

(觀點)

가

가

가

(Baek, 1994).

가

가

가

가

(:)

21

가

가

가

가

Bronfenbrenner

Capra

가

가

가

(Nystrand,

Gamoran, & Carbonaro, 1998).

(:

)

(Davey, 1989).

(ecology)

1930

Kurt Lewin

$$'B = f(P \cdot E)'$$

(Bronfenbrenner, 1979).

(:)

(

)

, ()

(Davey, 1989). ,

Urie Bronfenbrenner

(, systems) Fritjof Capra

가

가

가

1. Bronfenbrenner

()

Bronfenbrenner(1970, 1979,

1994)

가 (system) (< 1>).

< 1> Bronfenbrenner

(system)	
(microsystems)	가 , , ,
(mesosystems)	가 , 가 ,
(exosystems)	가 ,
(macrosystems)	, , , ,
(chronosystems)	, ,

, (microsystems) . (face to face)

() .

가 , ,

, , (mesosystems) .

Capra (思考)가 (還元論: reductionism)
 (全一論: holism)

‘A B C D’
 , A가 B , B C , C D
 A가 D , C가 B
 (A) (B), (C) (D)

‘ (A) (B), (C) (D)’
 ‘ (A) (D)’ , (前生) ‘ ()’
 ‘ (B) (C)’

Capra 가 가
 가
 ‘ ’ 가 , ‘ ’ 가

, Capra(1996) (paradigm)
 가 (part)
 (whole)

(web) (pattern)
 Heisenberg(1969)가 (structure) (process)

(manifestation)
 (objective) (認識的: epistemic)
 가

가 (building) (network)
 (truth) (approximate description)
 가 가

(Maturana & Varela, 1987).

(思考) 가 ,

가

3.

Bronfenbrenner

Capra

가

1)

가

(, 2001).

가

가

(人間事)

(:

)

가

(Bronfenbrenner, 1979).

2)

가

가

가

가

3)

,가

(ZPD: the zone of proximal development)

Vygotsky

. Vygotsky ZPD

(, 1999).

가

가

.가

(相互互惠的, reciprocal)

(禮記)

‘(教學相長)’

. , ‘가

가

가 , 가 ‘ ’

가 .

가 가 가 ‘ ’가

(1998)가 ‘ 2002: ’ 21

가

가

가

가

(interrelationship)

가 ,

(Beach, 1996; Stiggins & Bridgeford, 1985).

(: , ,) (: , ,)

()

(2001)

가

가

가

)

가

(

)

가

가

, Sternberg (2000)

’(‘ ’)

(academic intelligence)

(practical intelligence)

(FIFA) 1904

, 1930

가

244cm

732cm , 가 , , , .

3. 가

가 , 가 가 가 (固定的 評價: static assessment) 가(力動的 評價: dynamic assessment)

1 가 가 (向上度)

가 가가 (Lidz, 1991).

Vygotsky (socio-cultural approach)

가 , .

Hawkins(1995)

() 가가

가 (量的) (質的)

가 가

가가 가

가가 , , ,

가(遂行評價: performance assessment) (: ,

,)

가

가 , ‘ , ‘ , ‘ ,
가 가 . . .
가 . 가 .
. 가 .
, , (ecological validity) (systemic validity)
validity) 가 . 가 가
. 가 , 가 가 가
. 가 (Wiggins, 1989).
, 가 가
. 가 가 , 가 가
가 . 가 가
가 가 가 가
가 가 가
. 가 가
. 가 가 가 가 가
, (systemic validity) 가 (system)
가 (Frederiksen & Collins, 1989).
Messick(1989) 가 .
validity)’ , (consequential validity)
, 가 가 .
. 가 가 가 가 .
가 가 가 ,
가 가 가

가 가

가

(symbiotic relationship)

가 21

가

가

가

가

가

가

가

가

가

가(static assessment)

가(dynamic

assessment)

가

(ecological validity)

(systemic

validity)가

(1998)

가 , 1999, 2001),

가 (2000)

가

가

가

가

가 가 , 가



(1998). 2002:

(1995). 가 , 33(3)
131-150.

_____(1999). Wgotsky ZPD 가 가 , 12(1), 191-215.

_____(2000). 가 :

가 (1999). 가 가 .

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가 (1999). 가 (10).

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* (UC Berkeley) ‘ 가’
 , 『 가 』,
 『 가 』, 『 Vygotsky

ZPD 가
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Abstract

Implications of Ecological Approach to Learning for Educational Evaluation

Baek, Sun-Geun*

The purpose of this review is to examine ecological approach to learning, and also to discuss its implications for educational evaluation. The ecological perspectives about learning imply restructuring of educational evaluation in Korea.

The first part of this paper reviews both Bronfenbrenner's classifications of ecological environment and Capra's descriptions of ecological approach. General characteristics of ecological approach to learning are also discussed. The second part describes implications of ecological approach to learning for educational evaluation. The main implications are as follows:

The areas of educational evaluation should be deepened as well as widened.

The objectives of educational evaluation should be more focused on both individualization and diversification.

The contents of educational evaluation should be more focused on 'process' than 'product' in education.

The methods of educational evaluation should be more focused on qualitative measurement rather than quantitative measurement. In addition, they should be more focused on dynamic assessment rather than static assessment in order to assess each student's progress.

Educational evaluation needs new strategies for test validity, such as ecological validity or systemic validity.

Since these implications that come from ecological perspectives are quite critical matters

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for optimum decision-making in education, they should be implemented in the whole educational system.

■ Key Words : Ecological approach, Ecological environment, Ecological validity, Educational evaluation, Learning