TEACH-IN EDUCATION

CAPACITAÇÃO E TREINAMENTO DE PROFESSORES
NAS ÁREAS LINGUÍSTICAS E METODOLÓGICA

BOOKLET

A STEPPING STONE TO PROJECT-BASED LEARNING

APPLICATIONS TO YOUNG LEARNERS' ENGLISH CLASSROOM

ABOUT THE AUTHORS

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INTRODUCTION

The idea of this booklet is to offer input to help you begin working with PBL in the young learners' classroom. If you are thinking about the challenges involved, we know there are plenty. However, there is nothing more fulfilling than working with an audience who is willing to ask all kinds of questions, is naturally curious and easily fascinated by the new and unknown. This is probably the greatest advantage of doing PBL with the young ones: they are eager to learn and will consume everything you bring to them.

You will also notice throughout this journey that not everything we hear and read on PBL will be suitable for such a young audience. In short, your work will consist of listening to students' questions and ideas so that they know they matter. You may also need to help students translate their thoughts and ideas into questions, and from them, begin the research that will lead to the final product. Within young learners, the final product consists of endless possibilities: albums, plays, public presentations, school exhibits, a class book, etc. Never underestimate their ability to transform information into knowledge. Remember that there is no limit to their imagination, and your most important job is to provide them with enough input and resources. The rest is up to them.

PBL AND PROJECTS – WHAT IS THE DIFFERENCE?

Let us begin by bearing in mind that working with Project-Based Learning is quite different from simply getting students to work on an end-of-unit project. The latter consists of a wrap-up activity, in which students present a sample of whatever they have learned. Usually these projects are posters, videos, or presentations that combine some visual resource with a brief oral presentation on what students have learned.

PBL provides us with a much more structured, embracing approach to learning, as the project *is* the unit, as well as the channel through which learning takes place. It is an approach in which students have voice to choose the questions they want answered and have the chance to actively participate in the community by designing solutions and proposing real change. Starting with a question that will guide them, students are bound to follow different ways, and that is part of the fun of PBL. When students have the freedom to choose what to focus on, learning becomes more meaningful.

Another main feature of PBL, one that makes it different from simply working with projects, is its length. PBL takes longer, as it requires different steps. It is important to come up with an interesting and engaging "entry event" that will introduce the topic and the driving question in a way that grabs students' attention. With such

activity, the teacher triggers curiosity and encourages students to ask relevant questions.

Finally, as we have previously stated, PBL is lengthy, complex, and more often than not, unpredictable. It is dictated by the students, which means that we as teachers must get used to being out of the spotlight. Above all, PBL tackles real-life issues while presenting content that is relevant. That in itself is what makes learning unforgettable.

DRIVING QUESTION AND INQUIRY-BASED LEARNING

One can definitely say that curious children are destined for success. They ask questions, seek answers and are constantly discovering and sharing new things. That is what drives PBL – curiosity and questions.

That is why the core of any project in PBL is the Driving Question. This is one of the main differences between a "dessert" project and a "main dish project", a metaphor coined by Larmer, J. & Mergendoller (2011) when describing the main differences between projects and PBL. The driving question (DQ) is what will "drive" students and teacher through the whole project. The inquiry, the final product, the assessment will all be based on this DQ. For this reason, one of the most challenging aspects of any project is to identify the best driving question that will engage students, motivate them to act upon it and do further research in order to not only answer the question, but also to find a solution for the problem/question and propose a real change in their own community. Driving questions can be of two types: the first, students would have to come up with a product, have a problem to be solved or a specific task to be done (ex: *how can you create a picture book of the animals' food chain, how can you invent a new toy which is cheap and engaging?*). The second type involves more complex thinking and cannot come to a simple "yes" or "no", as in *should the canteen offer different foods*? *Should our school have a bigger playground?*

You might assume that only older students have the cognitive skills for working on PBL for young learners are not yet able to tackle higher order thinking skills. Indeed, younger students will probably not be able to come up with the driving question themselves (many older students are not able to either). Within the curriculum established by the school, the teacher will be the one who will determine a DQ according to their age and maturity. It might not even come be a question that demands action or a product, but something that will simply trigger students' ability to wonder and hypothesize.

How do we launch a project for young learners? What does a driving question look like? As this booklet is designed for younger learners, we will focus our attention on

DQs that will work for this audience: in this particular work, we have designed projects for students aged between 3 and 6 years old.

The first and most important aspect of a DQ is that it cannot be answered by simply looking it up somewhere or by having students ask their parents for the answer. The teacher will not find the answer on the web either. This question will drive students and teachers to ask more questions, leading the students to further inquiry. In this case, as we are dealing with younger learners, they will not be using the internet as a resource, but other resources and supplies brought in by the teacher: images, storytelling, experiments, books, videos, songs, *realia*, and others.

In order to begin, we should have in mind the syllabus we have to cover in our curriculum and begin with the end in mind. What could work as a final product taking into consideration the profile of the group we are working with? How can the topic we want to cover involve the community? What is in the common curriculum of the country (BNCC for Brazilian schools, PYP for international schools)?

As a starting point for the teacher, we suggest using mind maps. As an example, let us say the transdisciplinary topic to be covered is *identity*. You may want to begin with *FAMILY*. As a driving question, you could come up with *how different are families in my school*? As the main word in the middle of the mind map, you could have the word FAMILY and then branch out to all the aspects you would like to cover (vocabulary, cross-curricular subjects, reading, visual resources, listening activities, social skills etc.). It would look like this:
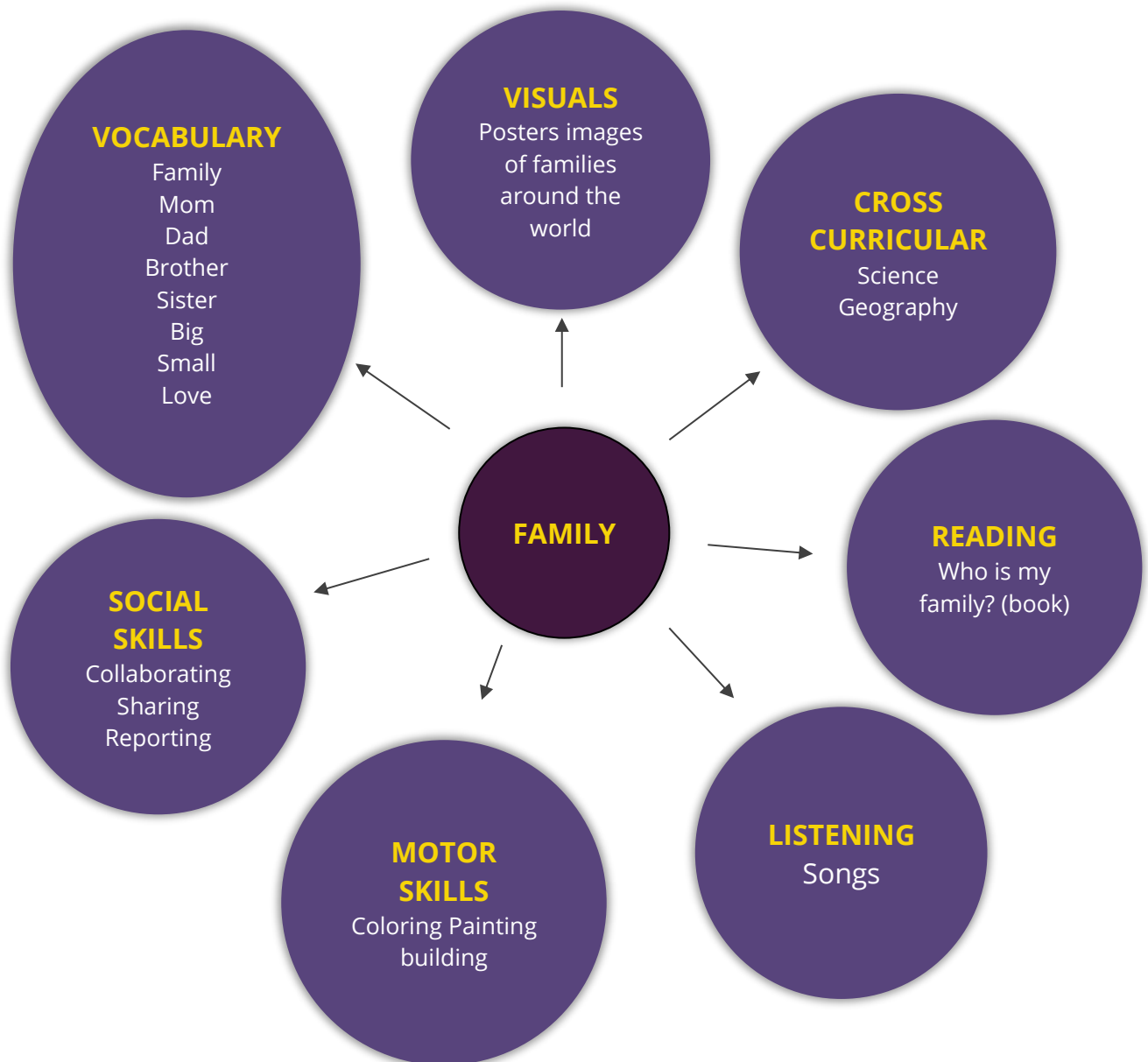
Fig. 1 – Example of a mind map

One of the main goals of PBL is to teach students to find their voice and, at the same time, have teachers listen to it. As in Reggio Emilia approach, students are taught to think outside the box and are encouraged to be creative and help create the curricular together with the teacher. Teachers sit aside, observe, and take notes. Their main role is to monitor the learning process. Children learn through an active process of exploring their world together, exchanging ideas, and learning from and with each other. Nevertheless, teachers need to know what they want to reach within the syllabus, accomplishing that hand in hand with the students. As explained Dr. Alan Edmunds, Associate Professor in the Faculty of Education at Western

University, "The key to inquiry-based learning is to teach students how to ask their own questions, and to discern good questions from bad questions."[1]

Crucial points for teachers of young learners within this approach are:

- Establish a culture in which students are encouraged to express their thoughts;
- Although we are working on a student-centered approach, the success of the approach depends on the guidance provided by teachers;
- Keep an open-mind and be willing to build on spontaneous questions.

Having discussed a little about how the teacher should get on board with PBL, we can shift to how we can get the students involved. Graphic organizers are always welcome when we are working with students, as they are visual tools. KWL charts and visual thinking routines such as THINK - PAIR - SHARE, are a good beginning to get students into a "need to know" mood.

Fig. 2 – KWL chart[2]

Students can reflect upon three main questions:

1. What do I already know about the subject?
2. What do I want to know about the subject?

And later:
3. What have I learned about the subject?

Giving students some minutes and asking them to think about the subject proposed, then sharing with a friend, and finally share as a whole class is a thinking routine

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[1] From: https://www.oxfordlearning.com/engaging-young-learners-through-inquiry-based-learning/ Access on March 8, 2019.

[2] From: https://www.teacherspayteachers.com/Product/KWL-Chart-595724 Access on March 8, 2019.

largely used as a starting point in some PBL classes. (THINK - PAIR - SHARE). We are then not only working on cognitive skills but also on other social skills.

After analyzing your school curriculum and syllabus, the next step is to come up with a driving question and then begin the project by asking students what they know about the topic. You can do this activity in pairs, small groups, or even as a whole class activity. The main goal is for students to draw from their previous experiences and bring these to the classroom. Before sharing the driving question, you can come up with an engaging "entry event" that will strike our students' attention to the topic. As an example, you could bring in a guest speaker (a professional related to the topic they will study), take students on a field trip, bring in a surprise box with objects to prompt their curiosity, or anything to get the students excited about the topic. Having done an entry event and introduced the driving question, students can build their repertoire using various different activities they draw upon their previous experiences: drawings, reports, books, videos, dramatizing etc. As we are talking about an EFL class here, students will fall back on their native language and that is obviously no problem at all, as they still do not have enough language skills to proceed in English. You can also ask introduce the vocabulary students need by using their drawing as input. As students move on, their productivity in the target language will increase.

Our next step would be to ask them what they *want* to know regarding the topic. As we have stated above, children are naturally curious, and this step is crucial. All questions should be taken into account, no matter how absurd they might seem to us.

Having finished this phase, we enter the inquiry phase. This is where the teacher has to provide the resources and supplies, they will need for their discovery path. Texts, recordings, videos, realia, objects, magazines, everything that might aid students through their inquiry. Field trips and interviews are also great sources for students to deepen their inquiry. During this stage, vocabulary words and chunks of language are introduced and practiced so that students relate the subject to the language. You could set up a PBL corner in your classroom, where supplies are available at all times.

We must always remember that this is a cross-curricular approach. All subjects are related to the main PBL project. While working on the transdisciplinary topics *identity* and *family*, you can use charts, songs, videos depicting families around the world, families living in different climates and many different matters might come up while discussing the topic FAMILY. It goes way beyond members of the family. When working with PBL, we go beyond the walls of the classroom and connect our students to the real word issues and happenings.

One must also remember that children learn through play. When they are playing, they are also speaking, drawing, sculpting, role-playing, building, watching,

imagining, and always learning. The PBL approach with young learners takes all these elements into account in order for students to discover the way they best learn.

ASSESSMENT

The assessment happens during the whole project. Tools such as rubrics designed by the teacher and by the students are crucial to scaffold students' learning strategies. One very important aspect during the assessment is the reflection stage providing opportunities for students to reflect upon what and how they are learning. To make it possible, it is essential that students are an active part of the process. Together, you can make decisions regarding what, when and how to assess, so that students are aware of what is expected from them.

The idea of assessment in PBL reflects the basis on which the approach was built upon: students have voice and choice, are active participants and are aware of what is expected from them.

RUBRICS AS A TOOL FOR ASSESSMENT

In order to successfully assess students in PBL, rubrics come as a useful and practical resource, once you can build the criteria and the descriptions for each step. They are also one of the best ways to build a collaborative tool to assess the socio-emotional skills that are extremely important to develop in younger learners. For example, suppose you want to build rubrics for students to self-assess their behavior when working in groups: what are the items you want to assess? What would be a description for poor, good, and excellent behavior for each item? From that you can build your rubrics with the students' help. The example below shows us rubrics for student self-assessment:

Self-assessment

	😃 I did very well	😊 I did "ok"	😐 I need to do better
I was part of all group activities.			
I respected my friends when it was their turn to speak.			
I stopped talking to listen to my teacher.			
I helped my friends when they needed and was nice to them.			
I used my inside voice.			

Table 1 – Student self-assessment behavior rubrics

As you may have noticed, the example provides students with a clear description of ideal behavior and invites them to reflect upon their performance on each criterion described. Successful group work depends greatly on good attitude on the part of the students. Considering that students still cannot read, you will probably need to help them by adding pictures and symbols that will help them better understand the table. You will notice that they are quite honest when grading themselves, and you should encourage this behavior by making sure they understand that this exercise is to help them get better, rather than to bring punishment.

The following rubrics, on the other hand, shed light on the aspects the teacher should assess:

Student assessment – teacher's version

	Excellent	Good	Needs Improvement
Student overall participation and engagement	Student participated actively in every activity, showing engagement and motivation.	Student participated actively in the events and activities of his/ her interest.	Student showed little engagement and motivation in the activities proposed.
Student overall behavior	Student shows excellent behavior, listening skills, and respect towards the teacher and classmates.	Student showed good behavior. There was some acting out, but it was easily controlled.	Student showed poor behavior during most activities. Student lacks social skills to work collaboratively.
Student's effort to use the target language	Student tried to use the target language most of the time and was not afraid to take risks.	Student shows some hesitation in using the target language, but makes an effort when asked.	Student shows little or no effort both to use the target language, not even when asked by teacher.
Student's level of comprehension in the target language	Student understands most or everything the teacher says.	Student does not understand everything, but uses strategies for clarification.	Student understands nothing or very little and does not use strategies for clarification.

Table 2 – Teacher's assessment rubrics for individual students

FINAL PRODUCT

Although young learners are very curious and creative, they still need scaffolding throughout the process of inquiry and production. That is why formative assessment, self-assessment, and critical feedback are necessary. Our main role is to refine their thinking and improve their ideas in order for them to reach an idea for their final product. The final product must always refer back to the driving question, and there should a performance or presentation to a public audience, demonstrating what they learned while working on the project. Deciding on the end product can be just as challenging as choosing the driving question. Again, the end product must be of the students' interest. Final products can range from bumper stickers to art galleries; cartoons and infographics for the local public to poems and dance routines; a letter to the local paper to fossil exhibitions; a rap song demonstration to a puppet show or radio program. The sky is the limit. As mentioned before, the idea of the final product must be something that originates

from the students will, and the teacher should guide the students by using formative assessment and critical feedback when necessary.

GETTING THE SCHOOL INVOLVED

Doing PBL involves much more than the classroom boundaries or books. Therefore, the school as a whole must be supportive, and work alongside the teachers towards a successful outcome. The key to this is to have careful planning, communication, and alignment with the school's philosophy.

Above all, we must have in mind that working with PBL involves a major shift in paradigm, which is not always a smooth process. That is why, with a little patience, persistence, and good modeling, you will be able to get everyone in your school onboard.

GETTING PARENTS INVOLVED

Because PBL resorts to real life issues in order to create relevant "need to knows", involving parents in the process from the beginning is extremely important. The reason for this is the fact that young children's most experiences, beliefs, and references are still limited to their household. In that sense, parents can be extremely helpful in working together with the school and the teachers. Here are some ways they can contribute to your project work:

- Ask them to come to the classroom to talk about their jobs and be interviewed by the children;
- Organize field trips and ask them to help you chaperone;
- Assign activities that will be a part of the project and that should be made by the children at home, with the help of the parents;
- Ask parents to record moments in which their children are working on a project-related activity.

Most importantly, inform parents of what you are doing. Chances are they are not familiar with the principles of PBL, and therefore will have many questions. Show them you are on their side and you will have their full support.

CONCLUSION

Just like any other teaching approach, you can read everything you find on PBL and you still won't be able to know what it is truly about until you try it in your classroom. We should probably mention that you won't know the benefits of working with PBL after the first or second project you do. Chances are that the first attempts will overwhelm you and make you want to give up. That is why the most important advice we have for you is to stay strong. We promise it will be worth all the while when you realize how much students can grow if we let them take the lead.

The projects we have designed for this booklet will (hopefully!) help you get started in your first attempts. Remember that everything here can be adapted and easily changed or even suppressed, if that is the case. Most importantly, they are only for inspiration, as we can never say for sure what is going to happen the moment we walk into a young learners' classroom!

Have fun!

PROJECTS FOR 3 AND 4 YEAR-OLDS

Title	Containers in my life
Main theme	Containers.
Learning goals	As from an initial driving question, students will dive into an investigation, researching possibilities of what we use containers for, what they look like, what fits in them, where we find them, what they are made from and investigate other uses by using the target language as a means of learning vocabulary and functions related to the topic.
Bloom's taxonomy levels	List, describe, compare, classify, analyze, reflect and create.
Possible driving questions	*How important are containers for our daily routine?* *What do we use containers for?* *How many containers do I have at home and what do I use them for? What is cool about containers?*
Vocabulary goals	Adjectives (shapes and size), usefulness, materials they are made of, numbers.
Cross-curricular possibilities	**Science and language**: building different objects from containers, what containers are made of. **Geography and language**: building different structures using containers. **Math and Language**: revising numbers and sizes. **Art and language**: making toys using containers . **Music and Language**: students make different musical instruments with the containers.
Resources	Different types of containers, graphics organizers, rubrics, magazines, images, videos related to the theme.
Final Product	Objects students build with their containers and reflection regarding what they learned about the importance of the containers in their daily life. Drawings, pamphlets and others.
Reflection	We use containers for everything. We can reuse containers and make fun things out of them.

PROCEDURES

ENTRY EVENT AND DRIVING QUESTION

Bring in a number of different containers to the classroom (empty bottles, empty plastic containers, boxes, baskets, buckets, etc.) and ask students what they are and what they are used for. Use the target language to introduce the containers. Ask them what we can put into them and if they are useful. If possible, also bring a large packaging box (one that things like ovens or refrigerator comes in) so students can also investigate it and think of uses for it. Make a mind map on the board with all the different uses a container can have. Give them time to handle the containers and investigate. Encourage them to shares their thoughts. Use drawings in the mind map instead of writing.

Another suggestion for an entry event would be a field trip to the local supermarket. Before the field trip, introduce the word CONTAINER and tell students that during their field trip they will have to observe all the different containers they see in the supermarket. You can build a worksheet and have drawings of all the different containers we can see in the supermarket so students can check and number.

INQUIRY

Help students decide which questions they would like to know first. There are many different activities you can do that will help students find answers to their questions. Here are a few suggestions of activities you can do.

- *What are containers made of?* – This question guides them through different materials containers can be made of (plastic, basket, glass, cloth, wood, metal, stone etc.).
- *Why do people use containers?* – The idea behind this question is to explore the reasons we use containers (store different foods, decoration, carry things, etc.). Students can look into different uses for containers to answer this question.
- *Can containers be reused?* – This can be associated with a recycling project.
- *What kind of containers are there in my house?* – This question can help you connect family to the project and have students look for different containers in their house.
- *Can containers help people?* – Have students reflect upon how containers help us in our daily lives.

For the project described below, we will take into consideration the following driving question: *What is the importance of containers in our daily lives?*

You may also come up with a different driving question; however, we will use this one for students to get set off on their own inquiry. Students should choose any empty container (one that they can find at home) and bring it to class and think of

all the different uses this container can have. Share their thoughts with the class. Have students work in pairs or groups if they like, as they will have to build something else out of their container later on. During this phase, we will introduce the necessary vocabulary each student will need (*car, toy, bus, pencil holder, shaker*, etc.). Give them the vocabulary according to what they will want to build using the container they brought in. Have an extra number of containers in the class in case students need them. Students will need access to paints, glue, scissors, paper etc. to build their own gadget. To wrap up this stage of the project, ask students to walk around the school and look for all the different containers they can see. Ask them if they think containers are an important part of our lives and why.

Having finished the first part of the project, we will then move on to a math class. Hand out different containers to each student and ask how many of a certain object would fit into different containers. Bring in stones, marbles, cotton wool, coins, sand or anything else you can think of for students to fill their containers. The main goal is to work on numbers and prediction during this small project. Ask students to predict how many marbles/stones/cotton wool balls will fit in their container. You could also ask them to predict which will be heavier or lighter. *(It is heavy/ It is light).*You can also move on to having students use their own common sense and higher order thinking skills and bring in many different containers that have different lids to each one. Students would have to match the container to the correct lid. Make sure you bring in containers that have similar lids. Students could then use their sorting skills and sort containers into big and small, which container could contain liquid and which could not and why, different shapes, different containers used in different parts of the house (kitchen, dining room, bedroom, bathroom) etc. During these activities, the teacher should always introduce the vocabulary in English and scaffold their learning. Read the scaffolding tips below. You should drill numbers, objects, sizes, etc: *Is it big? Is it small? Is it heavy? Does it fit? How many fit?*

Students will then analyze what containers are made out of: cardboard, plastic, cloth, glass, metal, basket, wood. Have student experiment by putting different things into containers made of different things and analyze the results. *Which container is stronger? Why?* Have students put liquid into a cardboard container and a container made out of cloth. *What happens? Why?* Hand them different things to put into different containers and come to different conclusions.

If possible, bring in different food containers (with the contents). Eggs, milk, corn can, soda, bread, beans, chips, pasta and others. Have them analyze why these foods are put in these types of containers. Have them sort out the containers regarding the material they are made out of and use of each one.

Have students make a container out of clay. After they have made their own container, have them try to fit different things into the container and again use the language: *it fits/ it does not fit. It is big/small. I like it/ don´t like it. It is square/ rectangle/ round*, etc.

As a wrap up activity, bring in various different kinds of empty containers and ask them to build some kind of structure gluing containers together. They can build bridges, monuments, anything that comes to their mind. Students should then share their structures and explain them to the class. Ask them to describe their structure using shapes, numbers, sizes, etc.

SCAFFOLDING LANGUAGE

The teacher's main role is to guide students' projects and scaffold not only their learning regarding the topic of the project, but in our case, scaffold their language learning. In order to do this, your goals towards the target language must be clear as much as they can be unpredictable, in the sense that they may change depending on the way the project goes. Below are some ideas of how to scaffold their language learning:

- Create and maintain a vocabulary wall for the language associated with the project.
- Use graphic organizers throughout the project.
- Provide varied opportunities for students to practice speaking and listening (relay races, flashcard relays, think-pair-share, role-plays, etc.).
- Provide sentence frames and drill them using games.
- Provide language models for their final products and presentations.

ASSESSMENT

Assess their learning by having daily self-assessments and daily presentations of what they have found out. Ask them how they would like to present their findings to the group. A crucial aspect to assess, apart from their cognitive skills, is their social skills. How are they working in pairs? Are they cooperating with their peers? Do they listen to their peers? All these aspects must also be taken into consideration.[3]

FINAL PRODUCT

Make a display of all the different stages of this project and invite other classes and the parents to visit them. Ask students to explain to their audience what they did in each stage, what they learned and make sure they show a token of their learning in the target language.

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[3] See some ideas related to rubrics for PBL here: http://ete.cet.edu/gcc/?/pbl_developing/

REFLECTION

Reflection upon what students learned by the end of any project is also a crucial aspect that must not be forgotten during a PBL project. Teachers should have students reflect upon not only what they learned regarding the topic itself, but also upon their social interaction with their peers. In this case, we can ask them to answer the driving question on the importance of containers in our life. Ask them where or when they use containers in their family. Ask them what they use containers for at school and at home.

Figure 3: Containers[4]

USEFUL LINKS

https://7esl.com/containers-and-quantities-vocabulary/https://www.southernearlychildhood.org/upload/pdf/Science_Concepts_Young_Children_Learn_Through_Water_Play_Carol_M_Gross.pdf

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[4] From: https://kidspicturedictionary.com/english-through-pictures/food/containers-quantities Access on March 8, 2019.

Title	A World of Hats
Main theme	Clothing and culture (hats).
Learning goals	Develop a project in which students investigate everything related to hats. From the driving question, students will look into the different reasons people wear hats, from cultural reasons to professional needs. They will reflect upon the how different materials impact the purpose of hats and will exercise their creativity by thinking of different uses for hats.
Bloom's taxonomy levels	List, describe, compare, reflect, and create.
Possible driving questions	*What is so cool about hats?* *What do we use hats for?*
Vocabulary goals	Different names for hats (*cap, hood, sombrero, crown, helmet,*), clothing, professions who wear hats (*chef, police officer, firefighter, baseball player, nurse, surgeon,* etc.), colors, materials (*wool, plastic, cloth, straw, felt*), adjectives (*warm, cool, nice, big, small),* etc.
Cross-curricular possibilities	**Art and English:** making/ decorating a hat; making something else out of a hat. **Math and English:** measuring heads to make hats; sorting. **Social Studies and English**: researching professionals who need hats; why do people need hats? **Religion and English:** looking at how different religions wear different hats. **Science and English:** understanding the different materials hats are made out of: which ones are more resistant/ softer/ warmer/ cooler?
Resources	Different kinds of hats, flashcards of professionals and other people wearing hats, different materials for hats, different types of decorations (for students to use in the hats), graphic organizers, videos, old pictures, etc.
Final Product	A hat exhibit A hat fashion show A hat museum
Reflection	Hats are something so simple and can say so much about professions, people, countries, etc.

PROCEDURES

ENTRY EVENT AND DRIVING QUESTION

Doing a PBL unit with younger students poses a few challenges, especially in terms of language use. You will more than ever need to resort to the mother tongue to work with students but remember to slowly transition into English. The most important thing is not to keep expectations too high, especially regarding their production in the target language: they will hear and understand first, so that they can begin speaking.

The idea behind a project about hats is that it can go anywhere, depending on students' curiosity. It can travel around the world and through time, looking into the way hats have changed; it can go towards the different occupations who need to wear hats; it can explore different ways to use a hat, other than on our heads, and so on. The limit is students' imagination and the way they choose to go.

As we have said before, the entry event is extremely important, and many times determines students' engagement throughout the project. It is easy if we think about the entry event as the beginning of a book, or a movie. If it does not entice you, it is likely your enthusiasm won't be as high as before the movie/ play started. As an entry event for this particular project, we have some suggestions:

- Bring in a box with several different hats: crowns, flower hats, different helmets, baseball caps, nurse's hats, chef's hats, top hats, cowboy hats, witch's hats, a *sombrero*, etc. If you can find so many different hats, use flashcards for some of them. Have students go through the box and make their own inferences and questions about the hats. Make sure you write them down, as these will determine the direction the project will take.
- Write a note to parents asking them to pack any hats they might have at home and send them to the school. Put them altogether in display and tell students to guess whose hats they are, what they are used for, etc.
- Ask parents to find family pictures that show people wearing hats.

After the entry event, students should be ready to work. Begin with the whole class by recalling the entry event, asking students what know about hats and what they would like to learn about hats. This is the moment when they come up with questions related to the topic. The idea is to record their questions, so that you can go back to them during the different stages of the project. One way you can do that is by making a large KWL chart (see introduction) to leave somewhere visible in your classroom. In the first column, write the information students bring to you. The idea is that you record their thoughts and hypothesis in the first column, more than the "real facts" they know about the topic. The "W" column (*What I want to know*) is where you list the questions and wonderings students bring. Here are a few questions that should come up:

- *Why do people wear hats?*
- *What kind of hats are there?*
- *Who wears hats?*
- *What are hats like around the world?*
- *Who makes hats?*
- *How many uses can we find for hats?*
- *What are hats made of?*

INQUIRY/ PROJECT WORK

Help students decide which questions they would like to know first. There are many different activities you can do which will help students find answers to their questions. Here are a few suggestions of activities you can do, according to the questions we listed earlier:

- **What kind of hats are there?** – This question works well with the next question on the list. Students will look into different kinds of hats and categorize them.

- **Why do people wear hats?** – The idea behind this question is to explore the reasons we wear hats (work, decoration, protection, etc.). Students can look into different types of hats to answer this question.

- **Who wears hats?** – This can be associated with occupations who wear hats as part of their uniform. This is an opportunity to work with vocabulary for professions.

- **What are hats like around the world?** – This activity can be done in the form of a collage. Students can use a world map and stick pictures of typical hats according to the country or region they are used.

- **Who makes hats? –** Students investigate how hats are made and who makes them. They can later measure each other's heads in order to make a hat.

- **How many uses can we find for hats? –** This is a creative class in which students should think of something else they can do with hats. Some examples can be a vase, a container to keep something they collect, a basket to store fruits, a decoration for their bedroom, etc.

- **What are hats made of? –** Students explore the materials we can use to make hats (plastic, straw, cloth, felt, wool, etc.) The idea is to lead them to conclude the materials change according to the purpose of the hats.

SCAFFOLDING LANGUAGE

The teacher's main role is to guide students' projects and scaffold not only their learning regarding the topic of the project, but in our case, scaffold their language learning. In order to do this, your goals towards the target language must be clear as much as they can be unpredictable, in the sense that they may change depending on the way the project goes. Below are some ideas of how to scaffold their language learning:

- Create and maintain a vocabulary wall for the language associated with the project.
- Use graphic organizers throughout the project.
- Provide varied opportunities for students to practice speaking and listening (relay races, flashcard relays, think-pair-share, role-plays, etc.).
- Provide sentence frames and drill them using games.
- Provide language models for their final products and presentations.

ASSESSMENT

Be sure to observe how students use the language they are introduced to and how much comprehension strategies they are able to incorporate as they move along. In this particular case, assessing their creativity and ability to make connections between what they do in the classroom and their real life is also suitable. Self-assessment can be used for behavior and attempts in using the target language.

FINAL PRODUCT

As you move on and students' productions get bigger, make sure you keep their work organized for public display at the end of the project. As we have suggested earlier, the final product can be a display of everything the children did along the project, divided into different activities: an exhibit, a fashion show, and a "museum". Students should be the protagonists of such events – they are the hosts, the guides, and the presenters.

REFLECTION

How much have students learned about the topics entailed when the world of hats came into picture? Was it a meaningful channel through which other interesting subjects came about? What would you do differently?

USEFUL LINKS

https://alphamom.com/family-fun/holidays/diy-holiday-hats-for-every-occasion/

https://hatsoffaith.com/

https://br.depositphotos.com/85190966/stock-illustration-different-types-of-hats.html

https://www.easypacelearning.com/all-lessons/learning-english-level-1/1181-types-of-hats-vocabulary-learning-english

PROJECTS FOR 5 AND 6 YEAR-OLDS

Title	A Class Cookbook
Main theme	Food and drink/ recipes.
Learning goals	Develop a project in which students investigate the eating habits in their households and family traditional meals and how their ancestors have influences what they eat and how they value family meals. Introduce and practice language related to food and drinks, meals, and eating habits.
Bloom's taxonomy levels	Remember, list, compare, reflect, and create.
Possible driving questions	*How can we create a cookbook to showcase our favorite family's special recipes?* *If we had restaurant that served special family foods, what kind of food would we serve?*
Vocabulary goals	Food and drink, nationalities, family members, recipe instructions, dishes and measurements.
Cross-curricular possibilities	**Art and English:** researching about food portrait by famous painters and making their own painting. **Science and English:** reflecting upon healthy food choices at home and at school. **Math and English:** studying measurements in the recipes. **Social Studies and English:** making a food map of foods we eat and where they come from/ reflecting upon food waste and what can be done about it.
Resources	Videos from food habits around the world, world maps, magazine cutouts, realia, restaurant menus, dishes for tastings, posters, cookbooks, flashcards, etc.
Final Product	A class cookbook A class menu A restaurant day A poster display
Reflection	Student should reflect upon the role played by food in their families and lives. How much is what they eat influenced by their origins?

PROCEDURES

ENTRY EVENT AND DRIVING QUESTION

As we said before, the entry event is extremely important, and many times determines students' engagement throughout the project. It is easy if we think about the entry event as the beginning of a book, or a movie. If it does not entice you, it is likely your enthusiasm won't be as high as before the movie/ play started.

For this project in particular, and because we are going to talk about how students' origins influence their eating habits, bringing in someone whose job is to cook can be an exciting source for children to ask questions and get started. This person can be a chef, the school cook, a nutritionist, or the owner of a local deli or restaurant. Ideally, this person should come to the school, but if that is not possible to arrange, try a live chat, or have this person record a video talking to the students about their job, what they like about it, why they like working with food, etc. Bear in mind that whomever you choose must receive some instruction as to the age of their audience (5-6 year-olds), and therefore bring to the conversation elements that will hold their attention and interest.

If you want to guide the group to the first driving question suggested (*How can we create a cookbook to showcase our favorite family's special recipes?*), your guest could come up with a "special request" and ask students to put together their family's recipes so that they can help him/ her with new ideas for his/ her work.

Another fun entry event is to take students on a field trip that involves typical food from your area, or a visit to a popular restaurant in your town.

Whichever event you choose to have, make sure that students can actively participate by interacting with people and asking questions.

After the entry event, students should be ready to work. Begin by recalling the entry event, asking students what they liked about it, what they learned, what they would like to learn with their project, etc. From here on, every class will present moments in which you work with language at the same time students engage in different activities designed to help them answer their questions.

LANGUAGE WORK AND INQUIRY

It is always a good idea to begin by resorting to students' knowledge. They can do some brainstorming by simply naming foods and anything they can relate to eating. Divide them into groups and hand a large poster paper to each group, along with crayons, pencils, and markers. Have students draw anything they can think of when it comes to food: the foods they eat at home, what they like and do not like to eat, a typical family meal, foods that are healthy, their favorite fruits, vegetables, etc. After the brainstorming, which should take at least 20 minutes, ask the groups to show their work to the class.

From there you will have an idea both how to lead them to the driving question and how to help them come up with the questions they will need to answer during their inquiry.

Both driving questions suggested are relevant to students because they resort to their reality, can generate a final product that may be presented to a real audience, and will engage them in asking other questions to sustain their research.

After presenting students with the driving question, it is time to allow them to think about other questions to which they might need answers in order to design their final product. Here are a few questions that should come up and a few ideas on how to work with them:

- **Where is my family from? –** Use a world map to have students identify their origins. Parents' help involves sending pictures of grandparents and other objects that reflect their origins.
- **What do people eat there? –** This question should be worked on the same day as the question above. Have students look up on computers, cookbooks, and any other source you find suitable.
- **What kind of foods did my great-grandparents cook?/ What kind of foods do my grandparents cook? –** These questions are great to involve grandparents. Have students conduct interviews and record videos of their grandparents speaking. They can do the same if they still have great-grandparents around.
- **What did my mom/ dad learn how to cook with grandpa and grandma? –** This is a great moment for parents to step in. If you have the possibility, set up an event in which some parents come to cook a typical dish. If this is not your case, ask parents to record a home video of them cooking a special dish with their child's help.
- **When does my family eat together? /What do we like to cook at home? –** Students, again, will talk about their experience and habits at home. This is a suitable moment to talk about healthy eating habits, the importance of family meals, etc.
- **How can I help mom and dad in the kitchen? / What dishes can I make? –** as you may have noticed, the questions have started with students' ancestors, grandparents, parents, and now it is their turn to think about how they can fit into the family's eating traditions. There are many ways to proceed, but the idea is to allow students to use their creativity to come up with a "recipe" of their own.
- **What dish am I going to add to the cookbook? Why? –** This question should be included even if students do not come up with it themselves. This question is the hook to the final product, and it can be used to assess students understanding of the purpose of the project as a whole.

SCAFFOLDING LANGUAGE

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- Use graphic organizers throughout the project.
- Provide varied opportunities for students to practice speaking and listening (relay races, flashcard relays, think-pair-share, role-plays, etc.).
- Provide sentence frames and drill them using games.
- Provide language models for their final products and presentations.

ASSESSMENT

From the question, *why did I choose this recipe to go into the cookbook?* it is possible to assess many aspects of the project: how much have they understood regarding the importance of family heritage? How well were they able to relate the inquiry questions to their own reality? Another point to assess is their collaborative skills. How successful were the attempts of pair and group work at this point?

FINAL PRODUCT

The final product should be fun and colorful, preferably depicting images of the dishes and of the students' families. The recipes should be written by the teacher, with the students' guidance. Ideally, a special event to present the book should be organized, and every family should have their own copy of it.

REFLECTION

Did students understand the importance of family stories? Were they able to see how food ties people together and helps us remember where we came from? Was there enough involvement of parents?

USEFUL LINKS

http://foodmuseum.com/food-heritage

http://pogim.org/food/

https://www.edutopia.org/blog/culinary-arts-integration-pbl-food-sarah-henderson-lori-holm

Title	Where are the dinosaurs?
Main theme	Dinosaurs
Learning goals	As from an initial driving question, students will dive into an investigation, researching possibilities of what might have happened to the dinosaurs, what they looked like, what they ate, where they lived by using the target language as a means of learning vocabulary and functions related to the topic.
Bloom's taxonomy levels	List, describe, compare, analyze, reflect and create.
Possible driving questions	*Why did the dinosaurs leave the earth?* *Can we still see dinosaurs today?* *How are dinosaurs similar to animals today?*
Vocabulary goals	Body parts, adjectives to describe animals, food chain, words related to habitats.
Cross-curricular possibilities	**Science and English:** researching and describing dinosaurs eating habits, researching about what happened to the dinosaurs. **Geography and English:** researching and describing dinosaurs habitats: Where did they live? Did they live in caves? **Math and English:** researching and describing size and weight. Categorising dinosaurs. **Art and English:** drawings and sculptures of dinosaurs.
Resources	Graphic organizers, rubrics, magazines, images, "bones" made of papier-mache, and videos related to the theme.
Final Products	Booklet with drawings Magazine Drawings Sculptures to compose a dinosaur exhibit
Reflection	Are dinosaurs important to us nowadays? What have they taught us?

PROCEDURES

ENTRY EVENT AND DRIVING QUESTION

If possible, have the art teacher help you make a big dinosaur bone out of papier-mache or out of any other material and then bury the "bone" in the school garden. If you are not able to bury it, leave it somewhere for the students to find and make them try to guess to what animal this bone belonged to. If you are not able to make a bone, draw a big bone on a cardboard paper and leave it somewhere in their classroom. Make sure you make it out as if it were buried, by making dirt marks around it. Feel free to come up with any other entry event that you believe would be more suitable for the profile of your group. Bring in a paleontologist, use videos, images of dinosaurs, or movies.

Students will probably mention all the big animals they can think of. As they mention the animals, put up flashcards of the animals. As the bone was buried, you may bring up the word *paleontologist* and lead a discussion about what paleontologists do. Mention these names in English as you go along. Make a list of all the animals they mention in English. Use visual resources such as mind maps to keep it as visual as possible. Flashcards, images from magazines, and even your own drawings will do the trick. Remember that in PBL, we allow students to guide the project according to their interest, so go along with their ideas and questionings.

Have them draw all the big animals they mentioned and ask them to make a hypothesis as to which animal the bone belonged. Ask them to give you evidence why they think that.

It is a dinosaur because it is big.

You can bring in videos about the work of paleontologists like the ones listed under *Links*.

If you decide to co-author the driving question with them, observe their reaction as they are looking at the bone and deciding to whom it belongs. Take notes of their questions and encourage them to make further questions regarding their curiosity towards the bone. Students will probably use their mother tongue during this discussion.

Present them or come up with the driving question together. Some examples are given above.

Use a KWL chart once they have decided (if they do) what they know about dinosaurs and what they would like to know. Graphic organizers help organize their thoughts.

INQUIRY

During the inquiry, each student will have a different interest regarding the dinosaur. Some students can even question why dinosaurs do not exist anymore. Make sure you do not interfere with the students' interest during their inquiry, although we might think their questions are simple.

Your main role is to build onto students' background knowledge by bringing in images, magazines related to dinosaurs, observing animal skeletons, videos and objects for raise their interest and promote questioning.

Students may want to analyze parts of the body of a dinosaur, discover what it ate, where it lived, how they disappeared however, make sure all these queries come from the students' interest and not what you would like them to learn. That is what PBL is all about...the students' interest to motivate them and engage them. Some questions that might come up:

How big are dinosaurs?
Where did they live?
What did they eat?
Why don`t they live here anymore?
How many different dinosaurs are there?
Why did they disappear?
Were they dangerous?

You may question that we are using the past tense here and students have not learned the past tense. In PBL, we think of language as functions. Students understand the full meaning of the question without actually learning about the grammar yet. Students will be guided by the DQ to what they must research (different types of dinosaurs, sizes, food, habitat etc). The language will come up in the vocabulary they will use during the final product and the language that will come up during their inquiry.

Use graphic organizers such as mind maps, tables and charts to scaffold their language needs. You can even go further and introduce some academic language such as claim and evidence regarding the subject on dinosaurs.

Claim: *Dinosaurs do not live nowadays.*

Evidence*: We only see dinosaurs in museums and not in zoos.*

SCAFFOLDING LANGUAGE

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ASSESSMENT

Assess students by having self-assessments and presentations of what they have learned in each phase of the project. Ask them how they would like to present their findings to the group. A crucial aspect to assess, apart from their cognitive skills, is their social skills. How are they working in pairs? Are they cooperating with their peers? Do they listen to their peers? All these aspects must also be taken into consideration. See some ideas related to rubrics for PBL here.

FINAL PRODUCT

Students share their finding about what they learned during this project with an audience. They can create a book called: *My dinosaur family*, telling a story about what happened to a family of dinosaurs by drawing and then expressing their ideas while telling the story. They can pose a question and answer it using claim and evidence, make a dinosaur sculpture and tell a story about his/her dinosaur, and they might also just make a comic book with all the different dinosaurs they learned about. Remember that we are working with young learners, so their final product will be directly related to what a child is able to do at the age we are aiming at.

REFLECTION

Reflection upon what students learned by the end of any project is also a crucial aspect that must not be forgotten during a PBL project. Teachers should have students reflect upon not only what they learned regarding the topic itself, but also upon their social interaction with their peers.
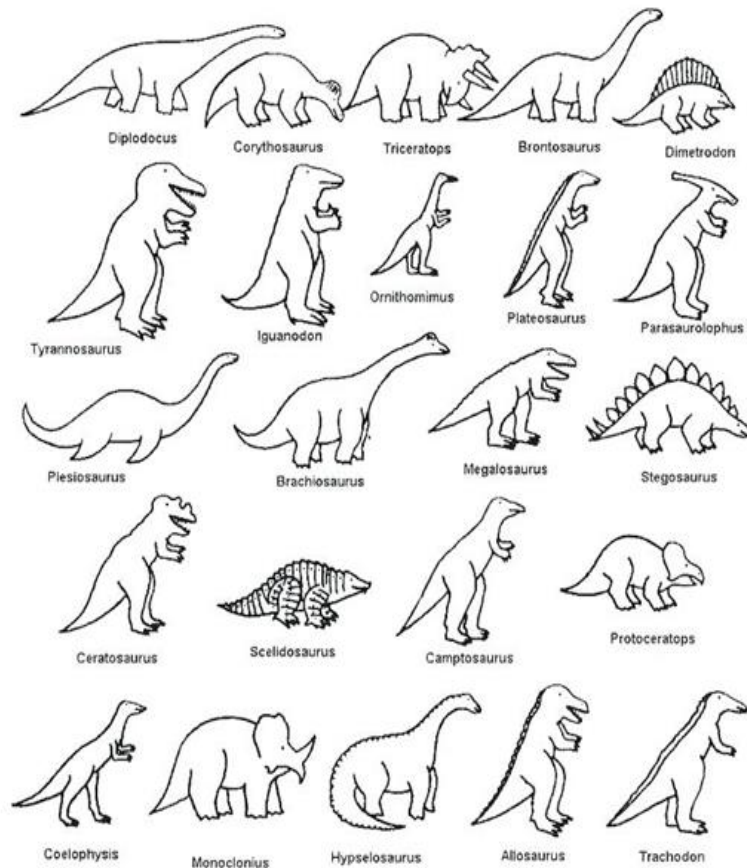
USEFUL LINKS

https://www.youtube.com/watch?v=41Rr1NEJ42w
https://www.amnh.org/explore/ology/paleontology
https://www.kids-dinosaurs.com/dinosaurs-for-kids.html
https://kids.nationalgeographic.com/explore/youtube-playlist-pages/youtube-playlist-dinos/

Diplodocus Corythosaurus Triceratops Brontosaurus Dimetrodon

Tyrannosaurus Iguanodon Ornithomimus Plateosaurus Parasaurolophus

Plesiosaurus Brachiosaurus Megalosaurus Stegosaurus

Ceratosaurus Scelidosaurus Camptosaurus Protoceratops

Coelophysis Monoclonius Hypselosaurus Allosaurus Trachodon

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WEBSITES:

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Design Thinking: https://designthinkingforeducators.com/

Edutopia: www.edutopia.org

Teach Thought: https://www.teachthought.com/

Visible Thinking: http://www.visiblethinkingpz.org/VisibleThinking_html_files/VisibleThinking1.html