Lesson Title:	Subject:	Grade(s):
Blender - Final Project Submission + AR Castle Share Out	Digital Media / Graphic Design (ADST)	8-12
Name:	Date:	Lesson #
		3.4

Rationale:

(lesson context and reasons why lesson matters)

These lessons are intended to provide a basic understanding of the Blender software, enabling students to use these basic understandings to allow them to develop greater skills and 3D modelling in future projects.

Curriculum Connections : https://curriculum.gov.bc.ca

Core Competency

Creative Thinking

Curricular Competency

Identify appropriate tools, technologies, materials, processes, and time needed for production.

Construct prototypes, making changes to tools, materials and procedures as needed

Identify and assess skills needed for design interests, and develop specific plans to learn or refine them over time.

Consider how others might build upon the design concept

Critically reflect on their design thinking and processes, and identify new design goals

Share progress while creating to increase opportunities for feedback and collaboration

Content:

Methods and principles of 3D Graphic Design

2D, 3D, Audio, and video digital media editing tolls, including paid, freeware, open source, and cloud-based solutions.

Tools and techniques for image manipulation

Learning Intentions	Activity	Assessment
Students Will be able to:		
Get an appreciation for other students' castle designs, and be inspired by design choices, focusing on the sharing aspect of this project.	Students will interact and display others Castle Designs through the Adobe Aero app.	Summative: Students will submit their final Blender Castle Projects into the LMS, along with the AR QR code. Students will be assessed based on the rubric provided in the assignment.

Prerequisite Concepts and Skills:
For student success
Basic understanding of Blender and the UI The basic understanding of various Blender Tools

Materials and Resources with References/Sources:		
For Teacher	For Students	
Computer	Computer	
Projector	Blender (Free Software)	
Blender (Free Software)	Import / Export Blender File and Adobe Aero	
Import / Export Blender File and Adobe Aero	(Instructions)	
(Instructions)	Apple Mobile Device (iPhone / iPad)	
Apple Mobile Device (iPhone / iPad)	Pencil (<i>Optional</i>)	
Printer with Paper (Digital is also possible)		
Tape (Optional)		
Pencils (<i>Optional</i>)		

Differentiated Instruction (DI):

Accommodations

Students may be able to create shapes or play with the program at their own pace. This is still introductory advanced work, so for students that work a bit slower, it may be advised that they can learn / follow along using an instruction sheet as the class runs at a different pace. (Instructions on various tools provided)

Organizational/Management Strategies:

Anything special to consider?

It is highly recommended to have a projector in a spot where all students are able to view and see the content easily.

It is strongly suggested that teachers familiarize themselves with Blender prior to teaching any lesson to reduce teacher frustration / confusion.

Teacher should create succinct steps when discussing new programs such as Blender

Concrete plans or instructions should be considered beforehand.

Possible Aboriginal Connections / First Peoples Principles of Learning

http://www.bced.gov.bc.ca/abed/principles_of_learning.pdf https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/aboriginal_education_bc.pdf

Learning takes patience and time.

Lesson Activities		
Teacher Activities	Student Activities	Pacing
Introduction		
Teacher prepares Blender Software and projector to begin class.	Students take their seat and log into their computers.	
Once students are settled, take attendance making note of who is not available for this introductory lesson.	Students will raise hand / provide attendance. <i>Teachers may have students complete</i> <i>daily tasks / activity to settle the class</i> <i>prior to or during attendance.</i>	5-10 mins

Body		
<i>Note: At this point, students have worked on the 'Final Castle Project' for several lessons / days. It is imperative that students have had an opportunity to work on their Final Castle Projects.</i>		
Final Project Submission		
Teacher will remind students that the submission day for the Castle Project is due, and that students are to submit their projects in a (.blend) format to the LMS, along with a copy of the QR Code for their AR experience.	Students will listen to the reminder regarding what needs to be submitted by the end of the lesson, and what content is to be expected regarding it.	10 mins
Teacher will explain that he will provide final moments for students to submit their projects and finalize any last touchups to their castles prior to submission.		
Final Touchups		
Teacher will provide students the opportunity to complete Final Touchups to their Blender design, or any level of completion on their AR implementation through Adobe Aero. Teacher will circulate the classroom, assisting students where necessary or working with students who may need additional assistance where needed.	Students will take the time to prepare their projects for submission, working on final touch ups on their Blender Castle, or ensuring that the AR Experience through Adobe Aero is functional and easily accessible.	~20 mins
AR Experience		
Teacher will gather QR Codes submitted via LMS. The teacher has the following two options:		
Online AR Experience		
The teacher will post the submitted QR codes through the classrooms LMS program, where students have the ability		

to scan them using their Apple Mobile Device and experience each students castle. Teacher will ask students to provide "Two Stars and a Wish" regarding each castle that is viewed as a way to provide positive, professional reinforcement of hard work.	Students will log into the classroom provided LMS, and using their Apple Devices (with Adobe Aero installed) scan the QR codes the teacher has placed onto the LMS, making sure to provide 'Two Stars and a Wish' regarding the AR experience.	20.40
Teacher is to remind students that inappropriate or unprofessional comments regarding student work is unacceptable.		mins
Teacher can monitor and ensure that comments left on students' work is appropriate and respectful, removing any harmful or demeaning comments.		
Teacher reminds students at the end of the activity to share their QR codes with their family / parents / guardians so they too can experience your AR experience (if possible).	If possible, students will share their AR experiences with their friends, family, guardians and/or parents to share their castle design and progress.	<5 mins
Paper AR Experience		
Teacher can (or students can) print their QR codes on the in-class printer. Using tape or other adhesive properties, students can tape their designs to appropriate locations within the classroom.	Students will print off their Adobe Aero QR codes loaded with their castles / experience and find a suitable and appropriate place within the classroom to place their QR Code.	5 mins
The teacher would, once all students have had the opportunity to print and place their QR codes in the classroom, would invite students to wander the classroom, scanning their peers QR codes and interacting with their Castle designs in AR. Students are to leave "Two Stars and a Wish" on the paper where the QR code is printed on, providing respectful and	Students will, when prompted, circulate the classroom, scanning their peers QR codes and interacting with their AR design. Students will provide 'Two Stars and a Wish' on the paper where the QR code is scanned.	30-40 mins

constructive comments on the student's project.		
The teacher will wander the classroom, ensuring that students are engaged with the activity, and taking an opportunity to model respectful behaviour through interacting with the QR codes themselves, and leaving feedback and comments.		
At the end of the activity, students are asked to go back to where they placed their QR codes in the room, collect them and read the feedback provided to the student from their peers.	Students are to go back to their QR codes they placed in the classroom and review the feedback that was left from their peers.	10 mins
Students are asked to bring their QR codes home, and share the AR experience with their family / friends	If possible, students will bring their QR code home to their family / friends to also experience.	<5 mins
Closure		
Teacher will ask students to log off their computers, push in their chairs and prepare for the next lesson.	Students will log off their computers, and prepare for their next class.	<5 mins

Post Lesson Reflections: