R1/T5: FOLLOW ME Handbook

A Practitioner's Approach to ELT in Minecraft

Table of Contents

I. Introduction

This handbook has been created as a part of the [Erasmus+](#) project **English Language Teaching adventures in Minecraft** (or **Follow Me to Minecraft** for short).

It aims to be a guide for **ELT teachers** who want to use **Minecraft in ELT** as a tool employing **Problem Based Learning**. The majority of today's approaches lack engaging lesson plans suitable for their students. Even though Minecraft is an ideal environment for delivering this kind of experiences, today there is no framework to fully support Problem Based Learning in this context, let alone for ELT.

This is what Follow Me to Minecraft aims to change: we offer a complete framework to support PBL for English teaching in Minecraft. Follow Me to Minecraft will harness the power of Minecraft to create a fun learning experience through activities aligned to level A2–B1 of the CEFR. Our project ultimate goal is to enable students to embrace complexity, find relevance and joy in their learning, and enhance their capacity to make creative contributions to real-world problems using critical thinking.

The handbook represents the results of joint work of all **project partners**:

- Channel Crossings s.r.o. (Czech Republic)
- Střední škola gastronomie a služeb, Přerov, Šířava 7 (Czech Republic)
- ATERMON B.V. (Netherlands)
- HEARTHANDS SOLUTIONS LIMITED (Cyprus)
- CCS DIGITAL EDUCATION LIMITED (Ireland)
- English Language Secondary School "Geo Milev" (Bulgaria)
- Universal Certification Solutions S.A. (Greece)

For more info about our methods, deliverables and partners, please, visit: **http://followme2minecraft.eu**.

II. Introduction to the World of Problem Based Learning (PBL)

A. General Definition and Cycle of Problem Based Learning

Problem-based learning is a constructivist pedagogical approach that organizes curriculum and instruction around carefully crafted "ill-structured" problems as the focus for learner engagement. Guided by teachers acting as cognitive coaches, students work collaboratively to develop critical thinking, problem solving, and critical skills as they identify problems, formulate hypotheses, conduct research, perform experiments and formulate solutions. Problem-based learning enables students to embrace complexity, find relevance and joy in their learning, and enhance their capacity to make creative contributions to real-world problems." Ram et al (2007)

The PBL cycle

1. **Problem setting:** The problem directs the lesson and acts as a focus point for information acquisition. It has to be presented and introduced in a variety of methods that could engage students, such as: written on the board, as a letter delivered to the class, revealed through an artefact/object, from a newspaper clipping.

2. **Identify prior knowledge and gaps:** An important step for educators is to provide background, clarify terminology and answer basic questions relating to understanding the problem. If this is the first time the learners have undertaken PBL, a discussion on parameters related to PBL, expectations and group working etc. is deemed also essential.

3. **Formulate Questions or Problem Statement:** It is important that the students have limited background to the problem. This means that the students hold enough prior knowledge to understand the problem, but solving the problem requires them to actively participate in the learning process and conduct more in-depth research to formulate questions and set the problem.
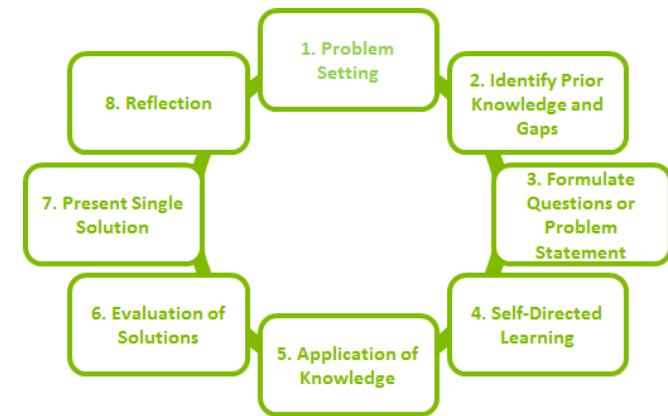
4. **Self-Directed Learning:** Students should be encouraged to go off in small groups or individually, using the questions they developed for themselves to guide their data collection. Students will then have to read, comprehend and begin to analyze the materials they have gathered to determine in what way the data and information they have found might be useful in solving the problem. This will involve analysis, evaluation and for some learners, a degree of scrutiny and criticality (critical thinking).

5. **Application of Knowledge:** Individuals or cooperative pairs bring their findings back to the main team. The team begins to work their way through the findings to try to gather the evidence to answer their questions. Supporting students in finding strategies for communicating and sharing ideas and in practicing using dialogue and questioning that helps them clarify and refine their collective thinking will be useful, particularly to groups undertaking PBL for the first time.

6. **Evaluation of Solutions:** Once all of the ideas and possible solutions are on the table students will have to employ convergent thinking strategies to decide which one to propose as the solution and justify why they are discarding the others. Students must weigh up evidence, negotiate and debate with each other and find a way to come to a consensus about the most appropriate solution for the problem.

7. **Present Single Solution:** Students present their solution, supported by well sourced evidence and justifications. The format of this presentation can be pre-determined by the teacher (report, group poster, PowerPoint presentation, video news report, podcast, animation, Minecraft world, model etc.) or can be selected by individual teams based on a list that is provided.

8. **Reflection:** A crucial element of the process is to allow time at the end of the programme for students to reflect upon their learning. Educators could provide a template that asks reflective questions or invite them to journal throughout the process. Reflection is important because only by understanding choices, methods, decisions and the ways in which they reached conclusions, will students be more likely to transfer their learning to other problems in future.

Features of the Problem Based learning:

- In Problem Based Learning the problem is ill-structured, non-linear and complex.
- The role of the problem in problem-based learning is crucial. It drives learners to construct their own knowledge, and to do this, teachers do not provide any content prior to learners undertaking their own research.
- There are a number of specific processes learners undertake in problem-based learning (problem-finding, self-directed study, reflection) with specific pedagogical purposes.
- Assessment processes and products occur continuously throughout the whole PBL programme, so the focus is on creating a solution to a problem.

Theoretical underpinnings of PBL:

- Students do not start with a clean slate. Prior knowledge, assumptions and experiences are critical in helping students find meaningful entry points into the problem
- Learning happens in a social context, with meaning negotiated in a collaborative team setting
- Strategies are consciously applied to deal with unfamiliar information, handling team dynamics and working out feasible and well-thought through solutions
- Learning takes place through self-directed discovery & questioning
- The use of problems acts as a stimulus for learning
- Critical reflection happens throughout the learning process

B. Using PBL method in an English Language Teaching

The PBL approach would enable students to engage in collaborative decision-making and team-building skills as they learn to solve the problem through group negotiations with other peer students while practicing their language skills. In addition, the PBL approach would encourage students to venture into 'thinking out of the box' as the problem assigned for them to solve is usually open-ended and does not require a prescribed approach to problem solving. As students engage in solving the problem, they would also learn the processes involved in finding solutions to problems, resulting in deep learning and a more practical approach towards the language.

Through PBL, students would also learn not just a foreign language but to adopt an interdisciplinary approach to problem solving. This mirrors the real working world where solutions to real problems require a range of knowledge and skills. The PBL approach would encourage self-directed learning as students decide for themselves how they should go about finding a solution to the problem meanwhile gaining a lot of „language self-confidence". Rather than the teacher dispensing a prescribed English content, students plan and decide the course of action they would have to take.

Get inspired here:

https://onedrive.live.com/redir?resid=91F4E618548FC604%212182&authkey=%21AM_v9jh7DZ4b-c8&page=View&wd=target%28Preface.one|4a72b36d-27fd-4a8b-b586-2ca790a89a39%2Fpreface|2c56573a-f8e1-db43-87b0-8544771e4427%2F%29

III. Enhancing PBL with Minecraft

A. Minecraft in Education

In Minecraft, players can mine and craft 3D building blocks of different materials within a generated world of varying terrain. It's a sandbox game, meaning there is no overall quest or plot — players decide what they want to build and do.

From the beginning, Minecraft was used by creative teachers as a tool in the classroom to bring historical buildings to life, encourage students to work together on group projects within Minecraft, etc. In 2016, Microsoft released a version of Minecraft specifically for educators called Minecraft: Education Edition or Minecraft EDU for short.

The basic core of the game is the same, but the education version adds extra features. Students can download the game at home without having to pay for their own version of the game, and they can take photos within the game and share them with other students. From language learning point of view, Minecraft EDU has some great assets: they provide authentic content and context for learning in multiplayer games. Perhaps the greatest asset modern digital games bring to language learning is the ability to play in a group. Games with multiplayer modes allow gamers to act jointly in a virtual world, often collaborating or competing with one another.

B. Example – Minecraft and PBL

- **Adventures in English with Cambridge:**

Adventures in English can be delivered as part of a structured lesson in a classroom setting, and can also be played by learners independently. It combines the Cambridge approach to language teaching with the engaging and creative context offered by the world of Minecraft. Activities have been aligned to level A1 of the Common European Framework of Reference for Languages (CEFR) and are designed to focus on the skills and knowledge required by English language learners in order to communicate successfully at this level.

More info: https://education.minecraft.net/en-us/lessons/English-adventures

- **STEM4CLIM8 Project**

The STEM4CLIM8 project aims to create a special console and related learning materials. The console will function not only as a platform for learning tools, but as a learning tool itself, with programming and creating their own scenarios in Minecraft and games using physical computing. Accompanying this will be a set of lesson plans to support teachers in using this console to deliver relevant and engaging lessons to young people that link up STEM excellence and practical knowledge with a sense of environmental consciousness and awareness.

Within the frame of the project a Minecraft World „Floodina" has been created. The goals of the world: This world targets to instruct children about the physical disaster of a flood. The structure aims to give some tips on how to protect themselves during a flood and present some measures that prevent flooding. In this world, we have 4 activities to complete and a set of 4 questions to answer after the completion of the activities. The NPCs in the game will give you directions on the activities you need to accomplish.
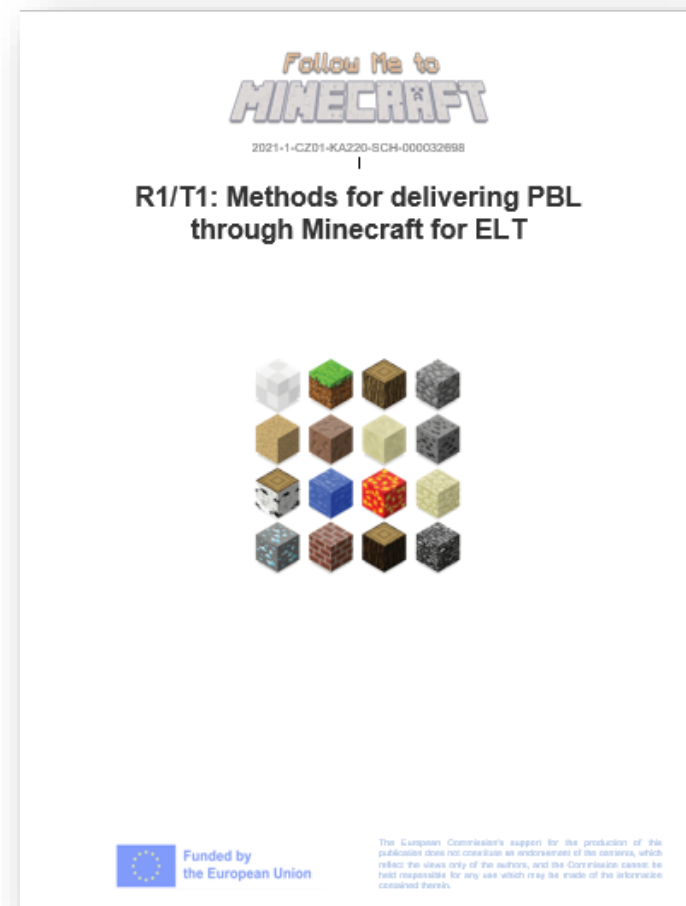
More info here: https://stem4clim8.eu/about

IV. National Best Practices

In the initial phase of the project, we created a document that represented a **result of research activities** conducted in **all project's partner countries** (Bulgaria, Cyprus, Czech Republic, Greece, and the Netherlands) that mapped the situation regarding PBL for ELT there.

Its aim was to guide, help bring together and compare ideas from each country related not only to Minecraft, but also to PBL in general, **describing the current situation and bringing to light examples of good practice**.

As the study represents prolonged reading, we decided to **upload it on our webpage as a separate resource**, so that it can serve for further reading and inspiration for those engaged in education, more specifically in ELT.

If you wish to read the whole text,
please feel welcome to download it here.

Follow Me to
MINECRAFT

2021-1-CZ01-KA220-SCH-000032698

R1/T1: Methods for delivering PBL through Minecraft for ELT

Funded by
the European Union

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V. Collection of Ideas in Minecraft World Using PBL Methodology in ELT

The aim of this part of the handbook is to compare ideas of ELT experts and the Minecraft experts to cross-check the possibilities that the Minecraft environment offers for delivering PBL and ELT challenges. The elaborated methods provided us the initial input of requirements to be transcribed to specifications for a Minecraft ELT world and as we did not use all of them for the creation of our worlds, we believe that they can together serve as an inspiration to those who can create Minecraft environments by themselves.

The specifications will allow the manifestation of remote learning experiences to concrete Minecraft implementations and they will provide a tool for delivering remote PBL experiences for ELT through Minecraft.

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1. "Airport" (A2)	
1. Short summary of the purpose of this specific world	Can be solved individually or in a group. The student arrives at the airport, wants to fly to another destination and has to overcome all the situations and obstacles that may arise at the airport.
2. The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)	Vocabulary
3. Detailed description of the knowledge/competences that this world aims to develop	• Vocabulary of environment (words and terms connected to the situation at the airport) • Learning about what to do at the airport • Decision making • Group Work – collaboration • Communication – discussion

	• Critical thinking • Identifying necessary actions
4. *What tasks/activities do they need to accomplish in this world?*	Students will have to go through the entire process at the airport such as buying a ticket, check-in, finding the right gate for departure, the check-in process, post-arrival customs or other checks to deal with lost luggage.
5. *How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The situation is based on solving problem situations that can occur at the airport such as lost luggage.
6. *What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	They will learn new vocabulary related to situations at the airport. Collaboration and critical thinking skills will be required in group work. Students will learn to deal with crisis situations they may encounter in the real world.
7. *Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	It certainly does. There are plenty of problematic situations at the airport that students may encounter. Since it is not possible to take pupils directly to the airport and experience these situations in a realistic way, bringing this situation into a virtual environment is ideal. Moreover, this topic is discussed in English language classes in Czech schools. If they go through the airport process virtually, they can feel much more comfortable and confident in a real situation.
8. *Activities outside the MC world*	Preparation – introducing the student to the vocabulary Brainstorming on the topic What can I experience at the airport? What documents do I need to fly to different countries (such as ESTA to the USA)? Post-game activities – reviewing the game, listing other words they encountered during the game situations, preparing short situational skits that can be acted out in class.

9. *Estimated time for this task*	2 lessons (45 minutes each)
10. *Level of English (CEFR)*	A2
11. *Vocabulary objectives*	• Nouns: air travel and services • Adjectives: descriptions
12. *Grammar objectives*	• Prepositions of place • Prepositions of time: on/in/at • Modals – can/could • Modals – have to • Questions
13. *Communicative objectives*	• Students understand short, simple texts containing familiar vocabulary including international words. • Students are able to find the most important information in advertisements, information leaflets, webpages, catalogues, timetables etc. • Students can understand short, clear and simple messages at the airport, railway station etc. For example: "The train to London leaves at 4:30".

2. "A Night in the Museum" (A2)

1. *Short summary of the purpose of this specific world*	A group of students end up locked at the museum, when their classmates leave, and the guide accidentally locks them inside.
2. *The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	• Vocabulary • Grammar

3. *Detailed description of the knowledge/competences that this world aims to develop*	• Vocabulary of rooms and artefacts in the museum (statues, reception, fossils, paintings) • Grammar: modal verbs, propositional phrases • Group Work – collaboration • Communication – discussion • Critical thinking
4. *What tasks/activities do they need to accomplish in this world?*	• Explore the areas of the museum • Find the key to unlock the door and escape
5. *How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The game is focused on a problem: what happens if a group of students are trapped in a museum and need to escape. Identifying their prior knowledge (related English vocabulary and their experience with museums).
6. *What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	They can learn new vocabulary about museums and culture in general. They can learn to collaborate and make decisions, form questions. To achieve that, they will need to consolidate the grammar, vocabulary, syntax elements presented and practiced in the previous courses.
7. *Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	The specific world would be successful in the Dutch curriculum, as students are familiar and interested in arts, culture and museums, so they will be motivated to complete the challenge and gain new knowledge.
8. *Activities outside the MC world*	Preparation: group brainstorming (What can be found in a museum? When was the last time you visited one?) Playing the game itself: groupwork of 2–3 students with a notebook Follow-up: after playing the gaming activity a short group reflection with the students – both orally (what did you like the most? What surprised you the most?) and in written form – individually (e.g.: write down three new words you have learned; translate this question into English etc.)
9. *Estimated time for this task*	90 minutes (the quest can be finished individually for homework)

10. Level of English (CEFR)	A2
11. Vocabulary objectives	- Nouns: names of places found around the city (bank, hospital, cinema, bookstore, police station, library, restaurant etc.) - Adjectives: descriptions
12. Grammar objectives	- Questions - Verb + ing/infinitive: like/want-would like - Wh-questions in past - Zero and 1st conditional
13. Communicative objectives	- Students understand short, simple texts containing familiar vocabulary including international words. - Students can find the most important information in advertisements, information leaflets, webpages, catalogues, timetables etc.

3. "Around the City" (A1)

1. Short summary of the purpose of this specific world	Group of friends have lost their dog and are looking for it in the city.
2. The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)	Vocabulary
3. Detailed description of the knowledge/competences that this world aims to develop	- Vocabulary of places found around the city (bank, hospital, cinema, bookstore, police station, library, restaurant etc.) - Asking for help, directions, - Providing descriptions (e.g., the dog is big and white…) - Groupwork – collaboration

		• Communication – discussion • Critical thinking
4.	*What tasks/activities do they need to accomplish in this world?*	• Report the missing dog to the police • Organize a search group around the town
5.	*How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The game is focused on a problem: what happens if a group of friends lose their dog. Identifying their prior knowledge (related English vocabulary and their experience with moving around the town).
6.	*What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	They can learn new vocabulary connected to various places in a town. They can learn to collaborate and make decisions, form questions. To achieve that, they will need to consolidate the grammar, vocabulary and syntax elements presented and practiced in the previous courses.
7.	*Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	The specific world would be successful in the Dutch curriculum, as students enjoy facing challenges and pets, such as dogs and cats are extremely popular among young learners, so they will be extra dedicated to devoting time and energy to accomplish the task.
8.	*Activities outside the MC world*	Preparation: group brainstorming (what are places and buildings found in a town? Name them in English.) Playing the game itself: groupwork of 2–3 students with a notebook Follow-up: after playing the gaming activity a short group reflection with the students – both orally (what did you like the most? What surprised you the most?) and in written form – individually (e.g.: write down three new words you have learned; translate this question into English etc.)
9.	*Estimated time for this task*	90 minutes (the quest can be finished individually for homework)
10.	*Level of English (CEFR)*	A1
11.	*Vocabulary objectives*	• Nouns: names of places found around the city (bank, hospital, cinema, bookstore, police station, library, restaurant etc.)

	• Prepositions of place • Descriptive adjectives
12. Grammar objectives	• Forming questions in present simple and past simple tense
13. Communicative objectives	• Students understand short, simple texts containing familiar vocabulary including international words. • Students are able to find the most important information in advertisements, information leaflets, webpages, catalogues, timetables etc.

4. "Green School" (A2/B1)

1. *Short summary of the purpose of this specific world*	To help students to make their school greener. Help them discover how they can make their environment greener.
2. *The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary, environmental studies, to express ability and inability, learn to express suggestions "(Let's…)
3. *Detailed description of the knowledge/competences that this world aims to develop*	• Vocabulary of environment (plants, outdoor materials, words related to sustainability: wood, electricity, solar panels etc.) • Looking up possibilities how to be "greener in our everyday life" • Looking up possibilities how can you make a building and environment more sustainable • Decision making • Group work – collaboration • Communication – discussion • Critical thinking

	• Identifying actions that are necessary
4. *What tasks/activities do they need to accomplish in this world?*	Students need to learn about solar panels and how to install them (which degree to the light etc.) Student can create their own garden with planting trees
5. *How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The focus of the problem is how to make our environment more sustainable. They can gather ideas and look for more possibilities online. Based on gathered knowledge students can agree, argue and design an environment that is green and sustainable. It is important to reflect on how the sustainability issue is addressed in real life and what can be done to achieve it.
6. *What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	• Students learn about sustainability and related solutions • Students can discover possibilities and using "can" or "can't" • Students learn vocabulary related to green solutions • Students can take and suggest actions ("Let's do it!") • Students can discover already existing best practices
7. *Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	Yes, indeed. Students like to discover new solutions that create a sustainable future for them and their children. This game can help them to be involved in the topic of sustainable living. They can learn about how their lifestyle can affect the environment positively and negatively as well.
8. *Activities outside the MC world*	Preparation: group brainstorming (what can you do to be "greener"? Do you have green solutions at home? What do you do to live more sustainable?) Playing the game itself: group work of 2–3 students with a notebook Follow-up: after playing the gaming activity a short group reflection with the students – both orally (what did you like the most? What surprised you the most?) and in written form –

	individually (e.g.: write down ten new words you have learned; translate this question into English etc.) Make a list of "can do"-s and "cannot do"-s
9. Estimated time for this task	90 minutes (the quest can be started by a home-based desktop research about green solutions and finished individually for homework)
10. Level of English (CEFR)	A2/B1
11. Vocabulary objectives	• Nouns: vocabulary related to school and to environment and ecology • Prepositions of place • Descriptive adjectives
12. Grammar objectives	• Adverbial phrases of time, place and frequency – including word order • Adverbs of frequency • Zero and 1st conditional • Will and going to, for prediction • Modals – can/could • Modals – have to • Modals – should
13. Communicative objectives	• Students can start, maintain, or end a short conversation in a simple way (outside the game). • Students can understand simple information and questions about school life.

5. "Escape Room" (A2)

1. *Short summary of the purpose of this specific world*	Group of students need to escape a room before the time runs out
2. *The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary and grammar
3. *Detailed description of the knowledge/competences that this world aims to develop*	• Vocabulary of their surroundings • Grammar skills • Teamwork • Leadership
4. *What tasks/activities do they need to accomplish in this world?*	They need to solve a number of puzzles that involve grammar and vocabulary in order to escape the room
5. *How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The game focuses on problem after problem. With each task that students complete successfully they get additional time added to their total.
6. *What can students achieve by completing tasks and activities given the world? Learning outcomes*	They can learn new grammar and vocabulary by completing tasks and puzzles. Learn how to do better in a group.

7. Do you think this specific world could be implemented successfully in your country's education curricula? Why?	Yes, escape rooms have been very popular in the last few years. Students love to solve mysteries and problems one after another.
8. Activities outside the MC world	After the activity, students can discuss with each other how they could have solved problems faster and improve their teamwork.
9. Estimated time for this task	60 min
10. Level of English (CEFR)	A2
11. Vocabulary objectives	Vocabulary of the character's surroundings
12. Grammar objectives	• Possessives – use of 's, s' • Forming questions in present simple and past simple tense • Articles – with countable and uncountable nouns • Countables and Uncountables: much/many • Present perfect
13. Communicative objectives	• Students can explain what one doesn't understand and asking simply for clarification. • Students can ask somebody to repeat what they said in a simpler way.

6. "Farm" (A1/A2)

1. Short summary of the purpose of this specific world	A group of students spend a day at a big farm.

2.	*The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary
3.	*Detailed description of the knowledge/competences that this world aims to develop*	• Vocabulary of environment (animals, vegetable, fruits, tools) • Learning about animals and how to grow crops
4.	*What tasks/activities do they need to accomplish in this world?*	Students have to craft tools and items on a crafting table, plant crops and feed animals.
5.	*How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	Students get to complete tasks and activities and get rated based on how they have performed.
6.	*What can students achieve by completing tasks and activities given the world? Learning outcomes*	They can learn new vocabulary connected to animals, plants and farming tools.
7.	*Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	Yes, I think this specific world could perfectly fit in our country's education curricula.
8.	*Activities outside the MC world*	After the tasks are completed, students can write down their experiences and compare them with each other.
9.	*Estimated time for this task*	60 min

10. *Level of English (CEFR)*	A1/A2
11. *Vocabulary objectives*	• Nouns: animals, crops, vegetables, fruits, farming tools and basic machinery
12. *Grammar objectives*	• Articles – with countable and uncountable nouns • Countables and Uncountables: much/many • There is/are • Imperatives • Present continuous vs. Present simple
13. *Communicative objectives*	• Students can understand short, simple texts containing familiar vocabulary including international words. • Students can explain what one doesn't understand and asking simply for clarification. • Students can ask somebody to repeat what they said in a simpler way.

7. "Feeling III" (A2)

1. *Short summary of the purpose of this specific world*	Group of students feel sick and have to seek medical advice
2. *The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary, Grammar

3. *Detailed description of the knowledge/competences that this world aims to develop*	• Describing the symptoms (vocabulary) • Finding the right specialist (vocabulary/decision making) • Making an appointment (appropriate register, polite language in communication) • Visiting the doctor (describing problems, communication and discussion vocabulary – checking up – e.g., take a deep breath, body) • Getting advice, prescription (imperative do/do not, must/mustn't/have to) • Getting well (vocabulary) • What helped us to recover? – critical thinking, discussion
4. *What tasks/activities do they need to accomplish in this world?*	Students need to find the right doctor to solve their problems, make an appointment, see the doctor, get medical advice and follow it, sum up how they feel and what helped them to recover
5. *How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The game is focused on a problem: what happens if a group of students gets sick and need to find a doctor. Identifying their prior knowledge (related English vocabulary and their experience with medical specialists, body parts, appointments, giving advice and following advice, feeling well/unwell).
6. *What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	They can learn new vocabulary connected to illnesses, making appointments, body parts, medical procedures. They can learn to collaborate and make decisions, express their feelings, form questions, follow advice (by saying what they have to/must/mustn't do, imperatives)

7. Do you think this specific world could be implemented successfully in your country's education curricula? Why?	Yes, making an appointment when feeling sick, seeing a doctor and following their order is one of the essential life-saving skills students should acquire.
8. Activities outside the MC world	Preparation: group brainstorming (what's wrong with me, where does it hurt and why?) Playing the game itself: groupwork of 2–3 students with a notebook Follow-up: after playing the gaming activity a short group discussion with the students – What was the matter? Do you often see a doctor? Do you faint at the sight of blood? What was new for you? Role-play: making an appointment, visiting a doctor
9. Estimated time for this task	90 minutes (the quest can be finished individually for homework)
10. Level of English (CEFR)	A2
11. Vocabulary objectives	• Feelings / feeling ill • Nouns: parts of human body
12. Grammar objectives	• Imperatives • Questions
13. Communicative objectives	• Students can understand short, simple texts containing familiar vocabulary including international words. • Students can explain what they don't understand and ask simply for clarification.

8. "Shopping Mall" (A2/B1)

1.	*Short summary of the purpose of this specific world*	Can be solved individually or in a group. Students come to a shopping mall and are asked to purchase specific goods.
2.	*The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary
3.	*Detailed description of the knowledge/competences that this world aims to develop*	- Vocabulary of environment (words and terms connected to the situation at the shopping mall) - Communication about payment methods - Conversation with the shop assistant - Decision making - Groupwork – collaboration - Communication – discussion - Critical thinking - Identifying actions that are necessary
4.	*What tasks/activities do they need to accomplish in this world?*	Students will be tasked with shopping for specific items at the mall. First, students will be tasked with identifying the correct stores from the map. Some items will be available for cash payment only and others will be available for card payment only. They will have to withdraw money from an ATM. During the game there will be interviews with various shop assistants.
5.	*How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The situation is based on solving problematic situations that may arise when shopping, such as the possibility to pay only in cash, etc.

6.	*What can students achieve by completing tasks and activities given the world? Learning outcomes*	They will learn new vocabulary related to shopping situations. In group work, collaborative and critical thinking skills will be required, for example, to find the right deal. They will learn to deal with crisis situations they may encounter in the real world.
7.	*Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	It definitely is. This is a situation that they are bound to encounter when traveling abroad. The opportunity to experience such a situation in a virtual environment will allow students to better acquire vocabulary and prepare for a similar real-life situation. Besides, the vocabulary and phrases needed for this are included in most English coursebooks.
8.	*Activities outside the MC world*	Preparation – introducing students to vocabulary Dividing students into groups, assigning a shopping list. Post-game activities – reviewing the game, listing other words they encountered during the game situations, preparing short situational scenes that can be acted out in class.
9.	*Estimated time for this task*	2 lessons (45 minutes each)
10.	*Level of English (CEFR)*	A2/B1
11.	*Vocabulary objectives*	• Things in the town, shops and shopping • Services • Descriptive adjectives
12.	*Grammar objectives*	• Modals – can/could • Articles – with countable and uncountable nouns • Prepositional phrases (place, time and movement) • Future Time (will and going to)

13. *Communicative objectives*	• Students can understand short, simple texts containing familiar vocabulary including international words. • Students can find the most important information in advertisements, information leaflets, webpages, catalogues, timetables etc. • Students can explain what they don't understand and ask simply for clarification.

9. "Throwing a Party" (B1)

1. *Short summary of the purpose of this specific world*	Group of students hold a party
2. *The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Vocabulary, Grammar, Syntax
3. *Detailed description of the knowledge/competences that this world aims to develop*	• Deciding on theme/programme, venue, people invited (vocabulary, grammar, syntax, questions) • Responsibilities of each member (communication, decision making, dividing roles) • Making a shopping list (food and drinks) • Writing invitations/posters – social media posts (persuasive language) • Writing texts (commonly used abbreviations) • Doing the shopping (vocabulary) • Dressing up (clothes, make-up, hairstyles – vocab, asking for advice) • Party time! (small talk, fun, food, activities)

		• The day after – the highlights
4.	*What tasks/activities do they need to accomplish in this world?*	Students need to organize a party, decide on its programme, venue, people invited, decide on responsibilities, make a shopping list, write a social media post, write texts, dress up, turn up at the party and reflect on it.
5.	*How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	The game is focused on a problem: students want to have a party and must organize everything on their own. Brushing-off related vocabulary, grammar for plans, intentions, suggestions. Discussion, critical thinking, dividing tasks Writing to a specific audience, vocabulary for shopping, clothes and style. Party (vocabulary, politeness) Reflection
6.	*What can students achieve by completing tasks and activities given the world?* *Learning outcomes*	They can learn new vocabulary connected to events, shopping, dressing up, making plans and decisions, persuasive written language, small talk). They can learn to collaborate and make decisions, share responsibilities, have a polite conversation express their feelings, form questions, follow advice
7.	*Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	Yes, similar tasks are part of school leaving exams and organizing an event is a common topic.
8.	*Activities outside the MC world*	Preparation: group brainstorming (what do we need to keep in mind when organizing a party? Share your personal experience: what might get wrong? Playing the game itself: groupwork of 2–3 students with a notebook

	Follow-up: after playing the gaming activity a short group discussion with the students – What is the hardest thing about organizing a party and why? What is the thing you like best about parties? Are you thinking of throwing a party? When was it last time you were at a party?
9. *Estimated time for this task*	90 minutes (the quest can be finished individually for homework)
10. *Level of English (CEFR)*	B1
11. *Vocabulary objectives*	• Adjectives: personality, description • Colloquial language • Food and drink
12. *Grammar objectives*	• Will and going to • Broader range of intensifiers such as too, enough • Complex question tags • Modals – might, may, will, probably • Modals – should have/might have/etc
13. *Communicative objectives*	• Students can write emails, faxes or text messages to friends or colleagues, relating news and giving or asking for simple information. • Students can understand private letters about events, feelings and wishes well enough to write back. • Students can understand short, simple texts containing familiar vocabulary including international words. • Students can explain what they don't understand and ask simply for clarification.

10. "The Treasure Hunt" (B1)

1.	*Short summary of the purpose of this specific world*	Children re-read the longer passage with a partner, taking turns reading a paragraph and assisting one another with any difficult language.
2.	*The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)*	Point, evidence, explanation (P.E.E.) and Vocabulary
3.	*Detailed description of the knowledge/competences that this world aims to develop*	Principal Objectives: • To utilize the point, evidence, and explanation (P.E.E.) prompt when responding to text-based inquiries. • Making predictions based on presented and implied facts.
4.	*What tasks/activities do they need to accomplish in this world?*	"The Man of the Island" utilizes context to learn a new language, practice making cross-text comparisons, and compose an educational text.
5.	*How is the PBL method being delivered during the game? (Use the PBL cycle for reference)*	This set of lessons is intended to teach English Language Arts themes via the study of Treasure Island by Robert Louis Stevenson. Extended reading aloud/shared reading of "My Shore Adventure". You can find excerpts under the external resources section. Students read the shorter passage with a partner, taking turns reading a paragraph and offering assistance with any challenging terminology.
6.	*What can students achieve by completing tasks and activities given the world? Learning outcomes*	Students participate actively in all activities. Within the context of the text, students can explain the meaning of new terminology.

		Students can create similarities both inside and between texts. Students can compose educational texts.
7.	*Do you think this specific world could be implemented successfully in your country's education curricula? Why?*	Yes, absolutely. The game will allow young learners to practice their English language skills in an interactive island setting.
8.	*Activities outside the MC world*	In the follow-up writing activity, based on their experience with the game and the Treasure Island literature, children produce an instruction text titled "Ben Gunn's Guide to Island Survival". This writing project progresses over a series of lessons and includes involvement with instructional materials, sentence level development work, and modelling of best practices.
9.	*Estimated time for this task*	90 minutes (the writing can be finished individually for homework)
10.	*Level of English (CEFR)*	B1
11.	*Vocabulary objectives*	• Collocation • Colloquial language • Vocabulary of environment (countryside) • Sea travel
12.	*Grammar objectives*	• Reported speech (range of tenses) • Connecting words expressing cause and effect, contrast etc. • Past simple
13.	*Communicative objectives*	• Students can understand short, simple texts containing familiar vocabulary including international words.

	• I can understand the main points in straightforward factual texts on subjects of personal or professional interest well enough to talk about them afterwards • Students can explain what they don't understand and ask simply for clarification.

11. "Wildlife" (A2)

1. Short summary of the purpose of this specific world	Group of students got lost in forest during hiking and they need to find their teacher
2. The focus of this world in general in ELT (grammar, vocabulary, syntax etc.)	Vocabulary, using "can", expressing ability or inability
3. Detailed description of the knowledge/competences that this world aims to develop	• Vocabulary of environment (animals, plants, outdoor material) • Asking for help, directions, learning about what to do in case of being lost • Decision making • Group work – collaboration • Communication – discussion • Critical thinking • Identifying actions that are necessary
4. What tasks/activities do they need to accomplish in this world?	Students need to get water from a lake. In order to do this, they need to find/build a boat. Students need to build a shelter for themselves to spend the night there.

5. How is the PBL method being delivered during the game? (Use the PBL cycle for reference)	The game is focused on a problem: what happens if a group of students gets lost in the forest. Identifying their prior knowledge (related English vocabulary and their experience with outdoor activities).
6. What can students achieve by completing tasks and activities given the world? Learning outcomes	They can learn new vocabulary connected to outdoor activities and nature. They can learn to collaborate and make decisions, also to form questions. They can learn how to prioritize their activities.
7. Do you think this specific world could be implemented successfully in your country's education curricula? Why?	Yes, indeed. Students like quests, like to find their way out of a „maze" and they are inspired to solve something step by step. Also, as outdoor activities are not in the curricula, at least they have this experience virtually and they get inspired in their free time to spend time in nature.
8. Activities outside the MC world	Preparation: group brainstorming (what can you do in the forest? Have you ever got lost in the woods?) Playing the game itself: group work of 2–3 students with a notebook Follow-up: after playing the gaming activity a short group reflection with the students – both orally (what did you like the most? What surprised you the most?) and in written form – individually (e.g.: write down three new words you have learned; translate this question into English etc.)
9. Estimated time for this task	90 minutes (the quest can be finished individually for homework)
10. Level of English (CEFR)	A2
11. Vocabulary objectives	• Vocabulary of environment (animals, plants, outdoor material) • Feelings

	• Food and drink
12. Grammar objectives	• Modals – can/could • Modals – have to • Modals – should • Phrasal verbs – common • Gerunds • Questions
13. Communicative objectives	• Students can understand short, simple texts containing familiar vocabulary including international words. • Students can explain what they don't understand and ask simply for clarification.

VI. Lesson Structure with Minecraft

The aim of this document is to present the duration and structure of an example lesson to be delivered using PBL, more specifically Minecraft, to teach English.

Language focus will be on levels A1 to A2/B1. Most attention is paid to prepositions of place and time, modals, modal verbs, propositional phrases, wh-questions in past, zero and 1st conditional, forming questions in present simple and past tense, adverbial phrases of time, place and frequency, will and going to for prediction, possessives, articles with countable and uncountable nouns, present perfect, there is/are, imperatives, future time, collocation, past simple, phrasal verbs and gerunds. Students learn to follow instructions, make decisions, work collaboratively and explore linguistic challenges in a safe environment.

A. Tips to Create a Personalised Lesson Plan

1. Set your objectives: Using Minecraft in class should always be in concord with your learning objectives, not a just an activity for its own sake.

2. Reflect, reflect, reflect: If you plan letting your students play in groups (i.e., that more students share one computer or tablet), it is essential to reflect on their team work together and include time dedicated to a reflection activity in your plan.

3. Pre-teach: Minecraft should not serve as a tool to teach completely new grammar. If needed, pre-teach the structures and use Minecraft to practise them.

4. Set clear rules: Let your students know in advance all what they need regarding the time dedicated to the activity, pair/groupwork, the goals to achieve and the reward students get. You can set all these together with your students.

5. Let your students teach you: Be prepared to the fact your students can have mastered Minecraft years before you and can have vast experience in a wide range of worlds. Let the "experts" among them be heard and use their knowledge, but stay their guide.

6. Create positive and open atmosphere for all: This is crucial not only for PBL, but learning generally. If the students are not afraid to make a mistake or speak, they learn much quicker and more efficiently.

7. Let them be proud of their self-reliance: Think twice whether you need to interfere as students are often able to solve the problem on their own. Help them realise their self-reliance and learn from both their success and mistakes.

B. What Should a Good Lesson Plan Include?

- **Introduction**: It is great to introduce the topic by a short warming activity that does not (but can be) related to Minecraft. It is good to use flashcards, pictures and let students stand up and move to create a contrast to later work.

- **Time dedicated to instruction and reflection**: Always count with time to get ready for Minecraft (including potential technical difficulties) and also to reflect the activity afterwards. Do not let the end of the lesson arrive in the midst of playing.

- **Pre-teaching**: as mentioned above, if the Minecraft challenge includes any new grammar or even vocabulary, prepare your students so that they get competencies to achieve the goals.

- **A summary:** It is good to sum up at the end of the class what were the learning goals and whether + how the students achieved them.

Do not forget:

- Always try the Minecraft challenge you want to use by yourself in advance.

- Get assistance, if available – there may always be students who will need you help and technical issues may occur. If you can get an assistant / fellow teacher for at least part of the lesson, do it.

- If you decide to introduce competitive aspects of the game to the classroom, pay even more attention to setting clear rules and reflection.

- Always check the IT equipment in advance.

- Always check how your students managed with their quests if you let them finish them at home.

- Mistakes are your friends: In PBL especially, it is good for students to make mistakes once they are guided to recognise them and learn from them.

C. An Example Lesson Plan: Green School (A2)

ELT Challenges	Knowledge competencies	Learning outcomes	Learning objectives
Challenge name: Green School **English level: A2** **ELT focus:** **Vocabulary** **Estimated time:** **2 lessons (45' each)** **The quest can be started by a home-based desktop research about green solutions and finished individually for homework**	• Vocabulary of environment (plants, outdoor materials, words related to sustainability: wood, electricity, solar panels etc.) • Looking up possibilities how to be "greener in our everyday life" • Looking up possibilities how can you make a building and environment more sustainable • Decision making • Group work – collaboration • Communication – discussion • Critical thinking • Identifying actions that are necessary	• Learn about sustainability and related solutions. • Discover possibilities and using "can" or "can't". • Learn vocabulary related to green solutions. • Take and suggest actions ("Let's do it!"). • Discover already existing best practices.	<u>Vocabulary</u> Nouns: vocabulary related to school environment and ecology Prepositions of place Descriptive adjectives <u>Grammar</u> Adverbial phrases of time, place and frequency – including word order Adverbs of frequency Zero and 1st conditional Will and going to, for prediction Modals – can/could Modals – have to Modals – should <u>Communicative</u> Students can start, maintain, or end a short conversation in a simple way (outside the game). Students can understand simple information and questions about school life.
Green School **Challenge: Complete Lesson Plan**	**1. Before playing in the Minecraft world** Interaction Pattern: Individual/Pairs Time: 10 minutes		

Material: picture of some plants

Show the picture to the learners and ask them what the picture shows. Then you can ask them the following questions:
- *What can you see in the picture?*
- *Where are these plants?*
- *Do you have any plants at your school?*

Have the learners read the questions and discuss their ideas in pairs. Get feedback from the class and ask follow-up questions, e.g. *Do you think plants are important at school? How can plants help the school environment? What do you do to live more sustainable?*

After the discussion takes place, let the learners know that students around the world are working hard to make their schools greener. Elicit things they think the students might be doing, for example, planting trees or recycling plastic. Tell the students to act like Social Media Specialists and try to write on paper or on a Microsoft Word document (depending on the classroom's access to technology) their own tweets in order to encourage students around the world make their school greener and fight the climate crisis.

Introduction to the gaming activity [Green School challenge]: Tell the students that they are ready to enter the Minecraft world and start with the *Green School* challenge. Remind them that the participation is voluntary and that they can participate individually or in pairs. Remember that playing games together can be a great way to build classroom culture. When paired students can build collaboration skills, support the principle of "helping each other out" and sharing. Finally, not all the class students need to be at the same game's level at the same time. Use the gaming activity as an opportunity to differentiate.

2. While playing in the Minecraft world

Activity a)
Interaction Pattern: Individual/Pairs
Time: 20 min
Material: Green School Minecraft activity

Give the students time to get accustomed and explore the Minecraft world. You can also, as a teacher, play the game simultaneously with the students in order to show them that you are also participating to the activity and on the same time guide them if needed. Remember that it's highly advisable to play the game yourself before introducing it in the classroom. This way you can truly understand the game, make it work with the curriculum and your intended learning goals.

After the students get used to the Minecraft environment, ask them where they think they are in the virtual world (answer: *in the Green School*). Tell them that they have to find information about what they are supposed to do in the Green School. Let them explore for a little bit more until they finish the first task, which is to find out the Green School Rules at the Information Desk. Go around and help if necessary. When/If they discover the Information Desk and they get acquainted with the Green School policy ask them to repeat the Green School policy and the tasks described at the Information Desk (answer*: planting a vegetable patch, separate waste disposal and recycling, healthy eating and lifestyle*). Tell them that they can start by planting a garden to create an eco-friendly environment. Give the students time to understand and complete the task. Go around and help if necessary. Ask questions like: *Have you maybe found a space in the Green School where we can plant trees, veggies etc.? (*Answer: *outside the Green School Building in the schoolyard there is a garden patch for planting); How many beds for planting can you see in the garden? (*Answer: *six beds for planting and each bed consists of 5 places for planting*). When they are ready with this task go around and let them show you, their progress.

When most of the students are done with the garden planting activity, ask them what the next step was according to the information found on the Information Desk (answer: *collecting rubbish and recycling it*). Give the students time to understand and complete the task. Go around and provide help if necessary. You can ask them questions like: *Where do we throw the rubbish? (*Answer: *in the recycling bins*); *Can you see any recycling bins around? (*Answer: *opposite the garden there are five different, by color and purpose, recycling bins*); *Which recycling bin is for plastic waste? (*Answer: *based on the recycling bin's color decided*).

Activity b)

Interaction Pattern: Individual/Pairs
Time: 20 min
Material: Material: Green School Minecraft activity

Introduce the learners to their next task in the Minecraft environment according to the Information Desk (Healthy Eating and Lifestyle). You can ask them questions like: *How many vegetables should we eat every day and why? Do you think you have a healthy lifestyle and why? Is physical activity an important part of healthy lifestyle? How many hours of sleep do you need daily? Do you have a snack every time you are hungry, or do you wait for the lunch or dinner?* Give the students time to understand and complete the task in the Minecraft world. Go around giving help if necessary.

Move on to the final Minecraft task, which is getting the Green School award. Congratulate the learners for their progress so far. Inform them that now that they have completed all the tasks (milestones from 1 to 4) they are ready for the final challenge. Explain to them that the Green School Award is an important award since it verifies that whoever gets it can create an eco-friendly environment, knows how to recycle, and embraces healthy eating and lifestyle. For this reason, they need to pass a short revision test. Give the students time to complete the test in the Minecraft environment and answer orally to possible questions concerning the test.

3. After playing in the Minecraft world

SPEAKING
Interaction Pattern: Pairs/Whole Class
Time: 20 min
Material: 10 myths about climate change (source: https://www.wwf.org.uk/updates/here-are-10-myths-about-climate-change)

Green School challenge reflection: after playing the gaming activity have a short group reflection with the students both orally (e.g., *What did you like the most? What surprised you the most? Would you follow the lessons learned in your everyday life?* Etc*.)* and in written form – individually (e.g., *Write down ten new words you have learned; translate this question into English* etc.)

After this, tell learners to write down different ways that schools can help protect the planet. You can provide some examples in order to help the learners start the task e.g., *the school can start an initiative on reducing the use of plastic, environmental excursions can be organized where the students plant trees with the help of their teachers* etc.

Then, put them in pairs and have them order the ideas by how important they think they are – starting from 1 being the most important. Monitor them while they do this and note down any examples of good language use, and anything which could be improved. Go round each pair and get them to tell the class which idea they think is the most important and why. Then as a whole class decide on the three most important actions and discuss how easy they would be to implement at their school and how popular they think they would be. Finally offer some feedback on language use.

Finally, ask the learners to read the following 10 myths about the climate change.
Myth 1. The Earth's climate has always changed.
Myth 2. Plants need carbon dioxide.
Myth 3. Global warming isn't real as it's still cold.
Myth 4. Climate change is a future problem.
Myth 5. Renewable energy is just a money-making scheme.
Myth 6. Polar bear numbers are increasing.
Myth 7. Renewable energy can only work when it's not cloudy or windy.
Myth 8. Animals will adapt to climate change.
Myth 9. Getting rid of humans will fix this.
Myth 10. China is the only country responsible for climate change.

Pick 1-3 Myths to discuss in the classroom. Tell learners to elaborate on why these sentences are considered as myths for the climate change. After the discussion you can read with the learners the article (source: https://www.wwf.org.uk/updates/here-are-10-myths-about-climate-change) which clears up each myth and the confusion around it.

WRITING

Interaction Pattern: Group/Individual
Time: 20 min

Tell learners to imagine they have their own environmental club at school (if they don't already have one) and that they are going to plan a fundraising event to raise money for it. As a result, they need to create a social media post to advertise the event. Remind them that the goal of a social media post is to encourage people to

come to the event. Also, a social media post needs to be short and engaging but contain important information like:

- Who the organizers are?
- When will the event take place?
- Where will it be?
- Who will attend?
- What activities will be happening during the event?
- Where the money will be spent on?

The learners can work in small groups / individually, make notes and then write the social media post.

4. Project

Planning a Fundraising Event
Time Required: 2 lessons
Subject tags: Maths, Business

As an extension to the writing activity, learners are going to plan an event in more detail to raise money for their environmental club.
Research: Ask learners if they have ever been to a fundraising event. Brainstorm ideas for fun activities that could take place that they think people would enjoy. These activities should also teach sustainability and how to be greener in everyday life.

Preparation: In groups, learners decide the activities that will take place at the event. E.g., treasure hunt, healthy eating and lifestyle coaching etc.

Production: Give learners time to create a presentation outlining the activities that could take place during the event and their connection to the environmental club's goals.

Reflection: Once they finish, learners can share their presentation with their classmates and have them vote to decide which option is the most realistic and will encourage more people to attend the event.

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