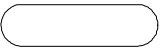


(權星湖)*, (鄭東淳)**



가

가

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가

I.

(hypermedia)

가

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가

(schema)

가
network)
2002).

(semantic
(

(2000)

(node)

(link)

가

가

가

가

가

(, 1992).

가

가

(monitoring)

(cognitive overload)

(desorientation)

가

가

(, 1994a)

(1993)

(multimedia)

가

Hammond(1992)

가

(animation),

가

(, 1994b).

가

(graphic browsers)

(hyperindex),

(Raynolds, et al, 1991 ; Jonassen,

1988 ; Jonassen & Wang, 1993).

Balajthy(1990) Park(1992)

(metacognitive)

가

가

Hammond(1992)

(quiz),

가

Hammond(1992)가

가

가

(structured hypermedia)

(node-link hypermedia)

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가 가

가

가

가

(programming)

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가 가

가

< 가 >

(가 가? -)

가

<가 1>

(가 -)

<가 2>

(가 -)

<가 3>

(가 -)

<가 4>

(가 -)

<가 5>

(가 -)

<가 6> 가 (가)

II.

1.

S 2 2
 () () 1
 . 2 ,
 .
 2 t
 < 1> . 2
 , (:5, :4, :3, :2, 가:1) 5
 t ,
 가 (p>.05) .

< 1>

					t	
	43	2.88	1.07	84	.80	.427
	43	3.06	1.07			

2.

가 .
 (macromedia) (director) 8.0
 , (lingo) . Me,
 (16) 가

가
가

가 가 가

가 가 6

가 가 6 가 가

가 가 2 16 가

3.

가 2

(가) , (가)

4.

가 ' '

가
 <가 1> t ,
 < 2> . < 2> , 가
 <가 1>
 (p>.05).

가
 가 .
 < 2>

					t	
	43	47.42	8.90	84	.55	.582
	43	48.61	11.56			

<가 2> t ,
 < 3> . < 3> , 가
 <가 2>
 (p<.05). 가
 . <가

1> 가 ,
 가

< 3>

					t	
	43	12.06	4.85	84	2.56*	.012
	43	9.03	6.09			

<가 3> t ,
 < 4> . 가 (equal variances not assumed)

Welch-Aspin 가 . < 4> ,
 가 <가

3> (p<.05).

가

.<가 1>

가

가

< 4>

					t	
	43	35.36	8.08	76	2.01*	.048
	43	39.58	11.14			

<가 4>

t

< 5>

.< 5>

가

<가 4>

(p<.01).

가

.<가 2>

가

가 75

80.09

1

131.88

2

< 5>

					t	
	43	131.88	72.88	84	3.54**	.001
	43	80.09	62.33			

<가 5>

t

< 6>

가

(equal variances not assumed)

Welch-Aspin 가

.< 6>

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가

<가 5> (p<.05).

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<가 3>

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< 6>

					t	
	43	66.08	5.26	63	2.48*	.016
	43	61.79	10.06			

<가 6>

가

t

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<가 6>

(p<.05).

가

가 가

가 가

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< 7>

가

					t	
	43	85.76	12.45	84	2.03*	.046
	43	80.81	10.06			

IV.

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(1993). : , 8(1), 147-167.

(2002). , : .

(2000). , 16(1), 29-45.

(1994a). 가 .
32(5). 207-234.

(1994b). , 10(1), 115-134.

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* 2002 5 23 / 1 2002 6 29 / 2 2002 8 27

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『 , 『 (『)』, 『 가 『가 『 .

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Abstract

The Effects of Methods of Controlling Learning Course on Learning Performances in Structured Hypermedia

Kwon, Sung-Ho *, Jung, Dong-Soon**

The purpose of this study is to identify the effects of the method of controlling learning course on learning performances in structured hypermedia.

To achieve the above objective, the hypotheses were formulated as follows;

Hypotheses : there would be a significant difference in total learning time, content learning time, testing time, learning frequencies, true-false frequencies of solving quiz and academic achievement according to methods of controlling learning course.

To verify these hypotheses, 86 students were selected from 2 classes of a high school located in Seoul as the subjects of this study. They were classified into two groups : 43 students of one class participated in the learning situation given by program which applied to method of controlling learning course, and 43 students of another class participated in the learning situation given by the program which applied to the method of non-controlling learning course. In order to verify the effects of the experiment, the instruments used in this study were two types of Hypermedia Programs developed by the researcher, using Director 8.0 authoring tool and the Academic Achievement Test developed by two high-school teachers.

The results of the study were that the method of controlling learning course was more effective than the method of non-controlling learning course. The methods of controlling learning course through solving quiz in structured hypermedia improved deep level processing about learning content. Thus, academic achievement was higher. Structured hypermedia which applied to the method of controlling learning course reduced such problems as cognitive overloads, disorientation, surface level processing. Further studies will

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be required across different methods, different hypermedia, comprehensive quiz, the quality of learning style, and learning through solving task and objective.

■ **Key Words** : hypermedia, desorientation, cognitive overload, surface level processing