Inquiry: Establishing the purpose of an interdisciplinary unit

Purpose of integration

**Complex explanation:**
Students will understand why and how change occurs as a result of cultural encounters, considering historical examples, and the process of collaboration within their own work. By looking at examples from different disciplines, students will gain a deeper understanding of the concept of change as it relates to religious, cultural and scientific ideas.

**Synthesis:**
Students will understand how we can use music to create a symbolic representation of places and events in the past. Students will make sense of their historical understanding of the Silk Route and translate this knowledge into an original piece of music that in itself draws on a variety of musical traditions.

**Key concept(s) / (related concepts)**

**Key concept: Change**
Students will investigate the causes, processes and consequences of change in an environment of cultural interaction.

**Related concept 1: Exchange**
Students explore the different forms of economic, cultural and intellectual exchange along the Silk Route. They experience the exchange of ideas themselves through collaborative group work conducted throughout the unit, and reflect on this process in their summative assessment.

**Related concept 2: Narrative**
The summative assessment of the unit is a script with musical accompaniment. In music lessons students explore ways that music tells a story and explore epic poems and songs. In I&S students understand elements of continuity and change in the history of the Silk Route. In the summative assessment they write a script exploring the experiences of a Silk Route trader.

**Global Context**

**Orientation in space and time:**
Students will learn about the interconnectedness of civilisations along the Silk Route, and how the connections forged through economic activities led to interaction and exchange between different groups of people. They will understand how these interactions changed over time.
### Statement of inquiry

Encounters between civilisations and communities can result in the fusion of ideas and collaborative innovation.

### Inquiry questions

**Factual:** What kinds of collaborative innovation came about as a result of trade along the Silk Route? (Process of change)
**Conceptual:** Why and in what ways does collaboration lead to innovation? (Causes of change)
**Debatable:** Which areas of people’s lives were most changed by the exchanges along the Silk Route? (Consequences of change)

### Summative assessment—interdisciplinary performance(s) of understanding

<table>
<thead>
<tr>
<th>Interdisciplinary criteria:</th>
<th>Task(s):</th>
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<tbody>
<tr>
<td>Integrating disciplines</td>
<td>Students will dramatise their understanding of the causes, processes and results of collaborative exchange and innovation along the Silk Route. They will use the experiences of a caravanserai as their starting point to explore these concepts. The plot, dialogue and incidental music of their play will show how change may have occurred through the exchange of ideas. In addition, their music will use devices from a variety of traditions to represent the physical environments and challenges encountered by the traders. Through the experience of working in groups, students will be able to see the fusion of ideas and collaborative innovation in a real-life context – their understanding of this will be assessed by their reflection task.</td>
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<td>Reflecting</td>
<td><strong>Note:</strong> Although the play and music can, and should, be performed, it is the script with music cues, and the unit reflection, that will be assessed.</td>
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### Approaches to learning (ATL)

**Thinking: Creativity and innovation**

Students have many activities in both disciplines in which they have to synthesise ideas to create something new. This culminates in the script writing and musical composition tasks, but can also been seen in the map-making activity, presentations, the timeline activity, etc.

**Communication: Collaboration**

Students have to work together to compose music, plan and draft a script, and make presentations. They will learn to negotiate difference, to compromise and to bring diverse ideas together as a group, rather than as an individual.
## Disciplinary Grounding

<table>
<thead>
<tr>
<th>Subject: Individuals and societies</th>
<th>Subject: Arts (Music)</th>
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<tr>
<td><strong>MYP Objective:</strong> Knowledge and understanding Thinking critically</td>
<td><strong>MYP Objective:</strong> Using knowledge Thinking creatively</td>
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<td><strong>Related Concepts:</strong> Culture Innovation</td>
<td><strong>Related Concepts:</strong> Composition Innovation</td>
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### Content:

**Geography of the Silk Route:**
The features of different parts of the route, and the challenges and opportunities these presented to traders.

**Trade along the Silk Route:**
The types of goods traded and the idea of barter/exchange.

**The history of the Silk Route:**
Key individuals who lived at the time and influenced the growth or understanding of the Silk Route.

**Cultures along the Silk Route:**
Different cultural features, their similarities and differences. Language, religion, arts, music, astronomy.

**Cultural integration along the Silk Route:**
How these cultures adapted, integrated and evolved as a result of contact with one another.

**Music as a symbol:**
Music can represent an idea, an event or feelings.

**Musical traditions along the Silk Route:**
Focusing on musical styles from China, Kazakhstan, Kyrgyzstan and the Pamir region of Tajikistan.

**Types of musical instruments and how they were used within these traditions**

**Contemporary music from along the Silk Route:**
How these styles are being reinterpreted in modern music, and the fusion of different styles.

**Composing incidental music for a play:**
How music can represent an idea, an event or feelings.
Disciplinary learning engagements and teaching strategies

Mapping the Silk Route:

Identify the routes that comprised the Silk Route and the areas through which it travelled. It is important that students come to understand that this was not one route and that traders worked different sections of it, rather than travelling the whole distance. Use an online map to introduce the route and then divide into different sections for students to research. They should gain an initial understanding of the physical and human environments: geographical, climatic, cultural, linguistic and religious features of the regions. This could be done in groups to report back to the class or as a jigsaw activity. Students should then identify elements of similarity and difference between the regions. This could lead to a discussion about which section of the Silk Route would be most dangerous/challenging to travel.

Students estimate the times taken to travel along the Silk Route by timing their own walking pace on the flat and on an incline and multiplying it along the lengths of the different sections of the route.

Trade along the Silk Route – barter/trade simulation:

Students work in groups to represent traders from different places along the Silk Route. They have different goods to exchange and all need to obtain different products to take back to their home markets.

At the end of the game students should discuss the challenges to trading with one another, why exchanges like this would have developed in the past, and how the game is similar to, and different from, the real exchanges along the Silk Route.

Music can represent an idea, an event or feelings:

Listening and analysis: Borodin's ‘In the Steppes of Central Asia’

Question sheet: How is the journey represented? How are footsteps represented? How do you think the travellers might have felt – loneliness, fear, excitement – and how are these feelings shown in the music? Could the music represent the caravan being seen by an onlooker – coming out of the desert, passing by and then fading into the distance?

Introduction of inquiry cycle:

Students input thoughts and understandings onto their individual inquiry cycles, connecting ideas between music and I&S.

Musical journey along the Silk Route:

Music from China:
Chinese instruments and the pentatonic scale. Students listen to examples of Chinese instrumental music and compose ideas using the pentatonic scale on appropriate keyboard voices.

Musical instruments along the Silk Route extended independent task:

Students research into the musical traditions in the countries along the Silk Route, mapping their findings onto a map they create and analysing the findings. They should find instruments common to many countries along the route and can find ways the instruments have evolved. This links directly to the key concept of Change.
The history of the Silk Route:

Students will research key individuals (Ibn Battuta, Marco Polo, Kublai Khan, Genghis Khan, Xuan Zhang) and sites on the Silk Route (Kashgar, Bukhara, Chang’an/Xi’an, Baghdad). Each pair of students researches an individual or place and prepares dates for a collaborative timeline. Construct a whole-class timeline (virtually or on the classroom wall). Pick out elements of continuity and change in the development of the Silk Routes.

Cultural divergence and mixing along the Silk Route, focusing on language, religion, arts, music, astronomy:
(During these lessons students will also begin work on their script, including ideas and examples as they discover them.)

Language and communication:
Students will learn about the major languages of the Silk Route, and linguistic challenges encountered by the travellers in communicating with people of different cultural and linguistic backgrounds. Students will explore ways in which the languages are similar and different, and examples of linguistic merging, by using audio clips of the different languages that highlight similarity and difference. The language tree diagram can help to show how languages are connected to one another.

Belief systems along the Silk Route:
Students will learn about some of the belief systems, and understand the similarities and differences between them. They will explore examples that show the mixing of religions (e.g. juxtaposition of Confucianism and Islam in western China) and the spread of religions along the Silk Route (Buddhism from India into East Asia).

Music traditions of Kazakhstan and Kyrgyzstan:
Listening/viewing instrumental and vocal music which tells stories through melodic and rhythmic musical devices, singing and narrative poems. Relate to English literature – ‘The Highwayman’ by Alfred Noyes. Students create their own narrative poems in small groups, telling a story related to journeying along the Silk Route.

Songs from the Pamir region:
Students learn a song, and some play percussion/keyboard accompaniment.

Central Asian modes:
Students listen to maqam examples from Central Asia and compose instrumental music based on it.

Contemporary cultural exchange along the Silk Route:
Students watch/listen to examples of musical fusion generated by musicians such as those who are part of the Silk Route Ensemble and the Aga Khan Music Initiative. These examples provide a model for the limitless of musical collaboration and fusion.

Composing incidental music for a play:
Students put together all their understanding from the above activities and create incidental music for a play they have scripted in I&S lessons. They will be able to demonstrate their understanding of different melodic modes and instruments which will indicate characters/setting. They can use rhythmic devices to represent motion (footsteps along the Silk Route) or variation in dynamics/texture to show something approaching. They can use narrative poem with rhythmic accompaniment and compose songs. They will use a mixture of vocal and instrumental music to add colour and variety.
**Arts of the Silk Route:**
This will work hand in hand with the understanding of belief systems as much of the art includes expressions of religious belief. Students will look at artefacts taken from along the Silk Route. They will recognise religious motifs and learn some of the meanings of iconography. The resource ‘Treasures of the Silk Route’ is designed for this lesson.

**Astronomy and the cultures of the Silk Route:**
Students will understand the importance of astronomy in different cultures and how this led to the exchange of knowledge and ideas – using examples and sources from the China Institute booklet ‘From Silk to Oil: 3. Exchange of Goods and Ideas Along The Silk Routes’.

**Music of the Silk Route** (Joint task with the Music Department)
Understand how music and musical instruments evolve over time and spread beyond their land of origin, explain the role that instruments played in the interaction of people and cultures along the Silk Route, and recognise the value of the musical diversity found along the Silk Route. Students will complete a mapping exercise.
### Interdisciplinary learning process

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<tr>
<th>Interdisciplinary learning experiences and teaching strategies</th>
<th>Formative assessment</th>
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<tr>
<td>Students use an inquiry cycle common to both subjects as they work through this unit. They use the cycle to reflect, pose questions, note down findings and make connections.</td>
<td>The ‘mapping instruments along the Silk Route’ activity is used as a common formative assessment.</td>
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<td>The musical instruments map activity focuses on the ATL skills of research, presentation and analysis. It requires students to research musical traditions along the Silk Route and present their research on a map. The map creation uses I&amp;S skills of mapping, use of scale and creation of symbols. Students analyse their research and add this information to the map.</td>
<td>The inquiry cycle and arts process journal can be used to monitor students’ understanding and progress as the unit progresses.</td>
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<td>The summative assessment is an integrated task and draws on the understandings and skills from both disciplines.</td>
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### Differentiation

- **Formative assessment**
  - The ‘mapping instruments along the Silk Route’ activity is used as a common formative assessment.
  - The inquiry cycle and arts process journal can be used to monitor students’ understanding and progress as the unit progresses.

- **Differentiation**
  - The music activities are very open-ended with opportunities for extension work for students with a strong background in music performance and composition. Grouped and paired work allows for students of a range of ability levels to mix and share ideas.
  - Within I&S, research tasks can be differentiated to allocate topics of varying levels of challenge to appropriate students.
  - Group work in I&S allows students to experience the collaborative process and exchange ideas, but also enables students from a range of ability levels to share ideas and understandings.
  - The wide range of tasks in the unit should allow learners with a diverse range of learning styles to acquire and express their understanding of the statement of inquiry.
  - By considering how music can be used to represent physical environments or human experiences, students are synthesising aspects of their different learning styles (visual, auditory, kinaesthetic, interpersonal). This can allow the teacher to draw on the diverse range of skills in the class and demonstrate how different strengths can be brought together to create a richer understanding of the topic.
## Resources

| General resources: | • A range of prepared curriculum resources covering many of the topics covered by this unit:  
| | http://www.chinainstitute.org/education/foreducators/curriculum-resources/  
| | • A quite simple introduction for students and teachers:  
| | http://www.amnh.org/exhibitions/past-exhibitions/traveling-the-silk-road/take-a-journey/xian  
| Geography of the Silk Route: | • A range of maps covering different aspects relevant to the unit:  
| | http://virtuallabs.stanford.edu/silkroad/SilkRoad.html  
| | • A detailed overview for teachers of the geography of the Silk Route:  
| | http://asiasociety.org/countries/trade-exchange/geographical-setting-silk-roads  
| History: | • An overview of the history of the Silk Route:  
| | http://www.chinaoceantour.com/enimage/culturesilkroadgeography.htm  
| | • ‘Crash Course’ video on the Silk Route – a 10-minute introduction:  
| | http://www.youtube.com/watch?v=vfe-eNq-Qyg  
| Language: | • Diagram showing language tree of Indo-European languages and their connections:  
| | [http://anthropology.net/2008/02/05/the-indo-european-language-tree/the-indo-european-branches-of-the-language-tree/](http://anthropology.net/2008/02/05/the-indo-european-language-tree/the-indo-european-branches-of-the-language-tree/)  
| Music: | • The Aga Khan Music Initiative:  
| | [http://www.akdn.org/aktc_music.asp](http://www.akdn.org/aktc_music.asp) (including extracts that illustrate the different musical traditions)  
| Art: | • A very detailed discussion of Dr Annette Juliano’s theories of cultural mixing on Chinese funerary furniture. Includes pictures of examples:  
| | [http://www.transoxiana.org/Eran/Articles/juliano.html](http://www.transoxiana.org/Eran/Articles/juliano.html)  
| | • Link to the Art Gallery NSW’s exhibition of the Yu Hong sarcophagus:  
| | • The Aga Khan Academies resource ‘Treasures of the Silk Route’ is available at:  
| | [http://www.agakhanacademies.org/general/teacher-resources](http://www.agakhanacademies.org/general/teacher-resources)  
| | • *Stories from the Silk Road* by Cherry Gilchrist. Barefoot Books (1999). |
Reflection: Considering the planning, process and impact of interdisciplinary inquiry

<table>
<thead>
<tr>
<th>Prior to teaching the unit</th>
<th>During teaching</th>
<th>After teaching the unit</th>
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<tr>
<td>The interdisciplinary units (IDU) assessment criteria need to be shared with students early on it the unit so they are aware of the expectation to make connections across subjects.</td>
<td>We have seen that students are not very clear about how to do the mapping activity and realised there is a need for a clearer, more detailed, rubric.</td>
<td>As a first attempt at an IDU the unit went reasonably well. The students were able to make connections across the subjects. I think we did not quite achieve teaching and learning through the key/related concepts, but students were definitely able to use them to make connections between the two disciplines.</td>
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<tr>
<td><strong>Individuals and societies:</strong> Students may be unfamiliar with basic mapping skills, depending on their prior educational experiences. Students progressing from the PYP will be familiar with these, but we need to assess the level of skill in students new to the school.</td>
<td>We could have made the key concept of change more explicit in the activity by encouraging students to articulate how instrument design changed along the route.</td>
<td>As this batch of students were not familiar with the use or function of an inquiry cycle, this was not a very effective visual learning tool. We found that they were filling it in, rather than using it to think and plan. We feel that when the unit is explored again by students who are familiar with this thinking tool, it will work very well as a way for students to make connections and display thinking visually.</td>
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<td><strong>Music:</strong> Students will build on their understanding of the ways that musical elements can be used to create certain effects.</td>
<td>There was a lot of new terminology for students to grasp. We need to make sure that we reinforce the new words in the unit so that students become familiar with them and are able to use them in their discussions and written work.</td>
<td>Similarly, this group, who are in their first year of an IB programme, have not previously been exposed to reflective learning or metacognitive processes, and the reflections showed their inexperience in this area.</td>
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<tr>
<td>They can use their understanding of the departure from and return to a home note as a useful tool in composing simple melodies.</td>
<td></td>
<td>We would like to introduce more artefacts so that students can see, touch and feel the kinds of goods traded along the route</td>
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</table>
Individuals and societies:
The group work was an effective way of allowing students to collaborate and model the idea of innovation through the exchange of ideas. Extended writing was more of a challenge. Students used very modern slang to convey their ideas. We could spend more time next year thinking about the use of more formal language between traders from different cultures.

Music:
Students had to write a plan of the incidental music for the play. While I gave them models of the choices for the layout, I did not give models for the content, so some plans were not detailed enough. This did not necessarily accurately reflect the students’ understanding. We should collect the materials for the mapping task into a pack so that students can work more independently, as this year it was quite teacher-led.