

AN INTERDISCIPLINARY APPROACH TO THE REALIZATION OF PROGRAM OBJECTIVES IN THE LOWER GRADES OF THE ELEMENTARY SCHOOL

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Abstract

The importance of early school education in the overall education process is remarkable. It is the basis of the complete educational upgrades. Program goals planned for the respective classes are different, but the variety do not move them away from each other, on the contrary- it offers space for various methodical approach to develop solutions and integrate into the complete knowledge. The aim of this paper is to highlight the importance of an interdisciplinary approach in planning and implementation of the program objectives in the lower grades of the elementary school. The authors consider the theoretical assumptions of an interdisciplinary approach and offer a methodical frame of the concept applicable in the lower grades starting from the premise that an interdisciplinary approach enhances students' motivation to learn and understand the presented content, which in a way to modernize education and raise the quality of knowledge to a higher level. This paper presents the results of a qualitative research on a sample of 205 teachers in the elementary grades (first to fifth grade). The study used a questionnaire that included open-ended questions. The respondents showed a positive attitude towards interdisciplinary teaching. Their opinion is that the interdisciplinary teaching should be applied from the lower elementary school grades. They pointed out that that they were interested in applying it in their work, but that they need quality seminars in order to plan and implement it properly. The results indicate the need for further professional development of teachers in this area as well as the support of the important state institutions in order to improve the quality of teaching through comprehensive (interdisciplinary) overview of programs and the adoption of the plan's objectives. Respondents presented the key issues in an interdisciplinary approach to teaching, the reasons for such a rare planning education and measures to overcome these problems.

Keywords: *elementary grades, interdisciplinary approach, initial teaching, student, teacher*

Introduction

The very concept of an interdisciplinary approach in teaching leads us to think about the integration of various program objectives, contents and activities into a single unit that provides cross-curricular connections whose outcome should be knowledge applicable in a variety of areas. In this way, the teaching is modernized and made more relevant to real needs and lives of students. Therefore, in "order to provide better conditions for individual development of all students, it is necessary to redefine teaching and learning" (Maksić, 2006, p. 231). Contemporary reformist approaches in the educational system are geared towards the unique and complete understanding of concepts. The emphasis is placed on integrated

knowledge and its applicability in practice. The teaching practice may allow this approach by finding related curricular topics and interdisciplinary connections of teaching contents, which guarantees greater rationalization, better conceptual connection between educational contents, and therefore a more comprehensive development of students (Buljubašić - Kuzmanović, 2007).

The need for an interdisciplinary approach in planning and realizing program goals and teaching content is characteristic for the upbringing and education system in the 21st century. Teachers seeking to effectively plan and implement the teaching objectives through different upbringing and education areas must be in possession of a quality professional and interdisciplinary education themselves.

An interdisciplinary approach to the realization of program objectives and contents can be explained by the functional connectivity of knowledge through harmonization and interaction of subject contents in a variety of messages and activities that are similar and complement each other. Usually, such a message contains symbols, which often change the meaning of words but keep their sense (Čudina-Obradović, 2008, p. 17). Therefore, without knowing the underlying content, we cannot link subjects and plan the implementation of the given objectives by adopting knowledge of the concepts that combine all of these items. This teaching contributes to a more comprehensive understanding of concepts that integrate different content areas and field. Blaganjac (2007) points out that the activities of the early school age needs to permeate and complement, so that any problem could be addressed through several aspects. We are right to point out that rigid subject teaching, which involves a separate implementation of the objectives and content of the specific activity, leads to a narrowly conceived knowledge and its utter dysfunctionality, and very often the acquired knowledge from one area cannot be applied in practical situations in resolving problem situations in other areas. Hence the role of teachers applying interdisciplinary educational model at the very beginning of their education is particularly important for students to understand all of life's questions (Walsh, 2002). Teachers need to be aware of their position in the teaching process and to apply one of the two models of practical activities. One model relates to a strict following of subject concepts and temporal organization of the class for the realization of the planned goal, while the second model tries to bring teaching and learning processes closer to real life and to connect practical realization of the planned objectives with related goals from other areas of teaching (art, education, native language, social science, music and physical) not limiting itself to the temporal dimension of a class. Which model will prevail depends on the teachers' competences and willingness to commit to a more devoted work, but also on the practical ability to address certain concepts from different subject areas and standpoints. The fact that is also that it takes much more time and concentration to plan and implement an interdisciplinary approach to teaching.

Interdisciplinary teaching is a mutual association of two or more subjects in which the goals, contents and activities permeate thus associating realization of one subject with the implementation of others. Through the realization of the objectives and content of the planned activities, teachers realize that given the goals and activities can be realized in different ways, but that the methods of work depend on the interdisciplinary approach. Due to complexity of the teaching process, it is not possible to predict in advance all activities and operations necessary to achieve planned goals (Vilotijević, 2000, p. 272). It is important to connect different subjects by linking the topics within them, which on the one hand

contribute to the development and improvement of general knowledge, while on the other side contribute to the adoption of various program objectives. Lake (1994) believes that interdisciplinary teaching should be seen as linking different subject areas into a unique process that combines the knowledge gained through a new - integrated way of thinking. If we look at the education of students as a the main point of educational system, then it is necessary to provide an interdisciplinary unity in the integration of knowledge and procedures that meet the educational needs of individuals and groups. Modern reformist moves in the educational system lead toward a unique and complete understanding of concepts. The emphasis is put on the full knowledge and its applicability in practice. Interdisciplinary planning of operational objectives allows a multidisciplinary approach to the realization of the objectives which is characteristic for the upbringing and education systems in the 21st century. If teachers strive to effectively plan and realize adoption of concepts from different areas of education in interdisciplinary teaching, it is necessary for them to have both professional and interdisciplinary education. It is therefore essential that they receive training in interdisciplinary approach to the realization of the planned objectives even during their initial university education. "This training concerns all educational areas with equal emphasis on their importance. Interdisciplinary approach to the organization and realization of the teaching process is achieved only through a close correlation of different areas of education in practice." (Mićanović, 2010, p. 197). The task of the teacher in interdisciplinary teaching is to highlight the connections between the different notions of reality, and this is achieved through the interweaving of different subject areas. Slunjski (2006) points out that this approach involves a completely different approach from the one which traditional teachers have.

Planning an interdisciplinary approach in teaching in the lower elementary school grades

Modern requirements of planning and implementation of the teaching process are not at all simple. The teacher must be well prepared and both professionally and methodically trained to be successful in this process. Therefore, the teacher needs to be methodically trained to know what goals he or she can connect, how and why, but also to know how to explain the procedure relating to the content of teaching, ways and paths of interdisciplinary realization of the set goals and objectives and how to establish causal relationships. Teachers are required to work more meaningfully, to be more organized, more rational, to achieve more, to be an innovator, researcher, developer, organizer, creator, visionary, consultant, educational diagnostician, therapist and methodologist (Laketa & Vasiljević, 2006). Some of these skills teacher develop during their undergraduate studies, and some during professional training and teaching practice. Since it is necessary to train teachers for the acquisition of knowledge and innovation in the field of pedagogy, psychology and didactics, for the modernization of teaching methods, with the aim of improvement of educational process and a more efficient and methodical work (Milijević, 2005, pp. 336-337), it is an obligation for schools to ensure, through competent institutions, continuous professional development of their teachers so that a practical implementation of teaching would be in line with the age and the needs of society .

The basic idea, both theoretical and practical, behind planning interdisciplinary teaching can be found in the need to bring teaching closer to real life and to “network” practical realization of the planned objectives with related objectives from different subject areas of teaching (mathematics, language and literature, fine arts, nature and society, music and physical

education) not limiting oneself to the duration of one class (45 minutes). Therefore, teaching should be flexible, interdisciplinary and related to real life (Jensen, 2003). Such teaching "breaks" from the traditional approach, because "it combines the experience, systemic thinking and original approach to the problem" (Vilotijević & Vilotijević, 2008, p.143). This approach no longer favors delineation between subject areas, but puts emphasis on overall personality development which involves all subjects that contribute to general and specialized education and development.

In order to explain how important the interdisciplinary approach in teaching is, we need to emphasize the need for integrated functional knowledge and the fact that its application increases the motivation of students to personally engage in the process of acquiring knowledge and developing skills. It is realistic to expect that an interdisciplinary approach encourages more effective understanding of the problem, connects fragmented knowledge, and that an interactive activity improves learning and gaining better knowledge with its more effective use. By avoiding irrationality, fragmentation and separation of teaching contents, all characteristic for traditional teaching and strict subject division, interdisciplinary teaching enables the integration of instructional objectives and contents, which allows students to perceive certain problems from different subject angles and also involves linking the very contents of different subjects. It is the interdisciplinary approaches which enables the development of original ideas and opinions, because the power of individual abilities allows students to use all available knowledge in an integrated manner and develops in them skills to solve particular problems or to give an answer to any question. Therefore, teachers, as the responsible persons in the educational process should plan how to engage students in active interdisciplinary forms of learning to enable them to complete the adoption of teaching contents, encourage them for creative thinking and responsible action and learning that will influence the development of self-esteem and a sense of personal value. Interdisciplinary learning is a process close to the way the human brain naturally works, so it is necessary to start with learning through the use of integrated teaching in early childhood. Early school age is a period when students need to learn how to learn. By involving students at the beginning of primary education in the appropriate forms of learning, designed to integrate the contents of different subjects, we create conditions for unique and applicable interdisciplinary experience and integrate social, humanistic and natural areas.

Depending on whether we include all subjects in the realization of a subject topic, idea or set of goals, or the process is organized through the participation of two or more subjects, but not all, interdisciplinary teaching can be either complete or partial. In case of *complete interdisciplinary teaching* that involves the participation of all subject areas in dealing with certain topics, idea or related program objectives, one must take into account the scope and depth of topics studied to avoid exaggerate with the requirements, but to allow students to comprehend everything and adopt the planned contents, from different perspectives. The second model, called partial interdisciplinary teaching, involves the inclusion of at least two subject areas, not all, in the processing of related topics, concepts or goals. So, planning interdisciplinary instruction modernizes the process of knowledge acquisition and makes it more coherent, and its products become more applicable in practice. Teachers who wish to apply this model of work in the realization of the planned objectives have to identify similar targets in all subjects in the process of drafting the annual work plan (Mićanović, 2012, p. 138). The knowledge gained through the interdisciplinary approach guarantee a more intensive application in practice. Interdisciplinarity promotes the process of adoption of

planned knowledge. The teacher plans a variety of activities for students with the aim of providing them with the most consistent and comprehensible practical information about the concepts to facilitate the process of acquiring knowledge about them. An individual, working on complex tasks in a group, constructs knowledge at a higher level and extends the horizons of thought that could not be so successfully achieved in individual activities (Scheffer, 2005, p. 115).

In order to plan interdisciplinary teaching, we have to take into account the underlying similarity of themes and concepts. When we talk about topic-related subjects we have in mind those topics that provide a high level of possibility of establishing inter-subject correlations. As this refers to elementary school and its lower grades, i.e. the first and part of the second cycle of elementary school, which includes first and second part of the nine-year primary school cycle, we can say that the teacher who is teaching in different subject areas much easier establishes inter-subject connections and interdisciplinary teaching plans, than it would be the case in the higher grades. There are many of the objectives and concepts in the curriculum that allow planning of complete or partial integrated teaching. It is up to the teacher, as a practical executor, to locate these goals and concepts, and to plan an integrated approach to their implementation. We can use as an example the concepts of spatial relations for describing planning of the model of complete interdisciplinary teaching. These concepts enable the connection of teaching math, language and literature, arts, social science, physical education and music in primary schools. "On the basis of insight into the possibilities of achievement of each student, the teacher creates certain conflicts adjusted for a particular category of students and encourages them to be self-reliant and to take initiative in their work. In doing so, of course, they take into account the so-called "Zone of proximal development" to reduce the "gap" between what the students know and what they can achieve thanks to the foreknowledge. "(Mićanović, 2003, p. 135). The tasks, teacher puts before their students, must inspire those students, arouse their curiosity and desire to seek answers (Vučković, 2006, p. 78).

When planning interdisciplinary teaching and working on the realization of some related topics, teachers must keep in mind what they possess in their classrooms, in the technical sense, to successfully implement the teaching. Stevanović points out that teachers working with students must always be innovative and to develop ideas on how to make students to actively participate in the planned activities, on the basis of their own work experience (Stevanović, 2003). This approach to the implementation of the plan's objectives and related content is more modern, but quite demanding for both teachers and students in relation to the traditional mode. As for the teachers it requires a more detailed analysis of plans and detailed preparation activities and teaching aids with integrated learning outcomes. When it comes to students it requires persistent mental work. Therefore, it is necessary to provide greater attention, concentration and perseverance in work. This can be achieved only if the teacher has the ability to plan such activities that will be of interest to students and which they can follow. It is necessary to maintain the interaction among students because learning process depends on the realized interactions (Meadows & Cashdan, 2000). If this is not ensured there will be a passivation students and the viability and feasibility of the approach will be brought into question.

An interdisciplinary approach to the realization of program goals is very important for cognitive development of students of junior school age, though it is not yet sufficiently

developed. Despite the high abstraction and complexity of many concepts that are taught separately in the classroom, a significant number of teachers resort to traditional subject teaching without reflecting on the actual students' needs and capabilities. In the contemporary context, the task of interdisciplinary teaching is not the mere acquisition of knowledge, but to develop the ability of thinking and reasoning so that students are capable of solving numerous life problem situations. Students to knowledge through come through an interdisciplinary approach with their own activities, rather than merely memorizing information.

Research methodology

Topic and purpose. The subject of the research was to determine the readiness of elementary school teachers to apply an interdisciplinary approach to the realization of program objectives in the elementary grades. The aim of the research was to get a clear picture about the willingness of teachers to apply an interdisciplinary approach to the realization of program objectives in elementary grades and to note any problems in this field, on the basis of the collected opinions of teachers who work in classroom instruction.

The research sample. The sample included 205 teachers, teaching in lower grades of elementary school, from nine cities (Bar, Budva, Herceg Novi, Podgorica, Cetinje, Niksic, Pljevlja, Bijelo Polje, Berane) in all three regions of Montenegro.

The research method. We conducted qualitative research with applied research methods, theoretical analysis and empirical non-experimental study. The use of questionnaires helped us to guarantee anonymity of respondents to give honest answers which would allow us to get a realistic picture of the studied problem.

The research results. The study was conducted in the first half of 2014 on a sample of 205 teachers in primary schools in several cities (Bar, Budva, Herceg Novi, Podgorica, Cetinje, Niksic, Pljevlja, Bijelo Polje, Berane) in all three regions of Montenegro. The main problem in the research was to determine the presence of an interdisciplinary approach to the realization of program objectives in the elementary grades and identify potential problems in the planning and implementation of it.

The questionnaire consisted of both open and closed types of questions that were defined in accordance with the given issue and tried to determine: teachers' opinion on interdisciplinary teaching; motivation of teachers to apply interdisciplinary teaching; training of teachers for the organization and implementation of interdisciplinary teaching; experiences of teachers in the implementation of interdisciplinary teaching in practice; the appropriateness of curricula in the elementary grades regarding planning and implementation of interdisciplinary teaching; relation between the reform and interdisciplinary teaching; factors limiting successful implementation; advantages and disadvantages of interdisciplinary teaching and proposals for measures to improve the quality of work through interdisciplinary teaching. Teachers who participated in the survey properly filled out the questionnaire and did not have any objection to the questionnaire and the interview process itself. This paper presents the frequencies, as a separate descriptive statistical indicators variables, based on which we can clearly see the dynamics of the response of the respondents stated that reflects the state of the phenomena studied in school practice. The conclusions obtained show that in the upbringing

and education practice we have a lot to do in order to intensify the implementation of interdisciplinary teaching.

Table 1. Frequency of the responses to the first statement in the questionnaire

Interdisciplinary teaching is applicable in the lower elementary grades and motivates students									
Strongly agree		Agree		Partially Agree		Disagree		Completely disagree	
78	38,04%	65	31,7%	23	11,21%	24	11,7%	15	7,31%

Based on teachers' opinions on the applicability of interdisciplinary teaching in the lower elementary school grades, we came to the conclusion that 38.04 % of respondents completely agree that this teaching is applicable to this age and to motivates students. With this statement agree 31.7 % of respondents, while 11.21 % of them partially agree, and below 20 % do not share this opinion. Therefore, teachers in greater numbers have absolutely positive opinion about interdisciplinary teaching and its applicability to the youngest school age.

Table 2. Frequency of the responses to the second question in the questionnaire

To what extent are you motivated to apply interdisciplinary teaching in the lower elementary grades									
To a great extent		I am motivated		I am partially motivated		I am not motivated		I am not motivated at all	
53	25,85%	87	42,43%	34	16,58%	23	11,21%	8	3,9%

It is significant that teachers are, in a very large number, highly motivated to apply interdisciplinary teaching in the early school age (25.85 %), largely motivated (42.43 %) and partially motivated (16.58 %), while only 11.21 % of respondents claimed that they were not motivated and 3.9% responded with not at all motivated). The responses obviously show a positive climate in teachers for the implementation of interdisciplinary teaching at this age.

Table 3. Frequency of the responses to the third statement in the questionnaire

Qualifications of teachers for the organization and implementation of interdisciplinary teaching in the lower elementary school grades									
I am fully qualified		I am qualified		I am partially qualified		I am not qualified		I am completely unqualified	
15	7,31%	37	18,04%	64	31,21%	63	30,73%	26	12,68%

Table 4. Frequency of the responses to the fourth question in the questionnaire

The experience of teachers in the implementation of interdisciplinary teaching in practice									
I have extensive experience		I have experience		I have some experience		I am more inexperienced		I am not familiar with this concept	
0	0%	7	3,41%	25	12,19%	74	36,09%	99	48,29%

If we compare the answers of respondents from tables 3 and 4 with the responses from the previous two tables (Tables 1 and 2) we see that despite the interest and positive reviews, teachers still do not considered themselves qualified to apply interdisciplinary teaching, because they mostly have no experience in the application of it. Therefore, professional development can take advantage of additional training as a way of teaching staff for training in the application of interdisciplinary teaching.

Table 5. Frequency of the responses to the fifth question in the questionnaire

The appropriateness of curricula in the lower elementary school grades for planning and implementation of interdisciplinary teaching									
Entirely appropriate		Appropriate		Partially appropriate		More inappropriate than appropriate		Not appropriate	
43	20,97%	82	40%	59	28,78%	21	10,24%	0	0%

When asked about the appropriateness of curricula in the lower elementary school grades for planning and implementation of interdisciplinary teaching the responses we received dominantly considered it to be appropriate (20.97 % entirely, 40 % appropriate and 28.78 % partially appropriate), while only 10.24 % of respondents believe that the curriculum is inappropriate than appropriate and there were those who thought that curriculum in general was not appropriate.

Table 6. Frequency of the responses to the sixth statement in the questionnaire

The reform encourages and supports the planning and implementation of interdisciplinary teaching									
Agree to the largest extent		Agree		Partially Agree		Disagree		Strongly Disagree	
0	0%	11	5,36%	57	27,8%	95	46,34%	42	20,48%

Even though we obtained encouraging teachers' responses on the previous question (Table 5) relating to the appropriateness of curriculum for planning and implementation of interdisciplinary teaching, 46.34 % teachers believe that reform does not encourage and support the planning and realization of interdisciplinary teaching, while there is 20.48 % of respondents who have a firm position that reform does not support this process, which represents approximately two-thirds of respondents opposed to one-third of respondents who partially agree (27.8 %) or agree (5.36 %) with the statement that reform processes encourage and support interdisciplinarity in teaching. This is a serious indication that teachers point to significant failures of reform processes that should recognize innovative approaches in the teaching process.

Table 7. Frequency of the responses to the seventh question in the questionnaire:

In your opinion, what are the limiting factors to the successful realization of interdisciplinary teaching, and if there is anything else please provide it below (you can choose more than one answer)				
Lack of support	Lack of support	Lack of didactic	Low cross-	incompetence of

from the central institutions of the system	from the institution where I work	resources and instructional technology in the work	curricular connections	teachers for organizing interdisciplinary teaching					
167	81,46%	132	64,39%	155	75,6%	83	40,48%	186	90,07%

The seventh question largely exposed factors limiting the implementation of interdisciplinary teaching, first of which is teachers' competences (90.07 %), followed by: the lack of support for central institutions of the system with 81.46 %, lack of instructional technology with 75.6 %, lack of support from the institution where they are employed with 64.39 %, and a low cross-curricular links with 40.48 % of the responses. Here we must point out that the respondents had a chance to choose to put down their opinion about limiting factors instead of choosing one of the offered answers and they listed the following:

- Lack of adequate textbooks and manuals for interdisciplinary teaching (8.29 %),
- Students' unpreparedness for this teaching (2.43 %),
- Weak material resources in schools (1.95%).

An interdisciplinary approach to the planning and implementation of educational objectives and contents falls into the category of modern teaching strategies that strive to make knowledge functional through its applicability in different spheres of human needs. This of course contributes to improving the quality of teaching and the process of teaching and understanding of the presented material is considerably improved compared to the traditional approach to the subject, which still dominates in the non-modernized educational systems. Modern teaching today cannot be imagined without the innovative educational approach to gaining knowledge and developing skills of their applicability, and the quality of teaching is directly dependent on the applicability of knowledge. Regardless of the approach we are aware that there are certain advantages, but also disadvantages in this teaching. An open-ended question in the questionnaire was related to the determination of the advantages and disadvantages of interdisciplinary teaching from the perspective of teachers. It is worth mentioning that we received a lot more positive than negative findings. Teachers list the following advantages:

- Integrated knowledge,
- Increased interest in students,
- More time for the realization of more complex objectives and contents,
- A greater commitment of teachers to design activities of students ,
- Greater durability of knowledge,
- More relevant knowledge,
- Training students for teamwork and cooperative work,
- Developing a need for additional professional development of teachers,
- Intensification of cooperation among teachers,
- The modernization work space (classrooms, laboratories)
- Encouraging reform in the publishing industry.

In addition to these advantages, respondent had a significantly shorter list of disadvantages of interdisciplinary teaching, and they are mainly related to:

- More difficult and complex work of teachers in the stage of planning and preparation classes,
- Increase in the cost of the teaching process - the approach requires the purchase of the necessary teaching tools and aids,
- Inconsistency in textbooks and manuals for interdisciplinary teaching ,
- Possible initial professional wandering since some teachers are not competent for the work,
- Depending on the teachers' preferences toward a subject area this approach could lead to favoritism of one at the expense of other areas of work .

Based on the responses about the advantages and disadvantages of the interdisciplinary approach in early school education, we can say that the teachers generally cherish a positive opinion of the considered approach. Teachers want some changes, aspire to innovation in the educational process, but they are often deprived of any support. Regardless of the present desire and need for new approaches in education of young people, we cannot expect significant step forward if we do not create the preconditions for such changes. Here we primarily think on providing teachers with professional competences and technologies for their work. Given the already positive mood of teachers toward the researched problem there would not be problems in terms of their interest for further training. It is an important factor that should be considered as an advantage and significant potential in the reform of the teaching process.

The conclusion and the proposed measures

Interdisciplinary teaching enhances the perception of learned concepts that become durable in the brain through the intensification of different sensory impressions. Adoption of the planned concepts, developing ideas about them and expressing them through words or images cannot be so successfully achieved through an isolated subject teaching, but only through an interdisciplinary approach to the interpretation of these concepts. Therefore, we think that in all situations where the nature of the learned concepts allows such implementation we should include other teaching areas that contain the given concept.

The results showed that teachers have positive opinions on interdisciplinary teaching and the need for it to be applied in teaching in the lower elementary school grades. Also, teachers are motivated to apply interdisciplinary teaching, but they do not consider themselves sufficiently trained for this type of instruction which indicates the need for additional education. This is confirmed by the fact that most teachers have no experience in applying this organization of teaching. It is interesting that teachers are of the opinion that the curriculum at primary school is age appropriate and gives the possibility for interdisciplinary teaching, but that the reform does not encourage the use of such approach. The main problems in the application of interdisciplinary teaching in the educational process, in teachers' opinions, are the incompetence and lack of support for central institutions of the system, lack of instructional technology, weak support of institutions in which they work, lack of school subjects connectivity, lack of adequate textbooks and manuals for interdisciplinary teaching, students unpreparedness for such teaching and poor material conditions of schools. So, regardless of the objectives at the center of the interdisciplinary approach to teaching it is essential to achieve the curricular interaction to such an extent that the student better understands than the learned concepts than in teaching carried out by a separate subject

teaching . We believe that, through an interdisciplinary approach to the realization of the objectives and contents, we can:

- Increase the efficiency of teaching to a higher level,
- Improve understanding of the learned contents,
- Further encourage the development of skills of logical reasoning,
- Enhance the development of abstract thinking,
- Integrate the knowledge,
- The make knowledge more durable and more relevant,
- Increase interest and motivation in the teaching process,
- Develop independent activities of students ,
- Increase creative activity of students .

If we want to see interdisciplinary teaching present in practice it is necessary to create the conditions for the design and delivery of teaching. To this end, on the basis of responses of the respondents, we give a proposal for measures to improve the quality of work through interdisciplinary teaching, which requires:

- Provision of support from the central institutions of the system,
- Aligning the goals of different subject areas,
- Customizing textbooks and manuals for interdisciplinary teaching,
- Provision of training for teachers,
- Provision of educational technology in teachers's work,
- Adapting the contents and activities to students' age ,
- Changing in the traditional concept of the teacher-student relationship.

In our and the opinion of all teachers, these measures are necessary for the organization of interdisciplinary teaching. A variety of subject contents that are present in the curriculum in the elementary grades are suitable for the implementation of this approach as evidenced by the fact that interdisciplinary education provides knowledge applicable in many situations. Therefore, it is imperative to have the central institutions of the system behind the whole organization of such work by providing the necessary resources. If this support is present, then other measures actually stemming from it will be present as well.

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