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. (41) . (40)

. ()

.(Lorenzen 2006)

. () .2009/6/3 2008/12/4

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.(Harasim, et al., 1997) New Hampshire 2002 University (Carroll & Leander, 2001) . (Felder & Brent, 1997) (2006).(Shenker, et al.,1996) (Active Learning) (2008)(Paulson & Faust, 2006)

(Mathewes, 2006)

(2006)

. 1 $\geq \alpha$)

(0.05

.2 $\geq \alpha$) (0.05

- 458 -

2011 2 38 : .(40-(9-8)

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.(2008-2007)

.(2008/2007)

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...

(Yoder & Hochevar, 2005)

(Taraban et al., 2007)

. (Page & Mukherjee, 2007)

(Tandogan & Orhan, 2007)

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(Scheyvens et al., 2008)

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(Loudas, 2001) (Anderson & (2003) McCarthy, 2000)) (24) (2006)(Lindow, 2000) 75 (2007) 100 (Foss, 1995) (Bargainnieer, 1996)

(118)

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		(1)			
	(1)				
41 41					
82			Taraban et al.,	, 2007; Foss,)	-
)	: .(-1 -2		.(. (1995 - Taraban et al., 2007)
· :		-3			& Mukherjee, 2007)
	(20)	:	& Orhan, 200	2003 2007; Yoder & Hocheva 77; Anderson & McCar ; Foss, 1995; Bargainieer	thy, 2000; Lindow
				·	-
(40)		: (2008/2007)			
				(2008/2007)	
(43)				(5)	(203)
(0.76)					

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Tennessee Self

. (2) concept
(2) .Piers Harris Children's Self-concept Scale

 $(0.05 \ge \alpha) \tag{30}$

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 $\geq \alpha$) . (26)

(0.05

(30)

() . (0.59)

(3)

 $(0.05 \ge \alpha)$

- (3)

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(2)

	()				
0.098	1.84	2.84	15.58	41	
		2.60	14.68	41	
0.269	0.38	10.64	23.80	41	
		11.93	22.83	41	

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(3)					()
	()				
0.00	4.87	2.28	21.66	41	
		2.20	19.22	41	

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Taraban et al., 2007;) (2007 2003

Yoder & Hochevar, 2005; Tandogan & Orhan, 2007;

Anderson & McCarthy, 2000; Lindow, 2000; Foss, 1995;

.(Bargainieer, 1996; Loudas, 2001;

$$\begin{array}{c} \vdots \\ \geq \alpha \end{array} \tag{0.05}$$

п

()

(4)

(4)

	()				
0.01	2 200	15.4	43.85	41	
0.01	2.298	17.47	35.39	41	

(4)

() (2.298) $(0.05 \ge \alpha)$

(43.15) (35.39)

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The Effect of Active Learning Strategies on Improving Third Grade Female Students' Achievement in Science and their Academic Self-Concept

Intisar Khalil Asha and Saleh Mohammad Abu Jado *

ABSTRACT

The study aimed at investigating the effect of active learning strategies on improving female third graders' achievement in science and their academic self-concept. The active learning strategies used in the study were four: Questioning and discussion, cooperative learning, role play, and problem-solving. The study sample, which was intentionally selected, consisted of (41) students in each group distributed among two class sections. One class section was randomly selected to form the experimental group, while the other class section was selected to form the control group. Students were taught the unit about *The Transmutation of Matter* in their science book using active learning strategies through (20) lessons at the end of which they sat for a (40) - item multiple choice achievement test and the Academic Self-Concept test. To test the study hypotheses, students' scores in the two tests were analyzed by computing their means and standard deviations. The (T) test for the independent samples was analyzed to pinpoint any statistically significant differences between students' mean scores in both the experimental and control groups. The results showed that there was a statistically significant difference between the two groups in both the achievement and the Academic Self-Concept tests in favour of the experimental group. In light of the aforementioned results, the researchers recommend employing active learning strategies in designing curricula.

Keywords: Active Learning, Third Grade Students, Achievement, Academic Self-concept.

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