

Mobile Learning Scenario 1

Intel® Teach Elements: Moving into Mobile Learning



A scenario to show the vision and possibility of mobile learning, based on real-life learning and teaching scenarios by teachers and school leaders.

Introduction

This scenario follows a day in the life of "Jack," a 6th grader who is learning in a school that embraces both mobile and digital technology. For Jack, mobile technology means that learning is no longer confined to just the school day. Indeed, he is challenged by the school to reflect on his learning whenever he can. In this scenario, you will also hear about some of the other key people (including the school principal, other collaborating teachers, and Jack's family) who have contributed directly and indirectly to Jack's learning.

Jack's Day

It's Wednesday. Jack wakes up at 7 a.m. and does what most kids of his age do: he picks up his smartphone and checks his messages. Of course, Wednesdays are slightly different, because at 7 a.m. Mrs. Knight (his teacher) sends the whole class an assignment that must be completed before the start of school, at 9 a.m., on the same day. Today's task—or "mission," as Mrs. Knight calls them—is quite straightforward. Jack has to use his cell phone to take three pictures, one each with a subject starting with the letters **G**, **H** and **I**.

Over breakfast Jack discusses the "mission" with his mum. She has already gotten a copy of the message, because she has chosen to get "copied in" on all of the correspondence between Jack and Mrs. Knight. Jack's mum likes this, because it helps her feel more in touch with Jack's learning at school, and she is able to provide support where required. This morning, for example, she reminds him that his history homework is due. Jack smiles and replies, "I submitted it by e-mail last night, mum."

At the heart of the school's mobile learning strategy are great educational apps and well-prepared teachers who help young people access the curriculum and learning 24/7 to develop a range of 21st century skills, such as communication and collaboration.

Jack's journey to school is exactly 2.3 miles door-to-door. Jack knows this because one of his other Wednesday "missions" was to use the GPS on his mobile phone to measure the distance from his bedroom to his classroom. As a follow-up activity, the class collaboratively added this information to a Google Map* and then used the information to collectively work out their class's school travel carbon footprint over the entire school year. Jack really enjoys some of these active learning scenarios. Although it is hard work, it is still a great start to the day and helps warm up Jake's brain before school. Some of the kids in Jack's class don't have cell phones with GPSs in them, but Mrs. Knight has a box of mobile learning "stuff" that students can borrow if they need it. This includes GPSs, cameras, and netbooks.

On the way to school, Jack takes pictures of a **G**nome, a **H**ouse, and an **I**nteresting tree. He thinks he might have cheated a little bit with the "interesting tree," so he texts one of his classmates on Google Talk* who pings him back straight away saying, "No, that's creative. Mrs. Knight will love that."

Arriving at school, Jack finds out that his other classmates have all been asked to take photographs starting with different letters of the alphabet (from A to Z). He also finds out that Mrs. Knight is going to be 30 minutes late to school, so they have a substitute teacher for the first part of the day. Luckily, Mrs. Knight has recorded a short YouTube* clip that includes the lesson objectives for the morning. She has also asked the class to post any questions

they have into a collaborative Google Doc*. She tells them that she will answer the questions individually if she has a chance, but it will also be useful to have them all in one place so she can answer them all at once after she gets to school. At the end of the video she adds, "Of course, if you all know what each other's questions are, perhaps you can help each other?"

Jack likes the task that Mrs. Knight has set. The first thing they have to do is upload their pictures to the class collaborative Google Drive* (a collaborative online storage space) so everyone can see the pictures that everyone else has taken. They are each randomly assigned three of the pictures. The substitute teacher uses the classtools.net* random name picker to help do this. Jack makes a note of the three pictures he has been assigned on his Chromebook* using Google Tasks*. Everyone in the class has a Chromebook, and from time to time they are allowed to take them home.

Jack's assigned pictures are of a **C**ar, a **S**treetlamp, and a **L**awn. The task is to use the three pictures as a prompt for some creative nonfiction writing. Each member of the class assumes the role of a reporter, and they have to produce a piece for their fictitious class newspaper. As always, Mrs. Knight has set some clear guidelines, which also help promote 21st Century Skills. First, the piece can be no longer than 500 words, but no less than 480—it has to fit into the space allocated by the newspaper. Second, the piece has to be finished by 11 a.m.—all newspapers, even on-line news, have deadlines. Last, at 11 a.m. the piece will be checked by another member of the class (the editor), who will suggest and track improvements. All pieces must appear on the class newspaper blog by 11:30 a.m. and should include the three pictures that were used as a prompt.

Jack found writing his story quite easy, although getting it down to 500 words was a little trickier. But for Jack, being the editor was the hardest part of the task, because he doesn't really like being critical of others' work. But as Mrs. Knight says, "It is an important skill that will not only improve your writing, but also will improve the quality of the work that you are critiquing." In any case, he managed to get his article uploaded to the class journalism blog before the 11:30 a.m. deadline. As part of this exercise, Jack has to choose whom he shares his work with (in addition to his class and Mrs. Knight). Because he is pleased with his effort, he decides to share it with his mum and with his granddad, who lives in another state. He likes sharing his work with his family, because they often leave him comments.

During lunch, Jack gets a text from his Google Calendar* reminding him that he has a drum lesson after school, and that he needs to borrow some drum sticks from the music department. He also notices that Mrs. Knight has changed their class schedule for the day, and now they will be doing some personal reading after lunch.

Jack enjoys personal reading. He can still remember when the whole class had to read the same book at the same time. But since the start of the year, the class has been making much greater use of electronic books, and he now has an extensive choice of books to read. The other nice thing about personal reading is that since the school has put in a robust wireless network, he has been allowed to go and read in places throughout the school and not just in his classroom. The comfy chairs outside the music department are a favorite place of Jack's for personal reading.

After lunch he picks up his Chromebook and uses it to continue reading *The Hobbit* by J. R. R. Tolkien. He is about halfway through the book and enjoys reading it when he can. Jack likes that electronic books remember where he is when he reads again on his tablet later at home. Jack wants to try and finish the book in the next two weeks, because his class assignment is to post a review of the book on both Amazon* and the Google Play Store*. After that, he will also send the links of his book review to Mrs. Knight. It's quite nice doing a task that is "real"—Jack can still remember the

days when they had to write their book reviews in their exercise books and no one else got to read them apart from the teacher.

The whole of the afternoon is dedicated to a collaborative challenge activity. Mrs. Knight explains that they can only do this activity in the afternoon, because the school they will be working with is in Honolulu, Hawaii. They connect to the other class using Skype* and Mr. Ritter (the Hawaiian classroom teacher) introduces himself and the rest of his class. Pairs of students from Mrs. Knight's class are matched up with student pairs in Mr. Ritter's class. They then have 15 minutes to speak to each other, introduce themselves, tell them about the local area, their likes, dislikes, etc. They use Google Talk* to do this, and even though Mrs. Knight's class is using Chromebook and Mr. Ritter's class is using Windows 8* tablets the whole experience works seamlessly. Jack enjoys the opportunity to speak to other young people his age around the world—two weeks ago they met (via Skype) a professor from Hong Kong, who helped them with their computer science work.

After the introductions, both classes are assigned a challenge that they must complete in roughly two hours. They will continue to work in their groups of fours. The activity is around the development of a new app for a smartphone. Mr. Ritter explains that the reason they are working in split teams is because in the real-world outside of school, big multi-national companies work in collaborative teams across time zones. He adds that these days when we talk about collaboration, we can't just mean face-to-face collaboration.

Jack's team use Google Docs and Google Talk to collaborate and share ideas. They divide up the tasks between the four of them and agree to schedule another meeting of 20 minutes. Then they head to different parts of their schools to work on their set tasks. The constant "backchannel" via Google Talk Instant Messages* keeps them all focused on what they are trying to achieve. After 20 minutes, they meet again on-line, share their findings and set tasks for the next hour. This process continues until their two-hour challenge time runs out. At the end of the two hours, they have developed an idea for an app and produced a six-slide Collaborative Google Slide Presentation* so they could pitch their app to potential investors if required.

The two classes then connect again on Skype, and Mrs. Knight and Mr. Ritter seem very pleased with everyone's work. Mrs. Knight explains that they will complete the next part of their challenge the following week, when each class will use their Google Slides to pitch their app to potential investors. The mock investor panel will consist of Mrs. Carson (the principal of Jack's School), Mr. Ball (the principle of Mr. Ritter's School), and Professor Jones (from the University of Hawaii at Manoa, Honolulu). All teams are given the option of refining their presentation over the next week on their own time.

It is almost the end of the school day, and Mrs. Knight reminds them that she will be online this evening between 7 p.m. and 8 p.m. if anyone needs any extra help with preparation for their science test. She also reminds the class of the home learning task that she has just uploaded to their Google Calendar and that needs to be completed for the end of the week.

The bell rings and Jack heads off for his drum lesson. Later, on the bus home, he uses his smartphone to have a look at the home learning task Mrs. Knight has asked them to do. He has to watch a short YouTube* video on the rain forests. Mrs. Knight calls this one of her "flipped" classroom tasks where they consume the content at home and then discuss the content and carry out follow-up activities in class. Because they are stuck in a traffic jam, Jack sticks his headphones on and starts to watch the video on the bus. He will watch it again later, just to make sure he understands it properly.

At home his mum tells him over dinner how good she thought his newspaper report was and asks which member of his class had to include an 'Interesting tree' in their story.

Jack decides not to join Mrs. Knight for the on-line science review class. Science is his best subject, and he is feeling very confident about the test tomorrow. Instead, he contacts his granddad (who has finally got the hang of using the computer) through Skype and asks him what he thought of his story. Then he plays him some of the drum music that he recorded on his cellphone during his drum lesson. While this is all going on, Jack's mum is thinking it is lucky that his granddad is slightly deaf!

That evening while Jack plays on the Xbox* (he loves games), he notices he already has a "friend" request from one of the boys from Hawaii he was working with on the enterprise project! Although, because of the time zones, Jack will be in bed before the school in Honolulu finishes for the day, perhaps they will be able to play something on the weekend and work on their presentation?

Finally, just before bed Jack reads a few more pages of *The Hobbit* on his tablet. It's been a long learning day and he needs to recharge before tomorrow!

About Jack's School

Until five years ago, the technology integration at Jack's school was really poor. Then they got a new school principal (Mrs. Carson) who quickly realized that many of kids at the school were disengaged. She encouraged members of staff (like Mrs. Knight) to try new and innovative things with technology. The kids responded well, but the staff responded even better.

The school found that there was something quite empowering and motivating about the "giving of permission" to educators to try new things and experiment with technology. Perhaps the quote of the year comes from Mrs. Knight herself, "In 25 years of teaching, I have never felt so excited."