



Mobile learning masterclass

Dani Palou
Pau Ferrer

#MootES18

Introductions



Dani Palou

dani@moodle.com

Moodle Mobile Developer at
Moodle HQ



Pau Ferrer
@crazyserver

pau@moodle.com

Moodle Mobile Developer at
Moodle HQ

Task requirements

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?



Text

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.

The app uses font-family: "Helvetica Neue", "Roboto", "Segoe UI", sans-serif.

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

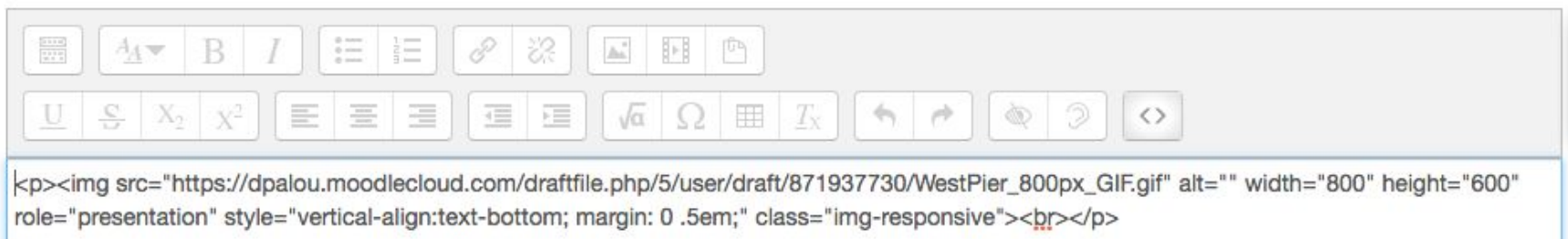
Images are re-scaled to fit the screen.

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.

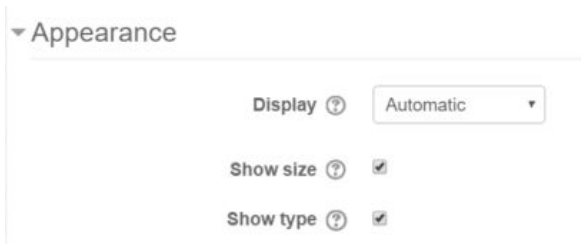
Audio works in background.

Subtitles supported.

Files

Use 'show size' and 'show type' to help mobile users.

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



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

SCORM

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, Iti 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



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

Other features	Browse	Submit	Offline
Grades	✓		
Notes	✓	✓	✓
Messages	✓	✓	✓
Completion	✓	✓	
Competencies	✓		
Badges	✓		

Questions



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PART 2

COMMUNICATION



Communication on mobile



let's talk

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

	One to one	One to many	Many to many
Public announcements		News forum Blog	
Private announcements	Messaging	Bulk messaging	
Help and support	Messaging Support forum		Forums
Expert guidance	Messaging		Forums Chat
Social networking			A bunch of apps

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?



let's talk

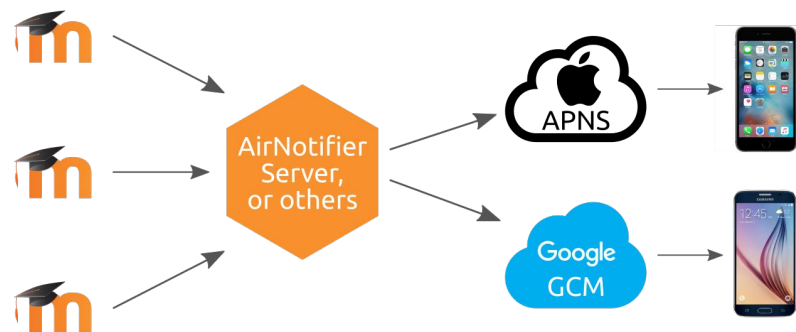
Most social networks are predominantly used on mobile

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

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

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



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PART 3

ASSESSMENT APPROACHES



Assessment on mobile



let's talk

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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

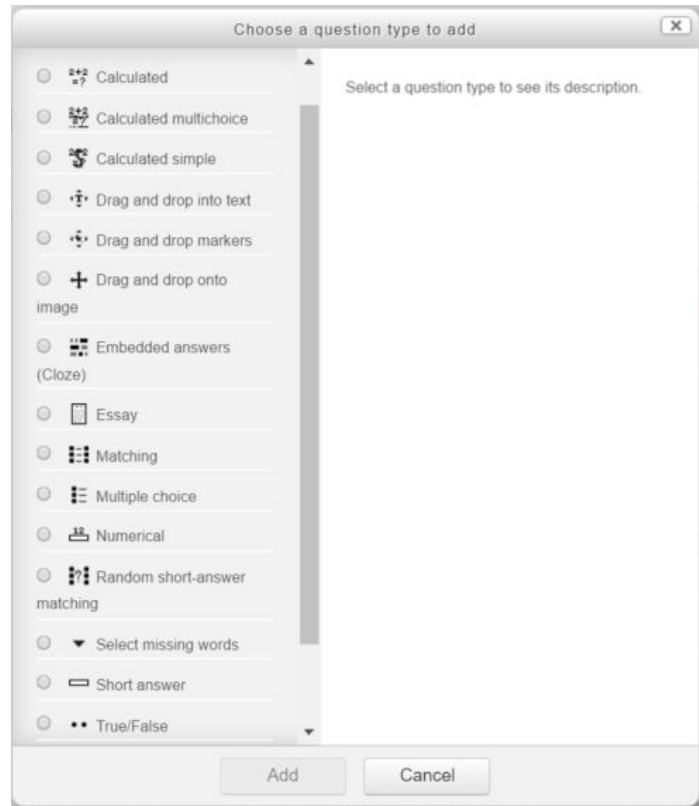
Formative assessments - how am I doing? Get feedback on improvements

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.

Assignment / forum upload on mobile

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,
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Other features	Browse	Submit	Offline
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PART 4

MOBILE LEARNING STRATEGY



Recap: what are mobile devices actually used for?



let's talk

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How much time
do you spend on devices?

DAILY DISTRIBUTION OF SCREEN MINUTES ACROSS COUNTRIES (RANK, MINUTES*)

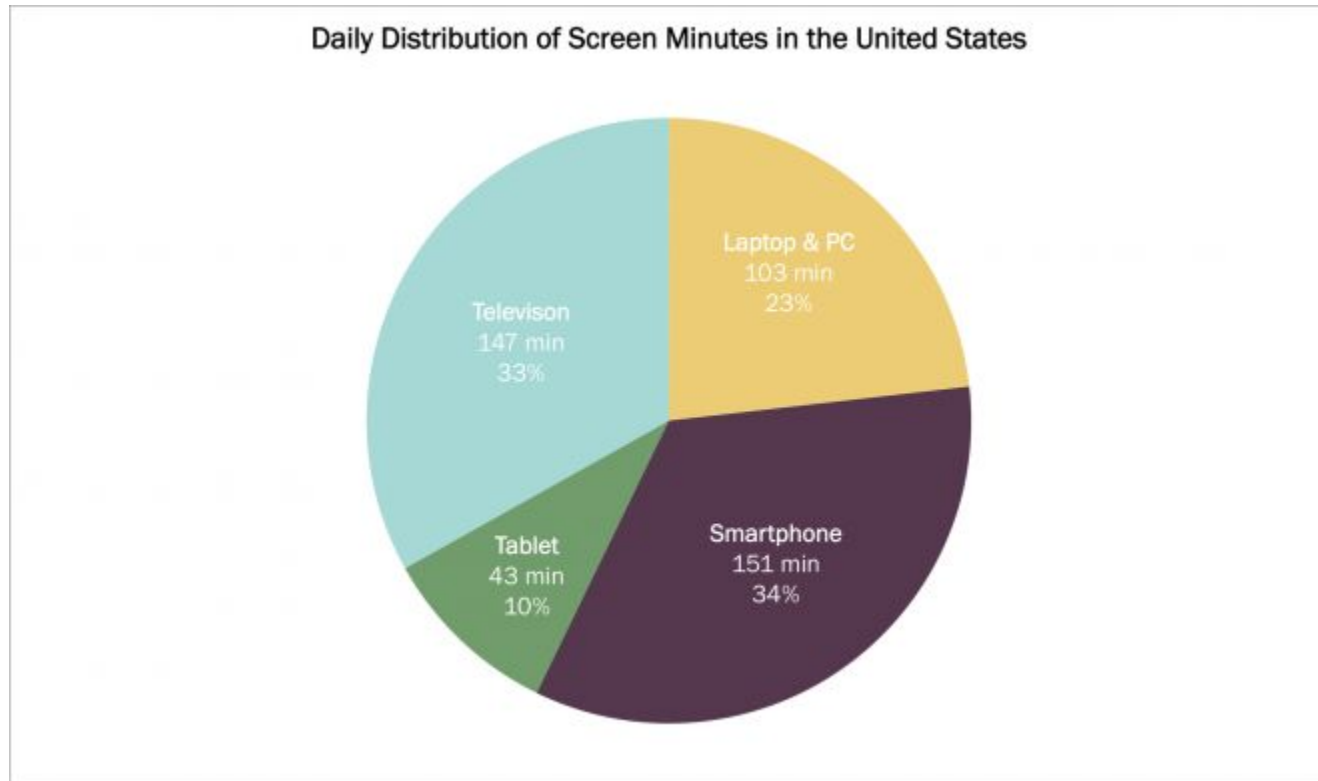
Country	Total Minutes	Smartphone	TV	Laptop + PC	Tablet	Country
Nigeria	7 443	1 193	6 131	27 80	19 39	Nigeria
Saudi	10 433	2 189	19 102	18 99	16 43	Saudi
Indonesia	1 540	3 181	5 132	10 117	2 110	Indonesia
Kenya	16 404	4 174	4 132	30 65	24 33	Kenya
Phillipines	2 531	5 174	20 99	5 143	1 115	Phillipines
China	3 479	6 170	28 89	1 161	10 59	China
Vietnam	5 466	7 168	30 69	2 160	5 69	Vietnam
Thailand	9 436	8 167	29 78	22 96	3 95	Thailand
Argentina	14 414	9 166	18 104	11 114	28 30	Argentina
Colombia	8 437	10 165	13 114	8 123	22 35	Colombia
Mexico	19 391	11 163	26 93	15 103	25 32	Mexico
India	21 384	12 162	24 96	23 95	26 31	India
USA	6 444	13 151	2 147	16 103	17 43	USA
Brazil	4 474	14 149	14 113	4 146	7 66	Brazil
South Korea	24 379	15 144	8 127	24 94	30 14	South Korea
Germany	23 379	16 137	7 129	28 77	21 36	Germany
Japan	28 343	17 135	9 125	29 68	29 15	Japan
Turkey	20 391	18 132	15 111	13 109	18 39	Turkey
Australia	18 396	19 132	10 125	17 102	20 37	Australia
South Africa	11 431	20 127	12 115	7 126	8 63	South Africa
Canada	25 376	21 124	17 104	19 97	14 51	Canada
Spain	17 396	22 122	11 124	20 97	12 53	Spain
Czech	12 422	23 119	16 111	9 122	4 70	Czech
UK	15 411	24 111	1 148	21 97	11 55	UK
Italy	30 317	25 109	27 89	25 85	23 34	Italy
Slovakia	26 351	26 98	25 95	14 106	13 52	Slovakia
Russia	13 420	27 98	23 98	3 158	6 66	Russia
Hungary	27 348	28 90	21 98	12 112	15 48	Hungary
Poland	22 381	29 90	22 98	6 132	9 61	Poland
France	29 326	30 79	3 134	26 83	27 30	France

*Rank is shown first in bold, followed by the minutes in each bar

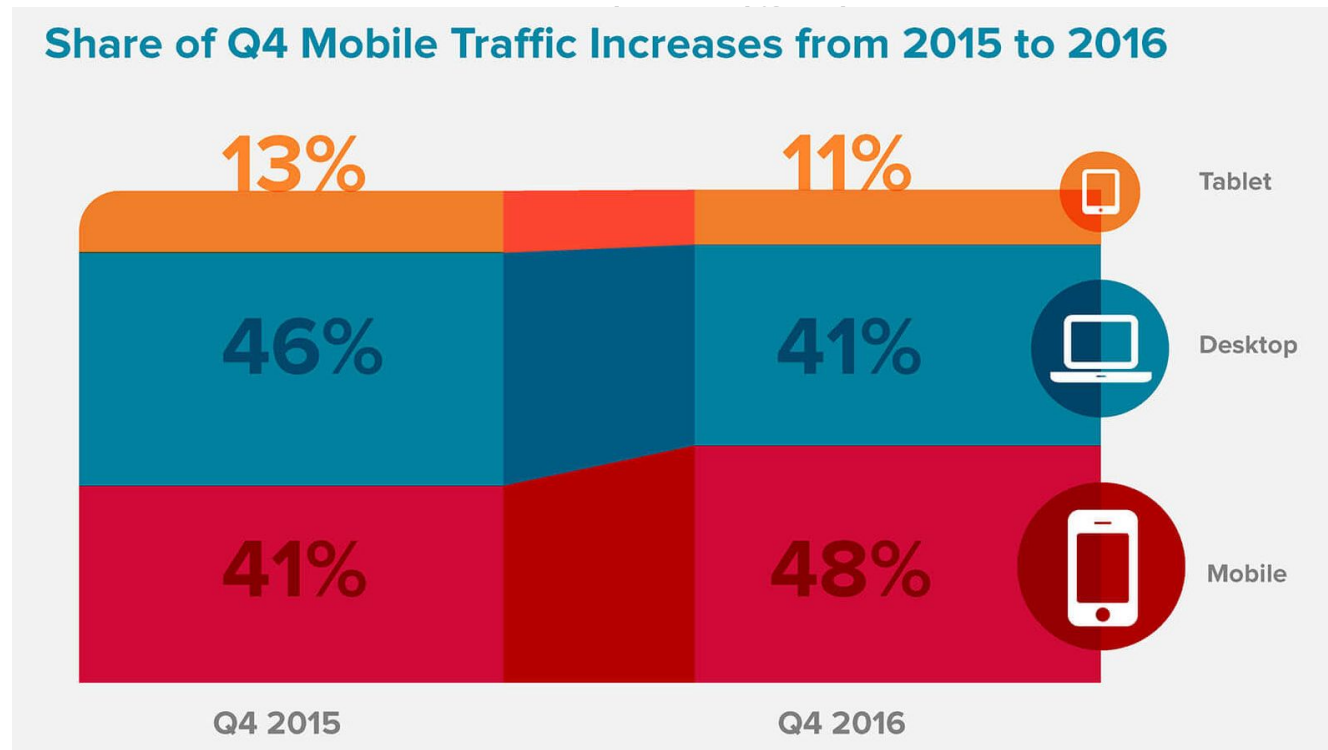
The box to the left of the country name shows the color corresponding to the highest usage type in that country.

Image: Mary Meeker, Kleiner Perkins, May 2014

How much time do you spend on devices?



How much time do you spend on devices?

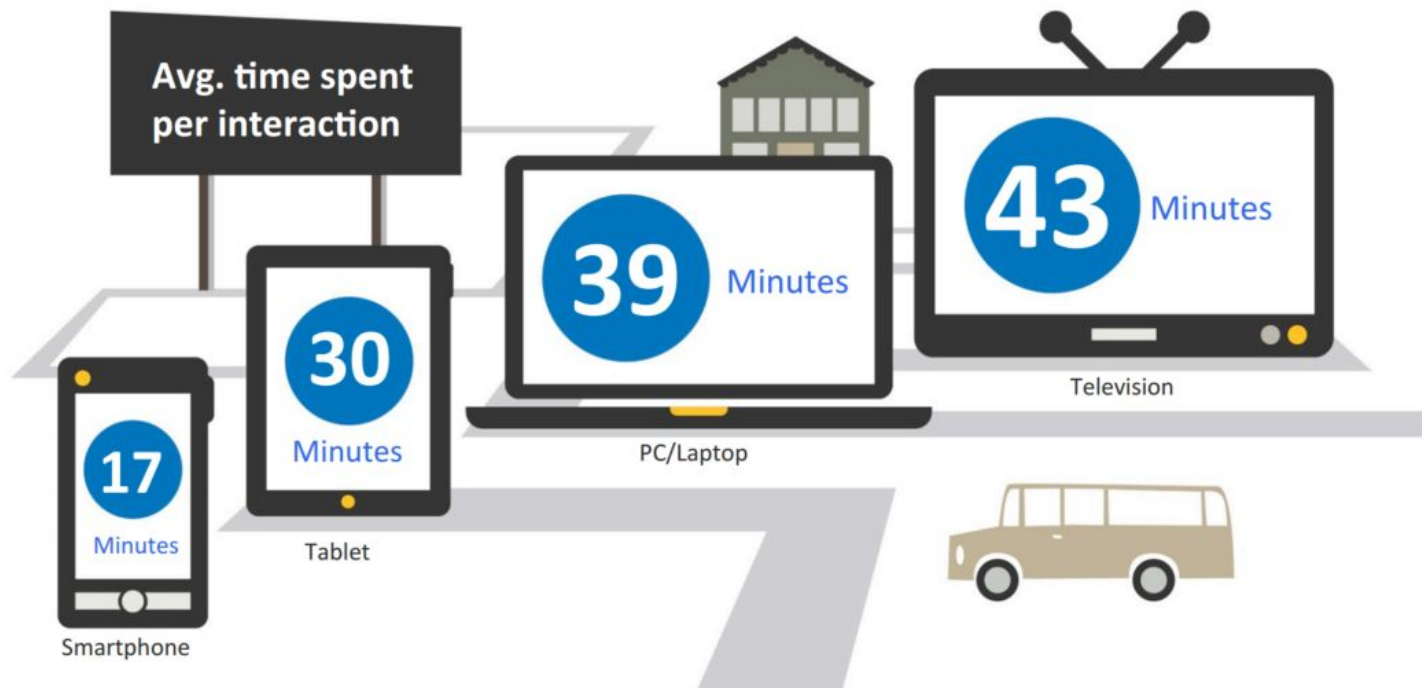




...and for how long in
each session?

...and for how long in each session?

Image: The New Multi-Screen World, Google/Ipsos/Sterling, US, Aug 2012



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.

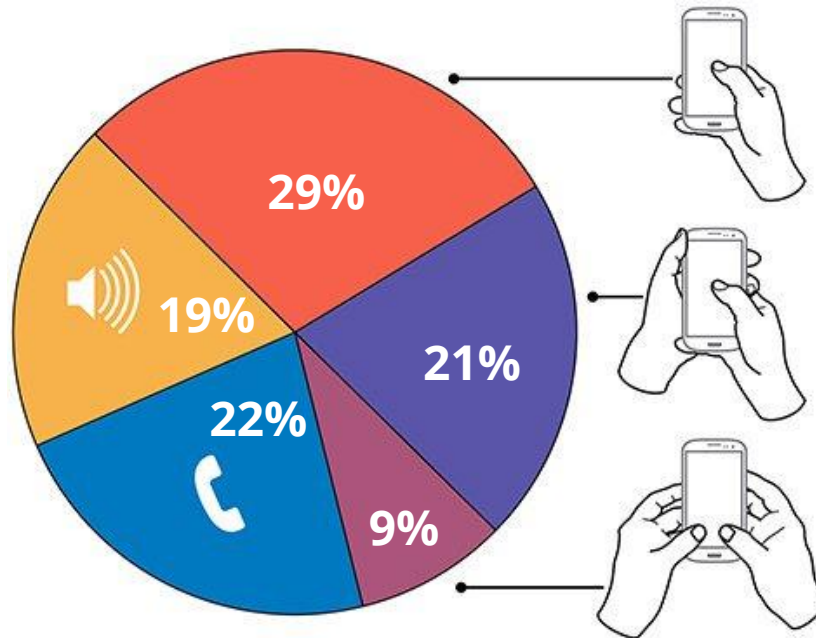
In some cases, like the
gradebook, additional
information is
displayed in tablet
view.



How do you hold
your mobile devices?

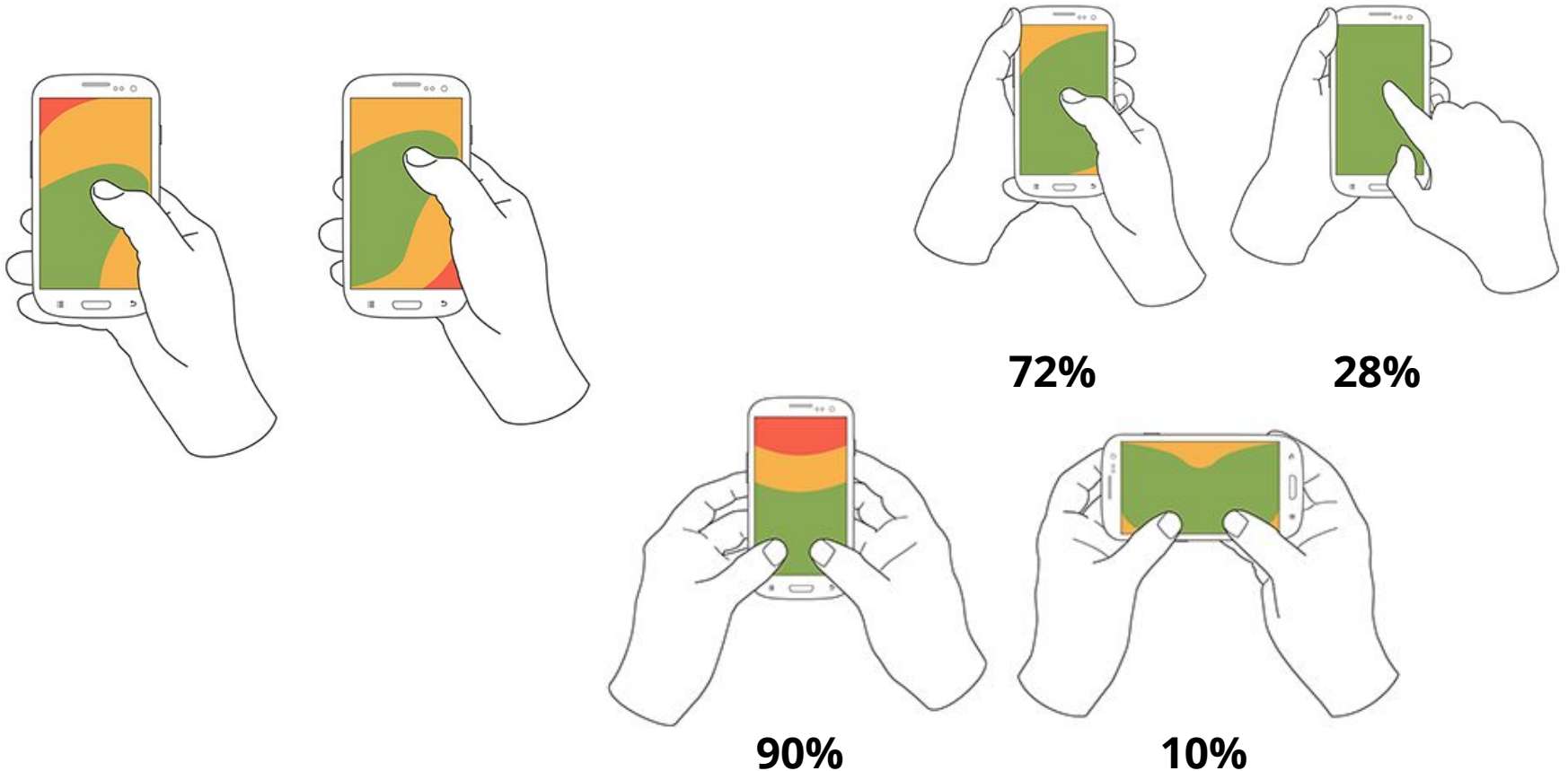
How do you hold your mobile devices?

Image: Steven Hooper, UXmatters, US, Feb 2013



How do you hold your mobile devices?

Images: Steven Hooper, 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).

Description	Origin
The user with id '3' viewed the course with id '3'.	ws
The user with id '2' viewed the log report for the course with id '3'.	web

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).

report_mobile plugin.

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!



mobile@moodle.com
@moodlemobileapp