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(() ()
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1972 " "



(235) (251) (486)

:

(%60) (%68.72) (%75)

.(0.48)

:

(99 1990) .

:

Sensor motor stage -

Preoperational stage

Concrete operational stage

Formal operational stage

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(104 1991) .

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(126 1995

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(124 1991) .

(47 1981) .

.(68 1988)

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.(200 1987)

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33)

(58

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. 2002 2001

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:1980

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(389)

(%17.22)

.(kalili,1980) .

:1983

(48)

" "

(%8.51)

.(278 1985) .

: 1989

(1036)

" "

(%18.51)

.(1989) .

: 1990

(502)

1976 " "

(19 17)
(1990) . (%5.6)
: 1990

"
, "
(96)
(%13.55)
(1992) .

:1996

" " (240)

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(107 1996

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2000) . (12 11)
.266

:1974

(128)

(%27.3)

(%78)

1990) .

(%48.8)

.(183

: 1976

(18 15)

(513)

.(111 1990) .

(%15.2)

:1976

(290)

(%14)

.(111 1990) .

:1980

(140)

(11 3)

.(Liben & Golpeck , 1980 , 97)

: 1985

(192)

(19 8)

(1996,111) .

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2002 2001

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219

%			%			
5	125	2479	5	106	3186	
8	110	1468	17	91	517	
6	235	3947	6	251	3703	

(7650)

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" " 1972 " "
" (72) "

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(0.77)
(.0.69)

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(.0.75)

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.(0.62) :

.(0.70)

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(60) :

.(0.66)

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160	73.5	117	26.5	43	0	0		
125	77	96	23	29	0	0		
285	75	213	25	72	0	0	+	
91	65	59	33	30	2	2		
110	56	62	42	46	2	2		
201	60	121	38	76	2	4	+	
486	68.72	334	30.45	148	0.82	4	+	+

(%0.82)

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0.48	39.94	250.32	486	

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0.00	5.072	6.64	38.74	285	
		6.29	35.73	201	

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0.078	1.76	6.62	38.01	251	
		6.67	36.94	235	

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43		
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: (1983) 13

. 1985

: (1990) 14

1990

. 1992
: (1991) 15

: (1987) 16

. 1987

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