Learning analytics

It can be really useful to analyze learners data and compare it between browser and app.

In the log reports you can see if an action was done via WebService (app).

### Mobile App notes

Mobile app supports logging in online.

Supporting offline logging is in the long term roadmap (it isn’t supported by Moodle right now).

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Mobile learning strategy - top tips

Mobiles are the backbone of daily media use, tap into this.

You don’t need to know about the latest models, but you SHOULD understand general capabilities of devices.

Design for screen size, not device models.

Design for session times: 15 mins on smartphone, 30 mins on tablets.
Questions
Final task: What three things will you do?

1. Which three things you will take back to your workplace to implement?

2. Share your thoughts with the #MootES18 community, tagged #mobilelearning
Rate the app

Do you like the app?

Rate us on Google Play, iTunes or Windows Store

Comments will help us!