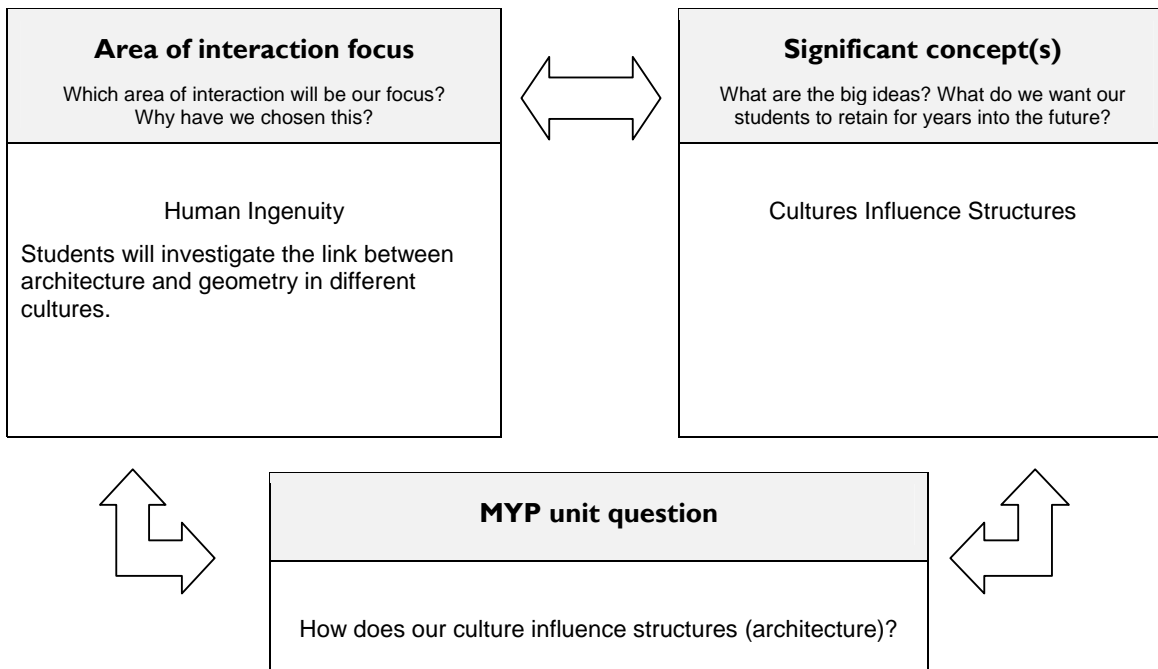


MYP unit planner

| | |
|-------------------------|--|
| Unit title | How do cultures shape structures? |
| Teacher(s) | Beverly Brown |
| Subject and grade level | 8 th Grade Advanced Math |
| Time frame and duration | 32 days |

Stage I: Integrate significant concept, area of interaction and unit question



| |
|--|
| <p>Assessment</p> <p>What task(s) will allow students the opportunity to respond to the unit question?</p> <p>What will constitute acceptable evidence of understanding? How will students show what they have understood?</p> |
| <p>Students will complete a comprehensive exam on the above concepts.</p> <p>Students will research the shapes of structures (architecture) found in different cultures, why specific geometric shapes were used to create them, and what impact the structures had on society. Students will also identify angles, parallel lines, transversals found in the structures, and present their findings in a Glogster poster.</p> |
| <p>Which specific MYP objectives will be addressed during this unit?</p> |
| <p>Criterion A: Knowledge and Understanding</p> <p>Criterion D: Communication in Mathematics</p> |
| <p>Which MYP assessment criteria will be used?</p> |

Students will know and demonstrate understanding of the concepts from the five branches of mathematics.

Students will use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations, including those in real-life contexts.

Students will use appropriate mathematical language (notation, symbols, terminology) in both oral and written explanations.

Students will use different forms of mathematical representation (formulae, diagrams, tables, charts, graphs and models).

Stage 2: Backward planning: from the assessment to the learning activities through inquiry

Content

What knowledge and/or skills (from the course overview) are going to be used to enable the student to respond to the unit question?

What (if any) state, provincial, district, or local standards/skills are to be addressed? How can they be unpacked to develop the significant concept(s) for stage 1?

MA.8.G.2.2

MA.8.G.2.3

- Students will measure, draw, classify, and find missing angles.
- Student will identify relationships of angles formed by two parallel lines cut by a transversal.
- Students identify and classify quadrilaterals.
- Students find the sum of the angle measures of a polygon and the measure of an interior angle of a regular polygon.

Approaches to learning

How will this unit contribute to the overall development of subject-specific and general approaches to learning skills?

Time management, information literacy, use a variety media, presentation skills, accessing information, selecting an organizing information, generating ideas

Learning experiences

How will students know what is expected of them? Will they see examples, rubrics, templates?

How will students acquire the knowledge and practise the skills required? How will they practise applying these?

Do the students have enough prior knowledge? How will we know?

Teaching strategies

How will we use formative assessment to give students feedback during the unit?

What different teaching methodologies will we employ?

How are we differentiating teaching and learning for all? How have we made provision for those learning in a language other than their mother tongue? How have we considered those with special educational needs?

Rubric for Glogster poster

Students will solve real-world problems involving angles and parallel lines and transversals.

Students will identify the impact of these structures on society.

Pre-test for prior knowledge

Think-Pair-Share

Cooperative learning

Distributed Guided practice

Independent practice

Graphic Organizers

Lesson/Learning Reflection Question

| | |
|--|--------------------------------------|
| | Homework Assignments Quizzes/Test |
| Resources What resources are available to us? How will our classroom environment, local environment and/or the community be used to facilitate students' experiences during the unit? | |
| Textbook, mobile laptop computers, calculators, protractors, internet | |

Ongoing reflections and evaluation

In keeping an ongoing record, consider the following questions. There are further stimulus questions at the end of the “Planning for teaching and learning” section of *MYP: From principles into practice*.

Students and teachers

What did we find compelling? Were our disciplinary knowledge/skills challenged in any way?
 What inquiries arose during the learning? What, if any, extension activities arose?
 How did we reflect—both on the unit and on our own learning?
 Which attributes of the learner profile were encouraged through this unit? What opportunities were there for student-initiated action?

Possible connections

How successful was the collaboration with other teachers within my subject group and from other subject groups?
 What interdisciplinary understandings were or could be forged through collaboration with other subjects?

Assessment

Were students able to demonstrate their learning?
 How did the assessment tasks allow students to demonstrate the learning objectives identified for this unit? How did I make sure students were invited to achieve at all levels of the criteria descriptors?
 Are we prepared for the next stage?

Data collection

How did we decide on the data to collect? Was it useful?

Figure 12
MYP unit planner