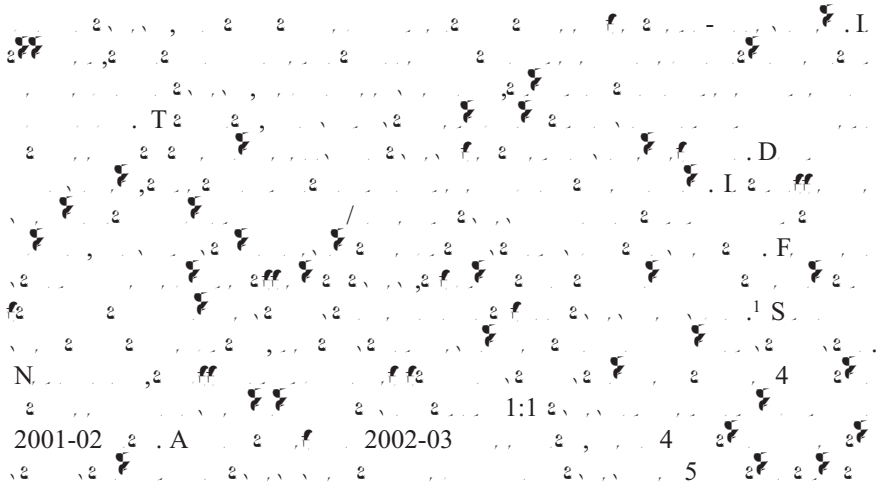
. 30(4) 313-330, 2004

LAPTOP LEARNING: A COMPARISON OF TEACHING AND LEARNING IN UPPER ELEMENTARY CLASSROOMS



DATA COLLECTION

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I[illegible] 37.7([illegible] AL([illegible] 93.7(905

F , . F - , . S (., 1:1) - . I , .05 . T (R , B , C , & C , 2003). T : 1) *d& C* ( ); 2) *P* ( ); 3) *d& D* ( ); 4) *O F* , .

FINDINGS

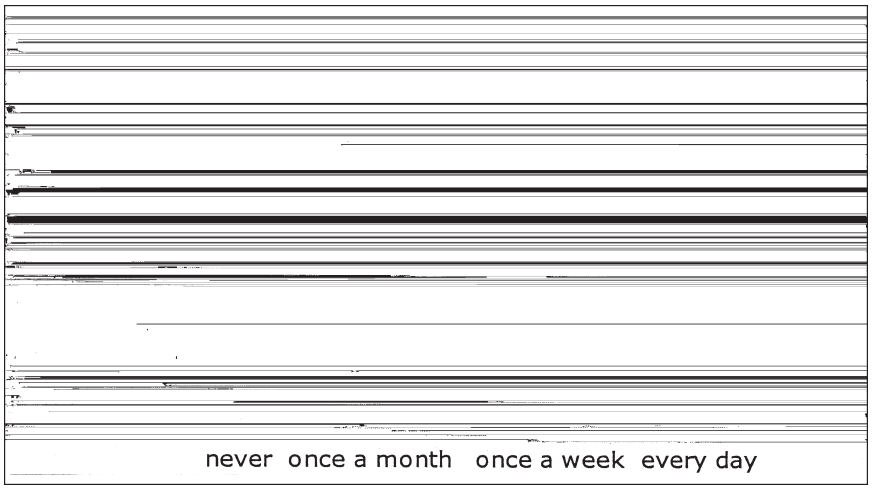
B , : 1:1 . F , . C 1:1 .

T M F 1:1 C

T , , 1:1 . A 15 15 60 1:1 1-2 2+ . T . C 1:1 .

1.

	1_1	
T T C		
	4.11	0.46
	1.78	0.38
	1.67	0.6
	1.56	0.31
	1.3	0.15
	0.22	
	0.17	0.08
	0.11	
	0.06	
	0.06	
I S T C		
	6.61	0.88
	4.22	0.46
	3.3	0.08
	1.00	
	0. 4	0.12
	0.72	0.15
	0.44	0.08
	0.44	
	0.17	
	0.17	
	0.11	
	0.11	
	0.11	
	0.06	0.12
	0.06	0.04
		0.15
		0.23
S - -S T C		
	1.8	0.15
	1.22	0.04
	0.33	0.04
	0.28	0.08
	0.22	
	0.06	0.12
		0.04
T I ( )	33.67	4.85



1

M E H

1:1 C

S -
, (C ,
2003, . 1). R , , ,
1:1
. O
1 ( ) 5 ( ),
1:1 3.8 3.3 ,
.05 (= 4.72, = 257,
< 0.001).

T
1:1 . O ,
1:1 6.1 4.8
. I ,
4.9 5.2

[illegible] . A [illegible] , [illegible] -
[illegible] .
[illegible] , 1:1 [illegible] :
A [illegible] . S [illegible]
[illegible] . A [illegible] , [illegible] 1:1 [illegible]
[illegible] . O [illegible]
[illegible] - [illegible] .

C [illegible] S [illegible] ' P [illegible]
[illegible] . T [illegible] 1:1 C [illegible]

T [illegible] , [illegible] , [illegible]
[illegible] 1:1 [illegible]
[illegible] . I [illegible] , [illegible]
[illegible] 1:1 [illegible]
[illegible] . A [illegible] 2, [illegible] 1:1 [illegible]
[illegible] . S [illegible] , 1:1 [illegible]
[illegible] 3.39 [illegible]
[illegible] 0.08 [illegible]
[illegible] . I [illegible] , [illegible] 1:1 [illegible]
[illegible] , [illegible] 0.44 [illegible] 0.58. [illegible] 2
[illegible] 1:1 [illegible]
(3.39/0.58 = 5.8) [illegible]
[illegible] . C [illegible] , [illegible]
[illegible] .
S [illegible]
[illegible] . A [illegible] 3, [illegible]
1:1 [illegible] . S [illegible] , 90.9% [illegible] 1:1

[illegible] 2. [illegible]

	[illegible]	1:1 [illegible]
[illegible]	0.08	3.3
[illegible]	0.44	0.58

[illegible] 1% [illegible]. L [illegible] 8.6% [illegible] 2.9% [illegible]. S [illegible], 86.7% [illegible] [illegible] -[illegible] 8.1%, [illegible] 1:1 [illegible]. T [illegible]

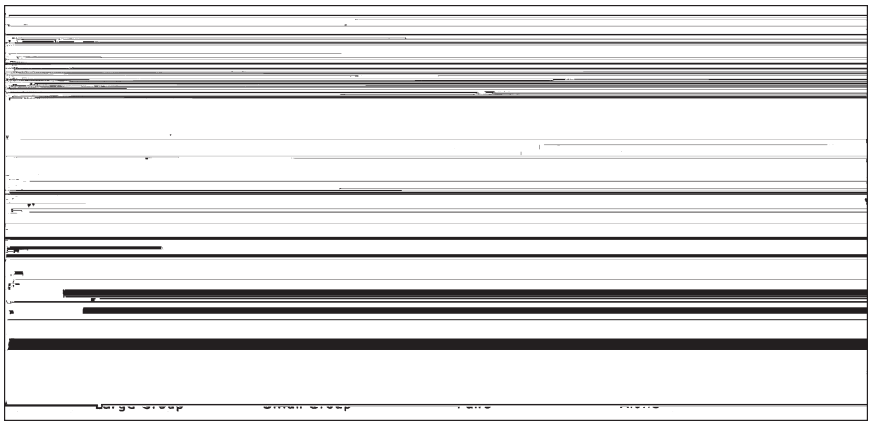
1:1 .

A F 2, 1:1 . C , . F 2 ( ) 1:1 . T 1:1 .

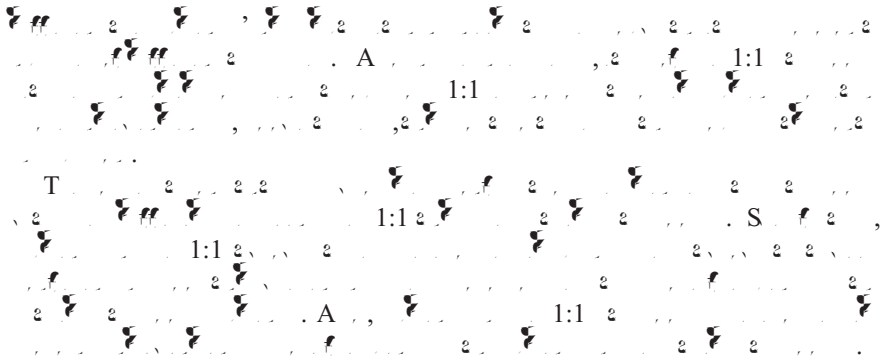
C . A T 4, 1:1 5.86 3.06. I , 1:1 . S 1:1 2.78 1.73.

A 1:1 1:1 .

A ,



2.



S 1:1 C C

[illegible] 1:1 [illegible] . [illegible] . [illegible] . [illegible] 1:1 [illegible] T[illegible] ($1800) [illegible] ([illegible]). [illegible] $1800 [illegible] $200 [illegible] 1:1 [illegible] . [illegible]

ACKNO LEDGMENTS

[illegible] S E S [illegible].

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B , MA: T A S C . A :// /PDF/ .
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S , K. (1999). L : A *A& b H&* . R N 6, 2003, /1999 04/ .
T , B. (2001, S 16). L . *P M* . A :// / .

D :

M R
323 C H
B C
C H , MA 02467

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