

A BETTER PATH TO LEARNING THROUGH INQUIRY-BASED MODEL



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Abstract: The article touches upon inquiry-based learning as one of the models of experiential learning. It targets at presenting general ideas about inquiry-based model, prerequisites for the research and inquiry-based model implementation in the Moldovan schools in teaching English. The investigation is formed of two stages: (1) questionnaire for thirty respondents; (2) implementation of inquiry-based model at the classes of English by five teachers. The results prove that this model can be used to develop language skills, train soft skills and offer the students the possibility to cumulate experiences necessary to integrate successfully in the today's competitive society.

Keywords: inquiry, inquiry-based model, Moldovan schools, sample lessons, soft skills

Introduction

The notion of inquiry should be traced back to the late 1800s and early 1900s. John Dewey who had a huge influence on education was sure that any language learning process should be connected to studying about science, history, geography, etc. The philosopher mentioned:

There is no wonder that after a while teachers yearn for the limitations of the good old-fashioned studies for English grammar, where the parts of speech may sink as low as seven but never rise above nine; for text -book geography, with its strictly inexpensive number of continents; even for the war campaigns and the lists of rulers in history since they cannot be stretched beyond a certain point (Dewey: 122).

He advocated that students needed to add to their philological knowledge that of science. Dewey felt that both teachers of languages and of exact sciences had to use inquiry as a teaching strategy to develop the student's inductive reasoning skills. The system proposed by Dewey targeted at students learning through active engagement in the process of inquiry itself, so as to apply inquiry to problems of social concern.

This approach started to be explored by many educators around the world. Today, we are referring to inquiry-based learning as an

experiential learning model. It has at the basis the process of asking questions. *Inquiry* in inquiry-based model implies possessing skills and attitudes, which allow a person to ask questions about new resolutions and issues while gaining new information. This model has at the basis the curiosity of the learners. This curiosity is together with the individuals from birth and it should guide them until they die. The fundamental concept in inquiry - based learning regards to a process of personal discovery by the learners. This model contributes to the gathering of the cumulative knowledge that is so important for the integration into any kind of society.

Moreover, there is a psychological explanation of the efficacy of the inquiry-based learning. If front-loaded well, it generates such excitement in students that neurons begin to fire, curiosity is triggered, and students cannot wait to become experts in answering their own questions. The linguists say that there are some elements that determine the efficacy of inquiry-based model. These are “the useful and structured knowledge about a field, practicability of knowledge and accessibility to a vast range of situations”. A good teacher's worksheet enables the student to increase the study skills by providing with different ways of viewing the world, communicating with it, and successfully introducing new questions and issues of daily life and finding answers to them. This model can be applied on all disciplines, a fact which has been confirmed through different researches (Noriah: 15).

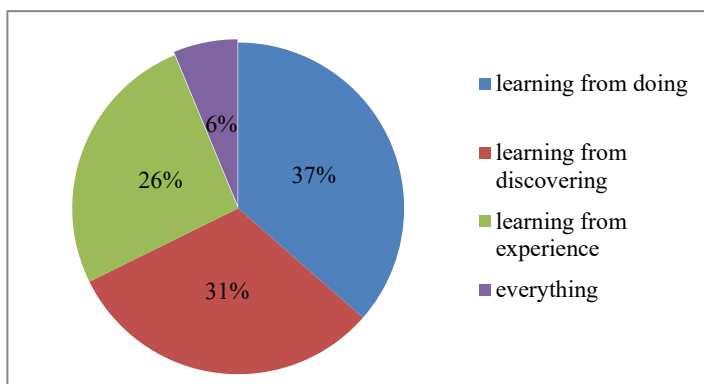
Prerequisites for the present research

d) The Republic of Moldova is one of the countries that is trying to adjust the system of education to the European standards. This can be observed both on the management and content levels. Referring to the content level, a revised National Curriculum was issued in 2019. It offers greater freedom to teachers in choosing contents, but it targets at developing other skills, except the language skills at the classes of languages. Moreover, the introduction of products as one of the outcomes at the classes of foreign language makes us draw the conclusion that the education system in the Republic of Moldova aims at empowering pupils with experiences that they need to succeed in life. When starting the investigation one year ago, I was interested what the teachers think about experiential learning and its implementation in the Republic of Moldova. The target audience was represented by 35 teachers from different Moldovan lyceums. Their age range was

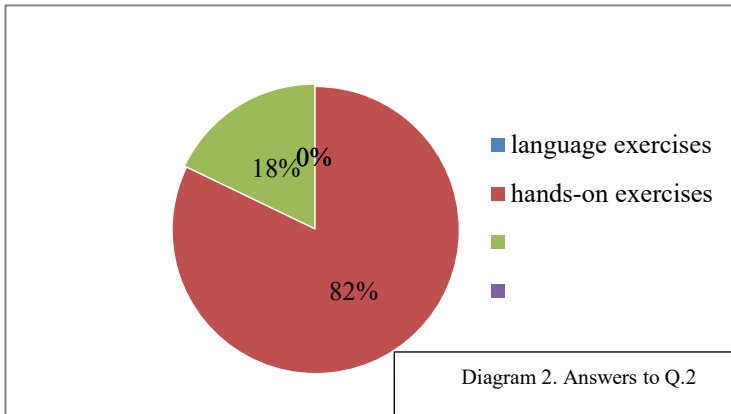
between 28 years through 48 years. The teachers had to provide with answers to 5 questions. Three types of questions were selected for this questionnaire: display, referential and situational. The display questions (or *known-information questions*) are types to put knowledge or information on public display. The referential questions (or *information-seeking questions*) are types posed when the answer is not known by the questioner at the time of inquiry. The situational questions are types that provide the interviewee with a situation that is to be analyzed. The questions that the 35 teachers from the Northern part of Moldova had to answer are as follows:

1. What do you understand by the term “experiential learning”?
2. How often do you encounter troubles when implementing experiential learning approach? Justify your answer with an experiential learning activity.
3. How were you taught a foreign language when you were a high school pupil?
4. Do you think that this approach should be implemented in teaching your discipline?
5. Have your students ever complained about the structure or contents chosen to teach your discipline? If you were in their place, what would you do?

The results that I have got are the following. All the teachers understand what experiential learning is (see Diagram 1.).



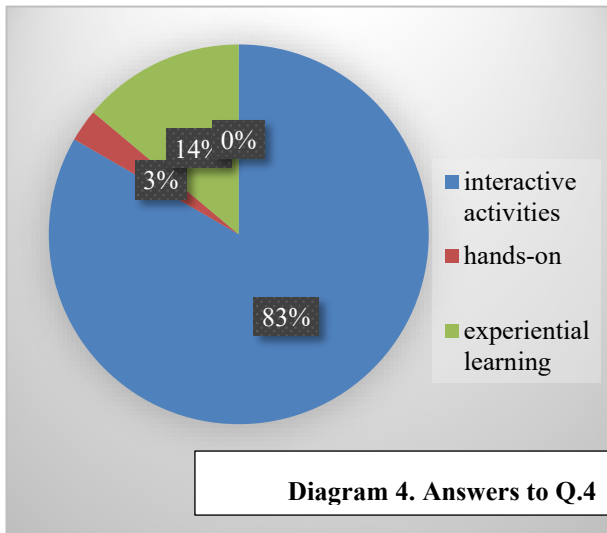
Their answers describe the essence of this approach (learn from experience, learn from doing, learn from discovering).



The answers to the second question were not exact (see Diagram 2). The greatest number of teachers (29 from the total number of teachers) answered that they never encounter troubles. Only 6 respondents could not provide with any answer. The justification entered into contrast with the answers to the first question. When the teachers were asked to provide with examples, the science teachers provided with more vivid experiential learning examples. The English teachers believe that the experiential learning patterns are question making, fill-in and matching exercises, etc.

The answers to the third question were unanimous. All the respondents mentioned that the process of teaching has changed. About 10 years ago, the input was only through reading texts and listening (we were taught in a traditional way, using the textbook and copybook, direct translation method). The output was similar to the input.

When analyzing the data that referred to the fourth question (see Diagram 4), it is worth concluding that the teachers of English believe that this approach should be implemented once in a while. These answers come into contradiction with the answers from question number



The answers to the last question were the most interesting. The interviewed teachers agree that more interactive activities should be used in motivating the pupils. All the answers were very general, no activity was mentioned; only one teacher mentioned the usage of experiential learning.

Thus, the conclusions to be drawn are as follows:

- Experiential learning approach is an alternative approach in teaching any discipline.
- The educators in Moldova do not know the essence of experiential learning, its models and principles of implementation.
- The educators are aware that the approach should be changed.
- The Ministry of Education, Science and Research is striving to implement experiential learning in Moldova, but no trainings are delivered.
- Today, Moldova is ready for this approach, but the educators do not know how to implement it.

Inquiry-based Model Implementation

As inquiry-based has at the basis a question, it can be implemented very easily and with minimum efforts at an English class. There have been presented two samples of lessons that 5 teachers had to use in designing their own lessons in two periods of time: (1) December, 2019

- February, 2019; (2) April, 2020-May, 2020. The samples were created in accordance with the general purpose and the changes in the learning environment. The target audience was represented by 75 tenth graders. The domains chosen were: social and cultural.

The first stage of inquiry implementation was the psychological test on curiosity (<https://hbr.org/2015/12/assessment-whats-your-curiosity-profile>) and motivation (<https://testyourself.psychtests.com/bin/transfer>). All the students had to take the two tests and the results are as follows:

Curiosity: 55 pupils have the third level of curiosity from 7 levels; 20 pupils have the fourth level of curiosity from 7 levels;

Motivation: 22 pupils proved to have a low level of motivation; 40 pupils showed a medium level of motivation; 13 pupils turned to be highly motivated.

The sample for the inquiry-based model implementation for the first time period explores the culture domain and was used before the pandemic. The content was chosen on britishcouncils.org site. As it was too long, I have abridged it.

The first drawings on walls appeared in caves thousands of years ago. Later the Ancient Romans and Greeks wrote their names and protest poems on buildings. Modern graffiti seems to have appeared in Philadelphia in the early 1960s, and by the late sixties it had reached New York. The new art form really took off in the 1970s, when people began writing their names, or 'tags', on buildings all over the city. In the early days, the 'taggers' were part of street gangs who were concerned with marking their territory. They worked in groups called 'crews', and called what they did 'writing' – the term 'graffiti' was first used by The New York Times and the novelist Norman Mailer. The debate over whether graffiti is art or vandalism is still going on.

For decades graffiti has been a springboard to international fame for a few. Graffiti is now sometimes big business.

Stage 1. The students read the abridged variant of the text. The teacher provides with some visual examples of graffiti masterpieces. 5 words or word combinations to be trained are underlined in the chosen text.

Stage 2. (Question Stage) The teacher asks the students to formulate a question to be answered. The question should be formulated on the basis of the selected vocabulary. It is advisable to write on the board as many questions as possible. Then, the teacher chooses for investigation only one (ex. *How is it possible to reach international fame through architectural units in Moldova?*)

Stage 3. (Investigation Stage) As the greatest majority of teachers do not have the necessary equipment to make the investigation in class, it is desirable that the teacher provides with some information about architecture / different styles. The students choose the style they want to investigate.

For example:

Tudor architecture is the final style from the medieval period in England between the 1400s-1600s. While the Tudor Arch or the Four-Centred Arch is the distinguishing feature most people would recognise the timber-framed houses of the Tudor era.

Key features: *Thatched roof, Casement windows (diamond-shaped glass panels with lead castings), masonry chimneys, elaborate doorways.*

Materials: colored paper, glue, carbon, cotton pads, felt pens

The Victorian Era (mid to late 19th Century) saw a return of many architectural styles including Gothic Revival, Tudor and Romanesque as well as influences from Asia and the Middle East. During the industrial revolution, many homes were built in the Victorian style as part of the housing boom.

Key features: *'Dollhouse' effect with elaborate trim, sash windows, bay windows, imposing 2-3 stories, asymmetrical shape, a steep Mansard roof, wrap-around porches, bright colours.*

Materials: carbon, masking tape, sticks, colored paper

The students are asked to answer the question by making an architectural unit that will represent a certain style they have chosen to research on.

Stage 4. (Presentation Stage) The students are asked to communicate the obtained results. The directions and connectors are offered:

Our team investigated...

The question that we have formulated is ...

First, (we have done this) ...

Second, (we have done this) ...

Third, (we have done this) ...

The conclusions that we have come to are ...

The second sample was used when the learning environment changed. The teachers were encouraged to work on google slides that facilitates the synchronous process of e-learning.

Stage 1. (Question Stage) The students are encouraged to guess the topic of the lesson by taking a genius test (<https://kids.nationalgeographic.com/games/personality-quizzes/what-kind-of-genius-are-you-/>) and brainstorming the word “arts” using www.coggle.it. They have to formulate a question that is related to the brainstormed topic.

UPLOAD THE PICTURE OF THE SELECTED PIECE OF WORK HERE

Information about the artist (4 facts):

- 1.
- 2.
- 3.
- 4.

Describe the selected work

Use the platform, create your own piece of art choosing one element and describe it

Picture 1. Worksheet #1.

Stage 2. (Investigation Stage) The students are proposed to get informed about a piece of art and its creator. In order to simplify the investigation process, the teacher asks the students to access the link <https://www.baamboozle.com/game/141>.

Name the selected work:

**Qualify the selected facts about the artist:
Ex. interesting, funny, etc.**

Describe the team's created work:

Is there any necessity to improve it?

Picture 2. Worksheet #2.

Stage 3. (Reflection Stage) Every team has to fill in the worksheet. It ends with a digital product created on the basis of the selected piece of work via <https://canvas.apps.chrome/>.

Stage 4. (Improvement Stage) Peer evaluation is proposed. Teams have to assess their peers' worksheet that is a part of the google slides shared by the teacher. They are given an evaluation peer worksheet.

The post inquiry-based model implementation was characterized by taking the curiosity and motivation tests by the tenth graders again. The results are as follows:

Curiosity: 25 pupils have the third level of curiosity from 7 levels; 40 pupils have the fourth level of curiosity from 7 levels; 10 pupils have the fourth level of curiosity from 7 levels.

Motivation: 16 pupils proved to have a low level of motivation; 40 pupils showed a medium level of motivation; 19 pupils turned to be highly motivated.

Conclusions

Experience is important and stands at the basis of any achievement. In such a way, the lessons derived from experiential learning stimulate the process of drawing conclusions, making associations, and systematic satisfaction. The main aim of teaching is to create autonomous learners, who are able to take responsibility of their learning and are capable of individualizing their experiences to obtain maximum benefit to be competent users of the target language. In this respect, experiential learning is regarded as a wonderful way to teach a new generation of youth in the reframed society. It is believed that experiential learning in modern education is "the process whereby knowledge is created through the transformation of experience".

The Ministry of Education, Science and Research of the Republic of Moldova recommends the usage of experiential learning models in teaching language skills, developing competences and train soft skills. Inquiry based model is the most appropriate to be used in teaching English as a foreign language, as it puts the pupils in charge with their own path, it triggers curiosity and brings authenticity to the learning environment.

The research is quite modest, but it contributes to the general understanding of principles and strategies to be used to boost students' curiosity and motivation. Although the teachers in Moldova do acknowledge the importance of experience accumulation at the lessons, they find it too difficult to put in action.

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