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Project Based Learning and its effective management in pre-primary education

Introduction

When „something” comes to our mind, it is usually the result of a flow of many thoughts. In that particular moment, we are able to introduce only foggy suggestions and unclear statements. This state is considered to be natural at the very first stages of planning a project and it should be gradually transformed into purposeful activity with concrete objectives and expected output whose relevance should be primarily filtered with respect to learner's age, their abilities, needs and interests. Children at pre-primary level of education are very curious, they have a strong desire to experiment, and they are opened to whatever knowledge using their vivid imagination. These attributes are undoubtedly known to each (English) kindergarten teacher from theoretical point of view but to apply them to the specific project requires a detailed preparation, time, energy and skills. The principal questions which the teacher possibly encounters starting a project are the following: Which topic would be appropriate for children when they have a restricted amount of knowledge and experiences? How to start and design the project? How to proceed and manage a group of children? Which grammar and vocabulary will be incorporated? How to make project real, personal and useful for children? What will be the output of the project? Before we give answers to these questions, we take a closer look at the deeper meaning of the „project based learning” along with the three elements which project members cannot avoid.

What is project based-learning

Project based learning (PBL) is a dynamic interconnection of cognitive, emotional and psychomotor domains which enable children to visually and orally present their (not teacher's) product (author's definition). In simple words, children show the product (*visually*) and at the same time comment on it (*orally*). The reason why we use the negative form „not teacher's” and we put it in brackets is not his/her redundant position in the project. The point is rather to emphasize his/her role as a facilitator, a skilful coordinator, good organizer and advisor. Children or more precisely groups of children come up with a great variety of ideas. It is the teacher's task to shape and narrow them in relation to the topic of the project. Consequently, the teacher plans and the children do and act. Children are involved holistically (*cognitive, emotional and psychomotor domains*) as human beings and not only as learners who absorb information and they learn it by heart. They must experience a feeling of success which brings a job satisfaction using three CCC. This abbreviation stands for *communication, cooperation* and *collaboration* that should be active (*dynamic*) during the whole period of making the project and mutually *interconnected*. Firstly, the focus is placed on *communication* as a starting point where the members of the group send and receive messages simultaneously (transactional model of communication). They constantly change their roles in authentic and spontaneous conversation. Secondly, each member of the group contributes to the discussion with his/her own visions about a given topic so the group *cooperates*. Finally, all members of the group should *collaborate* not to insist on their partial visions trying to adapt to the intended group aim¹. It is a real pedagogical mastery to achieve a symbiosis among children because in their age they have a tendency to disagree with something on principle without stating the reason. It is vital for the teacher to be also a perfect speaker and to anticipate the possible problems within the project and its procedure.

How to start, proceed and complete the project or what does „driving question” mean

If the teacher wants children to collaborate, he/she has to firstly think not about the appealing topic but about a *driving question* which includes the main topic². Oxford English dictionary offers multiple meanings of the

¹ J. L. Stoner, *Let's Stop Confusing Cooperation and Teamwork with Collaboration*, 2013, n.p.

² K. Woodson, *How to Get Your ESL Students Excited with Project-based Learning*, 2017, n.p.

word *drive*. The one that is common for all of them is a certain „power” which moves forward. The driving question should also „drive” the project. It influences the whole procedure of the project by its formulation, choice of words and emotional colouring (the extent up to which the children will be able to interiorize and personalize the topic). The kindergarten teacher may say: *This driving question sounds very friendly and it is thoughtful for me*. However, would it be meaningful for children? The teacher cannot introduce the question which he himself/she herself is interested in. He/she has to perceive the issue from child’s perspective and be familiar with „its world,” to know how a child feels, what he/she wants and in what way he/she can contribute to its knowledge about the world.

It is likely to happen that during investigation of the topic, children find another thought-provoking subtopic and without realizing it, they start to elaborate and develop it instead of the initial objective. This is the moment when driving question should serve as a guide and put the members of the group on the right track. Furthermore, it is recommended to often return back to the driving question during designing a plan of the project to avoid this occasional misleading. It does not mean that children do not have to convey their own ideas and they are limited to that particular driving/guiding question. The essence consists in a proper coordination of their flow of thoughts (as stated in the introduction) to create and present a solid final product³. In the light of the process of investigation, it is significant to emphasize that driving question does not have to be „google-able.” As a consequence, the aim of the whole project is useless and achievable by doing one „click” without any effort or using child’s mental operations⁴. Well-designated driving question naturally includes a series of other branching questions which again referred to driving question and they develop the main idea⁵. In addition, driving question does not have to be necessarily „a question.” It can be a statement containing the element of question. As a result, the most important is its formulation and clarity.

Refinement of driving question- practical approach

Driving question is the introductory and crucial component of the project. In the following two paragraphs, the prototypes of weak or incorrect driving questions indicating by a cross („X”) and strong refined driving

³ A. Miller, *How to Write Effective Driving Questions for Project-Based Learning*, 2015, n.p.

⁴ K. Woodson, *How to Get Your ESL Students Excited with Project-based Learning*, 2017, n.p.

⁵ A. Miller, *How to Write Effective Driving Questions for Project-Based Learning*, 2015, n.p.

questions indicating by a tick („✓”) are proposed. The keywords or expressions which result from incorrect driving questions are written in italics. All incorrect versions are accompanied by the interpretation based on the aforementioned theoretical entrance, suggestions for their further exploration and improvement. Besides, the reader has the opportunity to analogically compare both versions (correct and incorrect ones) of driving questions.

Incorrect versions of driving questions and its justification

X Do you like animals?

This driving question is very general and it implies two answers: yes or no. On one hand, *generalization* itself may open more possibilities for discussion. On the other hand, it can lead to nothingness and even chaos because after answering this question there is no direction. As a result, the teacher and children produce a number of aimless (and endless) responses because the central question is too weak.

X How do you domesticate a hyena?

This type of driving question is structurally acceptable but a *cultural dimension* of it is questionable. The fact that hyena is the African and not Slovak animal is easy to understand. However, it is highly probable that children do not have a concrete concept of this animal in their minds and to talk about its characteristics would not be helpful for them (we are pretty sure that even adults would have problems to imagine this animal). Children need concrete input, they need to personalize the topic. For this reason, it is recommended to start with animals, objects and things which children encounter very often or on everyday basis. Considering animals, the teacher should firstly introduce the ones with which children have direct experiences such as *dog, cat, bird* (not kinds of birds), *fish* or farm animals, for example *horse, cow, duck, chicken, sheep*. Even though the teacher wants to broaden children's horizons (in this case to introduce exotic kinds of animals), it is better to bear in mind „the less is more” or „move from general to more specific.”

X What is a poem?

Resulting from the previous incorrect formulation of driving question, we can assert that concrete thinking („here and now”) of children at pre-primary level do not allow them to create mental images without personal experiences. One may argue that children acquire a lot of poems in their age and it is enough to point to one of them and we have the answer. The aim of this driving question is to *describe* or *define* the subject which is *very abstract*. Moreover, it is *google-able*. It is true that children are directly familiar with the

poem but their task is not to explain the genre. They perceive it as a piece of writing with rhymes and melody (thanks to rhymes, children learn it much more easily). These concrete literary samples are subconsciously rooted in child's mind. It is admirable that when children meet with the term „poem” theoretically, the practical examples promptly activate in their memory. Then, they will serve as a real help also in terms of vocabulary and specific poetic grammatical structures.

X Imagine that our school has outdoor classroom.

Children have a lively imagination and fantasy. They want to create something new, feel useful, and share their experiences with peers and adults, too. The topic of school is very close to children. They spend a lot of time there and it would be remarkable to listen to their suggestions. However, the effect of this statement is counterproductive. On one hand, it motivates children to think about. On the other hand, it inhibits their mental operations because children are only supposed to „imagine.” This statement is the example of *worthwhile skeleton* which is *not fully developed*.

Correct versions of driving questions (analogical to the previous ones) and a handy teaching aid for their formulation

- ✓ *What if we had an aquarium at our school?* (highly probable question)
- ✓ *Can a dog live in the desert?* (speculative question)
- ✓ *How do I create a nice poem for my parents?* (aimed at product)
- ✓ *How do you as architects design an outdoor classroom in our school?* (aimed at role)

All in all, to introduce a good driving question is a matter of constant practice- its refinement. Therefore, Miller⁶ adds one useful and witty teaching aid for formulation of driving questions. It is called a „*tubric*”, a blend consisting of two words: „tube” and „rubric.” Tubric is a colourful paper in the form of tube with the slots. These slots are pre-prepared for strips of paper of different colour comprising parts of the sentence (see the example below). The point is to slide the papers in the slots to create new and still meaningful driving questions. For instance, the driving question *can a dog live in the desert?* will be written in four slots, that is *can* in the first one, then *a dog*, the third one will be a verb *live* and the rest of the question *in the desert* will be placed in the last slot⁷. Additionally, this division supports

⁶ A. Miller, *How to Write Effective Driving Questions for Project-Based Learning*, 2015, n.p.

⁷ Ibid, n.p.

a syntactic awareness and a correct word order in terms of questions which is considered to be more problematic than in statements. In this way, the teacher can prepare and modify more driving questions and he/she is able to plan an achievable output in advance.

PBL as a process and a product in eight steps

Although a project work is the activity without specific linguistic objectives, it determines the final output (or at least expected one). It provides children with a possibility of using their acquired language material in a natural context⁸. Harťanská claims that also during this activity a child may acquire so called *formulaic language* comprising simple greetings, conventional and routine expressions, instructions, ritualised formulas, asking for permission⁹. The output is a visual and verbal presentation in front of other classmates, teachers and parents. Its importance is equal to driving question or the process of investigation. Children gain the knowledge outside a standard curriculum and it may happen that they contribute to existing knowledge of the researched field. PBL enables to build a positive relationship to learning not only for school purposes (exams, tests, and assignments) but also for gaining life and communication skills („public speaking”). It fosters children to overcome obstacles and believe in their own abilities¹⁰.

If the teacher wants to succeed in reaching the aim, he/she should respect the following steps:

1. Expose learners to an engaging topic that gets them thinking;
2. Pose the essential question that will drive the project;
3. Design a plan that lays out clear steps to follow;
4. Create a schedule with flexible deadlines and post it in the classroom;
5. Conduct research to explore the project's essential question;
6. Guide and monitor learners during their research;
7. Develop the final product that exhibits learners' learning;
8. Reflect on what learners have learned¹¹.

⁸ Z. Gadušová, *Teória a prax osvojovania cudzích jazykov: príjemca: dieťa*, Univerzita Konštantína Filozofa, Nitra 2004.

⁹ J. Harťanská, *Vyučovanie anglického jazyka na 1.stupni základnej školy*, Univerzita Konštantína Filozofa, Nitra 2004, p. 42-43.

¹⁰ V. Hajdúková, *METODIKA na tvorbu školských vzdelávacích programov pre materské školy*, Metodicko-pedagogické centrum, Bratislava 2009.

¹¹ K. Woodson, *How to Get Your ESL Students Excited with Project-based Learning*, 2017, n.p.

Summary

To know how to ask, plan, investigate, organize the thoughts logically, justify an opinion using appropriate arguments, present the results of a work in front of the audience removing anxiety and discomfort. This is only a fragment of skills which cover a huge potential of project based learning. These activities sound very abstract but when they appear in child's concrete activity, the teacher may say that he/she fulfilled the objective of the project. The ways of how to produce a wanted result or at least to be closer to it is represented by the abbreviation „CCC” - communication, cooperation and collaboration. It is important to search for and find proper associations because only in this way, children create and will create a valuable net of knowledge and contact with others.

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The paper deals with project based learning as an effective approach for acquiring English language at pre-primary level of education. It provides the reader with the theoretical framework and practical samples of this approach emphasizing the role of „driving question which initiates this process„.

Keywords: project based learning, management, pre-primary education, long-lasting skills.

Nauczanie przez projekty i efektywne zarządzanie nim w edukacji przedszkolnej

Artykuł poświęcony jest nauczaniu przez projekty jako skutecznemu podejściu do zdobywania języka angielskiego na etapie edukacji przedszkolnej. Tekst przedstawia teoretyczne ramy i praktyczne próbki tego podejścia, podkreślające rolę „pytań-kluczy, które inicjują ten proces„.

Słowa kluczowe: nauczanie przez projekty, zarządzanie, edukacja przedszkolna, trwałe umiejętności.