

“CLIL no 1.º Ciclo do Ensino Básico”

Unidade de Formação Contínua

Faculdade de Letras da Universidade do Porto

Bookmark Design

Exploring Material Functionality and Sustainability

Lesson Plan & Materials

Ana Correia
Samanta Paralta

February, 2024

CLIL lesson plan

Ana Correia
Samanta Paralta

1 A context

Samanta's students have been invited by the School Library to participate in an international bookmark exchange project. The planned sequence of activities aims to engage students in this initiative while incorporating content related to *Educação Artística* and *Estudo do Meio*. The CLIL lesson plan detailed here is integrated into the midpoint of the unit.

2 The unit

In this unit students will be exploring and integrating:

- artistic concepts related to **Medium** (what we use in a surface to create something new), **Support** (the surface we can create in) and **Creativity**
- scientific concepts connected to **Materials** and their **Properties** and **Environment**

The lessons will be organized in the following sequence:

- Lesson 1 - Sustainable materials: students bring different materials to class, explore their properties, reflect on the environmental impact and on ways to avoid waste. Artists using waste as medium will be explored.
- Lesson 2 - Materials and their properties: students explore different bookmarks and categorize them according to the support used. They identify the properties in those materials that make them suitable for the purpose.
- **Lesson 3 - Functionality: students explore materials brought to class to choose the most suitable for their bookmarks. They justify their choice according to functionality and sustainability criteria.**
- Lesson 4 - Aesthetics: students explore bookmarks and some artists to understand concepts such as conventional/unconventional; creative; ...
- Lesson 5 - The drafts: students draft their bookmarks and get feedback from peers and teacher
- Lesson 6 - The bookmarks: students create their bookmarks

3 A rationale

This lesson plan focuses on lesson 3, the moment learners will evaluate materials based on functionality (thin, light, flexible and good for support) and sustainability criteria (waste, inexpensive and durable materials - standing for ecological and economical sustainability) according to their final purpose (appropriate support for a bookmark).

To do so effectively, they will use both language and content knowledge learnt in previous lessons. By this class, they have already sorted objects into boxes according to the materials they are made of. They have also discussed some simplified concepts connected to design/arts (materials, media and supports) and science (properties of materials) in English. To improve students' understanding of the concepts, questions such as "What can we use to create something? (materials); On what surfaces can we create it? (supports); What can we use on that surface? (media); And what can we use to make a bookmark?" - were explored in previous classes.

Given this, we expect that this lesson and the collaborative activity of evaluating materials for completing a grid will give learners the opportunity to make informed decisions when selecting materials for their bookmarks, which will be done in the next, and last, lesson. By then, learners will choose materials to create bookmarks according to functionality and sustainability.

4

Some references

- Abreu, C. R., Esteves, V. R. (2023). Easy-Peasy English - Inglês - 3.º Ano. Porto Editora.
- Harmer, J. (2012). Essential teacher knowledge: core concepts in English language teaching. Harlow, England: Pearson Education Ltd. <https://www.ircambridge.com/books/Essential-Teacher-Knowledge.pdf>
- Lima, B., Peixoto, B., Pedrosa, C., Gomes, M.C., Madruga, M., Fumega, N. (2022). Défis - Francês - 7.º Ano. Porto Editora.
- Ministério da Educação. (2018). Aprendizagens Essenciais. Despacho n.º 6944-A/2018, de 19 de julho. <https://www.dge.mec.pt/aprendizagens-essenciais-ensino-basico>

Lesson Plan

Unit: "Bookmarks exchange"

LESSON Nº 3

LEVEL: 4th

TIME: 60 minutes

AIMS

From Aprendizagens Essenciais, Ministério da Educação, (2018)

Educação Artística: Artes Visuais

- Understand basic art and design concepts
- Explore and choose materials according to their properties, use and context
- Use different means to take notes, plan and express choices in an artistic project

Estudo do Meio

- Compare materials and identify their properties
- Create technological solutions for everyday needs

Inglês

- Communicate effectively
- Explore content-related language
- Understand and produce text genres

Assessment Criteria

Teacher will assess how well learners:

- can **evaluate** bookmark materials based on functionality and sustainability criteria by completing a grid
- can **work together** in groups
- can **produce a text** justifying choices
- can **present** their choices

By:

- **Observing** the interactions and discussions among the groups, giving **instant feedback**
- **Assessing the above with rubrics**

Teaching Objectives

Content	Cognition
• To develop students' understanding of the properties of different materials. • To explore the functionality and suitability of materials according to purpose.	• To foster critical thinking skills by engaging students in comparing/reasoning about the properties and purpose of different materials.
Culture	Communication
• To promote cultural understanding by facilitating collaborative learning experiences • To foster global citizenship by engaging students in an international exchange • To develop students' ability to create sustainable solutions	• To stimulate the use of English as a means of accessing, understanding, and communicating content • To develop language skills

Lesson Plan

Unit: "Bookmarks exchange"

LESSON N° 3

LEVEL: 4th

TIME: 60 minutes

Language of Learning	Language for Learning	Language through Learning
<u>Key vocabulary:</u> <u>Materials:</u> paper, cardboard, plastic, fabric, metal/tin, magnet, felt, foam, elastic <u>Adjectives:</u> thick, flexible, reusable, durable, thicker, more durable (than) <u>Objects:</u> cereal box, plastic box, plastic bag Examples: A cereal box is made of cardboard. Cardboard is flexible. Cardboard is thicker than paper. It is waste material. It's a good support for a bookmark.	<u>Identifying:</u> Language to talk about characteristics/properties <u>Classifying:</u> Language to exchange information and categorise <u>Applying:</u> Language to experiment and explore <u>Justifying</u> Language to explain Examples: What can we use to create a bookmark? What surfaces are suitable? What can we use on that surface? Is it reusable? Is it durable? What is it...? Is it...? It is... /It isn't... We will use... because...	Language through interaction during the lesson
Learning Outcomes		
By the end of this lesson learners will be able to: Decide and explain why they have chosen a specific material as support for their bookmark		
Anticipated problems and solutions		
- Difficulties with interactions in English: code switching allowed - Not enough time to complete the activities: students will present their works in the following class		

Lesson Plan

Unit: "Bookmarks exchange"

LESSON N° 3

LEVEL: 4th

TIME: 60 minutes

TEACHING / LEARNING ACTIVITIES					
Time (mins) Interaction	Stage	Teacher's procedures	Students' procedures	Aims	Scaffolding strategies
5m Whole class	Greetings	T greets the Ss.	Ss greet the T.	Set the tone for the lesson.	Provide visual cues (e.g., smile, wave) to welcome students.
10m Whole class	Introduction	1. T picks a wooden coffee stirrer from the boxes which contain wooden materials. 2. T explores it by putting it inside a book, weights it, folds it, draws on it while asking questions about functionality (according to the criteria on grid): ➤ <i>I'm going to choose one object from the wooden materials box to see if wood is good for a bookmark.</i> ➤ <i>I need to put it inside a book to check if the material is good for a bookmark.</i> ➤ <i>It is light or heavy? It is thin or thick? Is it flexible or not...</i> 3. Then T asks questions about sustainability (according to the criteria on the grid): ➤ <i>Does this material come from waste?</i> ➤ <i>If so, do you think that we are saving money?</i> ➤ <i>If we are reusing materials, we are saving money, right? What do you think? Yes, or no?</i> ➤ <i>Do you think that if we reuse materials we are thinking of sustainability?</i> ➤ <i>Is this important?</i>	• Ss explore with the T. • Ss help completing the grid. • Ss ask questions if clarification is needed. • Ss develop awareness of the text genre.	Clarify the purpose and methodology of the activities.	Use simple language and manipulate objects/materials to ensure comprehension. Provide examples to illustrate the purpose of the worksheet. Check Ss's understanding of the activity.

Lesson Plan

Unit: "Bookmarks exchange"

LESSON N° 3

LEVEL: 4th

TIME: 60 minutes

		➤ <i>So, we must evaluate what objects to use and what objects we can reuse to sustain the planet.</i> 4. T asks students to evaluate the wooden coffee stirrer by completing the grid with the students to serve as an example: ➤ <i>Let's fill in this grid with ticks or crosses on the functionality and sustainability of this object to be a good support for a bookmark.</i> 5. T models the text genre (justification of the bookmark support): ➤ <i>Now that we have seen what materials for good support for a bookmark are, let's write the conclusions.</i>			
25m Small groups	Main activity (completing the grid)	1. T announces that Ss are going to evaluate materials as good support for bookmarks by choosing material from the boxes and completing their own grids in groups of 3. ➤ <i>You are going to evaluate materials as good support for bookmarks by completing your own grids in groups of 3.</i> 2. T groups Ss in threes in a mix of 3 proficiency levels: pre-A1, A1 and A1.1. 3. T hands in the grids. 4. T provides support.	• Ss form groups with peers. • Ss pick up one object from the different boxes with different materials. • Ss explore the materials according to the entries on the grid, discuss ideas and collaborate to make decisions. • Ss fill in the grids.	Explore properties of objects/ materials. Discuss functionality and sustainability of materials. Apply knowledge while completing the grid. Promote peer collaboration.	Break down instructions into clear steps. Provide guidance on evaluating materials, prompting deeper thinking and analysis. Encourage active participation and ensure equitable contribution.

Lesson Plan

Unit: "Bookmarks exchange"

LESSON N° 3

LEVEL: 4th

TIME: 60 minutes

15m Whole class	Consolidation	1. T checks the grids 2. T helps learners to write the text if needed. 3. T asks groups to come to the front of the class to present their results.	1. Ss use the genre studied as a model to justify their choices. 2. Ss present their text to the class.	Show knowledge of genre. Communicate results effectively.	Reinforce modelling.
5m Whole class	Conclusion	1. T summarises the lesson with Ss suggestions on the board: ➤ <i>Can the summary of the lesson be "The importance of functionality and sustainability in selecting support for a bookmark?"</i>	1. Ss collaborate in writing of the summary of the lesson. 2. Ss write the summary in their notebooks.	Reinforce learning objectives.	Write the summary on the board.
Materials					
Boxes with sorted objects Real bookmarks Worksheet Rubric Writing Materials Board and Projection Equipment					

Resources

1. Worksheet: **Exploring Materials**
2. Rubric: **Assessment Rubric**

Exploring Materials

Group: _____

Objective: identify materials, their properties and their adequacy to create a sustainable bookmark

1 Properties of the Materials

Tick ✓ or cross ✗

Material	Functionality				Sustainability			Adequate
	Thin	Light	Flexible	good for support	waste material	not expensive	durable	

2 Choice

In your notebooks, write about each material using the structures bellow. Decide the support you are going to use and present your conclusions to class.

We **will not** use _____ because it is _____

We **will** use _____ because it _____

Assessment Rubric

	Needs work N1	N2	In progress N3	N4	Achieved N5
Understands properties of materials in different contexts	Shows no understanding of the properties of different materials, seldom using vocabulary learnt to identify and classify them.		Shows some understanding of the properties of different materials, frequently using vocabulary learnt to identify and classify them.		Shows complete understanding of the properties of different materials, using vocabulary learnt to identify and classify them.
Classifies materials as functional	Doesn't identify properties of different materials in English according to functionality criteria.		Identifies some properties of different materials in English according to functionality criteria.		Always identifies of the properties of different materials in English according to functionality criteria.
Classifies materials as sustainable	Doesn't identify properties of different materials in English according to sustainability criteria.		Identifies some properties of different materials in English according to sustainability criteria.		Always identifies of the properties of different materials in English according to sustainability criteria.
Negotiates with others to make decisions and organise work	Never gives suggestions, integrates colleague's ideas or negotiates to reach adequate conclusions on time. Doesn't seek to maintain group cohesion or to improve the output.		Sometimes gives suggestions, integrates colleague's ideas and negotiates to reach adequate conclusions on time. Tends to seek to maintain group cohesion and improve the output.		Always gives suggestions, integrates colleague's ideas and negotiates to reach adequate conclusions on time. Seeks to maintain group cohesion and improve the output.
Understands and uses the text genre to justify a decision	Shows no understanding of text genre or can't use it to justify the decisions made.		Shows good understanding of text genre, using it with some inaccuracies to justify the decisions made.		Shows complete understanding of text genre, using it correctly to justify the decisions made.
Shares conclusions with others	Never participates in the presentation and demonstrates no knowledge of the content of the work.		Participates in the presentation and demonstrates some knowledge of the content of the work.		Is central to the presentation and demonstrates a lot of knowledge of the content of the work.