PROJECT TECHNOLOGY IMPLEMENTATION FOR DEVELOPMENT OF BUSINESS QUALITIES IN SENIOR PUPILS

Liliia Martynets

1Doctor of Pedagogics, Associate Professor, Vasyl' Stus Donetsk National University, Vinnytsia, Ukraine. liliamart7@gmail.com

Received: 13.04.2020 Revised: 20.05.2020 Accepted: 11.06.2020

Abstract
The article considers the role of project activity in senior pupils business qualities development. Fundamental changes in the education field accompany the transfer from the industrial to the information society: refusal to understand education as a knowledge ready to develop ways of adequate integration into Ukrainian society. Nowadays a modern society does not need a performer, but a creator capable of modelling independently, creating projects that must be up to the requirements of time, able to live a full life and to work actively in the new world, to self-improve constantly, adequately react to changes, especially during the technological and civilisation breakouts. It conditioned the introduction of the educational institutions of the project activity in the educational context. The solution of this task requires, first of all, the identification of the means of project activity in the comprehensive educational institution.

Keywords: Business Qualities of a Person, Creativity, Lifelong Learning, Presentation, Project, Success Situation.

© 2020 by Advance Scientific Research. This is an open-access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)
DOI: http://dx.doi.org/10.31838/jcr.07.11.158

INTRODUCTION
The process of business qualities of a person formation is carried out in a specially organised activity aimed at gaining the practical experience. Vivid representatives of this idea are supporters of pragmatism, who identify reality with the “experience” referring to as “the stream of consciousness”. Based on the basic principle of the named philosophical direction, according to which “all that is useful is true”, J. Dewey defended the value of the practical activity and personal experience, considering the problem of forming the business qualities from the standpoints based on the solution of those problems and questions that arise in the course of specific work.1

Therefore, one of the means of active formation of business qualities of senior pupils in project activity. Advantages, namely predetermine the tremendous and sometimes crucial importance of project activity for the development of the pupil's business qualities, the formation of key competences: the project method allows to test and consolidate theoretical knowledge through practical application. The project provides a productive link between theory and practice in the learning process. The life outcome of the project is a product (which ensures the integrity of the project as the completed product and its evaluation), and the conditions and tools for its achievement are the competencies of the pupil, the project activity helps the pupil to gain life experience.2,3

The focus of modern education on specialised training makes the knowledge and application of project activity extremely relevant. However, it essential to remember that project activity should not reduce the level of educational achievements of pupils should promote the development of creative personality, the formation of business qualities of pupils. So, without giving up knowledge, abilities and skills, we should consider the project activity as a priority direction that will help to shape the business qualities of senior pupils.

The purpose of the article is to reveal the implementation of project technology in the formation of business qualities of senior pupils and to determine the results in the main areas of development of business qualities of the individual, development of abilities and skills in the field of project activity.

RESULTS
For three years (9th-11th form) each pupil has participated in the creation of five projects. The project managers were deputy directors, subject teachers, class teacher, club leaders, organisers, parents, and others. During working on any project, a teacher adheres to creating a “success situation” algorithm.

At the organisational and preparatory stage of project making, pupils got a motivating set up to create a successful project. The task was to instil self-confidence. There were other students’ successful projects presentations showing the advantages of every project. The teacher aimed the pupils at the fact that the project activity is not easy, but manageable and a pupil with any level of knowledge can carry it.

The teacher talked to the pupils about the importance of presenting the projects at the conference. It is necessary to form a “motive for achievement” (O. Korotaieva). It may be the desire to create an original creative project on their own, to show their abilities to others.

The main task of this stage is to make the pupils “to engage in the project”, to make them have a desire to reveal and present their creative abilities, to express their “I”. We have aimed the pupils with such sets as: “You will surely succeed”, “You will be able to create a successful project”, “I am sure that your projects will be better than the previous ones”. It is crucial to overcome the students’ indifference to the activity, to prevent the formal attitude to the project and to create a positive mood.

At the second stage of project creation – technological one the teacher provides the conditions for the pupils to solve the problem successfully, organises the supervision of the beginning and completion of work and provides emotional support. In the process of creating the project, the teacher supervised the pupil’s activity and directed it in the right direction in the order it was successful. If the pupil was moving in the right direction, the teacher emotionally praised him, encouraged him and stimulated his further activity. In order to encourage the pupil, the teacher used psychological means – a smile or a nod. If a pupil faced the problems, the teacher tactfully pointed out the defects, suggested ways to solve the problem, provide moral support, changed tasks as needed or assigned help from classmates.

If it was a group project, then the teacher was the organiser of a favourable psychological atmosphere in the group. As a
supervisor, he was involved in the system of relations of cooperation, co-creation and was responsible for the quality of each project. His task looked difficult also because it was he who helped to organise the subject-subject relations of the pupils in the group, created the conditions for work discipline and the organisation of project activity that revealed the potential of each pupil. To create such an atmosphere of communication, the teacher was not “above” the pupil, but “near” him, in order to reach out for help in time, to be his partner and his colleague. Establishing a favourable relationship between teacher and pupils based on trust and understanding was an incentive for successful project activity.

Thus, at this stage, it is vital to get pupils interested in the educational process, project activity, to encourage, to stimulate and to set up to the successful completion and presentation of the project.

The third stage – the final one, is the most important in creating a “success situation” in the project activity. At this stage, the pupil presents the results of his activity, of his efforts - the project. The result is to evaluate the project by all the participants and to discuss its advantages and disadvantages. It is essential here to organise the educational process in such a way as to convert the result into an incentive for further activity (including project one). The teacher’s task is to adequately evaluate the project itself as a result of independent educational activity and the efforts spent in the process of its creation. If the project turned out to be a success, the teacher, in order to create a “success situation”, expressed his pleasure, praised the pupil, pointed out the advantages, paid the pupils’ attention to positive features, creative findings that they could use in further projects. The teacher emotionally approved the project and gave the setting to further fruitful work. If the project was not very successful, the teacher first pointed to its advantages, noticed the positive features, then tactfully pointed out the shortcomings, aiming the pupil at the fact that if creating the next project he is more attentive and responsible, gives more efforts than the project will be more successful.

During the implementation of the project activity, we used the following techniques to create a “success situation”: positive attitude; encouragement and praise.

The first step (9th form, summer term) was the creation of an informative individual project “My Way to Business Success”. Ninth-form pupils supervised by a classroom leader prepared information about their achievements and building of their goals for achievement in life. The discussion of the projects took place during classroom hours. In their speeches, the pupils had to reveal the following aspects:

1. To substantiate the system of their life and professional goals.
2. To tell about the technology to achieve these goals.
3. To reveal the qualities foreseen by any activity (future profession) that they will bring up in themselves.
4. To say about personal achievements.
5. To list sports events, concerts, competitions in which they participated.
6. To present photos and awards.
7. To answer the listeners’ questions.

Pupils know that the use of information tools [presentation] is an obligatory part of such project. The presentation of the projects was beneficial during a meeting of senior pupils, where project participants reported on their future achievements in various fields of activity. After the presentation, the participants discussed the advantages and disadvantages of the projects, the evaluation by the teachers and pupils evaluated the projects according to predetermined criteria. The competition for the best project started, and the winner was determined by voting.

The second step (10th form, winter term) is to create a practice-oriented group project in pupil’s self-government or a creative group project in group work (design workshops). Pupils got specially selected project topics. At this stage, the tenth-form pupils were supposed to familiarise with the algorithm of work on the project and to improve the skills of practical use of information technologies for problems solving. In pupil’s self-government under the supervision of the teacher-organiser or the deputy director of educational work, pupils were able to create projects for the program or a game. Each group consisted of 10-12 pupils. The pupils discussed the projects at self-government meetings and developed the idea of the project, determined its budget. The result of the project was a program or a game script. The projects were evaluated by the jury, which included teachers and graduates (ex-presidents) of the pupil organisation. They continued the most exciting projects as extracurricular work. The most striking among them was “Steps to Success”, “How to Become a Leader?”, forum “Voice of Pupil Youth”, “Do as We Do! Do it with us! Do it Better Than We!” “School Social Advertising”, “What I Can Change in My School Life”. Through the created group projects in the self-government, pupils learned to work in a team, to prove, to defend their point of view, to listen not only to the teacher and themselves but also to others and to admit their mistakes. During the project, defence stage pupils developed monologue skills presenting the information on their topic.

Conducting the experimental work, we tried to organise the interaction of senior pupils of the experimental group with the pupils of other schools and with the students of higher education institutions. In connection with its joint meetings, conferences and project presentations were held. Communication with the pupils of other educational institutions and with the students increased the importance of the work performed in the eyes of pupils, and it clearly showed to senior pupils that this work is not one-time that it will continue.

In the group work pupils also were introduced to the technology of project activity and to the methods and tools that allowed the creation of unique material products based on the real experience. Thus, in the design workshop “Fashion modelling”, the girls of the experimental group made neckerchiefs, aprons, concert costumes for the performances of elementary school pupils, and the boys in the design workshop “Technical modelling” produced bookshelves, household trowels and other things. While working on projects, the pupils learned more about a project budget and different ways to foresee the expenses, materials and equipment, the dynamics of consumer demand. Pupils have successfully sold their creative products at school fairs. The project “School Yard” created by 10th form pupils was also interesting and useful.

The basic idea of the project is related to the need to create a playground for the pupils of the extended day group. The project participants have determined the register of the fulfilment of their goal:

1. To select a day and to clean up the territory of the gymnasium.
2. To collect and to prepare planting material.
3. To prepare for the creation of a fairy town. According to the conceptions of the project, there should appear fairy-tale characters, various flowerpots, sidewalks, flowerbeds and other small architectural forms.

The participants made the project budget. As one of the objectives of the project was to involve parents, residents and teachers, with the joint efforts was organised the delivery of horticultural sundry, work gloves, building materials, flower
seedlings and seeds, old buckets, barrels, logs, tires and other things. With the efforts of the gymnasium, the student organisation “Youth Federation” and the sponsors provided other materials and equipment.

4. To create architectural forms.
5. To implement the project: preparation of the territory of the school area for work; creation of flower beds; installation of architectural forms.

Of course, such a project remained only partly implemented in a year, today’s senior pupils make creative corrections and additions to it. However, working on such a project helped the pupils to express themselves, to find confidence in their abilities, to participate in the public life of the gymnasium, to develop a sense of responsibility, business orientation, creativity, willingness to risk and caring attitude towards others.

The third step [10th form, summer term] of pupils was to create a study (profile) project, which is a collective (group) activity of pupils under the supervision of subject teachers consisting in creation of a product on a topic related to the subject or profile subject, with the involvement of information technologies. The project has a design of a report with an obligatory description. A requirement was to submit an illustrative material, photographs, diagrams and tables. Pupils actively used both traditional (books, manuals) and modern (Internet) tools of project activity. Pupils got specially selected project topics.

The study projects started from the elemental subjects, profile subjects or on optional courses. Here, the bulk of the projects worked more on the subject matter itself (several subjects) and first of all, depended on them and the pupils’ interests. These are not always project cases; more often, they are educational. These are literary projects, geographical “trips”. One thing is essential: in order to create interest and admiration in children, the main types of school must work focus on actual data and material. Then the very integrity and ingenuity of the lessons and optional classes stimulate the persistence and energy of the whole class.

Thus, for example, in the profile subject (economics) pupils worked on business projects “I own my own business”. Each pupil has learned how to create a competent business plan. A business plan is a project of future business. An adequately made business plan ultimately answers the question: is it worth investing in a business at all, or will it be profitable, and will the profits pay off all expenses? The pupils were divided into five groups, each representing a business plan for a hotel, hairdresser, restaurant, fitness club and a car wash. The pupils got the following scheme of project creation:

1. Role of a business.
2. The purpose of the project.
3. Marketing and sales.
4. Premises.
5. Production plan: a) premises; b) staff; c) financial part of the business plan: investment costs; running costs; sources of income (per year); profit (excluding taxes).
6. Project payback period, profitability.

The pupils presented the projects in an open lesson (where parents and teachers of the gymnasium were present). Due to work on the project, the pupils got acquainted with the structure of the business plan, learned to think, developed their creative imagination, ability to risk, responsibility for their own business.

In the geography lesson, pupils should make an imaginary trip to Western Europe. The class was divided into groups. Each group had to determine precisely the benefits and assets of their route; the route itself; duration of the trip; its cost.

The pupils got the outlined plan of general work on the project. Each group got acquainted with the country they wanted to visit, how to keep their health on the way, and which diseases are more common in different countries. In this regard, the questions about clothing, equipment, luggage, foreign passports, advanced foreign language learning have arisen. Further, it was necessary to obtain a great deal of information about possible transport and logistics. The class carefully studied the train schedule and the distance between the stops. Participants got an exact plan of the ship and had enough information about its structure and how it settled in cabins beforehand. They decided to keep short diaries during the trip, noting everything highly impressive in the notebook. The route was following: first stop is Athens (to the Greek temple in Athens, Greek columns), then an overview of Gibraltar, Malta, Italy (Naples, Venice, Florence, Rome), San Marino, Spain. Next microstates of Andorra and Monaco, Switzerland, France (Monte Carlo, Paris), Great Britain, Germany, Denmark, Sweden, Finland and Eurovision 2008 trip to Serbia.

It was also necessary to think about gifts. The participants had a long argument before they decided what was better to bring. Finally, they decided that everyone would bring a souvenir and a photo from each country.

We proposed the following text of the letters: “March 15th. We arrived in Naples today. Tomorrow we will go to the heart of Italy - Rome. Eager to see St. Peter’s Square. In six days, we will leave for Spain. However, most of all I want to visit Germany. I have heard so much about this developed, leading country of Europe. I bought many presents for my relatives and souvenirs for my friends. I dream of getting to Eurovision; I will cheer for our country. I don’t want to go home yet.”

The work on the project was quite satisfying for both the teacher and the pupils. Children have developed the ability to work as a team, to work with information, literary sources, to show creativity, to take responsibility, to have a tolerant attitude towards the peoples of other countries. Pupils learned a lot of new terms, learned to ask questions and answer them and to present their material.

Particularly useful is the usage of project activity on integrated lessons. As a result, the pupils developed their business competence and qualities at the cross-curricular level and got plenty of practical application in different educational situations. So, on different basic subjects, the students worked on the project “Water is life”.

The pupils worked in groups of 5 people in which they distributed by themselves. The selected material was studied and analysed by each pupil. The critical question of the project is what is it, water? Each group worked in their field of knowledge: chemistry, literature, physics, biology, art and geography. Thus, the first group in the literature class search an answer to the question of how water affects the writers’ personalities. It turned out that E. Hemingway enjoyed water sports, which contributed to the writing of “The Old Man and the Sea”. Writer O. Green in his life went to work as a ship sailor and was a fisherman. Later he wrote the symbolic fairy-novel “Scarlet Sails”, where he embodied himself as the main character Arthur Gray, who also loved the sea and was a captain on a ship. On geography lessons, the second group discussed the problem of water pollution and ways to solve it. The pupils answered the question: how water affects the terrain of the planet, how are islands created, ravines, what does water do more: destroy or create. A third group on the chemistry lessons selected the material on the properties of water, its chemical composition, and how water affects human health. Pupils presented the illustrative material: “Water: Life or Death?”. On biology lessons, the fourth group considered the importance of water for the human body, what diseases occur in humans if there is the absence of water, the composition of water in the human organism, our planet Earth. In the field of art, the fifth group made a presentation of vast and beautiful fountains in
different corners of the planet, selected paintings of artists who depicted water. The sixth group on the physics lesson revealed the physical properties of water. After all, no other substance exists on Earth in such quantity and at the same time in three states: solid, liquid and gaseous. On computer science lessons pupils were introduced to Microsoft Office programs (PowerPoint, Publisher) and others.

The implementation of the project should take approximately three months. In the course of work, pupils used the gained theoretical knowledge and benefits of teamwork to implement their projects and put them into practice. The pupils placed the received information in a newsletter and a booklet, created a presentation, a web page describing the progress of the project and the results obtained. Gymnasium pupils presented the project presentation to other educational institutions of the district, representatives of the district department of education, headmasters and deputy directors, teachers of the district, lecturers of higher education institutions. A jury judged each project on specific criteria. The group of students in the literary field has won.

The teachers on the lessons actively used the method of the projects because its advantages were distinct: high motivation, enthusiasm and interest of children, desire for success, the connection of the obtained knowledge with real life, display of creative abilities, competence, communication skills, responsibility, cooperation development and scientific curiosity, self-control, better attachment of knowledge, the conscious discipline of the group.

The fourth step (11th form, winter term) was the creation of a group social project at classroom hours at the “School of Self-Education”, where each fulfills its functions: two pupils collect and process information; two more – prepare a presentation (slideshow), are responsible for IT support; others represent the project. Classroom leaders advised on projects and discussed the projects during classroom hours. They got specially selected project topics as a recommendation. We assumed that the problem imposed should be relevant to the students, not random and abstract. The novelty of the material is the most crucial premise for creating interest in it and educational motivation.

The project aim is to acquire skills in working with information, to develop the ability to work in a team. The project success depended on each participant contribution and coordination of the group work, roles distribution, each participant activity and psychological compatibility. The classroom leader advised the pupil during the creation of the project, directed his work, gave advice on how to arrange a presentation in the best way and assisted in solving problems that arose during the work.

Here is an example of a pupil project created in classroom hours at the “School of Self-Education” by 11th form pupils “In the Name of Your and My Life (through the pages of the history of the Great Patriotic War)”. The primary purpose of the project was to provide moral and material support to older adults, war veterans. The pupils studied a lot of popular science literature, searched for exciting facts in news sources, visited war veterans, combatants, interviewed them, viewed photos and supported each other. The pupils made it their duty to visit the veterans and to support them. And then hand the relay baton to younger comrades. The work resulted in the creation of the movie “Generation Memory”. The presentation of the project took place on the concert dedicated to the Victory Day with invited veterans, and war participants.

The fifth step (11th form, summer term) is to create a multimedia project involving parents on the topic “The Most Successful Business People in the World”. At this stage, the teacher should consolidate the skills of practical use of information and communication technologies for solving the objectives and the joint creative work of pupils with their parents. Project consultants were the classroom leaders; they discussed the projects at the parents’ meeting and classroom hours.

The participants got the following scheme of project creation:

1. Presentation of biographical material.
2. Brief description of the works.
3. Significant achievements in professional and life spheres of activity.
4. Contribution to the history of the country.
5. Characteristics of the personal, business qualities of an outstanding person which helped to achieve success.
6. Media presentation (with intro music).

Each stage in the creation of the project played an essential role in the development of knowledge, abilities, skills in the field of project activity of pupils. During the project preparation phase, pupils and parents worked with information and literature sources, selected the necessary information. They created presentations, choosing the color, musical, sound design of the project, booklets and newsletters at the technological stage. During the project protection phase, the participants developed monologue speaking skills presenting information on their topic. While discussing the project, answering the questions, the participants improved their dialogical speech, ability to grammatically and correctly answer the questions. At the end of the eleventh form, an open whole-school conference jointed pupils and their parents presented their projects.

Therefore, the process of creating the projects mentioned above involves a gradual increase in the complexity of the material. First, the pupil creates an information project, which requires a minimum of knowledge, abilities, skills in the field of design and information technology. The creation of practice-oriented, creative projects requires more skills. There is an active self-mastering the necessary knowledge, abilities and skills in project activity. Finally, when working on educational, social, multimedia projects, senior pupils need a maximum of knowledge, skills and abilities. To create a project, the student uses the knowledge gained in previous project activities as well as the new ones.

Thus, there is a consistent and purposeful development in the field of design, information and technological activities, the main areas of development of business qualities of the individual.

CONCLUSION

Summing up, there have been changes in the main areas of development of business qualities of the individual: activity-willed (development of responsibility); emotional (formation of sociability, tolerant attitude to the point of view of others, self-control); cognitive (formation of creativity, competence); motivational (the pursuit of success, focus on business). Pupils developed the following skills in the field of project activity:

- Ability to work with information (to analyse, synthesise, make generalisations, make conclusions);
- Ability to make decisions, work in cooperation with parents;
- Ability to solve complex problems with information collecting and communication technologies usage;
- Ability to work with programs Power Point, Macromedia Flash, 3ds Max, Adobe Photoshop, Microsoft Publisher to create presentations.

The new formation appeared – lifelong learning skills.
REFERENCES