Figure 1

Including Mobile Devices in Second Language Learning

An Inquiry Question by Brigitte Atwood
Final Project OLTD 508

How can mobile learning and technologies benefit students in learning a second language ?

As a second language teacher, finding ways to bring authentic tasks to language learners has always been part of my teaching. I will be considering the benefits of mobile learning as well as the challenges it brings to teachers and students while teaching and learning a second language.

When we think of mobile learning, devices such as phones, tablets and laptops come to mind. According to Mcquiggan et al (2015), mobile learning has evolved into more than the consideration of the devices themselves. It is the flexibility mobile devices offers learners that we are to appreciate and explore. Learning independent of time and space offers personalized learning experiences. Learners have options to work collaboratively with others. Mobile devices offers a plethora of tools and resources to enhance learning. Mobile learning can offer us infinite possibilities in learning.

Figure 2

Figure 3

Why use mobile learning the language classroom ?

Kukulska-Hulme et al. (2015) state that mobile technology allows for "teachers and learners to be active participants in making and shaping language learning." They also add that the philosophy of good language teaching includes active participation of learners and teachers when "learners take responsibility for their own learning" and teachers support. This is good language philosophy. "Mobile technologies enable the implementation of this philosophy in ways that were previously impossible." The authors mention that mobile technology allows students to do the following:

● create and share multimodal texts	● communicate spontaneously with people anywhere in the world	● capture language use outside the classroom
● analyse their own language production and learning needs	● construct artefacts and share them with others	● provide evidence of progress gathered across a range of settings, in a variety of media.

"The learner should be brought to see the potential of becoming personally empowered in his or her language learning, with the possibility of becoming part of an online community of learners."
(Godwin-Jones, 2018)

# How to use mobile learning the language classroom ?

Quinn's 4Cs provide a snapshot of how learning is enhanced using mobile devices. (DesigningMLearning, n.d.)

-taking in data from the learner and processing it

Students use apps such as Google Docs, Explain Everything, Book Creator or Pictello to combine information into a deliverable project format, such as video or book, to show learning.

-connecting learners/performers with others

Students can share their created projects with peers, parents and teachers through youtube, email and apps to communicate their learning.

4Cs	Content	Compute	Capture	Communicate
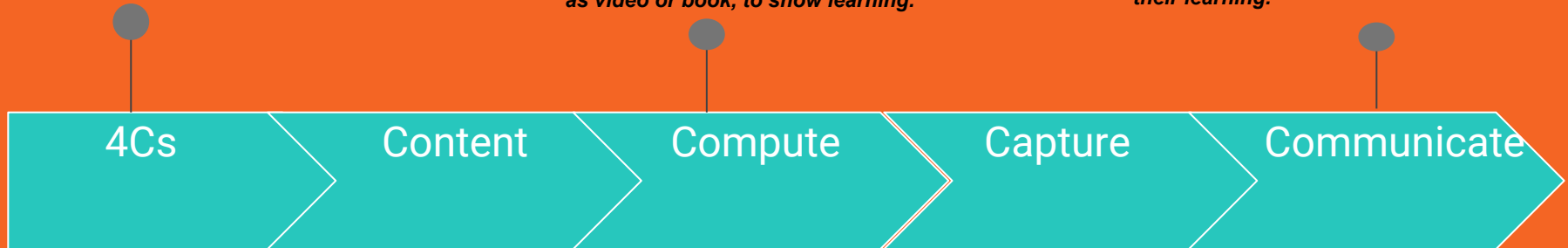
-the provision of media (e.g. documents, audio, video, etc) to the learner/performer

Students searched the internet for pictures and information on Riparian Zones to compare to local information.

-taking in data from sensors including camera, GPS, etc, and saving for sharing or reflection

Students used Ipads and apps to document findings, such as take pictures, videos and notes on field activities.

# How to use mobile learning the language classroom ?

Godwin-Jones, R. (2018) suggests using tablets and smartphones functions that support communication and multimedia use. These can be used to support collaborative learning as as well as explore virtually, outside the classroom, to connect to native or more proficient language speakers. All of these tools provide support for second language learning even if they weren't created for that purpose. They provide opportunities for learners to practice their oral, reading, writing and listening skills by completing authentic tasks.

-Note taking

-Photo capture

-Audio and video playback, recording and editing

-Email

-Text messaging

-Web browsing

"Mobile learning technologies clearly support the transmission and delivery of rich multimedia content. They also support discussion and discourse, real-time, synchronous and asynchronous, using voice, text and multimedia." (Traxler, 2007).
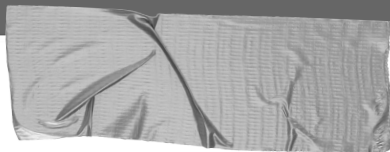
Applications to Support Language

Some examples from Godwin-Jones, 2018 are :

➔ **Free Apps**

Facebook and **Twitter** are social media sites that allow learners to post or comment by writing and reading..

➔ **Video-conferencing**

Skype and **Google Hangouts** allow for oral and listening skills to be practiced in the target language.

These are examples of apps that can be used for older students or used with the teacher.
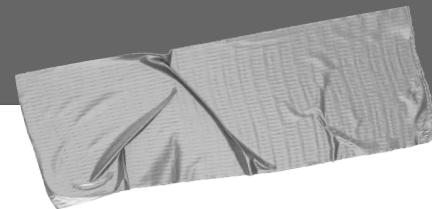
➔ **Freemium Apps**

Duolingo and **Babbel** to practice words and phrases. **Boukili** to listen to reading and to record yourself read. **Epic Books** to listen to reading and to practice reading. **Book Creator**, **Pictello**, and **Explain Everything**, let you create by recording voice, adding text and images. **Show me** acts like an interactive whiteboard which lets you record voice.

It's important to understand what the app can do to support the language learning goal in order for it to become a successful tool for the learner.

Different tools for different ages and learning objectives.

Students in K-3 :
IPads for listening and matching learning games, listening to stories, recording voices, taking pictures and labelling using vocabulary.

Students in grades 4-6 :
IPads and Chromebooks for educational individualized learning such as mathletics, creating digital stories, moviemaker, speech to text and text to speech.

Students in grades 7 to 12 :
Phones for texting, pictures, research, and watching or making videos, laptops for research, word processing, videos, posting in communities

Tip :

Different devices offers different tools. Being careful in choosing wisely will save time and money. It is important to have devices but it is also important to think about the necessity and task outcome first.

Language Learning....where to start?

When teachers of different languages teach , they may consult the CEFR (CEFR, 2015). The Common European Framework of Reference (CEFR) is a language reference guide which helps define levels of learning, teaching and assessment. It gives a description of what language learners **can do** at different stages of their learning. **According to the CEFR , we can consider 5 skills for second language learners :**

- **Spoken Interaction**
- **Spoken Production**
- **Listening**
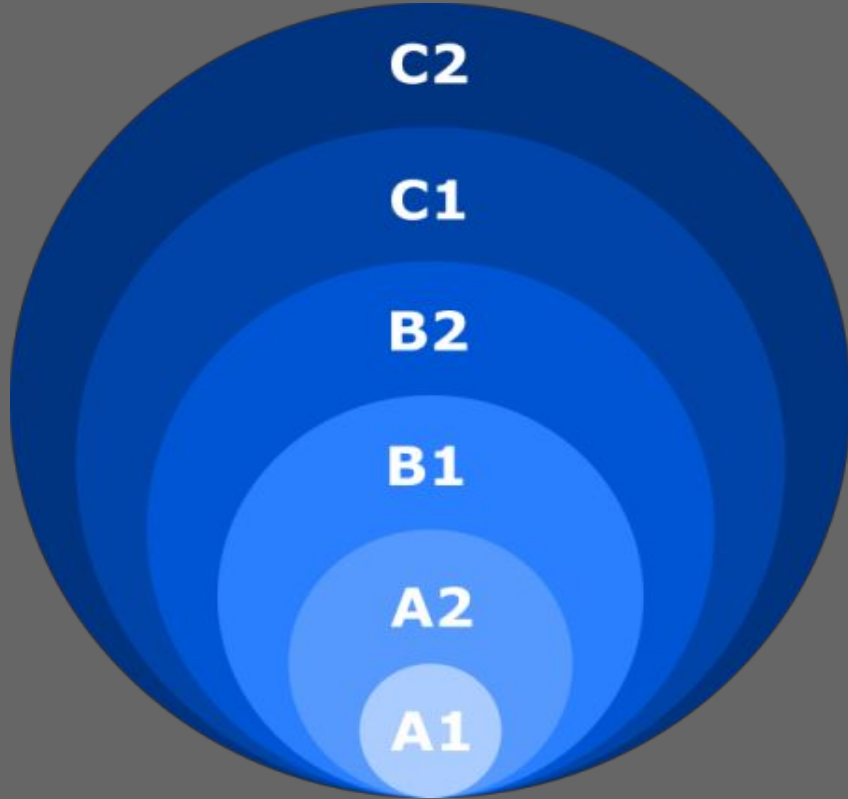- **Reading**
- **Writing**

Figure 4

Figure 4

"The CEFR organises language proficiency in six levels, A1 to C2, which can be regrouped into three broad levels: Basic User, Independent User and Proficient User, and that can be further subdivided according to the needs of the local context." (CEFR, 2018)

The CEFR provides a number of assessment grids and scales to monitor levels of language proficiency. This grid allows learners to self-assess with "can do" statements.

In Burston, J., Athanasiou, A., & Neophytou-Yiokari, M. (2016), the goal of the Cyprus University of Technology was to "increase students' linguistic competence to allow them to function professionally in English as independent learners in all four skills: listening, reading, speaking and writing in a course over 2 semesters. It showed that Internet resources, in particular YouTube and various Google applications (Google Drive, Google Docs, Google Scholar, Google Slides, Hangouts) were used to provide and organise online content as well as to support students in the production of written and oral materials based on discipline-specific input. The authors concluded that using technology played a significant role in achieving the "can do" statements. Online collaborative work motivated learners and there was an improvement in the basic language skilled learner.

Figure 5

1.2 Self-assessment grid

	Reception		Interaction		Production	
	Listening	Reading	Spoken Interaction	Written Interaction	Spoken Production	Written Production
C2	I have no difficulty in understanding any kind of spoken language, whether live or broadcast, even when delivered at fast native speed, provided I have some time to get familiar with the accent.	I can read with ease virtually all forms of the written language, including abstract, structurally or linguistically complex texts such as manuals, specialised articles and literary works.	I can take part effortlessly in any conversation or discussion and have a good familiarity with idiomatic expressions and colloquialisms. I can express myself fluently and convey finer shades of meaning precisely. If I do have a problem I can backtrack and restructure around the difficulty so smoothly that other people are hardly aware of it.	I can express myself with clarity and precision, relating to the addressee flexibly and effectively in an assured, personal, style.	I can present a clear, smoothly-flowing description or argument in a style appropriate to the context and with an effective logical structure which helps the recipient to notice and remember significant points.	I can write clear, smoothly flowing text in an appropriate style. I can write complex letters, reports or articles, which present a case with an effective logical structure, which helps the recipient to notice and remember significant points. I can write summaries and reviews of professional or literary works.
C1	I can understand extended speech even when it is not clearly structured and when relationships are only implied and not signalled explicitly. I can understand television programmes and films without too much effort.	I can understand long and complex factual and literary texts, appreciating distinctions of style. I can understand specialised articles and longer technical instructions, even when they do not relate to my field.	I can express myself fluently and spontaneously without much obvious searching for expressions. I can use language flexibly and effectively for social and professional purposes. I can formulate ideas and opinions with precision and relate my contribution skilfully to those of other speakers		I can present clear, detailed descriptions of complex subjects integrating sub-themes, developing particular points and rounding off with an appropriate conclusion	I can express myself in clear, well-structured text, expressing points of view at some length. I can write detailed expositions of complex subjects in an essay or a report, underlining what I consider to be the salient issues. I can write different kinds of texts in a style appropriate to the reader in mind.
B2	I can understand extended speech and lectures and follow even complex lines of argument provided the topic is reasonably familiar. I can understand most TV news and current affairs programmes. I can understand the majority of films in standard dialect.	I can read articles and reports concerned with contemporary problems in which the writers adopt particular stances or viewpoints. I can understand contemporary literary prose.	I can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible. I can take an active part in discussion in familiar contexts, accounting for and sustaining my views.	I can write letters highlighting the personal significance of events and experiences.	I can present clear, detailed descriptions on a wide range of subjects related to my field of interest. I can explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.	I can write clear, detailed text on a wide range of subjects related to my interests. I can write an essay or report, passing on information or giving reasons in support of or against a particular point of view.
B1	I can understand the main points of clear standard speech on familiar matters regularly encountered in work, school, leisure, etc. I can understand the main point of many radio or TV programmes on current affairs or topics of personal or professional interest when the delivery is relatively slow and clear.	I can understand texts that consist mainly of high frequency everyday or job-related language. I can understand the description of events, feelings and wishes in personal letters	I can deal with most situations likely to arise whilst travelling in an area where the language is spoken. I can enter unprepared into conversation on topics that are familiar, of personal interest or pertinent to everyday life (e.g. family, hobbies, work, travel and current events).	I can write personal letters describing experiences and impressions.	I can connect phrases in a simple way in order to describe experiences and events, my dreams, hopes & ambitions. I can briefly give reasons and explanations for opinions and plans. I can narrate a story or relate the plot of a book or film and describe my reactions.	I can write straightforward connected text on topics, which are familiar, or of personal interest.
A2	I can understand phrases and the highest frequency vocabulary related to areas of most immediate personal relevance (e.g. very basic personal and family information, shopping, local geography, employment). I can catch the main point in short, clear, simple messages and announcements	I can read very short, simple texts. I can find specific, predictable information in simple everyday material such as advertisements, prospectuses, menus and timetables and I can understand short simple personal letters	I can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar topics and activities. I can handle very short social exchanges, even though I can't usually understand enough to keep the conversation going myself.	I can write short, simple notes and messages relating to matters in areas of immediate need. I can write a very simple personal letter, for example thanking someone for something.	I can use a series of phrases and sentences to describe in simple terms my family and other people, living conditions, my educational background and my present or most recent job	I can write a series of simple phrases and sentences linked with simple connectors like „and", „but" and „because".
A1	I can recognise familiar words and very basic phrases concerning myself, my family and immediate concrete surroundings when people speak slowly and clearly.	I can understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues.	I can interact in a simple way provided the other person is prepared to repeat or rephrase things at a slower rate of speech and help me formulate what I'm trying to say. I can ask and answer simple questions in areas of immediate need or on very familiar topics.	I can write a short, simple postcard, for examples sending holiday greetings. I can fill in forms with personal details, for example entering my name, nationality and address on a hotel registration form.	I can use simple phrases and sentences to describe where I live and people I know.	I can write simple isolated phrases and sentences.

Observations so far...

In considering Quinn's 4Cs to enhance learning with mobile technology as well as have students use the CEFR to ensure they have a clear understanding of language goals has been a way to include tech to support language learning at the surface. Now, there needs to be thinking towards 21st century skills in language learning with mobile technology in order to transform the learning experience to extend further outside the classroom.

Synergy Project 2017/2018:
Inquiry Beginnings...

I had the opportunity to participate in a SetBC Synergy Project with my grade ⅚ class. This project had us investigate the use of Ipads to support language learning in the French Immersion classroom. The project required us to sample 3 Apps: Book Creator, Pictello and Explain Everything. I had the flexibility to create learning around the use of these apps to help my students show their learning in the French language.

Book Creator

Pictello

Explain Everything

My final Synergy Project can be found at https://prezi.com/view/G67UHxwxXPREEPXxs5YT/
My classroom Synergy Project Edublog can be accessed at http://batwood.edublogs.org/

Task

In groups of 3, students took pictures and added text about themselves. These books were emailed to a student who was at BC Children's.

This activity allowed students to manipulate the app and learn about how it could be used to support them with using French vocabulary as well as express their creativity.

Task

In groups of 3, students took pictures, added text and voice to explain the use of snowshoes. Each group presented their work to the class.

Pictello allowed students to use the Ipads outside of the classroom to make videos and show the use of snowshoes. They recorded their voices to explain or read the text screens they had written.

Explain Everything and Communication
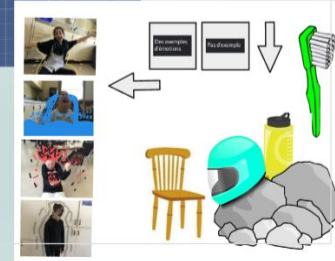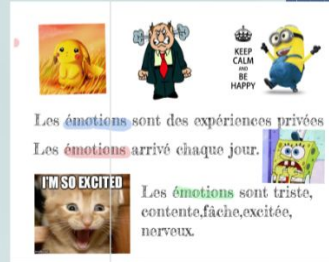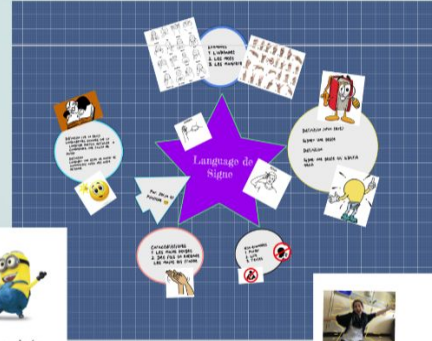
Task

In groups of 3, students had to choose an emotion and show their understanding with text, images and voice.

This activity allowed students to experiment different features of the app which let you animate, screencast, narrate, import and export. It offers great options to use voice and text in the target language.

Planning for mobile language learning

Figures 6, 7, 8

A pedagogical framework for mobile assisted language teaching and learning
(Kukulska-Hulme et al., 2015)

This framework has worked in my classroom to make language teaching and learning relevant as well as meet individual language needs. For example, I use Google docs to help students use speech to text to help type an assignment as well as use the predictive text feature to ensure proper spelling and vocabulary is used.

Different devices offer different tools to help learners. Educators and learners need time and practice to explore the different possibilities of device use. In my class, I have used Ipads to demonstrate how to use Google docs as a collaborative writing tool. Students used the same doc to add words on an explored theme and consulted the list and made changes and updates as needed.

Being able to connect through social media and the world keeps learners thinking and using language continuously. This benefits student who have their own devices because of their ability to stay connected to their digital communities outside of school. It's learning in real time! .

Teaching and learning with Ipads have enabled my students to learn outside the walls of the classroom by taking videos and pictures. This allowed them to show learning in different ways as well as teach them about extending learning independent of time and space.

REFLECTION
How does the activity design ensure reflection on learning?

Deploys teacher experience, teaching strategies, effective task designs

Makes use of multimodality, seamlessness, authenticity, collaboration

Teacher wisdom

Device features

OUTCOMES
How does the activity lead to improved language proficiency and other outcomes?

How does the activity exploit these aspects?

REHEARSAL
How does the activity make the most of circumstances and resources to enable more practice?

Language dynamics

Learner mobilities

Responds to diversity of communication channels and evolving language use

Takes account of places and times, contexts, cultures, learners' goals

INQUIRY
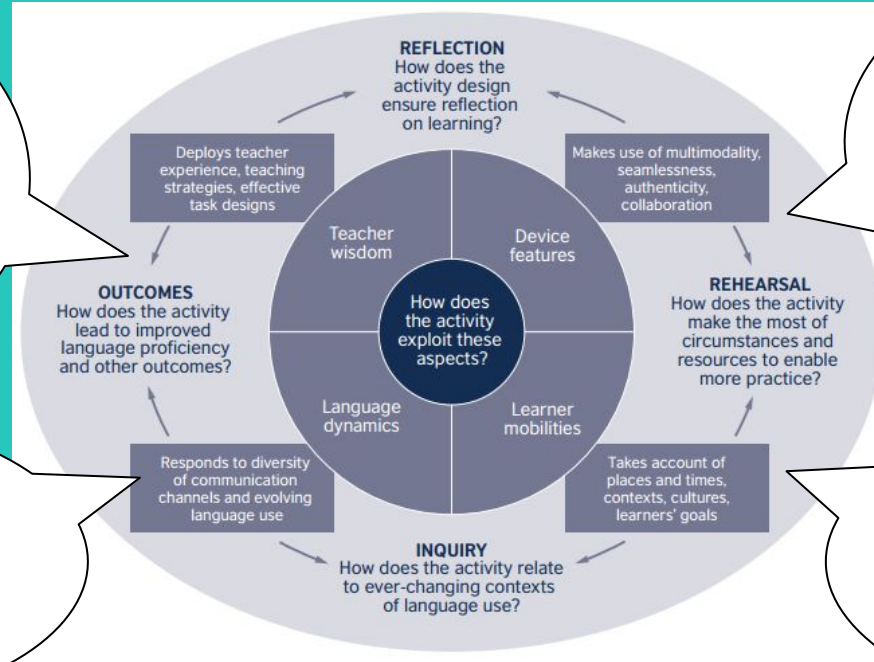How does the activity relate to ever-changing contexts of language use?

Figure 9

"One of the key aspects of successful mobile learning of English that the framework highlights is the use of activities which exploit a dynamic language and technology environment while drawing on the distinctive capabilities of teachers and learners." (Kukulska-Hulme et al., 2015)

Pedagogical Framework: Planning

Using the pedagogical framework, teachers can design learning activities using the 4 connecting concepts to considering to mobile language learning according to Kukulska-Hulme et al.(2015).

- Outcomes : *How does the activity lead to improved language proficiency and other outcomes?*

Here are a few ideas: identify gaps in knowledge, taking notice of how language is used, connecting basic to proficient learners, connecting to the real world and developing digital literacy

- Inquiry : *How does the activity relate to ever changing contexts of language use?*

Mobile devices are used as tools to capture and share language data, as well as used to pose questions and look for answers in the online world.

- Rehearsal : *How does the activity make the most of circumstances and resources to enable more practice?*

It offers a stimulating and supportive environment which engages the learners to practice in the target language outside of the classroom. It offers chance to provide and receive feedback as well as offers differents ways to express language such as texting.

- Reflection : *How does the activity design ensure reflection on learning?*

Here, the learner gets to reflect on "what has and has not been learnt or understood, how it may be applied, how to improve and progress, what new learning goals may be set and so on. Mobile devices can assist in this process, enabling more frequent reflection."

Enhancing and Transforming Learning in the Classroom

During my SetBC Project in exploring mobile devices to support language learning in the classroom, I was exposed to the SAMR model. At that time, I didn't really understand how I could implement this model. After using the IPads for a year and seeing the benefits they brought to learning, I now feel I have a better understanding of how to transform learning. I had to get comfortable with the technology and the changes I was making in my teaching.

The SAMR Model is described as a framework that allows educators to change the learning by including technology. "Effective technology integration happens across the curriculum, encourages higher-order creative and critical thinking skills, problem solving, collaboration and results in transformational learning." (Shiller, 2000)

Using the SAMR Model by Dr. Ruben Puentedura, consists of using technology at 4 levels of learning. This tech implementation meets 21st Century Learning skills.The first 2 levels of substitution and augmentation are when technology enhancements are provided as tools substitutions. The work does not change. The 2 upper steps are when the transformation takes place. There is redesign and new tasks created which supports 21st century skills.
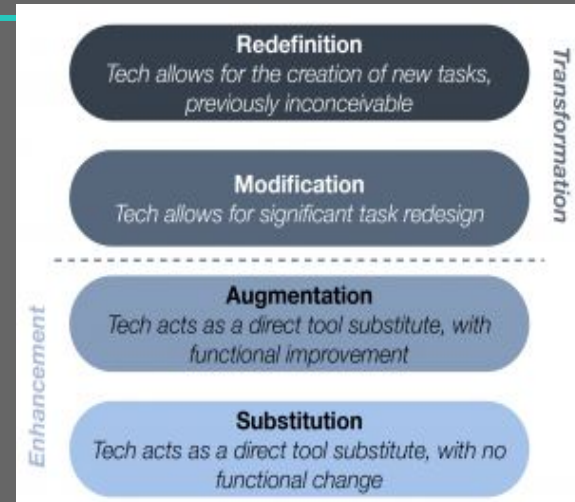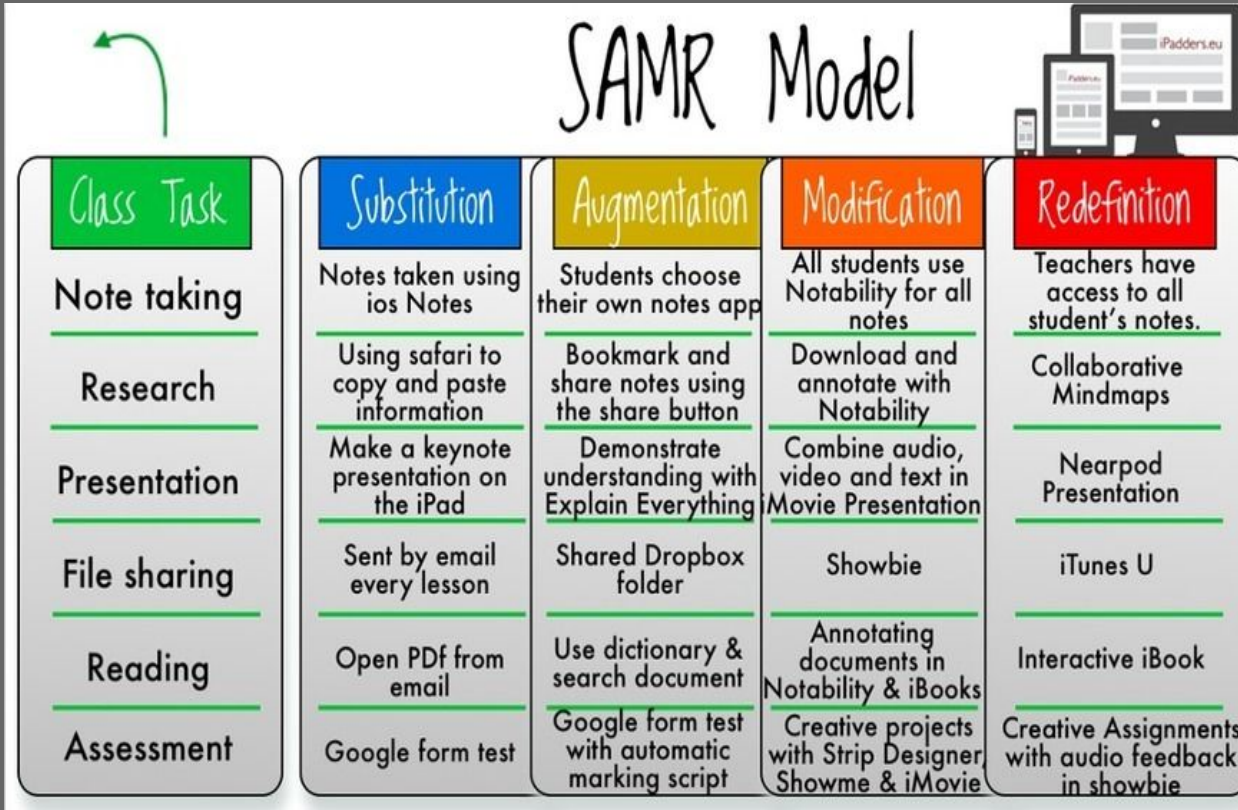

Figure 10

SAMR Model

Class Task	Substitution	Augmentation	Modification	Redefinition
Note taking	Notes taken using ios Notes	Students choose their own notes app	All students use Notability for all notes	Teachers have access to all student's notes.
Research	Using safari to copy and paste information	Bookmark and share notes using the share button	Download and annotate with Notability	Collaborative Mindmaps
Presentation	Make a keynote presentation on the iPad	Demonstrate understanding with Explain Everything	Combine audio, video and text in iMovie Presentation	Nearpod Presentation
File sharing	Sent by email every lesson	Shared Dropbox folder	Showbie	iTunes U
Reading	Open PDf from email	Use dictionary & search document	Annotating documents in Notability & iBooks	Interactive iBook
Assessment	Google form test	Google form test with automatic marking script	Creative projects with Strip Designer, Showme & iMovie	Creative Assignments with audio feedback in showbie

Figure 11
SAMR video (Retrieved from
https://www.youtube.com/watch?v=9b5yvgKQdqE&feature=youtu.be)

Using this example of the SAMR model in language learning gives educators options to maximize the level of engagement in second language learners. It also allows for flexibility in learning and shows relevance in using mobile learning to improve language learning. This levelling system can accommodate language learners by meeting them at their level. The attached video shows ways to use the SAMR model to transform language tasks.

Guiding Question: In what ways can mobile learning and technologies be utilized so as to benefit students (learning a second language) and (second language) teachers both in and out of the classroom? Here are some examples.

Student

Teacher

Benefits

-Personalized learning
-Takes place anytime, anywhere and globally
-Provides collaborative learning opportunities

Challenges
-Student might not have a mobile device
-Limited access to connectivity
-Distracted with other device functions
-Understanding tool vs toy

Benefits

-Provide options for learning tools to individualize learning
-Offers out of classroom learning to support ongoing language practice
-Creation of online communities to promote language practice

Challenges
-Limited number of devices
-Tech support
-Connectivity accessibility
-Teacher training

Now What?

Moving forward with what I've researched and what I've experienced.

I believe that mobile technology does help learners with acquiring or becoming more proficient in a language. Offering choice, hands on practice and support with personalization definitely motivates and gives learners safe places to practice and experiment with language learning. Using devices and tools offers options for language manipulation at various levels. I would like to investigate the level of depth in which they could learn a language.

One question I would like to explore would be : "How can pairing the CEFR framework with the pedagogical framework for mobile assisted language teaching and learning using the SAMR model, increase language proficiency at different grade levels?

References

Burston, J., Athanasiou, A., & Neophytou-Yiokari, M. (2016). Using instructional technology to integrate CEFR 'can do' performance objectives into an advanced-level language course. In S. Papadima-Sophocleous, L. Bradley & S. Thouësny (Eds), CALL communities and culture – short papers from EUROCALL 2016 (pp. 69-73). Research-publishing.net. Retrieved from https://doi.org/10.14705/rpnet.2016.eurocall2016.540

CEFR (2015) Cambridge University Press. Retrieved from http://www.englishprofile.org/the-cefr

Clark, R. (2015). Deepen technology integration with the SAMR model. Learning Architects.com. Retrieved from https://www.learningarchitects.com/the-samr-model/

Common European Framework of Reference for Languages: Learning, teaching, assessment Structured overview of all CEFR scales.(n.d.) Council of Europe. Retrieved from https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045b15e

Common European Framework of Reference for Languages (CEFR). Council of Europe. (2018) Retrieved from https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions

Godwin-Jones, R. (2018). *Using mobile devices in the language classroom*: Part of the Cambridge Papers in ELT series. [pdf] Cambridge: Cambridge University Press. Retrieved from http://www.cambridge.org/elt/blog/wp-content/uploads/2018/03/Whitepaper-mobiles-in-class.pdf

References

Kukulska-Hulme, A., Norris, L. and Donohue, J. (2015). Mobile pedagogy for English language teaching: a guide for teachers. British Council ELT Research Papers, [pdf] 14.07. Retrieved from
https://www.teachingenglish.org.uk/sites/teacheng/files/pub_E485%20Mobile%20pedagogy%20for%20ELT_FINAL_v2.pdf

Kukulska-Hulme, A. (2016). *Personalization of language learning through mobile technologies: Part of the Cambridge Papers in ELT series.* [pdf] Cambridge: Cambridge University Press. Retrieved from
http://languageresearch.cambridge.org/images/Language_Research/CambridgePapers/CambridgePapersinELT_M-learning_2016_ONLINE.pdf

 McQuiggan, S.et al. (2015). Mobile Learning. A Handbook for Developers, Educators, and Learners. Retrieved from:
https://oltd508lewis.weebly.com/uploads/8/2/7/9/8279059/mobile-learning-a-handbook-for-developers-educators-and-learners-scott-mcquiggan.pdf

Schiller, J. (2000). Implementation of Computing in Schools by Primary Principals: A Longitudinal Perspective, AARE, Sydney. Retrieved from
https://startime.com.au/2018/03/07/integrating-technology-classroom-samr-model/

Traxler, J. (2007). Defining, Discussing and Evaluating Mobile Learning: The moving finger writes and having writ . . . .. *The International Review Of Research In Open And Distance Learning, 8*(2). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/346/875

Designing MLearning by WorkLearnMobile. (n.d.). Retrieved from
http://www.worklearnmobile.org/mobile-experts/designing-m-learning-clark-quinn-quinnovation/

Figures

Figure 1 Retrieved from https://images.google.com/

Figure 2 Retrieved from https://www.pexels.com/

Figure 3 Retrieved from http://pixabay.com

Figure 4 Retrieved from https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions

Figure 5 Retrieved from
https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=090000168045b15e

Figure 6, 7 & 8 Retrieved from http://pixabay.com

Figure 9 Retrieved from
https://www.teachingenglish.org.uk/sites/teacheng/files/pub_E485%20Mobile%20pedagogy%20for%20ELT_FINAL_v2.pdf

Figure 10 Retrieved from https://www.learningarchitects.com/the-samr-model/

Figure 11 Retrieved from https://startime.com.au/2018/03/07/integrating-technology-classroom-samr-model/