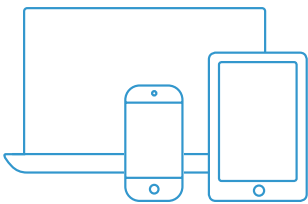# Blackboard®

Best Practices for Mobile-Friendly Courses

Getting Started with Mobile Learning

Mobile learning may sound complex, but in principle it is simple: mobile learning lets students benefit from interacting with their course content on the devices that they use to connect with every other aspect of their lives, nearly 24/7. Offering course material in such an easy to access environment can improve your students' engagement and participation, and ultimately make a positive impact on learning outcomes and retention.

Mobile Learning can take place in two ways:

1. Outside the classroom – students learn in their own time
   This can support the 'flipped classroom' model

2. Inside the classroom and during class time

   Mobile technology can be effective inside the classroom by way of reviewing course material in the mobile environment and for tools such as polling and collaboration. This can be as simple as inviting students to BYOD (Bring Your Own Device) and creating activities to leverage mobile device capabilities, such as cameras, videos, apps, and more.

Student mobile device ownership is at an all-time high (as high as 96% of students now own smartphones). Therefore, there is naturally an increased awareness of how smartphones can be used effectively as a resource and tool for academic course work. A majority of learners prefer blended learning environments[1] and mobile access provides options for instructors to flip their classrooms and provide course materials and activities to students 24/7. Fortunately, Bb Student – Blackboard's student app - makes this an easy option for faculty and learners alike by providing access to course content, tests, discussions, grades, due dates, and more while on the go.

Bb Student Supported Devices:

- iOS 8+
- Android 4.0.3+
- Windows 10+

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Design with Mobile in Mind

As you are designing your course, keep in mind the benefits Bb Student brings to this process. Bb Student can provide unique value to your course in ways such as:

- Ability to upload photos and videos anytime, anywhere and use cloud-connected accounts including Google Drive, Dropbox, and OnDrive to upload content
- Ability to respond to or post a comment to a discussion and create threads
- Ability to extend learning experience/studying/practice into places and times you wouldn't normally have the opportunity (bus, metro, cafe queue)
- Ability to access announcements and grades on the go
- Enhancing experiential activity through expanded opportunities to interact with peers simply, through mobile devices, while out and about (finding architecture examples in a city for a discussion board)
- Ability to join live Collaborate sessions with full audio and video

Keep these Questions in Mind as you Begin to Design Your Course

1. Do you want to create folders or content areas or learning modules? You have to decide how you want to structure your course.
2. Are you going to do it by week, unit or chapter?
3. How do you want students to interact with each other?
4. How are you going to interact with students?

Start building content and assignments and assessments around that content

Best Practices

Designing Content

When designing content for delivery on mobile devices, it is important to consider the following:

- Screen real estate: mobile devices have much smaller displays than desktop computers, and size varies from one device to another.
- Connection speeds: mobile data network speeds are considerably slower. As a result, content will potentially take longer to download, unless the mobile device is using a WiFi connection.
- Bb Student is available on a range of mobile devices, and files are handled differently among various manufacturers and mobile software platforms.
- Mobile technology can put up barriers for users who may struggle with touch screen devices, small screens and buttons, and complex menu systems.

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Text Documents and Presentations

Text documents or presentations are common in online and hybrid courses. Due to the limited screen size on mobile devices, the subject matter of your documents may require considerable scrolling and/or zooming to be visible.

Here are a few tips that you may consider when producing course content:

- **Use a larger font size** – this will eliminate the amount of zooming required on a mobile device. It's often easier for users to zoom out on a desktop than to have to zoom in on a mobile device.
- **Use simple formatting** – use sans-serif fonts which are easy to read, choose colors sensibly (contrasting, for example), and keep titles short and succinct.
- **Keep images to a minimum** – large images will only increase the file size of the document, and can sometimes affect the display of a document on a mobile device. If you need to supply images, attach them to your course as a separate file (see further information below).

It is also important to choose your file formats carefully. Most mobile devices will support a wide-range of file formats, but to maximize the range of compatible devices, we recommend using the following formats:

- .DOC or .DOCX
- .PDF
- .PPT
- .JPG, .GIF, .PNG (for images)

Media

Incorporating audio and video media can greatly improve your Blackboard course and make it more engaging for students. Bb Student has been designed to support the delivery of rich media content on mobile devices.

However, when attaching audio and video items to your course, you must bear in mind that not all mobile devices can play all types of media files. Additionally, the quality and length of an audio or video file will greatly affect the download time required—an important point to consider if your students are accessing Bb Student with their mobile network data connection, which is typically slower than a wireless connection.

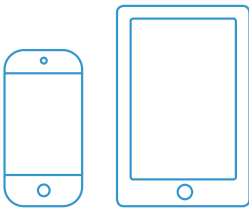**Here are some recommendations for audio and video content:**

Audio

- Use MP3 file format
- Use audio quality of no more than 128kbps.
- Keep the length short— (5 minutes maximum)

Video

- Use MP4 file format
- Keep your video dimensions small
- 480x320 is recommended for the iPhone—this should play back nicely on most modern mobile devices
- 640x480 is recommended for the iPad
- If possible, use software which has 'presets' for producing videos specifically for mobile devices
- HTML5 support

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Content Item	Use Case	Best Practice in Learn	Mobile Friendly Practice
Rich Graphics	Complement course content with relevant graphics to make it visually engaging and appealing.	Use the Content Editor Create an Item from the "Build Content" dropdown in the course content area and attach graphics from there.	Create a File under "Build Content," which will allow students to view the files properly on their devices. Items also work well in Bb Student.
YouTube Video	Complement course content with relevant videos to make it visually engaging and appealing.	Use the Content Editor to upload a YouTube video from the "Build Content" dropdown under the Mashup subheading.	Bb Student supports embedded YouTube videos if they are added as an "embedded" item through the mash-up tool.
Rich media	Complement course content with rich media to make it more engaging and personal for different types of learners	Use the Content Editor Create an Item from the "Build Content" dropdown in the course content area and attach media from there. Media types include, YouTube, MP3, MP4, QuickTime, etc.). OR Using the Mashups dropdown within the Content Editor, you can embed a YouTube video.	Create a file of MP3 Audio or MP4 video files under "Build Content" (no ash and no Content Editor)[2] OR Add a Weblink under "Build Content" with a very clear title such as "Cells Video – view in browser"[3]

Activity Stream

- The majority of the time students spend in Bb Student will be spent on the Activity Stream, a "smart view" of prioritized events and actions.

- This is a key communication tool that can be checked on the go by students, and updated by instructors.

- Since students are used to checking their mobile devices for updates via email and text, mobile access to important announcements and due dates can help you re-think the way you currently use announcements. For example, you may choose to use it for posting a reminder about items to prepare for class.

Activity	Use Case	Best Practice in Learn	Mobile Friendly Practice
Receive real-time notifications on important announcements	Send real-time updates directly to students' mobile devices	Instructors can post announcements from the course menu within Blackboard Learn. Announcements that automatically populate (eg. test posted) are immediately view- able on students' computers and mobile devices.	Student Benefit: Announcements entered through the Learn UI are supported by Bb Student.

2 Due to manufacturer restrictions, not all media les are accessible on all types of mobile devices. For example, Flash cannot be viewed on iOS devices.

3 Sometimes the "View in Browser" option is a viable alternative on mobile devices.

Menus and Titles

It's critical to ensure that menu items and content titles can be easily viewed on mobile devices

Activity	Use Case	Best Practice in Learn	Mobile Friendly Practice
Build a course menu that is easy to navigate in both Blackboard Learn and Bb Student		Use clear titles for menu items	Ensure titles don't wrap. Dividers don't appear.
Create titles for folders, content, assignments and assessments within a course	Build content, assignments and assessments that are accessible and usable within the Blackboard Learn UI as well as on a mobile device.	Use descriptive titles for inter- acting with content, assignments and assessments within a course.	Don't use symbols in titles; they won't appear on a mobile device. All folders and items need to be given descriptive titles, as their previous context may not be viewable on all mobile devices. For example: • Instead of "Assignment 1," use "Submit Assignment 1" or "Read Assignment 1" • Instead of "Assessments," use "Take Week 1 Assessment"

General Content

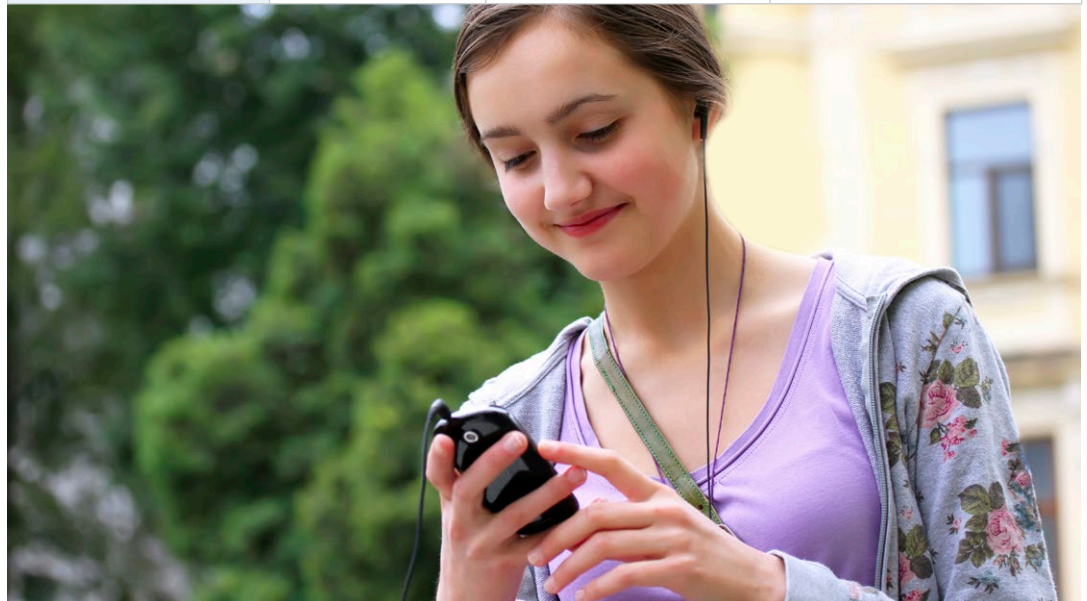It's necessary to take an extra step to ensure files can be easily viewed on a mobile device

Activity	Use Case	Best Practice in Learn	Mobile Friendly Practice
Instruct students to interact with a file that has been added to your course	Post files for students to access, and include instructions for what the students should do with the file	Use the Content Editor Create an Item from the "Build Content" dropdown in the course content area and attach les from there. This is a best practice because it provides access to the Content Editor within that item.	*This will seem redundant, but is necessary to ensure students can access content from their mobile devices*

Grades

Students will get real-time push notifications from Bb Student when grades are posted and are able to track their progress easily from anywhere at anytime by logging into Bb Student and viewing their course grades.

Activity	Use Case	Best Practice in Learn	Mobile Friendly Practice
Allow students to check their grades on-the-go	Give students access to their progress at any given time	Instructors grade using the Grade Center or the Needs Grading view on their laptop/desktop	Grades entered through the Learn UI are supported by Bb Student and will be send out through real-time push notification.

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