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Implementing an Integrated Conception of Education in Classes I–III by Means of the Project Method

Realizacja idei integracji metodą projektów w klasach I–III

Introduction

From the very beginning, the putting into practice of an integrated conception of education within the framework of early-school educational reform has raised fears that any such implementation is liable to lapse into mere routine. The materials prepared for teachers, in the form of various programs and methodological guides, but rather fewer actual didactic studies, for the most part offer just one way to implement this idea at the level of their methodological proposals: namely, so-called ‘methodical cycles’, performed within various periods of time, most often from 2 or 3 days apart to a week. Methodical cycles constitute the form most commonly adopted by teachers, having already been elaborated and put into practice by certain teachers in the 1970s. The integrative focus of such cycles is above all formed by the educational content involved, though where the integrated programs elaborated at the time of implementing the reform are concerned, the authors also mention other elements, particularly the activities of pupils. Presenting in principle just one form of implementation of such integration naturally leads to uniformity and descends into mere routine – at least where the implementation of such
an educationally important idea is concerned. Hence there is an urgent need to work out and popularize other conceptions of integration, making use of different integrative foci as basic drivers of the process of unifying the relevant pedagogical activities. Such a plurality of solutions to the problem of implementation promises to enrich the work of teachers, and thus also to reinforce the values responsible for guiding their pedagogic activity in the sense of ensuring that it is conducive to the positive development of pupils.

This article describes certain other forms of integration-oriented work that have a claim to being considered interesting and valuable: namely, those associated with the project method. The integrative focus of this conception centres on the practical actions of pupils, being mainly concerned with the planning, performance and evaluation of accomplishments pertaining to one’s goals and intentions. The basic value of this method consists in just teaching how to act or manage one’s work, and in making use of one’s experience in various teaching situations. It shows pupils how they can be independent, developing their initiative and stimulating them at the same time. Emphasis is therefore put on managing pupils’ research activities via the search for a proper strategy for acting – one that will make it possible for them to develop their integrative knowledge to the fullest extent possible. Highlighting the importance of such solutions to early-school education, D. Klus-Stańska and M. Nowicka write that "whether knowledge is integrated in the mind or not does not depend on the subject, but on the method according to which we handle it. (…) as long as we ‘discuss the subject’ in school instead researching and analysing it, we will integrate only contents, but never the knowledge."

The essence of the method

Although it is not long since the term “project” first appeared in pedagogical discourse, the idea of a project-based approach is not itself new. Indeed, it is highly likely that good teachers have always applied the most essential principles of the project method in their practice. In certain countries, especially in the earliest classes, the curriculum was divided not into particular subjects but into specific projects. A project is a deepened exploration of a subject to which high cognitive value has been ascribed. It is usually performed by a small group of children separated off from the rest of the class, but sometimes by the whole class or even by just a single

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2 I. Dzierzgowska, Jak uczyć metodami aktywnymi, Warszawa 2009, p. 35.
The fundamental characteristic of such a project is its exploratory nature; however, these exploratory activities are intentionally directed in such a way as to arrive at answers relevant to the topic that the children or the teacher have previously been inquiring into, or which has shown up during the course of the teacher’s overall engagement with children. The project itself should be understood in this case as a complex major task (problem) related to real life. The pupil identifies with it, taking responsibility for it, so as to achieve – via his or her theoretical and practical activities – the final outcome, which is the project’s findings. The logic of such a project is similar to that of life itself, so that it serves to familiarize pupils with the surrounding world. According to W.H. Kilpatrick, any course of action where the intentions of the person acting are determined by a goal that organizes the steps involved and strengthens the person’s motives, resulting in them gaining valuable individual experience of one kind or another, may be called a project. Meanwhile, J.A. Stevenson has reviewed various definitions of the term “project” and determined the most representative characteristics of this method. In his opinion, we are dealing with a project when teaching aims at changing the attitude of the pupil, who gains knowledge thanks to intellectual effort, while any theory is implemented specifically with a view to resolving problems arising in connection with the reality that surrounds the pupil.

Kilpatrick distinguishes four project types:

1. This refers to an experience whose purpose is to accomplish some specific end, e.g. to implement a certain idea or vision in a given form.
2. This refers to the uses to which an experience can be put, or its assessment.
3. This consists in resolving a specific problem, and so refers to experiences whose real purpose is just to go through the process of exploring intellectual difficulties and overcoming them.
4. This is connected with acquiring knowledge and skills and gaining experience, enabling participants to attain a specific point in their overall process of personal development.

The basic assumption of every project, according to Kilpatrick, is a plausible goal, whose significance will depend only on the pupils them-

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3 M. Niemiec-Knaś, Metoda projektów w nauczaniu języków obcych, Kraków 2011, p. 10.
4 E. Horwath, Uczyć, aby działać. O metodzie projektów, [in:] Twórczość i tworzenie w edukacji polonistycznej, (ed.) A. Janus-Starz, Kraków 2012, p. 239.
5 W.H. Kilpatrick, Introductory Statement: Definition of Terms, Teachers Record, XXII, 4, 283.
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selves, and for this reason he advocates orienting education entirely towards the pupils, as child-centered education. J. Dewey and Kilpatrick, as the two educationists and writers most closely associated with the project method, describe its most essential elements in their common work, Der Projektplan:

- its starting point is in an important problematic situation or a conflict, which we may encounter in our daily life;
- taking into account the starting point for the project, pupils prepare an action plan together with the teacher;
- pupils plan the process of learning, and undertake actions to achieve in-school and out-of-school targets relating to their project activity;
- they affect each other via their actions, gaining common experience;
- traditional educational subjects are not treated separately in the course of the implementation of the project method;
- the relationship between teacher and pupil takes the form of a collaborative partnership, even though the professional competences of the two parties are different;
- the project plan distinguishes between four phases: setting up the problem-related task, planning, performance, and revision.

The multiplicity of approaches to the project method, its uses, and its specific solutions resulting from the tools and skills worked out by the teacher, cannot nowadays be brought under a single common definition. Nevertheless, certain features – namely those presented above – distinguish it from other, often related and very similar methods.

As Dewey describes it, the project method works as a “spiral”: “(…) a teacher must see to two things simultaneously: first of all, the set task should result from an actual situation, and should not be too difficult, taking into account the abilities of pupils, and secondly, it should make pupils search actively for information and propose new solutions. Thus, new facts and new proposals become a foundation for further research, which will entail new tasks. This process resembles a never-ending spiral.”

The pedagogical, psychological and philosophical foundations of the project method

From a pedagogical point of view, the project method reflects the pragmatist pedagogy of Dewey, in which primary significance is attributed to actions and experience. In the pedagogy of pragmatism, processes of interaction are understood as processes of action unfolding relationally...
between the acting person and their environment. The psychological and philosophical foundations of the project method should thus be sought in educational theories with a cognitivist and constructivist orientation. A child is not steered by the teacher, but is instead guided by his or her own exploratory curiosity, being active, independently seeking solutions, experiencing astonishment, making discoveries, and all the time explaining and interpreting for themselves the items of information they have acquired. Hence they have a feeling of satisfaction and a motivation to go on learning, and in this way the knowledge gained takes on a personal meaning for them. A child’s activity manifests itself in their manipulation of objects, and in associated processes of assimilation and accommodation – these being tantamount to the construction of knowledge schemes. The assimilation process consists in learning and including new items of information (events, motives) using already existing intellectual structures (schemes). The child assimilates only those items of information (or other motives) that correspond to their actual experience, knowledge, etc. On the other hand, when it comes to the process of accommodation, intellectual structures are modified in order to acquire new items of information or to create new schemes. Cognitive theories and constructivist philosophy thus furnish the ideal theoretical background for understanding such fundamental changes to what goes on in the classroom. Indeed, they have inspired a number of developments relevant to the emergence of new conceptions in learning theory:

- in the conception proposed by cognitive psychology, a human being is considered to be a system that transmits and disseminates information;
- this system consists of complex knowledge components; the entire knowledge system is divided into those elements and organized in terms of them;
- it is controlled by mental operations (processes and strategies);
- new knowledge comes into being as a consequence of interactions between already existing knowledge and new motives;
- other mental operations direct the process of enlarging and reorganizing knowledge, and of deriving further knowledge; i.e. they serve to optimize the system.

Applying these cognitive and constructivist premises to the learning process leads to a consistent transformation in classes that have previously been highly institutionalized. Indeed, several parameters call out to be mentioned here:

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10 M. Sieńczewska, Metoda projektów w przedszkolu, „Wychowanie w Przedszkolu”, 2012, No 2, p. 15.
12 M. Niemiec-Knaś, Metoda projektów w nauczaniu języków obcych, op. cit., p. 17.
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- textbooks now count as meaningless in the learning process; instead, one should reach out for authentic materials, with textual learning taking a more complex form;
- one should focus on gaining such skills and knowledge as may be used in the real world; pupils should work on subjects stemming from reality itself;
- the conditions in which the learning process takes place should also be consistent with reality;
- the main principle shaping the learning process will be the learner’s reflections on his or her own learning, and his or her own evaluation of that process;
- learning techniques should be independently chosen by the learners themselves;
- teachers and pupils work together – studying as in a workshop, treating the school as a house of learning.

The importance of the project method for the development and education of small children

The project method refers to a form of intentional support whose essence is the satisfaction of the basic needs of the child in all spheres of its development. The most important benefits resulting from the application of the project method are connected with the acquisition of communicative competence: learning and passing on information, expressing one’s opinions, listening to others’ opinions, asking questions, cooperating as a team, getting to know rules of interaction, adapting the type and nature of one’s speech to recipients, developing a sense of responsibility for accomplishing tasks, planning actions, and gaining public-speaking skills. At the same time, children not only have the opportunity to solve problems involving the active engagement of such learning functions as attention, perception, thinking and memory, but also have the chance to pursue creative self-expression, involving the imagination and the emotions. The variety of actions they undertake make them authentically involved and keep them busy all the time, while fun and education are combined into a harmonious unity. Working according to this method gives the children the opportunity for the following:

- proving oneself as a researcher and creator, and in this way experiencing, suffering, exploring and acting;
- demonstrating initiative, planning skills and decision-making abilities;

13 M. Sieńczewska, Metoda projektów w przedszkolu, op. cit., p. 15.
organizing workshops, searching, selecting, collecting and elaborating information;
• cooperating and associating, as well as engaging in self-presentation;
• feeling responsible for accomplishing a task;
• connecting knowledge gained to that previously acquired;
• understanding the requirements of learning, and gaining skills in reading, writing and listening, and in communicating with both peers and adults.

Curiosity and a willingness to explore the world are typical features of all children starting their school education. The project method, with its shared performance of tasks and active searching for answers to important questions, may transform school education into an amazing adventure for children. Teachers in Classes I–III should set out to create educational situations in which pupils learn via their own search for new information and cooperation and, most of all, via their independently gained experience, which itself will surely enable their various essential competences to take shape.

The project method as a chance for a new type of schooling

The changes taking place in our society today require schools to develop and implement new teaching methods. At present, teaching according to the project method is quite likely to be treated either as a didactic conception with extensive scope of application, or as having a quite limited methodological relevance. Some schools take advantage of learning according to the project method, and also set out to meet the demands of the curriculum in this manner. At the level of early-years education, however, such projects mainly serve to supplement regular classes. Dewey himself saw, in the concept of project-based learning, a chance for a new type of schooling to develop, which through practical teaching might make the quality of social life more valuable. Currently, school classes are directed at gaining so-called key qualifications, which are especially needed in professional life. These include arranging and conducting communicative tasks, being able to cooperate, solve problems and make decisions, developing independence and responsibility, manual skills, mobility, and the ability to go on learning throughout one’s entire life. Education through projects is very inspiring, and is directed at furthering the pupil’s development in respect of versatility. Thanks to the fact that projects are adjusted to the skills of learners, they are more motivated to learn. Problem-oriented learning through project-based activities results in a syn-

14 M. Niemiec-Knaś, Metoda projektów w nauczaniu języków obcych, op. cit., p. 41.
thesis of in-school and out-of-school aspects of a child’s education, and in teaching and learning of a kind that cuts across subject-boundaries. Pupils better remember the content of what they have learned in the course of their own acting and researching. Weaker pupils also benefit from project-based classes – something that is related to the fact that in project-based teaching the teachers assume the role of assistants and advisors. By means of the various media and other options with which present-day schools are equipped, weaker pupils can quickly develop the skills pertaining to self-organization and organization generally that will be so greatly needed by them in their subsequent vocational lives.

In actual school practice, we typically encounter a variety of projects and divisions between them. There are, for example, projects in which the following needs of the pupil are fulfilled:
- the need to communicate and interact – social contacts are developed and supported through teamwork, talks, discussions and games;
- the need to learn actively, independently and on the basis of experience;
- the need to work in a pleasant atmosphere.\(^{(15)}\)

Regarding the project perceived as a method of implementing the curriculum, the following types of project should be mentioned:
- subject-focused projects, where part of a given subject’s curriculum is implemented in the form of projects located within just one subject;
- the project as an evaluative task, constructed in such a way that over the course of its implementation the pupil is able to demonstrate some of the knowledge and skills specified in the curriculum;
- the inter-disciplinary project, whose contents come from two or more subjects, but with one of these as the principal one;
- the school project, possibly implemented in the context of out-of-school courses and supplementing rather than directly implementing the curriculum.\(^{(16)}\)

In projects, we are dealing with complex targets and specific opportunities of the sort that should be offered by present-day schools:
- schools should open themselves up, inasmuch as the project method’s ultimate goal is for learners to be educated through direct experience and reflection, and via action; learning in various situational contexts constitutes a counterbalance to school learning;
- learning via surprise, where projects assume full engagement on the part of learners; in project-based activity it is not assumed that the process

\(^{(15)}\) R.E. Wicke, Vom Text zum Projekt, Berlin 1997, p. 120.
of learning results from compulsion or is carried out with some definite future goal in mind – sometimes a surprise such as a coincidence can decide the project’s outcome;

- in the foreground of the project-based approach stand the understanding and experiencing of relations between different contents – not only particular contents, but entire thematic networks; multi-aspected and multi-threaded teaching is the basis for this, with actions and effective thinking forming the main supporting edifice;

- balancing areas of competence and targets in respect of particular competences – professional aspects, learning techniques, and work-oriented and social methodology should all be equally present, and should be determined and controlled in particular phases;

- learning in society, which means that with project-based activities the whole group works on a common subject; one is expected to subordinate one’s personal concerns to higher goals, to be active in support of social issues, as well as for the sake of the subject matter itself, and for the sake of the work done by particular pupils in the course of implementing the project\textsuperscript{17}.

In school practice the project method makes the teaching process more difficult. Not every pupil is able to conduct the learning process himself, or to retain control over it. For this reason, pupils should be familiarized quite early on (with the teacher’s assistance) with techniques for working and evaluating independently, and be able to apply the skills they develop themselves. Applying the project method may also be hindered by other factors:

- if the curriculum has to be implemented within a specific period of time, then there will be no time left for projects, and besides, often the whole curriculum is divided into particular education areas, to the extent that only simple problem-solving skills are required from pupils, and no opportunities for project-oriented activity are created;

- easily verifiable proofs of progress in learning, such as tests and class work will definitely limit how far the project method can successfully be applied;

- for methodological reasons, not every topic can be realized in the course of project activity;

- it is particularly difficult to realize projects at primary-school level, because both pupils and teachers there are likely to possess insufficient competence as regards projects. An activity similar to a project is then preferred, as something realizing just two or three components of the project method itself;

\textsuperscript{17} E. Achermann, Mit Kindern Schule machen, Zürich 1995, p. 105.
for the school to be able to realize projects, it is necessary to have workshop rooms.\textsuperscript{18}

The project-based method is a strategically conceived didactic procedure that is highly pupil-friendly and teacher-friendly. It is feeds in positively to their common work and shared achievements – especially, of course, in the didactic realm. At the same time, the successful implementation of this method depends on persuading pupils to take on responsibility for their own work. If one can achieve this, then the educational result will be much better than with traditional methods.\textsuperscript{19} It should be noted that, on one hand, plenty of teachers of Classes I–III are interested in teaching according to the project method in the present school system, but also, on the other hand, that a falling off of motivation in relation to the project can be observed if too many difficulties are encountered while performing it. Nevertheless, one cannot help but notice that it is slowly becoming recognized as an element within school practice.

Another significant point is that it is crucial that attempts be made to adjust curriculums in such a way as to make it possible for projects to be implemented. Such actions will lead to the renewal of the education process for Classes I–III, and will give new meaning to the teacher’s role. A teacher is then no longer just an expert in a given subject: instead, they become a coordinator, a person engaged in motivating and supporting children. Everyone has his or her place in the project, while the teacher is the ”conductor of this orchestra.”\textsuperscript{20} The pupil also has a new role in the project, as he or she definitely has to show much more initiative and independence than during traditional classes. Schools should therefore also become more involved in organizing space for the implementation of projects, in the sense of workshop rooms, computer corners, etc.

In the project-based method we are, moreover, dealing with a different conception of evaluation. Evaluation is to contribute to blurring the differences between good and weak pupils, so the traditional mode of evaluation expressed in the form of grades cannot be recommended here, though it may be employed alongside other things. The open conception of a project requires a new approach from teachers to this, as evaluation and grades are discussed in the context of project-based activities in much the same way as the project initiative itself is. Any processes of checking and assessing should correlate with the systematic conception of the work to be carried out in the project, and for that reason, any materials that

\textsuperscript{18} M. Niemiec-Knaś, Metoda projektów w nauczaniu języków obcych, op. cit., 43.

\textsuperscript{19} A. Mikina, B. Zając, Jak wdrażać metodę projektów? Poradnik dla nauczycieli i uczniów gimnazjum, liceum i szkoły zawodowej, Kraków 2006, p. 131.

\textsuperscript{20} G. Woźniak, Mały badacz czy uczeń w ławce?, „Wychowanie w Przedszkolu”, 2012, No 2, p. 16.
might be needed to lend support to an evaluation, such as concrete outcomes, problems solved, diaries kept by pupils, reports or protocols, should be retained as essential items.\(^{21}\) In sum, we may be confident that pupils who gain knowledge and develop skills thanks to the open and flexible conception of a project will be brought into an engagement with a range of activities and materials, become involved in the project-based activities in ways that reflect their own interests, and end up using a wide range of learning techniques, and thanks to all of this will surely go to school more willingly and achieve better results in their education generally.

**Conclusion**

The approach to educating young children has recently undergone significant changes. The need to activate natural motivations for learning, and to arouse exploratory curiosity, is now emphasized more and more often, as is the importance for children of communication with both peers and adults when engaged in constructing knowledge and developing new skills. Understanding the world is a complicated process, reliant above all on the assigning of meanings to various experiences, so teachers are always on the lookout for motivational methods such as exhibit all the right didactic virtues while at the same time ensuring the possibility of creating educational scenarios attractive for children.

The project method would certainly seem capable of meeting expectations in this regard, and on this basis it seems right to recommend implementing programs in which exploratory actions are initiated by children, and to resign from those which rely on courses conducted by teachers. Programs which incorporate the project method certainly represent one of the options here. However, working according to the project method requires courage, good organization, and a willingness on the part of teachers to make changes to their style of working. Even so, the consequences in this respect should not be overrated: after all, parents will wish to cooperate and become involved in the education of their children, while their children can discover their passions, learn to be determined in their struggle for knowledge, and develop their ability to think and draw inferences, as well as enhancing their overall creativity and independence. Research projects also support emotional and social development, with pupils learning how to cooperate and emerging with their self-confidence strengthened. Indeed, all of the above skills should be pursued from an early age, so that children come to associate acquiring knowledge with being a little explorer rather than a “pupil at a desk”.

\(^{21}\) B. Klasińska, Metoda projektów i jej zastosowanie w nauczaniu początkowym, „Wychowanie na co Dzień”, 2002, No 7-8, p. 22.
Bibliography


Abstract

Educational activities have always been accompanied by a tendency to look to achieve optimal results. New and better teaching methods have been searched for, that would not only accelerate the learning process itself, but also make it more attractive and efficient. In present-day early-school education, we are dealing with a new type of pupil, using a set of learning methods and techniques that are totally different from those used previously. In this scenario, traditional learning methods may come to seem inadequate from the point of view of ensuring the attractiveness and efficiency of the educational process. From the very beginning, the implementation of an integrated conception of education in the context of reforming early-school education has raised fears that such reforms could bring about a deterioration into mere routines. The materials prepared for teachers in the form of many didactic studies, programs and methodical guidebooks, for the most part contain, at the level of their methodological planning, just one way of implementing this idea: namely, so-called methodical cycles. Presenting in principle just one form of implementation of such integration naturally leads to uniformity and descends into mere routine – at least where the implementation of such an educationally important idea is concerned. If we are looking for interesting solutions for early-school education, then it is surely worth noting the interesting and valuable form of integrated work known as the project method. This refers to an active methodology based on the exploratory activities of pupils, whose main goal is to bring it about that the knowledge entertained by pupils is of an integrated nature, making it coherent and systematic, and thus dynamic, flexible, and maximally available for the individual – both for purposes of reflection and in the form of a readiness to act in various situations. The basic value of this method just consists in teaching how to act, manage one’s own work, and make use of one’s own experience in various teaching situations. At the same time, it builds up skills connected with communication, negotiation, decision-making, and coping with atypical situations, releasing leadership potential and instilling self-confidence – something that in turn allows one to function actively in society, planning one’s life in a fully conscious way.

Keywords: early education, integrated education, teaching methods, stimulating methods, project approach, teaching according to the project method.
Realizacja idei integracji metodą projektów w klasach I–III

Abstrakt

Dążenie do osiągania optymalnych wyników towarzyszyło działaniom edukacyjnym od zawsze. Poszukiwano nowych, lepszych metod nauczania, które nie tylko znacznie przyspieszają sam proces uczenia się, ale uczynią go też bardziej atrakcyjnym i efektywnym. We współczesnej edukacji wczesnoszkolnej mamy do czynienia z nowym typem ucznia, do którego należy dotrzeć przy pomocy zupełnie innego niż dotychczas zestawu metod i technik nauczania. Tradycyjne metody nauczania mogą okazać się niewystarczające dla zapewnienia atrakcyjności i skuteczności procesu edukacji. Wprowadzenie w reformie edukacji wczesnoszkolnej zintegrowanej koncepcji kształcenia od początku budziło obawy o schematyzm realizacyjny. Przygotowane dla nauczycieli materiały w formie wielu opracowań dydaktycznych, programów, przewodników metodycznych zawierają głównie w swej warstwie metodycznej jedną formę realizacji tej idei, czyli tzw. cykle metodyczne. Eksponowanie głównie jednej formy realizacji integracji prowadzi do jednostajności i schematyzmu w realizacji tak istotnej dla edukacji idei. Poszukując ciekawych rozwiązań w edukacji wczesnoszkolnej, warto zwrócić uwagę na interesującą i wartościową formę pracy zintegrowanej, jaką jest metoda projektów. Nawiązuje ona do metodyki aktywnej opartej na badawczej aktywności ucznia. Jej głównym celem jest dążenie do tego, aby wiedza w umyśle uczniów miała charakter zintegrowany, a więc była spójna i systemowa, a przez to dynamiczna, elastyczna, dostępna jednostce jako refleksja i gotowość do działania w zróżnicowanych sytuacjach. Podstawowa wartość tej metody polega właśnie na uczeniu działania, organizacji pracy własnej, wykorzystywaniu doświadczenia w różnych sytuacjach uczenia się. Buduje sprawność komunikowania, negocjowania, podejmowania decyzji, radzenia sobie w sytuacjach nietypowych. Wyzwala umiejętności przywództwa, uruchamia pewność siebie, pozwalającą na aktywne funkcjonowanie w społeczeństwie i w pełni świadomie planowanie własnego życia.

Słowa kluczowe: edukacja wczesnoszkolna, kształcenie zintegrowane, metody nauczania, metody aktywizujące, podejście projektowe, nauczanie metodą projektów.

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