2011 63-30 ( ) ISSN 2070 - 3147

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(122) (61)

Statistical Package for ) " SPSS "
. " T.test " . ( social Sciences

## **ABSTRACT**

The effectiveness of a suggested program based on multiple intelligences on the achievement development , mathematical thinking , and postpone learning impact of students at basic stage governorate of  $$\operatorname{Gaza}$$ 

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The effectiveness of a suggested program based on multiple on multiple intelligences on the achievement development , mathematical thinking , and postpone learning impact of students at basic stage governorate of Gaza

This study aimed at identify the effectiveness of the program proposed in the multiple intelligences to develop collection and mathematical thinking among students in the basic stage Governorate of Gaza, was used in this study, the experimental approach, The sample consisted of (122) students divided into two groups; the experimental group consisted of (61) student and the control group consisted of (61) students;

The study instruments were observation card to assess the multiple intelligences and an achievement test in a spherical geometry of the second book for the tenth grade basic and test in mathematical thinking SPSS was applied to answer the research question , The findings of the study there were differences between the students of the experimental group and control group in achievement test of the experimental group, and there were no differences the perform between groups in the test thinking dimensional, There were differences between the perform groups in the achievement test in behalf The study recommended the application of multiple intelligences with a room multi-source and runs using the forms of mathematics, graphics, and in-service teacher education to address the theory of multiple intelligences .

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.(3:2006

. (33 : 2005 ) :

(Hoerr, 2002 : b)

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.(15:2003).

.(2:2006).

(8:2006 )

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. (170: 2004 )

: Mathematical Intelligence .2

(146: 2005 ).

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.(10:2003).

. (171 : 2004 )

: Spatial Intelligence .3

(2:2006).

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(11:2003).

: Kinesthetic-Bodily Intelligence .4

(11:2003 ).
: Musical Intelligence .5

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.(34:2005).

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	: Interpersonal Intelligence (	)	.6
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: 2005	). : Interpersonal Intelligence (	<b>)</b>	.(35 . <b>7</b>
		. (172 : 2004	)

	:Natural	Intelligence		.8
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: Standards for Mathematics Content :

: Number and Operations ( )

: Algebra

• Geometry

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• : Measurement

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Standards for Mathematics I	Process	: Problem Solving
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	: Reas	soning and Proof
		( )
		: Communication
		•
		: Connections

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• Representation
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			3.235	0000	2.03765	4.689	61		

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(000)  $120 = 2 - 122 \tag{3.235}$  (000) (0.05)

(0.14)

(0.05≥ α)

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: (Statistical Package for social Sciences)
. (T-Test) - .1

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(15)	(3)			: (15) :		.5

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 (3.235)

0.05 120=2-122 (1.980)

 $(0.05 \ge \infty)$ 

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T. test " "

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T . test "

(5)

			3.65138	8.9654	61	
0.05	1, 980	4.548	4.11376	12.321 4	61	

(4.548)

0.05 120=2-122 (1.980)

( 0.05≥ ∞ )

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(Pociazk, 2007) "

. (Hoerr, 2002) (2009 )

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	: :(2006)	-25
	:(2007)	-26
1	:(2004)	-27
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28-Armstrong, Thomas(2001), Multiple Inteligince in the Classroom U.S.A Association for Supervision and Curriculum Development . 29-Isik, Dilek; Tarim, Kamuran(2009), The effects of Multiple Intelligences & Cooperative Learning at Mathematics Skills Achievement for Grade 4 in Elementary School Mathematics; Asia Pacific Education Review, v10 n4 p465-474.

30-Hoerr, Thomas (2002) " More About Multiple Intelligence Academic Search premise , 16 (4)

31-Pociazk, A. and Settles, J, (2007), Increasing Student Achievement through Brain-Based Strategies, Unpublished phD Dissertation. Saint Xavier University Chicago, USA.