The interdisciplinary world

Secondary: (ages 11 – 14)

Interdisciplinary

Students are challenged to produce a creative, unusual and different output that represents and connects the contents studied in a number of different subjects. These creative products provide a tool through which students attempt to articulate possible narratives to explain the connections between disciplines and between the past and the present moment. Finally, they present and explain what they created to the school in small groups.

Time allocation	About 10 lesson periods		
Subject content	This unit provides opportunities to develop areas from across the curriculum, depending on what subjects are chosen. This example, deals with topics from history, literature, and social studies/citizenship		
Creative and critical thinking	 This unit has a creativity and critical thinking focus: Making connections between knowledge from different disciplines 		
Other skills	Communication, Collaboration, Persistence/Perseverance		
Key words	social studies; multidisciplinary; cross-discipline; team teaching		

Products and processes to assess

Students collaborate to produce and present an output that links the knowledge they have gained in three different disciplines. At the highest levels of achievement, their output is imaginative and unusual with a high level of personal features, whilst communicating subject knowledge accurately and making reasonable links between different subjects. Students consider several ways of meeting the challenge, and show a clear understanding of the strengths and limitations of the chosen and alternative positions as well as their areas of personal novelty. They participate actively in the process and are open to the ideas, critiques, and feedback of others when relevant.

Teaching and Learning plan

This plan suggests potential steps for implementing the activity. Teachers can introduce as many modifications as they see fit to adapt the activity to their teaching context.

Step	Duration	Teacher and student roles	Subject content	Creativity and critical thinking
1	Prior to lesson period 1	The teachers plan together in advance how and when the contents of each subject will be given to the students to facilitate connections between the subjects.		
2	Lesson periods 1 – 3 (this may need to be extended depending on topics chosen)	The teachers explain that students are going to produce a creative output that makes links between different subjects. The teachers show them the rubric. Specific disciplinary content is then presented. This content can be from any subjects that you wish to build connections and synergies between and area of subject knowledge within those disciplines. For example: * Art: Modern and Contemporary Art - Styles, Construction and Rereading of modern works; * Sociology/Citizenship: Rights and citizenship in Brazil - Observe achievements and setbacks throughout history by analyzing the current moment; * History: The 1st Republic in Brazil and its economic and social repercussions.	Subject knowledge from any discipline according to local curriculum (e.g. rereading modern works, history of citizenship in Brazil, and 1st Republic in Brazil)	Observing and describing relevant information and beginning to make connections and integrate different disciplinary perspectives
3	Lesson periods 4	The teachers ask the students to organize themselves into small groups and challenge them to produce something creative, unusual, or different that represents and connects the contents studied in the three subjects. The students can first brainstorm ideas for possible outputs (e.g. paintings, stories, plays, podcasts, documentaries, models, history books, exhibitions, cartoons etc.). If possible, this discussion can be led by students but teachers may need to encourage students to take roles (e.g. chair, note-taker, researcher, etc.) or otherwise organize their thinking. Teachers can challenge students to justify why they think this is a good choice for showing the links between the subjects, why they think it is unusual (compared to what?) and whether they think it can realistically be achieved in the time given. Students come up with a shortlist of ideas and then examine the strengths and limitations of each before deciding as a group which idea they will pursue	Discussing how to represent and connect subject knowledge	Generating and exploring radical or unusual ideas for outputs Identifying strengths and weaknesses of proposed outputs Making connections between knowledge from different disciplines Identifying and questioning disciplinary convention Considering several perspectives
4	Lesson periods 5-9	Once students have decided what output they are creating, they should start planning and producing the content. What elements are they going to cover and why? What links are they going to highlight and why? They are then given a set amount of time and are expected to work independently, with the guidance and support of the teachers if needed, to complete their work and prepare a presentation of it.	Articulating and explaining subject knowledge and links between ideas from different disciplines	Producing a meaningful output that is personally novel Reflecting on chosen solutions relative to alternatives

		Teachers can collaborate to support students to improve both the subject content and to regularly reflect on and assess their work according to the rubric and make appropriate amendments		
5	Lesson periods 5-9	Presentation of the works by small groups with the application of the creativity rubric. Teachers and peers give feedback on the students' work so that the work can again be reviewed and improved. This process can be repeated across a number of lessons, until their products are completely done.	Communicating the links between ideas from different disciplines	Identifying strengths and weaknesses and appraising their own work and the work of others
6	Lesson period 10	Finally, they will present to the school what they created in small groups. With what they have produced, pupils display the objects and articulate possible narratives to explain their ideas about connections between the past and the present moment or between the different areas of subject knowledge. The pupils should explain the source of the objects as well.	Developing technical skills in the presentation of materials and awareness of interdisciplinarity	Presenting a meaningful out put that is personally novel Reflecting on steps taken and the novelty of the output compared to possible alternatives
		As appropriate, the activity can be closed with a reflective discussion on steps taken, choices made, and what has been learned and a self-evaluation using the rubric of creativity and critical thinking.		

Resources and examples for inspiration

Web and print

> Students may need to complete some independent research so should have access to books and/or the internet

Other

> Recycling materials or other materials that students need to product their output

Opportunities to adapt, extend, and enrich

> This could be extended to any area of the curriculum

Creativity and critical thinking rubric

•Mapping of the different steps of the lesson plan against the OECD rubric to identify the creative and/or critical thinking skills the different parts of the lesson aim to develop

	CREATIVITY Coming up with new ideas and solutions	Steps	CRITICAL THINKING Questioning and evaluating ideas and solutions	Steps
INQUIRING	Make connections to other concepts and knowledge from the same or from other disciplines	2,3	Identify and question assumptions and generally accepted ideas or practices	2,3
IMAGINING	Generate and play with unusual and radical ideas	2,3,4	Consider several perspectives on a problem based on different assumptions	3
DOING	Produce, perform or envision a meaningful output that is personally novel	4-6	Explain both strengths and limitations of a product, a solution or a theory justified on logical, ethical or aesthetic criteria	5
REFLECTING	Reflect on the novelty of solution and of its possible consequences	2,3,4	Reflect on the chosen solution/position relative to possible alternatives	4,5,6

Appendix

Possible self or peer assessment questions

- Which connections did you make?
- What do you think your connections add to the idea/solution/product?
- What were the other connections you thought about? Why do you think these are better?
- In which other solutions do you think these kinds of connections could be useful?
- What do you believe is unusual, risky or radical in your product/ idea/ solution?
- Where do you think the idea/ product/ solution could be stretched? How can I help you stretch it?
- Which other possibilities and ideas/ products did you consider and compare to yours?
- If you had more time/ resources in which direction would you go? Do you think you could make your solution more useful/ applicable?