



The investigation of probe teaching method on academic self - efficacy believes of sixth grade boy students of Ahvaz in experimental science

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ABSTRACT

The main objective of this study was to compare the effects of traditional teaching methods and exploration teaching method on self- efficacy of sixth male students in ahvaz. To do this the classroom of the school ferdosi (as experimental and control groups) were selected by non-probability sampling. Researchers taught science in eight sessions during the two months in experimental class. To measure self-efficacy, a standard questionnaire was used. For content validity using experts viwes was obtained. Reliability was obtained through the pilot conduction and using cronbach alpha coefficient. In this study, to analysis data wilcoxon and uman-withny test were used. The findings showed that there were significant differences in posttest mean of self-efficacy and its components in the experimental group and control group, in favor of the experimental group. The results of the analysis wilcoxon test showed a significant difference between pretest and posttest control group between pretest and posttest control group there but there is a significant difference. That exploration teaching method has resulted into student self-efficacy increase.

Keywords: exploration teaching method, self-efficacy, traditional teaching methods, self-efficacy.

1. Introduction

from sentence way of teaching active way teaching probe is. Way teaching probe. On education process search and explanation phenomenon and codification a. Pattern that sacheh codification done is knowledge students and with processes the clash the slow that researchers from they to organizing knowledge and author principles use they (the transportation from time, 1386). Efficacy educational at years lately case attention very teethe is. On basis observations research fellow stating from it is that way of teaching active they can to motivation more at knowledge students to learning help the that possible is also on efficacy knowledge students also the impact leave. To response to confusion that researcher with it face is at this research effort on this is until the the impact way teaching probe and efficacy educational knowledge students boy sixth primary schools city Ahvaz at lesson sciences experimental case check the was.

2. Literature Review

One from goals major education and training tankan solution issue, creativity and innovation knowledge students is. With this tankan and knowledge students the can with conditions various life and position of new compatible are. Growth this ability and from way teaching active possible is (Armand, 1374). Thought operation and learning each man saddened from attitudes cognitive and emotional is. Difference of people at this background no singleton cause difference of mental beetle functional from beliefs, orientation of emotional, attitudes, values, relish, talent hands-on experience previous is. The way the impact collection beliefs at operation man at background of various proposed the is that one from this background and operation educational is. With attention to change fundamental at background of different cultural, art Avery system training also inevitably, from change basic is. Skills previous at encounter with art Avery societies inadequate were and system training at front side needs societies new inevitably, to matching it the is. With development complexity of art Avery, system social need to skill and and new there. Recognition factors effective on operation shyly, information more at authority system training to development own matching with needs societies new the the the (bandura, 1997(

Hussein and et al. (1394) in comparison the impact education based on on the web and strategies learning cognitive admit on development educational and efficacy at students nursing university free Islamic the unit rector result was established in each two way could development educational and efficacy and promotion day. So professors to recovery development educational and own effectiveness students nursing they can from ways of based on on the web and strategies learning cognitive use in their research, the Hamid dervish grocer and et al. (1392) results sign the that education strategies own regulatory cause promotion motivation internal, feeling efficacy educational and decrease anxiety test.

At other research thatby lambert (2015) in England performance was to this result hand found that way probe more from ways of speech and bade processing at development educational knowledge students the impact there. Also way teachingbade processing at comparison with way speech results more at sciences experimental to hand clear.

this research with the aim of check difference among efficacy educational knowledge students sixth primary city Ahvazat group test (method teaching probe) and group control (method teaching usual or traditional) attempted to answer this question: that is way teaching probecancomparison with way havetraditional on efficacy educational knowledge students sixth primary the impact.

3. Methodology

At this research from way quasi-experimental use was. Society statistics all knowledge students boy sixth at schools primary from areas four Ahvaz city who from school frowsy 60 to the subject sample selection was that to two group 30 the experiment and control division respectively.

Datacollected from the questionnaires efficacy educational and (2005) factor validity at this research. 86 hand respectively. Coefficients homology inner through calculation correlation each examination with score total scale and between 0.30 to 0.78 to hand respectively.

4. Finding

Distribution abundance sample at groups control and tests are shown in table 1.

Table 1: Distribution of samples in control and experimental groups

Groups	Number	Percent
Examine	30	50
Control	30	50
	60	100

Table 2: Descriptive statistical indicators of academic self efficacy and quality for components in the control group

Maximum	At least	The standard deviation	Average	Number	Test	
7.00	2.33	1.15841	4.6852	30	Pre-exam	Confidence in their ability in the classroom
5.89	2.89	.78,780	4.4741	30	After the test	
7.29	1.57	1.39723	4.6905	30	Pre-exam	Confidence in their ability outside of class
6.57	3.00	.84,801	4.4667	30	After the test	
7.00	2.20	1.35309	4.9533	30	Pre-exam	Confidence in their ability to interact with others.
6.60	3.00	1.00,776	4.5400	30	After the test	
6.40	3.00	1.03,344	4.7400	30	Pre-exam	Confidence in their ability to manage school and family
7.40	2.80	.83663	4.8267	30	After the test	
6.70	2.38	1.02,851	4.7672	30	Pre-exam	Self-efficacy
5.53	3.48	.55981	4.5769	30	After the test	

As table 2 can be seen in three dimensions efficacy of confidence in their ability to get out of class, confidence in their ability to interact with others, as well as the total score of self-efficacy post-test score lower than pre-test score and the significant gaps is. The differences in the components of confidence inability are almost zero in the classroom. Only a component (confidence in their ability to regulate relations between homes and school test score higher than the score before the test).

Table 3: indicators of self-descriptive statistics for the academic and components of his quality in testing

Maximum	At least	The standard deviation	Average	Number	Test	
7.11	3.44	.92,969	5.0778	30	Pre-exam	Confidence in their ability in the classroom
8.56	4.78	.99786	6.7815	30	After the test	
7.29	3.71	.92,171	4.9429	30	Pre-exam	Confidence in their ability outside of class
9.00	3.71	1.44,915	6.3095	30	After the test	
6.80	2.80	.99,758	4.9000	30	Pre-exam	Confidence in their ability to interact with others.
9.00	4.80	1.22407	6.5400	30	After the test	
6.80	2.60	.81,942	5.1600	30	Pre-exam	Confidence in their ability to manage school and family
8.40	3.00	1.39,076	6.1400	30	After the test	
6.39	3.64	.59,693	5.0202	30	Pre-exam	Self-efficacy
8.51	4.82	1.02,697	6.4428	30	After the test	

As can be seen in table 3 efficacy in all components of the pre-test and post-test score is over and the difference is dramatic. So that the difference in dimensions confidence in their ability in the classroom is more than one. Seven score.

Inferential statistics:

Test the normal distribution of research data:

Normal distribution of data in order to study the kolmogorov-smirnov test was used. In this test, the null hypothesis that the distribution is based based on data obtained by the normal distribution is no different. In this test, the research hypothesis states that the distribution of observed data with normal distribution is different.

H0 = each of the variables are normally distributed.

H1 = variable is not a normal distribution.

The results of this analysis are detailed in table 14-4.

Table 4: Results kolmogorov - smirnov test for variables

Variable	Z statistic	Meaningful	Test result
Confidence in their ability in the classroom	5.627	0.200	Is not normal
Confidence in their ability outside of class	0.388	0.011	Is normal
Confidence in their ability to interact with others.	5.540	0.200	Is not normal
Confidence in their ability to manage school and family	0.483	0.012	Is normal
The total academic self-efficacy	0.509	0.031	Is normal

table 4 shows the distribution data. Self-efficacy and all elements of self-efficacy (confidence in their ability in the classroom, outside the classroom confidence in their ability, confidence in their ability to interact with others, confidence in their ability to manage school and family) level. Meaning you have test fewer from 0.50 to is. Z-statistic and significance level of confidence in their ability to components in the class and confidence in their ability to interact with other shows the distribution of the two components is not significant in 0.50 so it can be

concluded that the data distribution these two components are normal. However, given that two components of the four components, as well as distribution of academic self-efficacy score at 0.50 meaningful reason to reject the null hypothesis (normal distribution of data) does not exist after assumption normal to be data and case confirm the the place.

Lu yen-like test results for the homogenization of two groups:

Table all- lug yen-test results for homogeneous groups of like yans·hay

Exams Variables	Levin equal variance test	
	F	Meaningful
Confidence in their ability in the classroom	0.021	0.800
Confidence in their ability outside of class	0.253	0.625
Confidence in their ability to interact with others.	0.981	0.251
Confidence in their ability to manage school and family	0.249	0.629
The total academic self-efficacy	0.749	0.494

As it can be seen in table 5 f obtained show that Levine's test for equality of variances in all components of the 0.50 self-efficacy is not significant. Therefore, the null hypothesis is not rejected that claim to equal variance in two groups, and the significance is not. Therefore, we can say that significant differences between experimental and control groups in the pre-test variance cannot be seen. In this way, we can do the analysis of covariance.

Test research hypotheses:

1 probe on teaching students self-efficacy sixth Ahvaz has a significant impact.

To test the efficacy significant differences between the test and control groups

Analysis of covariance was used. Tables 6, 7 and 8 are the results:

Table 6: The results analyzed kovar single variable yancey circle (ancova) of self-efficacy scores in the control and experimental group in the posttest

	Sum of squares	Degrees of freedom	Mean square	F test	Meaningful	Eta
Pre-exam	928/2041	1	928/2041	571/3	640/0	0.059
Intergroup	805/4174	1	805/4174	300/77	009/0	0.592
Error	372/32596	57	866/571			
Total	000/1056003	60				

As can be seen in table 6, the value f obtained pre-test scores of self-efficacy (affecting post-test) is equal to 3.571 to 0.50 statistically not significant level. This means that if the average adjusted if there is not significant difference between them. But when the effect of the difference is taken pre-test and post-test adjusted mean difference is significant. F the control group pretest value is equal to 7.300 and 0.5 statistically significant level. In other words, the average self-efficacy students are trained to probe the students trained using traditional methods statistically different.

Similarly, according to the above table data rows squares pre-test show that the amount of shared variance according to room ratio of 0.059 is obtained. This suggests that only about 6 percent of the difference between pre-test and post-test. Find the row between the groups in the above table shows that by controlling the pre-test and post-test to 592/0 arrives in the sense that by removing the effect of pre-test and post-test to post-test scores 59 percent of individual differences in the training the way the probe. So this method is able to make a significant impact.

Table7: results analyzed severalvariables kovar yancey circle (mancova) of self-efficacy scores in thecontrol and experimental group in the posttest

Test	Value	Statistics f	Hypothesis df	Df error	Meaningful
Pillay effect	0/750	53/001	4/00	54/00	0/017
Wilks lambda	0/871	53/001	4/00	54/00	0/017
Hotelling effect	3/901	53/001	4/00	54/00	0/017
The root	3/700	53/001	4/00	54/00	0/017

As shown in table 7 can be seen levels significantly all the tests show that the outside of the effect of pre-test method mancova results showed a significant effect for the factor of teaching methods between the components of the self-efficacy of students by probe and students who have been trained in the traditional way, there is a significant difference. Sure enough difference between the mean scores on the dimensions of academic self-efficacy in the control group and the test of univariate analysis of covariance was used in the context of mancova. The results of this analysis in the table.

Table 8: The results analyzed kovar singlevariable yancey circle (ancova) the efficacy of the scores in the control group and experimental stage prior test

	Variables	Sum of squares	Degrees of freedom	Mean square	F test	Meaningful
Pre-exam	Confidence in their ability in the classroom	11/548	1	11/548	2/108	0/215
	Confidence in their ability outside of class	13/653	1	13/653	2/557	0/119
	Confidence in their ability to interact with others.	14/586	1	14/586	2/981	0/112
	Confidence in their ability to manage school and family	12/289	1	12/289	2/321	0/185
Intergroup	Confidence in their ability in the classroom	1689/564	1	1689/564	5/139	0/027
	Confidence in their ability outside of class	305/524	1	305/524	6/358	0/012
	Confidence in their ability to interact with others.	402/148	1	402/148	6/289	0/017
	Confidence in their ability to manage school and family	299/731	1	299/731	6/451	0/011

Resultsof hypothesis

Results of hypothesis1-1:

.As can be seen in table 8 f component reliability test your ability in the classroom in the pre-test is equal to 108/2, which is not statistically significant. This shows that if the average adjusted done, there is no significant difference between them. The difference was only significant adjustment. Also, when the effect of the difference is taken pre-test and post-test averages are adjusted significant difference and means to reach equilibrium. F values in the control group pre-test is statistically significant at139/5. So we can say that scores of confidence in their ability in the classroom students who have been trained to probe method with students who have been trained in traditional methods statistically significant difference. The first hypothesis is confirmed.

Results of hypothesis 1-2:

As can be seen in table 8 component f statistic confidence in their abilities outside the classroom in the pre-test is equal to 557/2, which is not statistically significant. This shows that if the average adjusted done, there is no significant difference between them. The difference was only significant adjustment. Also, when the effect of the difference is taken pre-test and post-test averages are moderated significant difference and means to reach equilibrium. F values in the control group pre-test is statistically significant at 358/6. So we can say that scores of confidence in their abilities outside the classroom students who have been trained to probe method with students who have been trained in traditional methods statistically significant difference. The second hypothesis is confirmed.

Results of hypothesis 1-3:

As can be seen in table 8 component f statistic confidence in their ability to interact with others in the pre-test is equal to 981/2, which is not statistically significant. This shows that if the average adjusted done, there is no significant difference between them. The difference was only significant adjustment. Also, when the effect of the difference is taken pre-test and post-test averages are moderated significant difference and means to reach equilibrium. F values in the control group pre-test is statistically significant at 289/6. So we can say that confidence in their ability to interact with other students who have been trained to probe method with students who have been trained in traditional methods statistically significant difference. The third hypothesis is confirmed.

Results of hypothesis 1-4:

As can be seen in table 8 component f statistic confidence in their ability to manage the school and the families of 321/2 in pre-test is not statistically significant.

This shows that if the average adjusted done, there is no significant difference between them. The difference was only significant adjustment. Also, when the effect of the difference is taken pre-test and post-test averages are moderated significant difference and means to reach equilibrium. F values in the control group pre-test is statistically significant at 451/6. So we can say that scores of confidence in their ability to manage the school and the families of students who have been trained to probe method with students who have been trained in traditional methods statistically significant difference. The fourth hypothesis is confirmed.

5. Discussion & Conclusion

Results this research show the the that to promotion efficacy educational, difference lot between way probe and usual existence there. From view logical both this result reasonable to view the alone, because to by to bring until the about lot to probe and way learning on there. To this the reason this difference between two group probe traditional impressive been is. This subject show the the that with methods usual and traditional that at they knowledge students the their independent hand to probe should not expectation recovery efficacy and was because to probability strong event not falls. This order that increase score efficacy between ago test and so test at group control meaning arrowis and in group experiment by archshmgyr the be, thereto meaning is that feeling efficacy knowledge students time better the is that to with decision incentives themselves problems related to book sciences experimental and case check the day and

if knowledge students the traditionally, according to directions writing and beneath view lecturer and in gamut limitations very multiple book course to explore and solution question pay it both to exploration that methods results it from before considered passage is, efficacy she recovery will not found; results researches at this background stating from this is that among two the concept way teaching and efficacy relation existence there. To this the reason way teaching one from the most important elements is that at induction beliefs efficacy educational role effectively there. To opinion the seems that at education traditional to learning deep and meaningful that can lead to growth character knowledge students is and she and at solution difficulty help the fewer attention the was and with education surface target the original education and training that same learning deep effect the part is realization not found (mirza begay, 1380 transportation from time, 1386). Results research performance by at most about to happening items at survey style probe traditional consonant is. Also at case increase mharthavhbvd operation educational learners from way style probe one event view relative seen the be. Really reason this difference results what factors the can is if with take exact and small to case look we the see factors like conditions cultural - social, features mental and age learners or to phrasal amount fitness they facilities conditions educational, particular teacher or coach, kind theme training case training, time length the period educational, kind output case attention perhaps ten and factor other all the can on results work research effects major of behind leaves. With this now tip it importance this is that results this research should not these commentary is that if we want to that efficacy knowledge students and at one lesson increase our single to change way teaching enough we. In this place this question proposed the is that is with training book sciences experimental or geography or each lesson another, at one section degrees specified with rvshtdrysy special the power at case performance it way verdict do this problem of is that at several from research performance by that before expression were, seen the be. From view researcher " length the period training "for verdict at case way teaching special essential is. "conditions age "of major factors important at each training is. Specialists training and training there that speech from way teaching vmlakhay selection it the is immediately talk from conditions sunnilearners and ago the tide that point consumer attention important is. So shall at commentary this results caution necessary the face is and way teaching probe single to the subject one from factors that the can at increase efficacy knowledge students the impact have is case attention the place. Experiences researcher open interview of this point is that teacher should way probe and belief have is, at background theme case teaching awareness and information comprehensive thoroughly uninstall have bashdv from before to designing and program planning training pay. Often time at incidentally performance research seen by is, one examination suitable from by lecturer the can at this method, system and to side business result success more and in result conflict subjective more learners move to. At while not a question of misplaced program planning there may be widespread and have a bad understanding of the and the program probe and break out. Questions directed inquisitive, especially at methods of teaching explorers led by from the most important factor is. Design program planning more from ago at this way there is. Every few open are not you, it all happen qat class vsyvalat learners and the nose out, so the presence of mindfull on the

issue of course it necessary for subsequent analysis is. At research now that the review the impact methods of teaching probe on efficacy studies of school -based sixth grade pay by is consideration was that the method of teaching the probe to be significant at compared with the method of the usual traditional resulted in increased efficacy study of the is and in the method of routine failed that at amount efficacy of students differ greatly creation the. According to the results at program planning and execution of training academic empty from the benefit will be the hope is at the future has conducted surveys more and coherent more able to set guidelines with the values.

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