# **Course Profile: Angles Module**

**Background:** I am currently teaching a grade 6/7 split class of 23 students. I have 10, grade 7 students and 13, grade 6 students. However, for this module, I will be focusing on my grade 6 students only. Students have been 1:1 with Chromebooks since grade 5, and have been using a similar module for math this year. They are familiar with the routine of navigating Google Classroom and Google Sites for their learning.

## **ANALYSIS**

## **Purpose**

The main needs being addressed with this course module are;

- Balance of a grade 6/7 split classroom
- Inconsistency of attendance
- Complex classroom

More specifically this course module will focus on enhancing and engaging students' learning experiences to aid those who are consistently behind in class work due to behavioral issues and/or absences, all while also reaching students who are on pace or ahead.

### **Learner Personas**

Students who are in grade 6 ranging in age from 11 to 12 years of age. Additional notes;

- Two students with 60% attendance
- One student on an IEP with an Education Assistant (math)
- Two students who are below grade level (math)
- Two students with diagnosed ADHD

#### **Course Overview**

This course module will guide students through 7 lessons related to angles from the Shape and Space strand. The objectives have been taken from the <u>Saskatchewan Curriculum</u> website (listed below).

This is a blended learning (asynchronous/synchronous) course. Students will alternate between synchronous (direct instruction) and asynchronous (independent work). During the synchronous days, students will work as a whole class, allowing the facilitator (me) to clarify questions from their asynchronous work day and move forward with new content (when suitable).

Each day students will log in to their Google Classroom account to access their math Google Site. The Google Site has been designed for students to navigate independently at their own pace. Each lesson contains 4 to 5 steps; video (made by the teacher),

notes, practice, digital check-in, and an exit ticket (every other lesson) which they physically hand in to the teacher before moving on to the next lesson. While I am giving direct instruction to the grade 7 students, the grade 6 students will simultaneously work on their class content independently. If all students are on pace, this module is designed to be completed over 2 weeks. That being said, depending on attendance, commitment, and engagement the timeline will vary for each student and their specific needs.

# **DESIGN**

# **Course-Level Objectives**

Although there are 5 objectives in the Shape and Space strand, this module will only focus on the first one, with plans to continue the modules for the remaining 4.

<u>SS6.1</u> Demonstrate understanding of angles including:

- Identify examples classifying angles
- Estimate measures
- Determine angle measures in degrees
- Draw angles
- Apply angle relationships in triangles and quadrilaterals

# **Instructional Approach**

The main LMS that will be used are Google Sites and Google Classroom. Google Classroom will act as a host for the Google Sites link. Embedded within Google Sites will be instructional videos created by the teacher using <a href="Lumi">Lumi</a> and <a href="Screencastify">Screencastify</a> to make the learner's experience more personalized. Accompanying each video will be a set of guided notes that students will fill in as they watch. <a href="MindMeister">MindMeister</a> will be used as a collaborative group discussion tool, and <a href="GeoGebra">GeoGebra</a> will engage learners with interactive activities. For assessments, I will be using <a href="Mathletics">Mathletics</a>, <a href="Quizzes">Quizzes</a>, and Google Forms to give instant feedback to students as they maneuver through each lesson.

# **Learning Environment**

Learners	
<ul> <li>Opportunities</li> <li>Work at their own pace</li> <li>Work from anywhere</li> <li>Review lessons multiple times</li> <li>Instant feedback</li> </ul>	<ul> <li>Limitations</li> <li>Additional distractions</li> <li>Not face-to-face</li> <li>Need to be self-motivated</li> <li>Signing into the Chromebooks takes time</li> </ul>
Facilitators	

### Opportunities

- Allows for more one-on-one check-ins with learners
- Efficient time management (especially in a split class)
- Can be shared with colleagues easily

### Limitations

- Will need to monitor technology closely
- Different types of behavioral management issues with the integration of tech
- Need to be aware of how to troubleshoot technology problems that occur

# **Learning Technologies**

## **Opportunities**

- Access to more learning opportunities outside the classroom
- More engaging
- The tools and apps that are integrated are ones that our students will need to be familiar with for their future
- Provide instant feedback to students

#### Limitations

- A stable WIFI connection is not guaranteed each day
- Tech tools and/or apps can be inconsistent
- Getting off task is easier
- Upkeep of charging devices

### **Access & Cost**

### **Opportunities**

- Available to learn from anywhere
- Google Classroom & Google Sites are free to use

#### Limitations

 Need access to a personal device at home to stay connected to the class

# **Pre-Planning**

# Lesson 1: Angles in the Real World

# Learning objective

 Students will be introduced to angles by making observations and connections to their surroundings.

### Assessment

- Quizizz (Multiple choice)
- Picture upload (Google Classroom)

#### Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes
- Workbook practice (answer key uploaded)
- Mindmeister (digital group discussion board)

# **Lesson 2: Identify and Classify Angles**

### Learning objective

• Students will identify and classify acute, obtuse, right, straight, and reflex angles.

#### Assessment

- Mathletics (closed questions)
- Exit Ticket (hand into teacher)

# Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes
- Workbook practice (answer key uploaded)

#### **Lesson 3: Estimate Measurements**

### Learning objective

Students will estimate the measurements of angles.

#### Assessment

• Google Forms (multiple choice)

### Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes
- Workbook practice (answer key uploaded)
- Mindmeister (digital group discussion board)

# Lesson 4: Determine Angle Measurements in Degrees

### Learning objective

• Using a protractor students will determine angle measurements in degrees.

#### Assessment

- Mathletics (closed questions)
- My Name in Angles (activity)
- Exit Ticket (hand into teacher)

### Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes
- Workbook practice (answer key uploaded)
- GeoGebra (interactive activity)

### **Lesson 5: Drawing Angles**

### Learning objective

• Students will practice drawing angles given specific measurements.

#### Assessment

- Angle Task Cards (activity)
- Exit Ticket (hand into teacher)

### Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes

- Workbook practice (answer key uploaded)
- GeoGebra (interactive activity)

### Lesson 6: Apply Angle Relationships in Triangles and Quadrilaterals

### Learning objective

• Students will compare and contrast the relationship between triangles and quadrilaterals.

#### Assessment

- Venn Diagram (paper)
- Mathletics (closed questions)

### Learning Material

- Chromebook
- Pre-recorded instructional video using Screencastify and Lumi.
- Guided notes
- Workbook practice (answer key uploaded)
- Mindmeister (digital group discussion board)

### **Lesson 7: Review & Final Assessment**

## Learning objective

• Students will use their acquired knowledge from the first 6 lessons to express their understanding in the form of a summative assessment (test or project).

#### Assessment

- Written Test
- Art Project

### Learning Material

- Test
- Art supplies