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A Comparison of the Amount Effectiveness of Holistic vs. Traditional Teaching on Enthusiasm and Educational Progress of Elementary Students

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ABSTRACT: The present study is conducted with the aim of comparing the amount of effectiveness of holistic versus traditional teaching on the enthusiasm and progress of elementary students. To this end, the five-grader elementary students of two female-only classes were chosen from two schools in Islamshahr (25 kilometers south-western Tehran, Iran). Both schools are similar regarding economic, social and educational issues, then the students were randomly assigned to two groups of experiment and control. In the experiment class (n=35), the materials were instructed for 15 weeks in holistic and integrated way. In the control class (n=35), the same material was instructed in traditional and subject-centered way. The scores of teacher-made knowledge test including 10 MCIs were obtained from both experiment and control group in a pre-test and a post-test. The results were then analyzed by one-factor variance analysis and independent T-test. The results of the study showed more progress in students' education by integrative way than traditional way by control group. Investigating the results of education enthusiasm measurement questionnaire revealed that the average scores of experiment group are considerably different from that of control group. It means that the rate of students' education enthusiasm instructed by integrative way is higher than control group instructed with traditional way.

Keywords: Integrative instruction, Traditional instruction, Enthusiasm, Education progress

ORIGINAL ARTICLE

INTRODUCTION

Teaching is defined as "transformation of knowledge and skills to others in a way that they are applicable and bring about evolution and change in behavior". The important point is that the present young generation is experiencing the flood of change in science and plethora of information. It is in need of help and has to be able to make the best of his knowledge effectively and efficiently in order to become dynamic and not to experience problems in different global areas. Since nowadays "learning how to know", "learning how to act", "learning how to deal with others" and "learning how to be" are the four main columns of instruction (Rostama, 2004).

Since children and teenagers spend a great deal of their time in schools, thus schools are like a delicate and essential power in the process of their development. Furthermore, the traditional role of teacher as the transfer of knowledge has evolved to one who exercises skills of absorbing the knowledge in order to influence the students' learning motivation and to shape their frameworks and flow of learning, problem solving, recalling, reasoning, and social as well as moral understanding (Kariya, 2000).

Equipping the people with learning skills of acquiring science, knowledge and new technologies is an essential need which imposes change in curriculum, setting realistic goals, having updated educational bases and principles, standard curriculum, and making use of new teaching and training methods in schools. Nowadays the needs of the society especially those of the children must be investigated continuously and exactly so that the learners can have better access to high-quality and comprehensive materials thus having the necessary opportunities and grounds for flourishing their creativity in schools and consequently being able to make a better future (Thorburn et al., 2003).

Failure by the education system side in accomplishing its mission, that is the cultural transmission of the country and training talented students and preparing them for active participation in their own society will lead to failure, losing motivation, increased violence, being reluctant to go to school, lack of motivation for continuing education, failing to use the accumulated knowledge in books and pamphlets in real life, having poor experience in relation to living in natural and social environments, and eventually confusion and irritation from the teachers' side (Thorburn et al.,2006).

Traditional education as offering discrete and separated educational systems without having relationship with one another cannot account for the educational need in the 21th century. Nowadays teachers entangled in the layers of traditional,

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focused, rigid and compulsory find themselves weak and incapable for meeting the needs of young generation and performing their responsibility. They feel that they do not have enough time to cover the preplanned curriculum and are not able to move forward according to the students' needs and wants. They are doomed to performing preplanned curriculum and have no authority to intervene to change them (Rayisdana, 2001).

But today's schools and universities are demoded and have no convincible answer for today's issues and problems. Add to this problem the problem of social and technological changes moving much faster than the current educational system. Social realities are moving much faster than our imagination and in future, taking initiatives for change seems inevitable. The change is needed not only in educational courses but also in the internal structure of educational institutes and the outer layers that connect them to the society. Lack of knowledge about future leaves the programs fruitless and disarms the students. How the children or the grown-ups look at the future is directly related to their scientific and educational activities, and more important than that, to their experiences and capabilities for living and growing in an ever-changing society (Toffler, 1999).

In our schools we can still witness unfair comparisons, undemocratic teaching methods, field-centered and subject-centered curriculum, outdated and abstract materials, etc. This raises the feeling of failure and humiliation in many of our students and the source of it is too much stress on pure knowledge and the presence of course-books free of any relationship to the real life of our children (SarkarArani, 2002).

Our view to education has now evolved; education is in fact the result of a person's interaction with his surroundings and is always changing. Education needs reflection and an interchange of theory and practice in class and in society faster than ever. Education is not just providing the students with information, but is making a whole person's characteristics and a travel to one's inner world with the aim of discovering and flourishing his talents and values. The ultimate goal of education is not providing a comprehensive image with all the details of one's future but is taking into account a holistic growing of his personality, the way of offering proper material, helping the students to prepare themselves for life challenges, making use of opportunities and facing threats (Behrangi, 2008).

MATERIALS AND METHODS

The present study has been conducted by semi-experimental method. The independent variable is the instructional method (integrative method vs. traditional method) and the independent variable is educational enthusiasm and progress.

The present study contains all female grade five elementary students of Islamshahr elementary schools during 2009-2010 school year. The number was 5871.

After obtaining the authorities' agreement for purposeful sampling, the female-only students of QolamaliRafi'I and Fatemeye Zahra (P.B.U.H.) were chosen. In both schools 35 students were studying in fifth grade. They composed the members of our research body. The students of QolamaliRafi'I were randomly chosen as the control group and Fatemeye Zahra (P.B.U.H.) students were chosen as the experimental group. In order to obtain the required data a teacher-made questionnaire was designed and called Scientific Test as well as an education enthusiasm one.

The questionnaire consists of 25 MCI questions with choices labeled as: completely agree, somehow agree, somehow disagree, and completely disagree. Validity of the questionnaire was estimated by the internal consistency ratio. This test has one of the validity of construct and the rate of its validity was calculated by Cronbach's Alpha formula and the result was 0.89. The questionnaire was used for this study. To gain validity, the questionnaire was distributed among a few other fifth-grader classes and using Cronbach's Alpha formula, the result was 0.899. In this questionnaire the content validity was used.

In order to prepare scientific test with the help of experienced teachers, the authors of recently-published formal text books and the head-teachers of province organization developed 23 MCI tests. From among these questions, 10 were chosen in a way that content validity of the questions was taken into consideration. The questions were per-tested on a few fifth-grade female students and the validity of it was reported 0.764. The content validity of the test was therefore confirmed.

RESULTS

In order to qualitatively describe the data in this study, qualitative methods such as mean, standard deviation, etc. was calculated. In the inferential statistics, using one-way analysis of variance (ANOVA) was performed in order to compare the mean of marks with the control of the effectiveness of variable in pre-test and T-test with two independent samples for comparing the mean of education enthusiasm and progress of students in both control and experiment group via SPSS.

First hypothesis: Education progress of students in traditional and integrative way is different

Regarding the extracted results of Leven (f= 3.803) with the meaningful surface of 0.055, since the resulted number for meaningfulness surface is bigger than 0.05, in order to get the results, a T-test will be used conditioning that variances are of the same level.

Consequently the table 1 shows the difference in mean between the two groups in educational progress scale conditioning that the variances are of the same level (t=016.673) and degree of freedom is 68. This shows a considerable difference in the error level (0.0001) of the scores of those taught with integrative method and those taught with the traditional method ($p<0.01$). Thus the null hypothesis is rejected and the research hypothesis is confirmed.

Taking table1 into account, the mean score of students' education progress taught in integrative method (14.86) is higher than that of students taught in the traditional method (5.94). As a result it can be suggested that integrative teaching has resulted in more progress.

In the other method, with controlling the pre-test score of both groups in educational progress, using analysis of variance it can be stated that:

Considering the Leven test scores (f=0.308) level of pre-test in both groups is meaningfully higher than 0.05 (p=0.581). The performed test has had similarity of Variances.

Based on the results of the two groups' scores in table 2, there is a meaningful difference between the traditional and integrative method with pre-test control of both meaningful levels in the level of 0.0001 ($p<0.01$).

Looking back to table1, it can be understood that the mean score of educational progress for integrative method (14.86) is more than the mean score of the traditional method (5.94).

As it can be seen in the diagram 1, the low mean score of students in traditional method is completely noticeable. Educational enthusiasm of students studying with the integrative method is different from other students.

Considering the fact that the result of Leven test (f) is 1.736, it is in the meaningful level of 0.192 and since the resulted number for the meaningful level is bigger than 0.05, we use T-test if the variances are in the same level.

As a result, table3 shows the difference in mean scores of the two groups if the variances are in the same level (t=-2.022) and the degree of freedom is 68. Thus it can be seen that there is a meaningful difference between the scores of the students taught in traditional method and those taught in the integrative method in the error level of less than 0.047 ($p<0.05$). Therefore the null hypothesis is rejected and the research hypothesis is confirmed.

Regarding table3, the mean score of education enthusiasm for the students taught in integrative method (73.89) is higher than that of students taught in traditional method (82.80). As a result it can be stated that integrative method has led to higher education enthusiasm.

In another method, controlling the pre-test score of both groups' education enthusiasm using the analysis of variance the following conclusions can be made: Considering the Leven test results (f=0.067) in both post-test levels for educational enthusiasm of integrative and traditional method in the variable of educational enthusiasm in meaningfulness level is higher than 0.05 (p=0.797). The utilized test has the same level of variances.

Considering the result of the table 4, there is a meaningful difference between the two groups' educational enthusiasm in level 0.002 ($p<0.01$). Also regarding table3 the mean post-test of educational enthusiasm of integrated group (82.80) is higher than the traditional group (73.89).

Considering the diagram 2 that depicts the difference in mean scores of post-test for traditional and integrative methods, the low educational enthusiasm of traditionally taught group compared to the integrative method taught group can be understood.

Table 1. T-test of two independent samples for comparing the results of education progress of control group with experiment group

Item	Group	Number	Mean	S.D.	T-test	Df	α
Education progress	Traditional	35	5.94	1.798	-16.673	68	0.000
Post-test	Integrated	35	14.86	2.603			

Table 2. Investigating the effectiveness of variables of educational progress according to traditional and integrative groups

Item	Ss	df	MS	F test	A
Pre-test	106.349	1	106.349	30.474	0.000
Group	1450.749	1	1450.749	415.701	0.000
Error	223.822	67	3.490		
Total	9302.000	70			

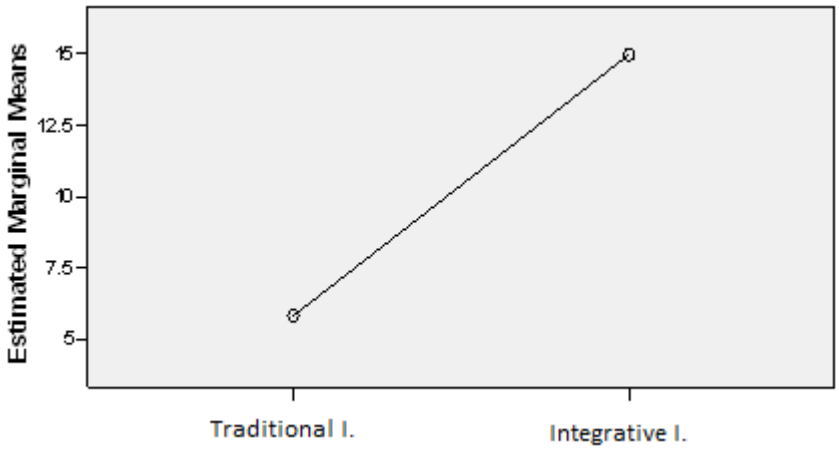

Diagram1. Investigating the difference in educational progress variables according to integrative and traditional methods with the control of effectiveness variable of pre-test for both groups

Table 3. T-test for two independent samples for comparing the education enthusiastic score of two groups

	Group	N	Mean	SD	t-value	Df	P
Educational progress post-test	Traditional	35	73.89	20.696	2.022	68	0.047
	Integrated	35	82.8	15.882			

Table 4. Investigating the effectiveness between educational enthusiasm variable

	ss	df	ms	f-test	
Educational enthusiasm pre-test	17638 .312	1	17638 .312	214.834	0.001
Group	888.622	1	888.622	10.823	0.002
Error	830.5500	67	82.102		
Total	454162	7			

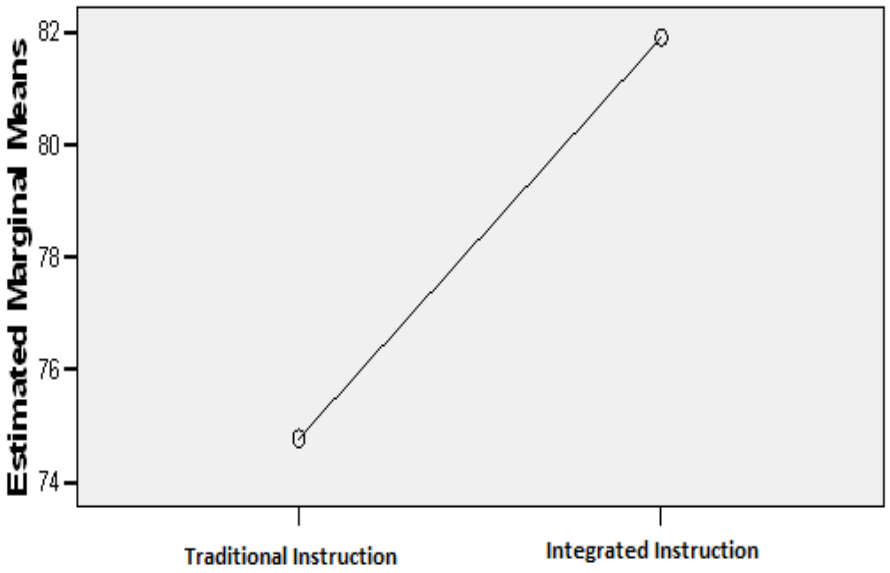

Diagram 2. Investigating the difference between variables of educational enthusiasm according to traditional and integrative method with the effectiveness of pre-test in both groups

DISCUSSION

In every country's educational system, the elementary level is of utmost important in everyone's educational success throughout life and education period both qualitatively and quantitatively. Therefore, the executive role of curricula in elementary school's classrooms is vital. The teacher's role is even more sensitive in implementing these curricula. No curriculum without research support can contain effective and useful necessities. Effectiveness of curricula is proved through organized and purposeful research activities based on feedbacks inside the class

and there is no place better than classroom for implementing and evaluating the curricula and getting feedback for their positive or negative points regarding the course material and curricula.

The reason behind designing and conducting this study was the existence of dark points in our current educational and learning system in both formal and informal organizations. The present study was conducted to evaluate the effectiveness of traditional and integrative method on fifth-grade elementary students' educational enthusiasm and progress. This study is an effort for using new trends in curriculum development and teaching-learning process and maybe a means to renewing our educational system.

The expectations of new century is shaped in the framework of what schools can offer for gaining success in the face of challenges of everyone's life. Integrative teaching in this study is probably a small but important step towards increasing quality in teaching-learning process and a starting point for reforming our curricula so that educational materials and subjects can be implemented similar to real life in it and connect educational materials to students' real life experiences.

Integrated education and the process of establishing a connection among materials is among the issues and necessities that should be taken care of in educational system. Its merits and demerits can be then spotted and considered with a dynamic trend in planning and evaluation. The clear point is that in order to achieve ambition of an integrated education in rank and file level, there must be predictions for investigating the necessity of this kind of education and consequently better perform in integrating the course materials.

After choosing the school for implementing this project, in order to investigate the effects of independent variable (teaching method) on dependent variable (educational enthusiasm and progress) and also in order to compare the results of students' learning in both control and experiment group, proper teaching method was developed. After the designing period, the program was implemented for 15 weeks in each class. There was first a pre-test of both classes and then in the experimental group the material for Farsi was in the focus and other materials were offered considering the materials of this subject. To this end, the general goal of educational program for Farsi, sciences, art, mathematics, Heavenly gifts, etc. were taught in logical-affective domain and then integrated according to their major and minor objectives. The considered teaching tactics were discussion, role playing, creative role playing, field trip, inductive reasoning, problem-solving, project, teamwork, team members teaching method and collaborative ways. In traditional class the materials were offered in chunk by chunk and isolated way so that the materials were mostly dissimilar to the students' real life. There was eventually a post-test for both classes in order to evaluate the effectiveness of these two approaches on the students' educational progress. In addition to the test itself, the educational enthusiasm questionnaire was also distributed among the students in order to evaluate the amount of their eagerness. The results of both pre-test and post-test as well as students' scores were compared.

The obtained scores showed that the two groups did not have much progress through time with traditional method. Some obtained higher scores in pre-test and some in the post-test. Regarding the mean score, no noticeable progress was reported. This is while comparing the integrative method students' scores revealed a considerable change in educational progress through time. There was also a considerable change in their pre-test and post-test scores.

In another comparison between both groups' pre-test and post-test results, it was shown that in traditional group the members had no significant progress regarding pre-test and post-test comparison and their mean scores for pre-test and post-test results were not considerably different. The mean score of this group for post-test was even a little lower. At the same time comparing the results of pre-test and post-test in integrative group showed a positive change in most cases and there was a considerable difference in pre-test and post-test results.

Therefore in discussion section the null hypothesis is rejected and study hypothesis is confirmed since there is a considerable difference between integrative and traditional method with the error level of below 0.0001 and higher mean of educational progress for integrative method can be understood.

Also the second hypothesis is confirmed and the null hypothesis is rejected since there is a meaningful difference between traditional and integrative students' educational enthusiasm and higher than that of traditional method.

The result of statistical analysis process revealed that educational enthusiasm and progress of integrative students is more than those taught with traditional methods. Thus it seems necessary to develop or adjust proper, decent teaching methods regarding individual differences and to remove current educational system's drawbacks with a forwarding view and stressing on integrative teaching policy and to realize educational goals extracted from principles in educational system.

REFERENCES

Behrangi, M. (2008). 2004's teaching models, Kamale-Tarbiyat Pub., Tehran: Iran

Kariya, T. (2000). The Distance between Educational Reform and Education in the classroom, Child Research Net, (URL: http: // www. child research. net).

Rayisdana, F. (2001). What is integrative educational planning? Development of Educational Technology, 4, 17-18

Rostama, S. (2004). The effect of integrative method on second grade elementary students' learning, M.A. thesis, IAU, central branch.

Sarkararani, M. (2002). Reforms in Japan's national course design with regard to integrative approach, Educational Innovations. 4, 67-88

Thorburn, M. & Collins, D. (2003). Integrated Curriculum Models and their effects on Teachers' Pedagogy Practices. European Physical Education Review; 9; 185.

Thorburn, M. & Collins, D. (2006). The effects of an Integrated Curriculum model on Student Learning and attainment. European Physical Education Review; 12; 31.

Toffler, A. (1999). Education for future: Future's role in education, Transition era's course development guide. Planning and developing course book office, 22-26.