

Design Project - Curriculum Guide

Tracy Evans, Danny Tulk, Dan Bosse

ETEC510 - The Design of Technology Supported Learning Environments

University of British Columbia

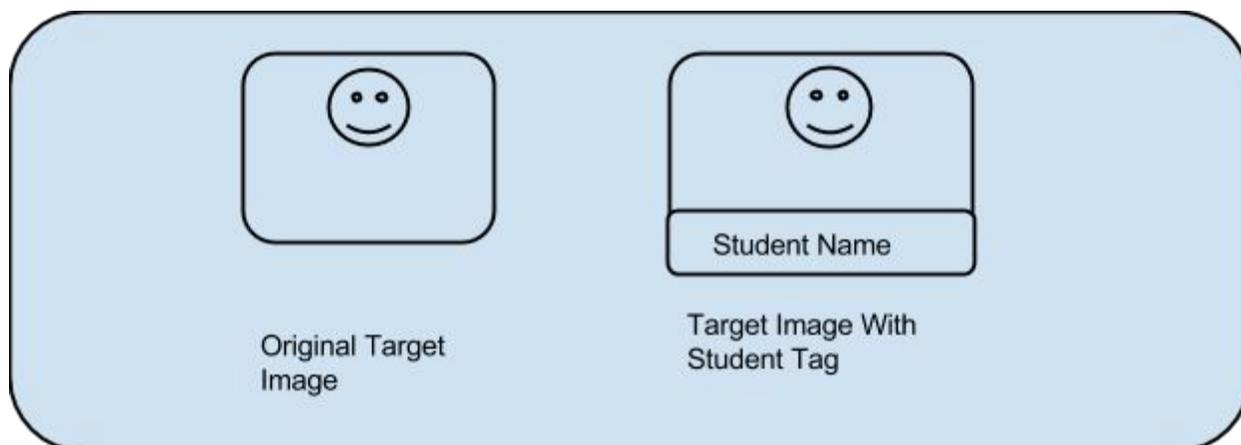
Table of Contents

Introduction.....	3
What Do I Need to Use This Guide?	
How Should I Use This Guide?	
Aurasma in the Classroom	
Before You Begin	
Lesson Format.....	7
Chapter 1: Getting Started.....	9
Chapter 2: Asking Permission.....	11
Chapter 3: Greetings.....	13
Chapter 4: Prepositions.....	15
Chapter 6: School Vocabulary.....	17
Chapter 7: Telling Time.....	19
Chapter 8: Verbs.....	21
Chapter 9: Going Further: Student-Created Aurasmas.....	23
Chapter 10: Student Created Auras: Adapting Sentences.....	25
Chapter 11: Going Further: Conversation.....	27
Chapter 12: Integrating New Vocabulary.....	29
Chapter 13: Formative and Summative Assessment: Closing the Loop.....	31
Chapter 15: Troubleshooting.....	33
Index.....	35
Assessment Rubric - Teacher Use	
Self-Assessment Rubric - Student Use	
References.....	37

Introduction

What Do I Need to Use This Guide?

- Mobile devices with Aurasma installed
- High-quality print-outs of provided triggers or
- Access to a computer monitor to display triggers
- Network access
- Response journals or visual journals (either digital or physical)
- In order for students to respond to the aura they will need a unique Aurasma trigger. For the purposes of this manual, the authors suggest having students create a unique name plate that they can lay next to the original to create a new trigger, which will start the student's response video.



How Should I Use This Guide?

Follow the instructions:

The teacher can follow the instructions step-by-step to guide students through learning activities that will increase the students vocabulary and ability to communicate in English.

Create your own lessons:

The teacher may use the information included in this guide in order to create original content tailored specifically to the learners in his or her classroom. In addition, students are invited to become content creators and solidify their understanding of classroom vocabulary.

This guide is intended for middle-years students experiencing early immersion situations with little knowledge of their second language vocabulary. While this guide is targeted at English Language Learners (ELL), its activities and theories also apply to students studying in other immersion settings with the goal of fluent communication in the second language. Augmented reality in the classroom setting is intended to provide students the opportunity to practice new language structures in less intimidating settings and to receive just-in-time feedback.

This curriculum guide will cover the initial situations that many learners new to a second-language environment experience, including: situations at school, greetings, prepositions, telling time, verbs. In addition to these initial experiences, the guide will help the teacher lead learners through the communicative approach to language learning as supported by the technological environment provided by Aurasma. This will include introducing new vocabulary, using new vocabulary in context, and providing the learner with valuable, just-in-time feedback.

By participating in the use of augmented reality triggers placed around the learning environment, students will increase their subject-specific vocabulary and their ability to use the vocabulary in context. In addition, through their participation in multiple feedback loops, students will perfect their use of the vocabulary in context and avoid fossilization of language-related errors. The collaborative element builds on the communicative approach to second-language instruction whereby students are motivated to use the language through authentic contexts, motivation to build on knowledge and build on the social constructivist approach. Finally, students will transfer this subject-specific vocabulary to their final projects.

Student use of subject-specific vocabulary in context will be improved. Students better remember vocabulary when they themselves investigate it or work out meanings in pairs or groups. The student-developed wiki will serve as a glossary that can be consulted by current student working towards the final project and also by subsequent groups of students.

Feedback loops and error correction by more-knowledgeable peers and the teacher are important for students to perfect use of second language vocabulary in context and prevent errors from becoming fossilized. "Of [feedback] provided by teachers in response to learner errors, just over half (55%) lead to uptake of some kind on the part of the learner; however, only 27% of the feedback turns lead to student repair. From the perspective of the total number of errors produced by students, only 17% of errors eventually lead to repair." (Lyster, 1997). The goal of this project is to increase the percentage of student-repaired errors and improve second language acquisition.

Through collaborative building of the wiki and providing corrective feedback for one another, students will be motivated to use the language in authentic contexts, an important element in the communicative approach to second language acquisition.

The design project will be relevant for English Language Learners in grades 6-9 with very little knowledge of the English language. In addition, the authors of this project see it being easily transferable to learners of other languages, experiencing early exposure to the language and with a similar level of technical ability. The project allows for a high-degree of differentiation in practice; as students create and respond to individual recordings and use vocabulary in context, the teacher is able to determine how students are using vocabulary and to respond with just-in-time feedback before errors become fossilized.

The educator must work with the various backgrounds of the students and the language patterns they bring to the classroom with their mother tongue as this is the framework upon which the learner's understanding of second languages will be layered. Building upon first language language structures supports the constructivist approach to education. "Exposure to [second language] input is often limited to the classroom context. The input may be increased by reading or listening in the targeted language (Takač, 2008)

"[as] 90% of words are learned through repeated, meaningful encounters it makes sense to optimize this avenue for learning." (Greenwood & Flannigan, 2007). Context clues merit careful teaching.

The collaborative piece of being able to participate in the use of the language without the intimidation of having to participate live in front of a large group of listeners will encourage students to begin to use the language within context (as this is an important stage in learning to use the language correctly) and will allow them to develop some mastery of the language use before using the language in front of a live audience.

Technology becomes particularly useful in helping the student measure growth in the use of the language and to reflect of the increasing ability to use the language in context. Generally, augmented reality, and specifically, Aurasma supports the use of the communicative approach to second language instruction.

Aurasma in the Classroom

The guide has been conceived for use within the classroom with high-quality printouts or digital displays of the Aurasma triggers to provide learners with the most reliable access to the content. While the guide has been designed to be used by learners using school-provided devices with pre-loaded Aurasma app, there is also a possibility that the content could be accessed by students using Bring Your Own Devices (BYOD).

Repeated exposure to vocabulary over a period of four days is necessary for students to be able to use the vocabulary in novel situations (Joe), and as such the teacher should consider revisiting lessons after having introduced them the first time. This guide has been created to be used with the support of a teacher within a classroom environment but with some learner support this content could be used by learners at home to create a blended environment where learners are able to deepen their understanding of the second language vocabulary by accessing it outside of the classroom and by creating content that can be assessed by other learners and by the teacher in order to provide effective feedback for the learner.

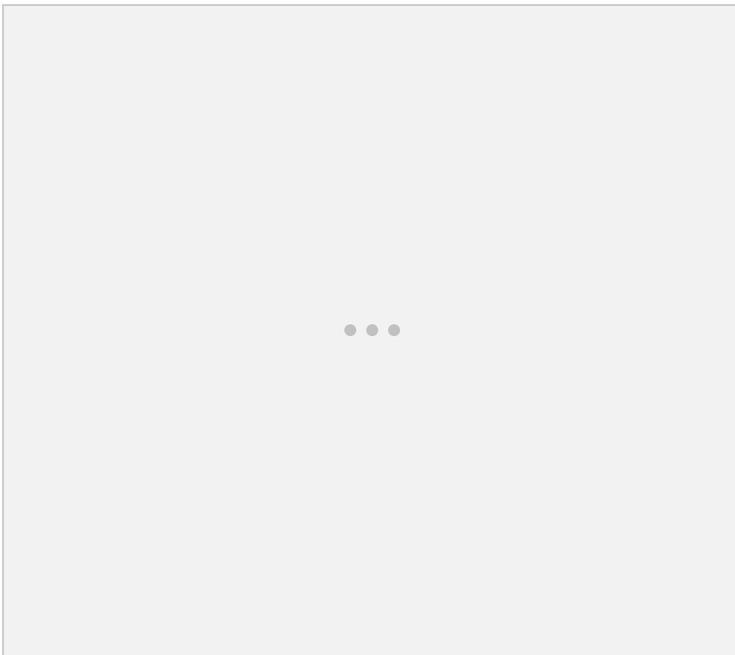
While this guide has been created with high-quality triggers that can be printed and used in the classroom, Aurasma is an app that also works easily with learner-created content. Not only can students create their own triggers, they can also create video and audio content related to those triggers. The "how to" for this stage of use has been included in this guide and is available on <http://augmentedrealityetec510.weebly.com>.

Before You Begin

Before beginning the lessons presented in this curriculum guide, the teacher may wish to pre-test students to determine their level of language proficiency. As such, the teacher will be able to differentiate lessons to each learner's level of proficiency. The lessons are presented as whole-group lessons but could easily be differentiated for students working ahead or those who need repeated exposure to vocabulary before attaining mastery.

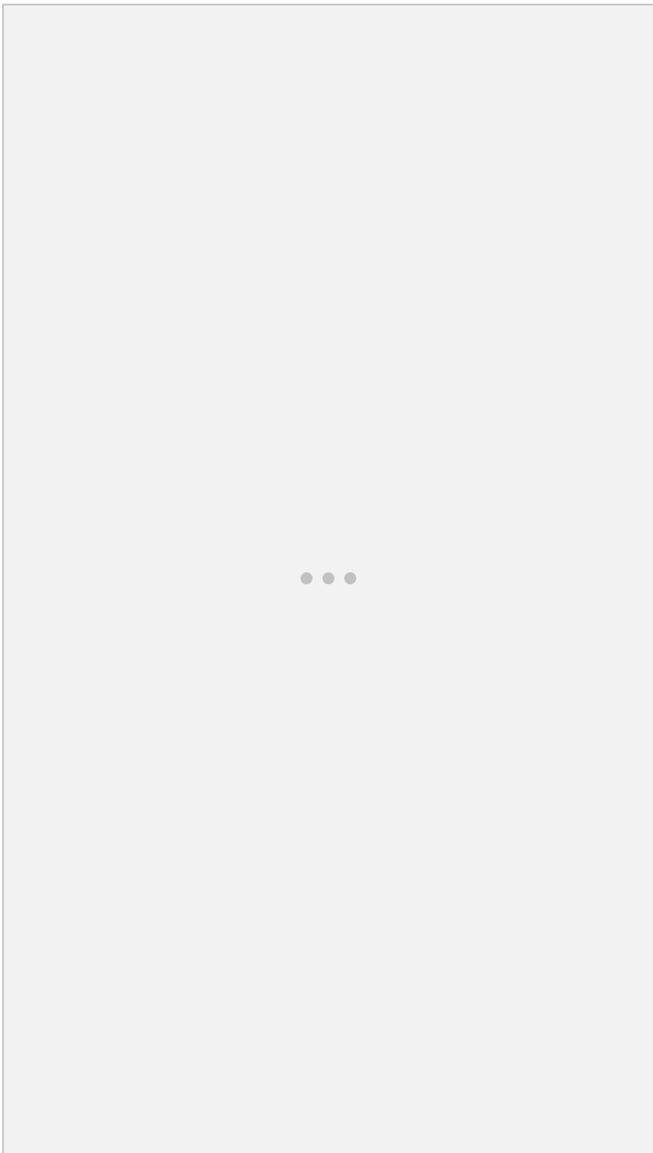
When using the communicative approach to language instruction, it is helpful for the teacher to create a climate of risk-taking in learning. These lessons will require some persistence from learners as they get the apps working and engage in using the vocabulary presented in the lessons.

What is augmented reality?

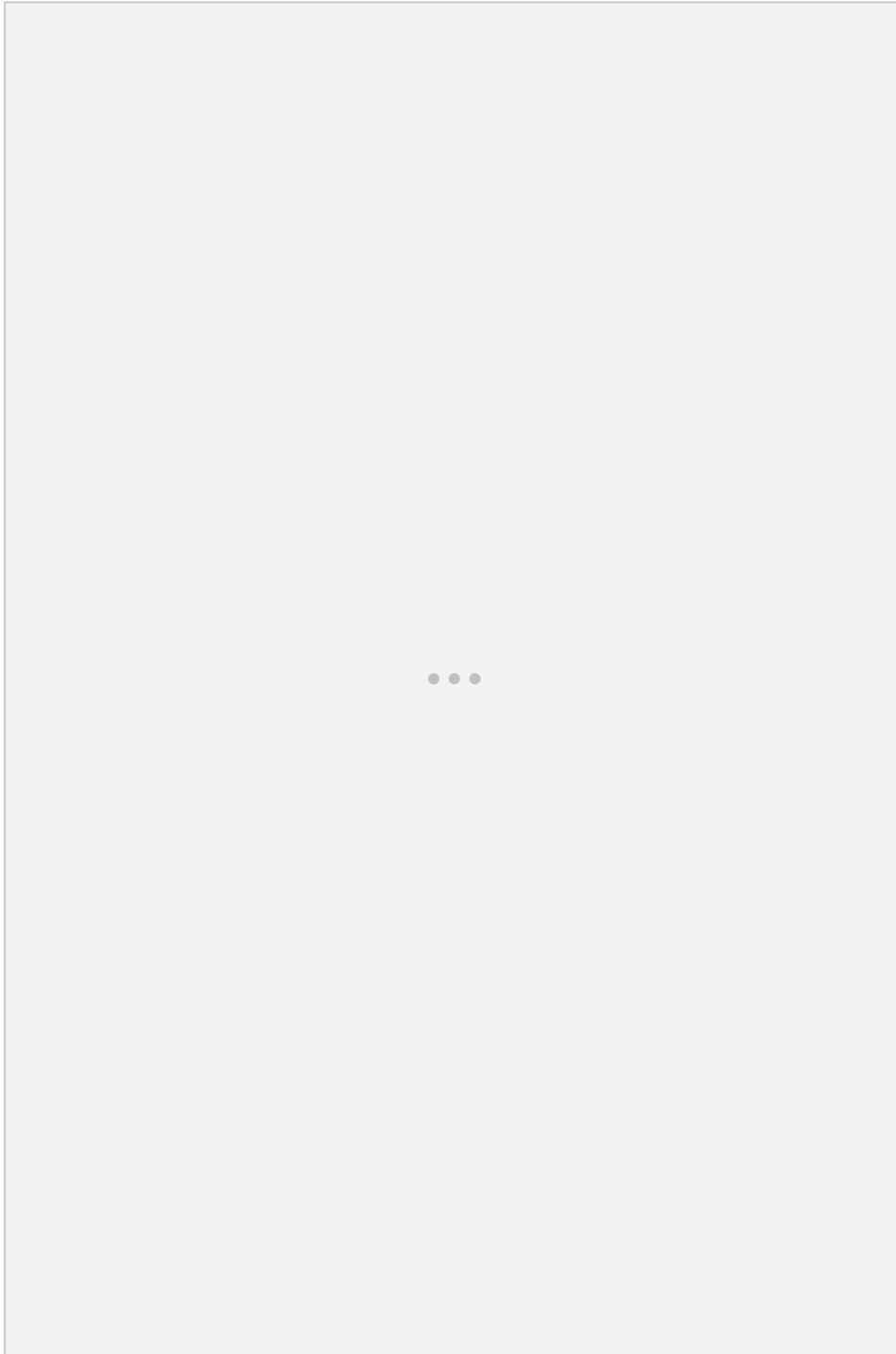




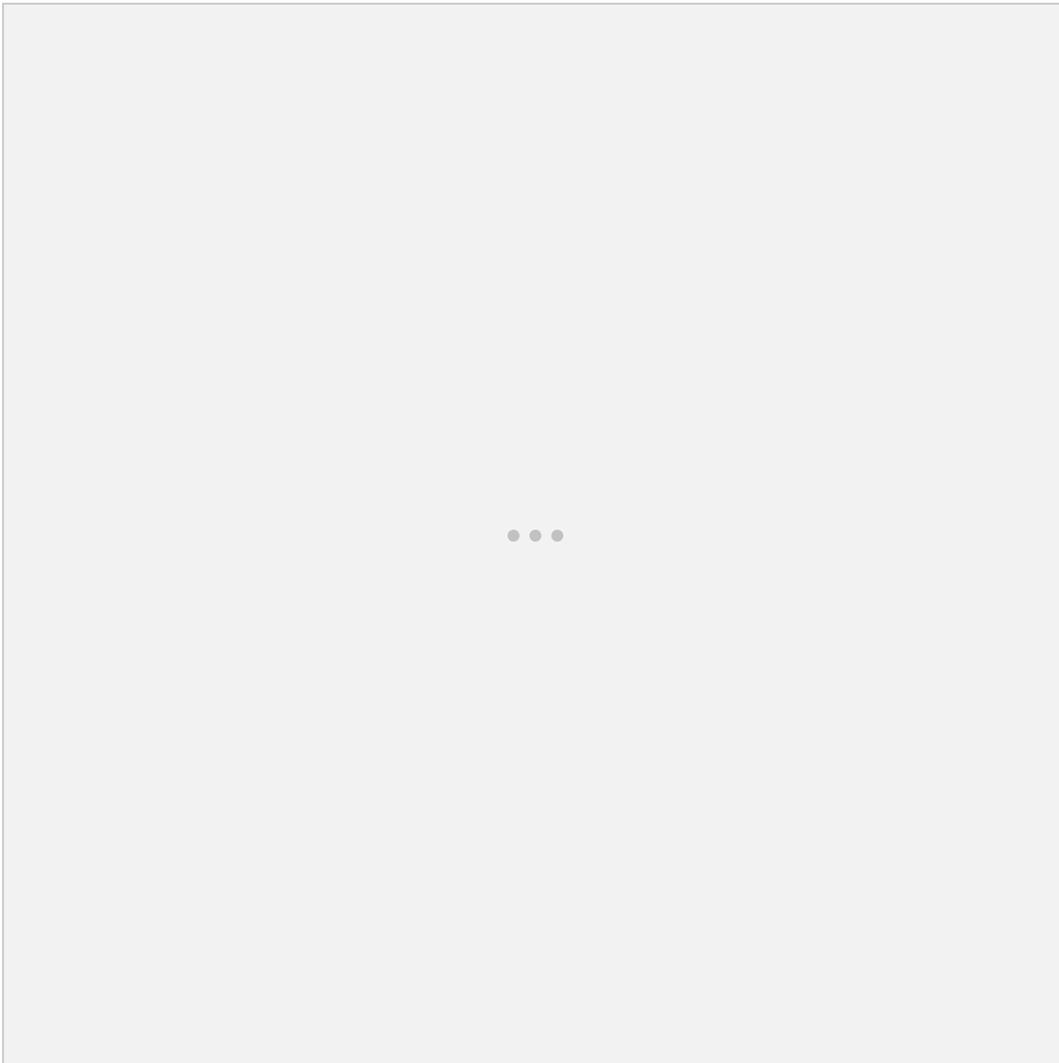
What can Aurasma do?



Viewing Auras:



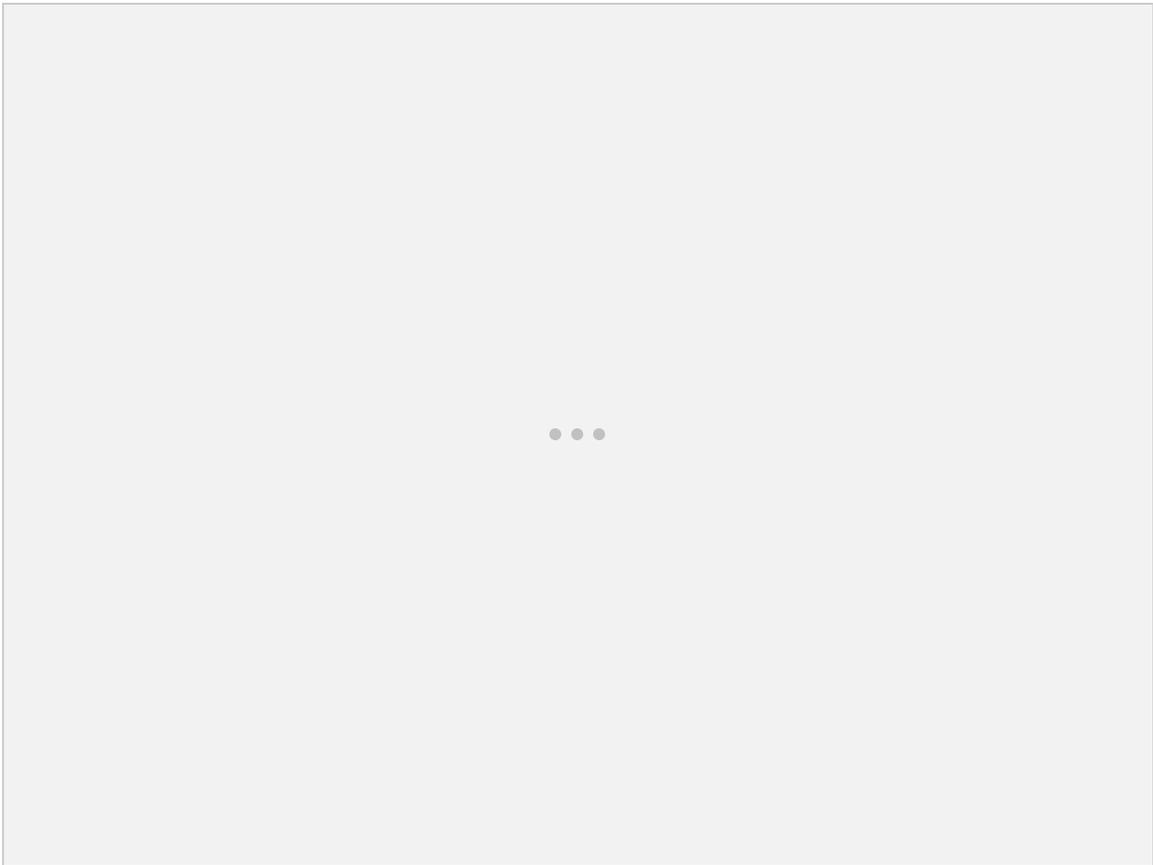
Creating overlays:



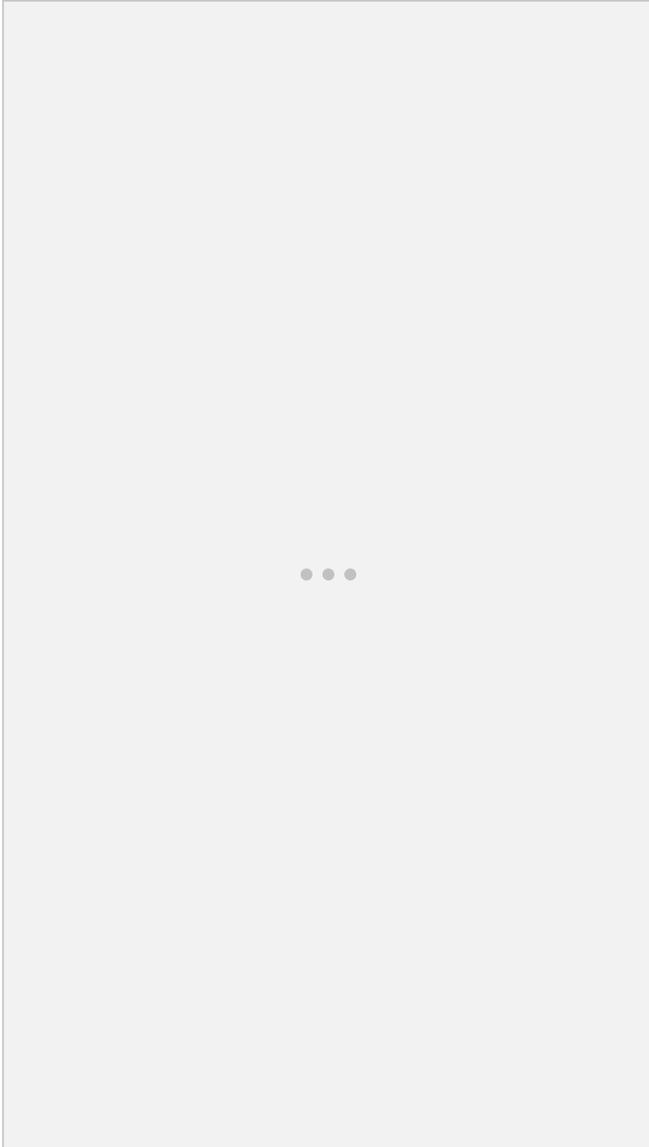
Quick Start Student Guide for English Language Learning

(Scan each image below with the Aurasma view to show content)

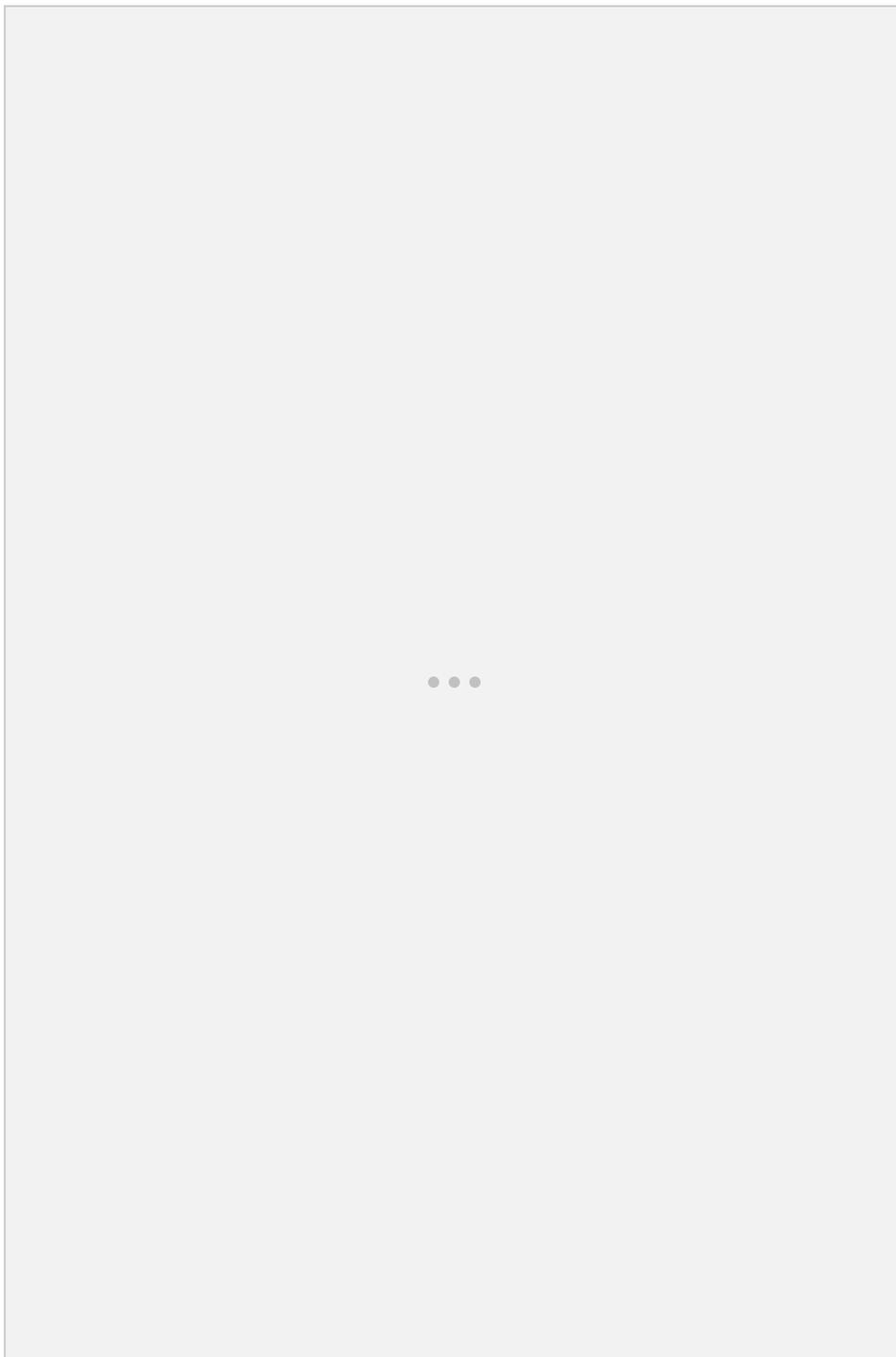
What is augmented reality?



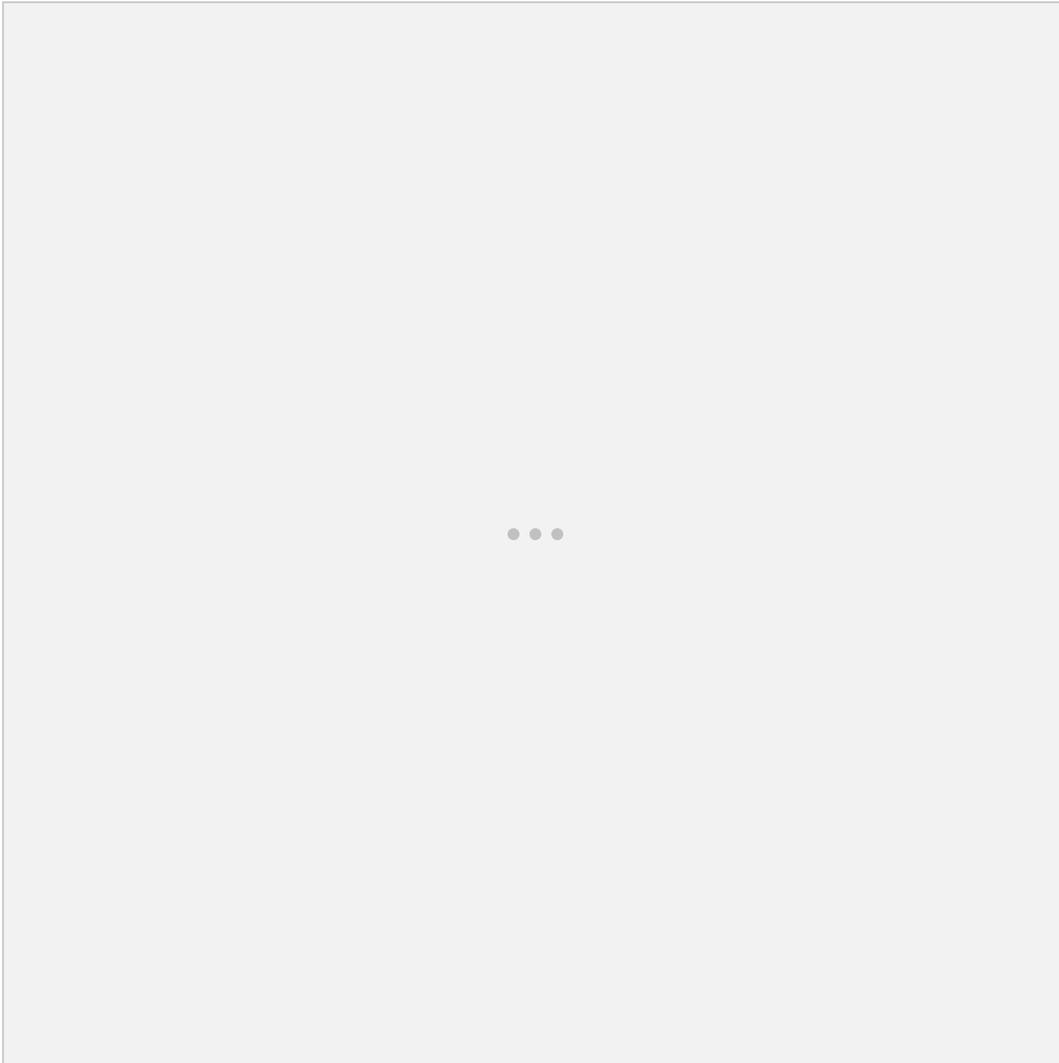
What can Aurasma do?



Viewing Auras:



Creating overlays:



Lesson Format

The Big Idea

This section will outline the major concepts to be covered in this lesson and what the teacher and learner can expect to take away.

Objectives

One or two objectives inspired by Alberta Learning's curriculum. Teachers are encouraged to check with their own curriculum guides to ensure objectives align with student learning outcomes.

Keywords and Concepts

This section will outline the specific vocabulary students will encounter while watching the video and will propose a short, cloze-type phrase or script for students to begin using immediately as a part of the lesson. This will take the work off the page or video and help students to begin immediately communicating using the new vocabulary.

Vocabulary	Vocabulary	Cloze phrases

Script:

Suggested Time

This is a suggested amount of time teachers may want to budget for the lesson in class.

Activity Description

Generally, lessons will follow these steps:

- Retrieve teacher feedback from the previous lesson
- View vocabulary
- Repeat vocabulary using the video
- Create a personal lexicon
- Create a conversation
- Record the conversation using the original trigger and a personal tag

Resources

All activities contained in this curriculum guide will use the following resources:

- Mobile devices equipped with Aurasma
- Internet connection
- Triggers available online at <http://augmentedrealityetec510.weebly.com>

Other suggested resources include:

- Index cards
- Sentence strips
- Visual or digital journals (The digital journal may take the form of a blog, a digital portfolio or other digital format of the teacher's choice.)

Reflection Prompts

Reflection activities are presented to students as culminating activities after each lesson.

- Students will be asked to reflect on newly acquired vocabulary through an "exit ticket"-type activity where they will be required to revisit one of the printed triggers around the room and to repeat the vocabulary word associated with it.
- Students may reflect on their day's learning in a visual or digital journal where they will record the day's vocabulary along with a visual representation.
- Reflections will take this format:
 - In a reflection journal:
 - Record a reflection in a journal. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback.

Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 1: Getting Started

The Big Idea

Getting started is all about having students begin using the tools and becoming familiar with the functionalities through its use in an authentic situation. Students must each have their own device that will operate on the same network as the auras are being created on. By exploring teacher created auras students will build the capacity to use the technology. Once they are proficient content consumers, they will become content producers.

Objectives

The student will:

- Be introduced to Aurasma as a classroom tool
- Be able to listen to and repeat high-frequency vocabulary

Keywords and Concepts

Aurasma-Specific Vocabulary
<ul style="list-style-type: none"> • Trigger • Aura • Overlay • Tag

Suggested Time

- 20 - 30 minutes

Activity Description

- Students will be introduced to the use of Aurasma triggers through the use of a printed trigger and a mobile device connected to a projector. The teacher will scan a printed trigger and the aura will open and start the video for the student. The teacher will demonstrate how to respond to the aura by repeating what is said.
- Students will see that printed triggers have been placed around the room and each will be given a device to scan the room.
- Students will be given 10 - 15 minutes to circulate around the room and scan triggers, repeating vocabulary as they go.
- The teacher will demonstrate how to capture vocabulary and add it to the student's personal lexicon through a digital or visual journal.
- The teacher will demonstrate with another student how to create a personal script.
- The teacher will demonstrate with a student how to record a conversation using the original trigger and a student tag.

- If they have not already done so, students will create personalized tags that will be used throughout the unit.
- Culminating activity: Students will be asked to reflect on the newly acquired vocabulary through an "exit ticket"-type activity where they will be required to revisit one of the printed triggers around the room and to repeat the vocabulary word associated with it and add one word to their personal visual or digital journal.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

In a reflection journal:

- Record your new vocabulary. Remember to scan this reflection as a trigger to get teacher feedback.
- Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 2: Asking Permission

The Big Idea

In this lesson, students will learn to ask permission within a classroom setting. By the end of the lesson, the student will be able to ask school-related permission of the teacher or of classroom peers and expect a “yes” or “no” answer.

Objectives

The student will:

- Learn and review permission vocabulary
- Be able to ask a question requesting permission
- Understand a “yes” or “no” answer to the question

Keywords and Concepts

Vocabulary (nouns)	Vocabulary (verbs)	Cloze phrases
light door paper window cup pencil sandbox	turn on open have open borrow play turn off	<ul style="list-style-type: none"> • May I _____ ? • Yes, you may. • _____ turn on the light • _____ open the door • _____ have some paper • _____ open the window • _____ have another cup • _____ borrow your pencil • _____ play in the sandbox • _____ turn off the light

Script

Student A: May I _____?

Student B: Yes, you may.

Suggested Time

- 30 - 45 minutes

Activity Description

- View vocabulary: using triggers posted in the classroom, the student will watch the related video.
- Repeat vocabulary: using the video as a guide, the student will repeat the vocabulary orally.

- Create a personal lexicon: using the capture function, the student will take screen capture of the vocabulary as it is presented while watching the video. The student will record this vocabulary in a visual or digital journal.
- Create a conversation: in partners, students will create a short conversation using the vocabulary practiced during the video. This conversation can be inspired by the script as presented to students or they may go further by creating a more in-depth script.
- Record the conversation using the original trigger and a personal tag: students will lay their tag over the original trigger and record their conversation.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

- In a reflection journal:
 - Write and illustrate a sample question. Remember to scan this reflection as a trigger to get teacher feedback.
 - Use the student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 3: Greetings

The Big Idea

In this lesson, students will learn vocabulary related to greetings and, by the end of the lesson, will be able to greet the teacher or classroom peers. After viewing, students are invited to practice their vocabulary with the app by speaking aloud.

Objectives

The student will:

- Use Aurasma to learn vocabulary related to greetings
- Greet the teacher or a classroom peers
- Complete a cloze-type sentence in response to the question “How are you today?” with “I am _____” (wonderful, happy, excited, awesome, great, delighted, relaxed, marvelous, super)

Keywords and Concepts

Vocabulary (greeting)	Vocabulary (adjectives of feeling)	Cloze phrases
Hello Hi	wonderful happy excited awesome great delighted relaxed marvelous super	I am _____.

Script

Student A: Hello.

Student B: How are you today?

Student A: I am _____ .

Suggested Time

- 30 - 45 minutes

Activity Description

- Students should launch Aurasma and point the device at the trigger to activate the linked video.
- View vocabulary: Watch the linked video and repeat this vocabulary using the video as a model.
- Repeat vocabulary using the video: complete the conversation as guided by the video.
- Create a personal lexicon by using Aurasma's capture function and record this vocabulary in a digital or visual journal.
- Create a conversation with a partner.
- Record the conversation using the original trigger and a personal tag.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

- In a reflection journal:
 - Write and illustrate a personal feeling. Remember to scan this reflection as a trigger to get teacher feedback.
 - I am _____ (wonderful, happy, excited, awesome, great, delighted, relaxed, marvelous, super)
- Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 4: Prepositions

The Big Idea

Prepositions of place are important to students navigating their way through daily school life as it helps them to situate objects inside and outside of the classroom. In this lesson, students will view and use prepositions of place in context.

Objectives

The student will:

- Learn prepositions of place
- Use prepositions of place in context

Keywords and Concepts

Home vocabulary (nouns)	School Vocabulary (nouns)	Cloze phrases Prepositions
Bath towel Toothbrush Sink Bed Washing machine Refrigerator Sofa Stove Table Pillow alarm clock	Paper clips Pencil case Desk Scissors Ruler Book bag Stapler Chair Calculator Crayons Glue Pencil sharpener Table	on The _____ is on the _____ by The _____ is by the _____ in The _____ is in the _____

Script

Student A: What's wrong?

Student B: I can't find the _____ .

Student A: It could be (by, in, on) the _____ .

Student B: I think you're right. Thanks.

Suggested Time

- 45-60 minutes

Activity Description

- View vocabulary: using the triggers placed around the classroom, have students explore the classroom.
- Repeat vocabulary using the video: students will repeat the vocabulary along with the video.
- Create a personal lexicon: using the capture function, students will capture vocabulary to add to their digital or visual lexicon.
- Create a conversation: together with a partner, the student will create and write a short conversation using the provided script.
- Record the conversation using the original trigger and a personal tag.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection prompts

- In a reflection journal:
 - Describe the contents of your desk. Draw the contents and write about the position of 5-10 items. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 6: School Vocabulary

The Big Idea

Students will need key vocabulary to successfully navigate their day at school. In this lesson, students will learn vocabulary related to school and, by the end of the lesson, will be able to talk about place at school and the objects found there. The vocabulary in the lesson is not presented as part of a conversation. As such, the teacher will need to guide students in using the vocabulary to create a script. This script will integrate the vocabulary introduced in the previous chapter related to prepositions of place.

Objectives

The student will:

- Learn vocabulary related to school
- Review vocabulary related to prepositions of place

Keywords and Concepts

Vocabulary	Vocabulary	Cloze phrases
backpack blackboard chair chalk classroom clock coloured pencils crayons desk eraser glue	locker lunchbox markers pencil pencil case pencil sharpener ruler school scissors tape teacher text book	Where is the _____. May I use the _____?

Script

Student A: Where is the _____?

Student B: The _____ is (preposition of place) the _____

Suggested Time

- 30 - 45 minutes

Activity Description

- View vocabulary using the trigger to begin.
- Repeat vocabulary using the video as a model.
- Create a personal lexicon by using the Aurasma capture function and record this personal vocabulary in the student's digital or visual journal.
- The vocabulary in the lesson is not presented as part of a conversation. As such, the teacher will need to guide students in students using the vocabulary to create a script. This script will integrate the vocabulary introduced in the previous chapter related to prepositions of place.
- Create a conversation together with a partner.
- Record the conversation using the original trigger and a personal tag.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

- In a reflection journal:
 - Describe the classroom, using school vocabulary and prepositions of place. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 7: Telling Time

The Big Idea

Being able to situate themselves in time is an important concept for students. In this lesson, students will learn vocabulary related to telling time and, by the end of the lesson, will be able to tell the time and date.

Objectives

The student will:

- Learn and use vocabulary related to time

Keywords and Concepts

Vocabulary	Vocabulary	Cloze phrases
Big hand Little hand Hour Minute Past the hour To the hour O'clock Quarter past Half past Quarter to	Number words 1-12	It is _____

Script

Student A: What time is it?

Student B: It is _____

Suggested Time

- 30 - 45 minutes

Activity Description

- View vocabulary using the video.
- Repeat vocabulary using the video as a guide.
- Create a personal lexicon using Aurasma's capture function and record this personal vocabulary in the student's visual or digital journal.
- Create a conversation with a partner by writing it in the student's journal.
- Record the conversation using the original trigger and a personal tag.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

- In a reflection journal:
 - Record the times at which you complete school- and home-related activities. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 8: Verbs

The Big Idea

In this lesson, students will learn vocabulary related to verbs, and, by the end of the lesson, will be able to construct a simple sentence that includes a verb. Cloze phrases and a script are not provided as a part of this lesson's video. The phrases provided in the cloze section and script of this lesson are not modelled for students. As such, teachers may find it useful to provide students with further examples of verbs and to model the use of those verbs in context.

Objectives

The student will:

- Use Aurasma to learn verbs in the present tense
- Use weather vocabulary

Keywords and Concepts

Vocabulary Verbs	Vocabulary Concept	Cloze phrases
<ul style="list-style-type: none"> • Rains • Snows • Wind blows • Wears • Uses • Run 	Add "s" after the infinitive of the verb when it follows "he", "she" or "it"	What do you wear when it _____? I wear _____.

Script

- Student A: What do you wear when it rains?
- Student B: I wear a jacket.
- Student A: What do you wear when it _____?
- Student B: I wear _____.

Suggested Time

- 30 - 45 minutes

Activity Description

- View vocabulary using the original trigger.
- Repeat vocabulary using the video.
- Create a personal lexicon using Aurasma's capture function and record the vocabulary in a digital or visual journal.
- Create a conversation with a partner.

- Record the conversation using the original trigger and a personal tag.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>.

Reflection Prompts

- In a reflection journal:
 - Record a description of your morning routine. Use the format “I wake up, I eat breakfast, I walk to school, I _____.” Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 9: Going Further: Student-Created Aurasmas

The Big Idea

Students will begin to use personally relevant images to personalize auras using student-chosen vocabulary. As such, students will begin to build their bank of vocabulary. Students may later refer to these auras to help support in-class communication. This vocabulary may be kept in the student's digital or visual journal or the teacher may wish to begin to build a talking word wall, accessible to all students. The use of a shared word wall supports the constructivist approach to education in that students will not only be building their own understanding of new vocabulary and language structures, but will also be contributing to the learning of other members of the classroom.

Objectives

The student will:

- Develop a bank of personally relevant vocabulary
- Create vocabulary auras using student-created triggers

Keywords and Concepts

As students navigate their day at school they will have questions regarding vocabulary required to discuss their day and their understanding. The teacher will help students to record this vocabulary and contribute to a common bank.

Suggested Time

- 30 - 45 minutes

Activity Description

- Students will find personally relevant vocabulary as they navigate their day.
- The student will create a target using an index card available in the classroom. The target must contain an image that the student will colour and a hand- or computer-written word so that students have multi-modal representation of the vocabulary.
- Plan a script to illustrate the vocabulary. Include correct pronunciation and an illustrative sentence.
- Record the vocabulary using the student created trigger. The recording must include the word's correct pronunciation and use in an illustrative sentence.
- Post the trigger in the classroom.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Student-created triggers
- Index cards available to students as needed

Reflection Prompts

- In a reflection journal:
 - Record a personal dictionary of personally relevant vocabulary. This vocabulary may take the form of student-drawn images or images cut from magazines.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 10: Student Created Auras: Adapting Sentences

The Big Idea

Students will now become producers of content to be used by other learners in the classroom. The teacher will help students to brainstorm a list of vocabulary that might be valuable to other learners. Using Vygotsky's concept of the "more knowledgeable other" students will become content experts for other learners in the community. The resulting word wall will serve as a resource for students seeking to read and write in English. Use a rich source image like those used as a part of the Picture Word Inductive Model (PWIM) (Calhoun).

Objectives

The student will

- Seek new vocabulary and useful phrases in the rich image
- Beginning students find nouns within image
- More advanced students will find verbs and multi-word phrases
- Most advanced student will begin to use new vocabulary in context

Suggested Time

- 45-60 minutes

Activity Description

The following steps are the steps to the Picture Word Inductive Model (Calhoun):

- Students will identify what they see in the image.
- As a group, the class will label what they see using index cards.
- Read and repeat the vocabulary as a class.
- Create a title for the image by thinking about the information transmitted by the image.
- Using the vocabulary found in the image, create and post complete sentences on sentence strips.
- Read and review the sentences. Use the sentences to create a short paragraph.

The following steps add augmented reality to the PWIM method:

- Students will photograph the source image with their personal tags to serve as a trigger for their personal response.
- The student will create a short discourse based upon the image
- The students' tags should be available to other students who will need them as a trigger to view the work of others and provide them with feedback.
- After viewing the auras created by other students, the viewer should create a feedback aura by creating a unique feedback trigger that will be posted on the PWIM wall.

Resources

- Large images (Picture Word Inductive Method (PWIM posters)
- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>
- Index cards
- Sentence strips

Reflection prompts

- In a reflection journal:
 - Record a written and illustrated version of your oral discourse. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.
- Students will be asked to reflect on their learning by integrating the vocabulary introduced by one other learner into a new sentence using Aurasma.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 11: Going Further: Conversation

The Big Idea

Using corrective feedback (Lyster), students will engage in conversation using the vocabulary mastered in previous lessons. The communicative approach to language instruction states that learners will develop mastery of the language through in context use and corrective feedback provided in a timely manner. Aurasma allows students to record their current ability with the vocabulary presented in class and to receive feedback on it's use in context and the learners ability to pronounce the vocabulary. The complicated part of beginning to create feedback loops will be for the students to create unique triggers that can be viewed and responded to by the original creator. For the purposes of the curriculum guide, students will add to the original trigger. The source image with a student tag will serve as the first student's trigger. The source image with the creator's tag and the first responder's tag will serve as a feedback trigger. Subsequent feedback will require an original tag in order to trigger the subsequent feedback videos. The authors of this guide suggest having students use index cards, on which they will create an original, detailed drawing and use together with the original image. This "feedback image" will be posted on the bulletin board together with the original PWIM image and PWIM vocabulary.

Objectives

The student will:

- Use language to communicate ideas about regular classroom functioning and routines
- Ask questions to facilitate the school day

Suggested Time

- 45-60 minutes

Activity Description

- Scan the triggers created by other students and view the video
- Plan feedback for the student
- Using the original image, the original student's tag, and the responding student's tag to create a unique trigger, record feedback for the original student. Use the sentence starters provided:
 - I liked _____.
 - You could improve _____.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>
- Index cards
- Student tags

- Student-created “feedback tags”

Reflection Prompts

- In a reflection journal:
 - Record feedback for your partner. Use the format “Two stars and a wish”, where “two stars” are two things that were well done in the original recording, and the “wish” is one thing that could be improved in the original recording. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.
- Students will be equated to reflect on their day's learning by recording their new sentence and response in aurasma. They will then be asked to record their learning in their personal learning journal and add to their personal lexicon.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 12: Integrating New Vocabulary

The Big Idea

Now that students are able to begin creating original sentences, the goal of this lesson is to build on the student-created recordings to create more complex, more interesting sentences that more accurately reflect the learner's original ideas.

Objectives

The student will:

- Reflect on teacher and peer feedback
- Improve the original sentence by adding to it using adjectives and adverbs

Keywords and Concepts

The authors suggest presenting the following adjectives and adverbs during this lesson and, during subsequent lessons, continue to build on the list of adjectives and adverbs that the students become familiar with. Each time a new word is added, the creator will use it as a trigger to create a related video, using correct pronunciation and using the word within a sentence that demonstrates its meaning.

Vocabulary	Vocabulary
Adjectives <ul style="list-style-type: none"> ● big ● small ● fast ● slow ● happy ● sad 	Adverbs <ul style="list-style-type: none"> ● quickly ● slowly ● sadly ● happily

Suggested Time

- 45-60 minutes

Activity Description

- Scan the triggers created by other students and view the video.
- Plan feedback for the student by suggesting an adjective or adverb to be added to the original sentence. Provide the suggested addition to the first student using a printed index card with an illustrated image.
- Using the original image, the original student's tag, and the responding student's feedback tag, the original student will create a unique trigger and record a new sentence or discourse.

Resources

- Mobile devices equipped with Aurasma

- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>
- Index cards

Reflection Prompts

- In a reflection journal:
 - Record a simple sentence. On the next line, add to the sentence by adding an adjective. On the following line, add to the sentence by adding an adverb. Remember to scan this reflection as a trigger to get teacher feedback.
 - Teachers may wish to have students use the model student rubric provided in the index to help students reflect on their own progress.

Reviewing Student Work

- Student's work will be assessed based on teacher observation of the student at work. This formative assessment will be used to guide further use of auras to develop student vocabulary.
- Teachers will use the student's visual journal as an Aurasma trigger to record personalized feedback for students. This feedback will give students an opportunity to listen to, reflect on, and respond to just-in-time feedback. Focus on what the student succeeded in doing and how specifically the student might improve the next script.
- Use the rubric provided in the index to provide students with formative assessment as they work through the lessons. Provide a colour-coded progression for students so they may see their progress from one lesson to the next.

Chapter 13: Formative and Summative Assessment: Closing the Loop

The Big Idea

In order to improve the use of language in context, learners must receive feedback on their use of the vocabulary in order to avoid errors that become fossilized without correction and are then more difficult to correct at a later stage.

Objectives

The student will:

- Improve the use of in-context vocabulary through the integration of teacher and peer feedback.

Suggested Time

Teacher and peer feedback is integrated in every lesson

Activity Description

- At the beginning of each new lesson students should be provided with the time to listen to feedback provided in the previous lesson. This listening time will provided learners with a refresher of the previous lesson's learning and prime them for learning in the next lesson.

Resources

- Mobile devices equipped with Aurasma
- Internet connection
- Printed triggers available online at <http://augmentedrealityetec510.weebly.com>
- Index cards
- Teacher “feedback tag”

Reviewing Student Work

Students should be provided formative assessment throughout the lessons in this curriculum guide. This formative assessment will take the form of:

- One-on-one conversations with the teacher
- Teacher recorded auras, using the student’s visual or digital journal as a trigger
- Teacher use of the rubric provided in the index. The teacher will use a colour-coded assessment in order to give the student feedback on the progress of their language skills. Using a single printed rubric, the teacher is encouraged to use a colour coded-system such as the following (in rainbow order):
 - yellow - first evaluation
 - orange - second evaluation
 - red - third evaluation

- continue in rainbow order so that the student has a visual representation of their progress
- Student's work will be self-assessed using the student rubric provided

Chapter 15: Troubleshooting

How to Manage the Lesson if the Technology Fails

The lessons provided in this guide, as any lessons that integrate technology, have the potential to fail on the day of implementation due to various factors; Internet being down, the school's mobile devices are double booked, the previous class forgot to plug in the devices before going home for the night, and the list goes on. Experienced educators know to always have a "B" plan just in case the well-planned lesson that seamlessly integrates technology into the classroom does not work out. The lessons proposed throughout this curriculum guide are based on research methods regarding the use of technology to support the communicative approach to second language learning. As such, they are built on a solid foundation of student language learning, even when the technology is not available during that particular lesson as a support in the classroom.

In case of technology failure, the educator has the option to simply not teach the lesson as planned and substitute another lesson in its place or to adapt the proposed lesson to be taught with limited technology. In this instance, Aurasma is used as a method of organizing the multi-media environment proposed as a tool for teaching second-language vocabulary and providing learners with feedback. Without the organizational tool of Aurasma, the teacher may simply adapt the lesson and return to it the following day when the technology is working as expected.

The authors of this guide suggest the lesson be adapted using the following strategies:

- Video tape responses with a camera or a computer's integrated camera. Photograph the intended target. The image and the video can be put together via the website account.
- In case of no technology at all, the lesson can still be completed face-to-face in the classroom in a large- or small-group setting. In this case, the conversation will not be recorded for later reference, but the conversation and use of vocabulary in the classroom is still a valuable lesson.

Index

Assessment Rubric - Teacher Use

	1 Beginning	2 Developing	3 Expanding	4 Bridging	5 Extending
Listening to oral language: vocabulary	Understands a few words with visual support.	Understands some words with visual support.	Understands many words with visual support.	Understands a range of words related to curricular content.	Understands a broad range of vocabulary with a multiple meanings related to curricular content.
Listening to oral language: syntax	Understands: simple commands and phrases with visual support and demonstrations.	Understands: three-step commands and phrases simple sentences on familiar topics, with visual support.	Understands: multi-step instructions detailed sentences on familiar topics, with visual support.	Understands: multi-step instructions complex sentences on familiar topics, with minimal support.	Understands: detailed instructions complex and compound sentences on unfamiliar topics, independently.
Speaking: use of oral vocabulary: knowledge of words and their meaning	Uses a few words, including to express basic understanding or communicate immediate needs and preferences.	Uses some subject-specific words to convey understanding of familiar topics.	Uses many subject-specific words academic words to convey understanding of curricular concepts.	Uses a range of subject-specific and academic words to convey understanding of curricular concepts.	Uses a broad range of descriptive, subject-specific and academic words to convey understanding of abstract concepts.
Speaking: use of linguistic grammar: Ability to form sentences	Uses nouns and present tense verbs ; some errors and omissions.	Uses subject pronouns , present and regular past tense verbs ; may make word-choice and word-placement errors.	Uses object pronouns , irregular verb tenses and prepositions; some usage errors.	Uses possessive pronouns , irregular verb tenses, word forms ; occasional errors.	Uses a variety of verb tenses , subject-verb agreement, a variety of word forms; increasing accuracy.
Speaking: Linguistic syntax: Knowledge of word order and sentence structure	Uses familiar patterned phrases and sentences.	Forms positive and negative : statements questions commands.	Adds detail to positive and negative statements questions commands.	Creates longer detailed sentences with clauses .	Varies sentence structures.
Speaking: Pronunciation	Imitates some English sounds; Pronunciation may interfere with meaning	Approximates English rhythm stress intonation although pronunciation may interfere with meaning	Uses comprehensible pronunciation appropriate rhythm appropriate intonation although errors may still occur.	Uses comprehensible pronunciation appropriate intonation with occasional errors.	Uses comprehensible pronunciation intonation (accented speech is expected and accepted).

This rubric has been adapted for the purposes of this curriculum guide based upon the evaluation criteria used for ELL students in Alberta available at: <http://www.learnalberta.ca/content/eslapb/search.html>

Self-Assessment Rubric - Student Use

	1 Beginning 	2 Developing 	3 Expanding 	4 Bridging 	5 Extending 
Listening: vocabulary	I understand words with pictures.	I still need some pictures.	I understand lots of words with a few helpful pictures.	I understand most words.	I understand a wide-range of vocabulary.
Listening: word order	I understands parts of sentences with pictures or gestures.	I understand three-step commands and simple, familiar sentences with some pictures or gestures.	I understand multi-step instructions and detailed sentences on familiar topics, with some pictures or gestures.	I understands multi-step instructions and complex sentences on familiar topics.	I understand detailed instructions and complex on unfamiliar topics without support.
Speaking: use vocabulary	I can use a few words to express basic understanding.	I can use some subject-specific words express understanding of familiar topics.	I can use many subject-specific words to express understanding of school concepts.	I can use many of subject-specific to express understanding of school concepts.	I can use a broad range of descriptive, specific to express understanding about abstract ideas.
Speaking: use grammar	I can use present tense verbs; some errors and omissions	I can use subject pronouns , present and regular past tense verbs ; may make word-choice and word-placement errors.	I can use object pronouns, irregular verb tenses and prepositions; some usage errors.	I can use possessive puns , irregular verb tenses, word forms ; occasional errors.	I can use many verb tenses , subject-verb agreement, a variety of word forms; increasing accuracy.
Speaking: word order	I can use patterned phrases.	I can form positive and negative : statements questions commands.	I can add detail to positive and negative statements questions commands.	I can create longer detailed sentences.	I can create complex sentences.
Speaking: Pronunciation	I can imitate some English sounds; People don't always understand.	When I speak it sounds like English but sometimes people don't understand.	When I speak it sounds like English. I still make mistakes.	When I speak it sounds like English. I still make a few mistakes.	When I speak it sounds like English. I might still have an accent.

References

Aurasma, (2015). Aurasma [Computer Software]. San Francisco, CA: Aurasma.

Alberta Education, (2012). *Supporting English language learners*. Retrieved from

<http://www.learnalberta.ca/content/eslapb/search.html>

Calhoun, E. (1999). Describing the Picture Word Inductive Model. In *Teaching Beginning*

Reading and Writing with the Picture Word Inductive Model. (Chapter 2). Retrieved from

<http://www.ascd.org/publications/books/199025/chapters/Describing-the-Picture-Word-Inductive-Model.aspx>

Greenwood, S. C., & Flanigan, K. (2007). Overlapping vocabulary and comprehension:

Context clues complement semantic gradients. *The Reading Teacher*, 61(3), 249-

254. Retrieved from http://digitalcommons.wcupa.edu/liter_facpub/1/

Joe, A., (2010). The quality and frequency of encounters with vocabulary in an English

for academic purposes programme. *Reading in a Foreign Language*, 22(1), 117-

138. Retrieved from <http://nflrc.hawaii.edu/rfl/April2010/articles/joe.pdf>

Kang, S., Dennis, J.R. (1995). The effects of computer-enhanced vocabulary lessons on achievement of esl grade school children. *Computers in the Schools*, 11(3), 25-35.

Retrieved from

[http://www.tandfonline.com/doi/abs/10.1300/J025v11n03_04?journalCode=wcis20#previ
ew](http://www.tandfonline.com/doi/abs/10.1300/J025v11n03_04?journalCode=wcis20#previ
ew)

Liu, T., (2009). A context aware ubiquitous learning environment for language listening and speaking in Jiang, X., Ma, M., & Chen, C., (Eds.) *Mobile multi-media processing*, (pp.517-525). Berlin: Springer

Lyster R., Leila R., (1997). *Corrective feedback and learner uptake*. Retrieved from

http://people.mcgill.ca/files/roy.lyster/Lyster_Ranta1997_SSLA.pdf

Takač, V. (2008) *Factors Affecting Vocabulary Learning and Acquisition*. Retrieved

From

[http://elt502ciu.wikispaces.com/file/view/Factors+Affecting+Vocabulary+Learning+and+A
cquisition.pdf](http://elt502ciu.wikispaces.com/file/view/Factors+Affecting+Vocabulary+Learning+and+A
cquisition.pdf)