DOCUMENT RESUME

ED 455 140 SO 031 929

AUTHOR Brown, Neil; Thomas, Kerry

TITLE Creativity as Collective Misrecognition in the Relationships

between Art Students and Their Teachers.

INSTITUTION Australian Inst. of Art Education, Melbourne.

PUB DATE 1999-09-00

NOTE 8p.; Paper presented at the Annual World Congress of the

International Society for Education through Art (InSEA) (30th, Brisbane, Australia, September 21-26, 1999). This paper has been assisted by the Commonwealth Government

through the Australian Council for the Arts, its art funding

and advisory body.

AVAILABLE FROM Australian Institute of Art Education, C/Suite 125, 283

Glenhuntley Road, Eisternwick, VIC 3185, Australia.

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Art Education; *Art Products; *Art Teachers; Classroom

Research; Classroom Techniques; *Creativity; Foreign Countries; High Schools; Qualitative Research; *Teacher

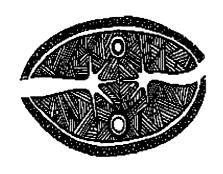
Student Relationship; Visual Arts

IDENTIFIERS *Art Students

ABSTRACT

Descriptions of the creative disposition are caught in a dilemma. If the spontaneous origination of ideas is a product of discrete mental dispositions, then how are these intentional traits made intelligible within conventional discourse? On one hand art students are obliged by teachers to find creative authenticity inside their own intentional resources. On the other hand students begin to realize that the originality of their achievements is rewarded in conformity with art educational convention. This paper tackles the contradiction of "learning to be creative." It presents a pilot study that posits creativity as misrecognition within the practice of art education, specifically that misrecognition of creative autonomy in various emergent forms takes place in the transaction between teachers and students, students and students, teachers and teachers, as well as teachers and others. Detailed observations were made of some 75-minute lessons in which a visual arts teacher introduced a new unit to a senior (Year 11) class (n=19). Presents in detail the theoretical framework. Discusses the results in terms of symbolic capital, focusing on the teacher's strategic command of the classroom. (Contains 42 references.) (BT)







"Creativity as Collective Misrecognition in the Relationships Between Art Students and their Teachers"

by

Neil Brown and Kerry Thomas

The University of New South Wales
PO Box 259
Paddington, NSW, Australia

Proceedings from the InSEA 30th World Congress "Cultures and Transitions"

21-26 September 1999 Brisbane Australia

Copyright 2000 Australian Institute of Art Education C/Suite 125, 283 Glenhuntley Road Eisternwick VIC 3185 PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

'

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

This project has been assisted by the Commonwealth Government through the Australia Council for the Arts, its art funding and advisory body.







Creativity as Collective Misrecognition in the Relationships Between Art Students and Their Teachers

Neil Brown and Kerry Thomas
The University of New South Wales
PO Box 259
Paddington NSW
Australia

Background to the Study

Descriptions of the creative disposition are caught in a dilemma. If, on the one hand, the spontaneous origination of ideas is a product of discrete mental dispositions how, on the other hand, are these intentional traits made intelligible within conventional discourse? In art education this dilemma is rehearsed as follows. On the one hand art students are obliged by teachers to find creative authenticity inside their own intentional resources. On the other hand students, with increasing maturity, begin to realise that the originality of their achievements is rewarded in conformity with art educational convention. How, in other words, do art students overcome the contradiction implicit in "learning to be creative"? Creativity acquired its identity as a quality of human imagination from Kant in the late eighteenth century. Although conceived by Kant as the representational basis for all knowing, the transcendental imagination is most exemplified within the concept of artistic origination. A psychology of creativity has, nevertheless, been difficult to realise.

Creative kinds of performance

The term 'creativity' refers to a particular kind of performance. Included among the properties of a creative performance are the products and artefacts that it enacts. Because artefacts are always produced within a historical context creative performances are invested with cultural in addition to intentional causes and properties (Gardner and Nemirovsky, 1991:2). Creative performances, therefore, derive their extension via a combination of semantically related properties and empirically underlying traits. For this reason they are most appropriately identified as non-strict natural kind terms (Norris 1992:5). It makes little sense, then, to investigate the empirical properties of non-strict natural kinds in isolation from their semantic properties. Creative traits, in other words, only make explanatory sense when understood within some particular field of production. As a result creative performances that stray beyond the intelligibility of their domain will go unrecognised.

The creative disposition

Psychological investigations into creativity traditionally seek a systematic account of the relation between the creative properties of the performance and properties of its performer. Biographies of creative individuals provide a fruitful avenue of inquiry (Gardner 1991, Ciselin 1952). But the teleological necessity of historical relationships is not sufficient. We know what occurred but we don't know why. Experimental investigation into creative behaviour, on the other hand, relies on criteria generated from inductive factors, such as "elaboration", "lateral thinking", and so on (Guilford 1967). When applied to artefacts produced under experimental conditions these criteria produce precise but unsatisfyingly recursive descriptions. Berti and Freeman found, contrary to expectations, that the ability of nine year olds relative to five year olds in elaborating a cross-categorical drawing of a "house-man", increasingly consulted the representational resources of a mental framework. This 'framework' could be consciously reflected upon and spontaneously generated by the older children without being prompted by the use of external examples. Thus elaborated drawing, even when performed under experimental protocols, reveals the use of complex mental redescription or frameworks that are not simply coextensive with the innovative properties of the products they represent (1997).

Discriminating creative dispositions

Let us assume that creative ability is a condition of the theoretical terms under which the creative properties of a situated performance, are transported into mental properties of the performer. Two difficulties face the theoretical transportation of properties between the two. Firstly, the extent to which the imaginative resources of mental redescription are brought to bear on all kinds of performances may be concealed if these resources are unilaterally attached to creative kinds of performances alone (Karmiloff-Smith 1992:23). Secondly, because creative performances supervene on non-creative performances, they cloak the manner in which mental representations in creative performances draw upon conventional resources. This possibility relocates the centre of creative agency within the logical space that manages the relation between the



resources of thought and artefact (Oxman 1999:108-09). Creative thinking is repositioned as a species of ordinary thinking made creative by its employment in the production of creative kinds of performance. Art students come to know the peculiar demands in originating art works, for example, and know, therefore, that making them presents special difficulties.

A developmental critique of the creative disposition

Vygotsky's critique of psychological method gives shape to the latter proposition (1978:65). Vygotsky argues that the structural relation between two agencies, illustrated in the relation between the performance and the performer, is explained in the conceptual space linking the two agents. Phenotypic characterisations of the "outer features" of the two agencies begs an explanation of the causal influence each one exerts upon the other. The simple co-occurrence of either one is not enough to show cause. Getzels and Csikszentmihalyi, for example, found no predictive covariance in the relationship between measures of the person and measures of the work (1966:363). They conclude that the most effective understanding of creative ability must eventually come from the study of reciprocal interaction among the person, the process and the product. Genotypical explanations, Vygotsky argues, emerge in the history of the performance. Thus the relation between performer and performance are developed through ongoing reference to the context in which they are transacted (1978:84). In other words, there is a contextual micro-history underlying the functional relations of creative performances in which the creative faculties of performers are transformed by the recruitment of new agencies into the relation.

How can we identify which functions are recruited into the relation between the creative performance and the performer, given the complexity of socio-cultural agency emergent within the semantic properties of creative products. In the course of his historical biography of Sigmund Freud Howard Gardner identifies the social field of the late nineteenth century as a critical agency in the formation of Freud's creative achievement (1986). Gardner says, "Just as projects serve as the intermediary between an individual and the domain, social institutions serve as the intermediary between an individual and the field" (111). If semantic properties have a causal impact within the creative relation then, according to genotypical methodology, it follows that psycholinguistic properties will be concealed within performances and artefacts.

The agency of the teacher within the creative performances of the student

The art teacher's pedagogical role in the production of their student's art is notoriously ambiguous. For example, responsibility for the creative activity of students is thought to be either dependent on or corrupted by the teacher at various historical moments (Lowenfeld 1949, Barkan 1968). The art teacher is represented in the literature as either fostering, collaborating with, or appropriating the student's creative originality. For instance, it is because students are **already** believed to be "problem finders" that the art teacher usually decides to adopt an inquiry based pedagogy (Csikszentmihalyi and Getzels 1971:52). How is - 'the teacher's decision to adopt an inquiry based approach' - introduced into the creative artefact as a semantic property and, consequently, how is its introduction entertained, as an empirical trait of the performer?

Theoretical Framework of the Study

Pierre Bourdieu provides the socio-cognitive framework for this study. Bourdieu challenges the assumption that the intentional actor is the sole originator of the cognitive resources that people bring to bear in the practices of their lives (1990:47). He relies on two central concepts of social competency. The first is the habitus. The habitus explains how the practical agency of individuals is shaped by the social formations of their existence (63). The habitus "... is the source of these strings of 'moves' which are objectively organised as strategies without being the product of a genuine strategic intention - ..." (62). Inculcated into a particular social formation the individual is able to harness the conventional regularities of their habitus to tacitly guide their actions and choices. The individual uses these pragmatic regularities to affect a semblance of certainty in how to go on and what to do next. It is impossible to secure a pure model of rational action. Weber shows, Bourdieu says, that this "pure model of rational action cannot be regarded as a rational description of practice" (63). In other words, it is a profound mistake of scientific method to reduce the explanation of cognitive dispositions subtending the practices of any particular social formation, such as creative practice, to an intentional logic. Creative practice is a disposition that is not strictly obedient to rules but can be conceived as the enactment of regulated improvisations. Although an objectively organised series of strategies the habitus of creativity lacks a genuine strategic intention. Nevertheless, there are, Bourdieu says, usually good objective reasons for the irrational things that social agents do.

The exchange of symbolic capital

Bourdieu's second explanation, the theory of symbolic capital, is entailed within the first. Symbolic capital is the primary currency of exchange in the social economy. It is expressed in the types of social value underlying the *habitus*. Social values are redeemed or 'cashed in' in the token exchanges of day to day social relations. Cognitive competency, required for fluent participation in this exchange, is explained as the ability to judge the difference between the material properties of the tokens of social transactions, from the symbolic properties of the underlying social types they represent. A cornerstone of the exchange of symbolic capital is its reciprocity. The notion of reciprocity is shaped around the archaic "project of the gift" (114). A



person who participates in the project of gift exchange is marked as one who is "...socially disposed to enter, without intention or calculation, into the game of the exchange" (1998:98). The gift is only a token however. Thus the reciprocity of symbolic transactions, such as gift giving, involve expectations of mutual understanding on the part of the giver, about the motivation or 'causality' of other social participants, otherwise the token quality of the gift might be misrepresented and taken as an insult by its recipient. In gift giving it is always a question of whether what has been given is appropriate to the symbolic content of the occasion. To be respectful of others is to possess social reasoning of sufficient subtlety to nuance the tacitly agreed order betokened within an exchange.

The asymmetry of social reasoning

However, rationalisation of social transactions 'pays back' the other in kind. Paying back in kind reverts to a logical symmetry that reduces the meaning of social transactions to a phenotype of their tokens. Social rules, on the other hand, are based upon the shared understanding that social transactions signify deeper symbolic meanings opaque within the instrumental reality of their token exchanges. Social transactions are by necessity, therefore, susceptible to profound misrecognition. Misrecognitions turn a blind eye to the material truths of token exchanges which can be destructive of useful social institutions if taken at face value. In the movie The Life of Brian Brian is approached by a hawker in the bazaar. The hawker berates Brian for his failure to misrecognise the symbolic capital of commercial transactions when Brian offers the hawker the full asking price for his wares. "You have got to haggle", the hawker tells Brian, preferring to deny himself the full money rather than jeopardise the valuable social practice of haggling. Haggling, although deliberately misrepresentative of the 'real' price of goods, plays an important social role through the exchange of symbolic rather than economic capital in the bazaar. Rationalisations which reduce underlying social values to the material level of their token exchanges do symbolic violence to their social meaning. In the field of art education there is a symbolic gap between how student works are instrumentally produced in the classroom and the way in which art educational narratives explain it. As in the bazaar, the 'narrative of creative autonomy' gives legitimacy to the instrumental realities of social transactions in the art room.

Creativity as misrecognition within the practice of art education

Art classrooms are sites for the exchange of symbolic capital. The symbolic economy of the art room can be likened to the 'archaic' economy in which everything takes place as if "...economic activity cannot explicitly recognise the economic ends in relation to which it is objectively oriented" (113). In the field of art education the technical reality of the teacher's pedagogical role may be repressed in the interests of maintaining the subjectivist narrative of the autonomously originating student. In the repression of this explicit economy, to paraphrase Bourdieu, we forget to question all the non-creative presuppositions of the creativity narrative (1998:130). It is not surprising that when it comes to the objectification of creative dispositions in the student the teacher's agency is either omitted from the relation or it is thoroughly mystified. There are many distinguished instances of misrecognising the art teacher's agency in the creative performances of students. Howard Gardner, for example, concludes that the art teacher must help to unfold the child's creative potential as a naturally developing competence (1982:217). Gardner, as earlier theorists such as Lowenfeld and most art teachers continue to do, turns a blind eye to the instrumentality of teaching art in his respect for the autonomous student. This is not to imply criticism. On the contrary there are very good reasons for the maintenance of contradictory social practices of this kind in art education. It is not the object of this study to expose these tacit misrecognitions with the purpose of condemning them as hypocrisy. Rather it is to understand them as complex social reasoning exercised in support of a valuable art educational institution.

Hypotheses of the study

Satisfying the narrative of the creative young artist - while meeting the obligations of instructional outcomes entails the use of teaching and learning strategies that call upon creative resources falling outside the exercise of laboratory defined dispositions. It entails the mastery of a cultural tradition that requires the exercise of tactful social reasoning. In particular that:-

- 1 Misrecognition of creative autonomy in various emergent forms, takes place in the transaction between teachers and students; students and students, students and teachers, teachers and teachers, as well as teachers and others.
- 2 Students of different developmental ages respond with differing frameworks of "tact" in the misrecognition of creative autonomy in the art room.
- 3 Social reasoning relative to maturity is adaptive to different contextual "points of view". That the expression of "denial" and "open secretiveness" in the misrecognition of creative exchanges is sensitive to different classroom contexts and to wider educational situations.



4 That the aesthetic value of creative products will correlate positively with the increasing subtlety of misrecognition possessed by their creators.

The pilot study

This study reports on a pilot investigation into proposition one above in terms of the relationship between a Visual Arts teacher, her senior art class, and their art making. To begin with we have chosen to observe the interaction between these three agencies in a classroom, without any presuppositions and without any further thought other than of producing a clinical characterisation of their transactions. Our reasoning is based on the need to establish objective benchmarks of exchange among the three agencies that can be used as a guide to the future viability of our proposal. The issue of symbolic capital has been set aside until the concluding discussion of the results.

Methodology

The pilot study uses an emergent qualitative design. Guba argues that qualitative methodology is well suited to the characterisation of complex situated dilemmas (1978, 1985). Qualitative methodology rests on two planks of validity. The first is triangulation, the second is semantic analysis. Triangulation subjects a variety of discrete observational methods and independently audited ethnographies, to cross checking and mutual reinforcement. It helps objectify interpretive methodologies and to keep them independent of their theoretical explanations. Semantic analysis was used to produce a series of emergent concepts or "cover terms". Transcripts of the unstructured interview; structured interview; records of observations; other documentary evidence; and photographic records of students' artworks were coded and provide the textual content referred to in the analysis. Detailed observations were made of a number of seventy five minute lessons in which the Visual Arts teacher introduced a new unit of work on "Collections" to her senior class. Photographic records were also taken of the classroom spaces, and of selected examples of the students artworks. Protocols of confidentiality were observed as part of the design and reporting of the study (Punch 1994).

Instructions

Respondents were asked if they would agree to be interviewed. The teacher was asked to be interviewed at least twice about her views on art making, and on her approach to the instruction of senior art students. She was also asked if she would agree to being observed teaching her senior art class. Teacher and students agreed to participate in the study unreservedly. Neither the teacher nor her students have any formal knowledge of the "habitus", "symbolic capital", "misrecognition" or "social reasoning" as elaborated in the theoretical framework and hypotheses of the study. The art department's programming documents and records were reviewed, and handouts circulated to students by the teacher at the time of observations were sampled. The most developed and resolved of the student's artworks were closely described. Data from these texts were considered in conjunction with data from the teacher's interviews and from the descriptions of the lessons observed.

Respondents

The visual art teacher, whom we shall refer to as (R1) has taught for over twenty years and has a specialist degree. She is female, in her mid 40s, married with two children in primary school. She is Head Teacher of the Visual Arts Department in the school. Students in the senior art class were willing to be observed and are used to having outside people in the room. The class is one of two Year 11 Visual Arts classes in the school. There are 19 students in the class: twelve girls and seven boys. Students are from predominantly Anglo-Celtic backgrounds.

Results

The results of qualitative studies do not lend themselves to the abbreviated format of conventional reporting and by the editorial limits placed on conference proceedings. Four cover terms emerge out of the data retrieved from the art room and its respondents:

- 1. lead up exercises and formulas
- 2. subjective experience
- 3. making artworks and creative activity
- teacher knowledge/teacher's strategic decision making

Interpretation and discussion of the results.

It emerges from semantic analysis that R1 conceives of her longer term intentions for year 11 students, in producing competitive artworks for the Higher School Certificate matriculation examination in the following year 12, as "lead up exercises and formulas". With this in mind, planning and programming through the Year 11 course focuses on offering her students a range of formulas and techniques and, upon introducing students to the work of selected artists that R1 believes will be later adapted by students into production of their own artworks for the HSC.



Particular techniques are focused on: in particular the use of the "viewfinder" to frame up formal and abstract qualities for enlargement into finished works. The value of the viewfinder is conceived of in different ways by the teacher, depending on the time at which it is introduced in the 11-12 course, and on how it is related to the intentions of a particular student or students who use it. For example, viewfinders provide students with a tactical way of designing compositions, they reduce the threat of the blank white piece of paper, they offer the opportunity for students to act as autonomous artists because they get to 'choose the bit to use', they have a respectable tradition of use in the artworld, and students would not have come to them on their own. Sometimes viewfinders are also used by students who continue needing to be spoon fed.

Other formulas used by R1 include strategies for recontextualising aspects of existing sculptures into new works by students. These procedures, disguised in R1's discourse as student 'experiences', are based on programs of teacher directed Collections and Installations. Students also undertake different 'direct' experiences of the local area through structured exposure to qualities of the urban environment whose iconic qualities lend themselves to proposed printmaking experiments. The teacher's response to three structured questions following up the cover term "teacher knowledge/teacher strategic decision making" can be summed up in her phrase: 'guided democracy'. As an overarching concept, guided democracy provides her with a way to explain the importance of building student's confidence by praising work that is good, assisting students in how they could go forward, and maintaining a rapport with students. She notes the negative effects of a poor rapport stating 'it seems to stymie them in their work'.

She recognises some of the constraints on guided democracy by questioning whether particular students are not as involved because of inherent attributes, the art department itself, the social demographic of the area, or a perceived lack of interest in the visual arts in student's homes. She also notes that some students want to take what they can for their own benefit at the expense of others. Rewards for good work are systematised and naturalised within the art department through an award system. 10-20% of students receive awards for different tasks and a small few in addition to these who have worked really hard.

R1 faces a dilemma in the students reliance on her approval (particularly in Years 11-12). She notes their dependence on her, their belief in her knowledge about what is regarded as good, and their perceived need to do their own thing. She also notes that she won't just let them do anything, otherwise she says, they would do what they have been doing here for thirty years. This same concept can be used to explain her interactions with particular students in the group. The teacher comments on how she will 'push' some students and suggest a host of different approaches whilst, with others, her advice is more direct although still suggestive.

There is overwhelming evidence of the teacher's strategic command of her class. There is urgency in her need to bring students to the point of accommodating to a series of tactical measures which will lend predicability to their production of original works, and produce works of a quality that will satisfy the terms of creative "success" in their examination year to come. It is evident that the teacher and the class are spending year 11 aligning themselves with the classroom culture of creative achievement in year 12 visual arts. It is also evident that student's creative success is deeply dependent, and in the teacher's mind as well, upon their ability to "make the leap". But making the leap is a double-sided notion that is misrecognised as the capacity for the spontaneous origination of ideas. It is applied as a euphemism for students' capacity to grasp the reasoning behind the strategic imperatives or the 'strings of moves' advanced by the teacher in the face of the pending Year 12 examination. From these observations there is sufficient grounds for us to infer that in her partitioning of critical discourses, and in transacting "the leap" with students the teacher is engaged in the exchange of pedagogical tokens that, for the very best art educational reasons, both she and her students misrecognise as creative capital. The system of reasoning that underlies their creative misrecognition warrants further investigation.

References

Berti, A.E. and Freeman, N.H. (1997), Representational change in resources for pictorial innovation: A three component analysis, *Cognitive Development*, 12, 501-522.

Bourdieu, P. (1990), The Logic of Practice, Cambridge, The Polity Press.

Bourdieu, P. (1998), Practical Reason: On the Theory of Action, Cambridge, Polity Press.

Carroll, J.S. and Brown, N.C.M. (1998), An Ethnographic Study of Art as a Discipline Concealed in the Beliefs and Practices of Two Artists, *Australian Art Education*, 21: 1.

Carroll, J.S. (1998). An Ethnographic Study of Art as a Discipline Concealed in the Beliefs and Practices of Two Artists, Unpublished Masters Thesis, The University of New South Wales.

Ciselin, B. (1952), The Creative Process, Berkeley, University of California Press.

Clark, G and Zimmerman, E. (1984), Educating Artistically Talented Students, Syracuse, Syracuse University Press.

Cross and Clayburn, (1996), Winning by design: the methods of Gordon Murray, racing car designer, *Design Studies*, 17, 91-107.

Csikszentmihalyi, M. and Getzels, J.W. (1971), Discovery-Oriented behaviour and the originality of creative products: A study with artists, *Journal of Personality and Social Psychology*, 19, (1), 47-52.



Getzels, J.W. and Csikszentmihalyi, M. (1966), The study of creativity in future artists: The criterion problem in O.J. vey (Ed), Experience, Structure and Adaptability, New York, Harper Publishing Company.

Ecker, D.W.)1966), The artistic process as qualitative problem solving, in E. Eisner & D. Ecker, (Eds), Readings in Art Education, Massachusetts, Blaisdell.

Eisner, E. (1966), A typology of creative behaviour in the visual arts, in E.W. Eisner and D.W. Ecker (Eds), Readings in Art Education, Massachusetts, Blaisdell.

Freeman, N.H. (1995), The emergence of pictorial talents, in J. Freeman, P. Span, and H. Wagner (Eds), Actualising Talents, Cassell.

Gardner, H. (1982), Art Mind and Brain: A Cognitive Approach to Creativity, New York, Basic Books.

Gardner, H. (1986), Freud in three frames: A cognitive-scientific approach to creativity, *DÆDALUS: Journal of the American Academy of Arts and Sciences*, 115, (3), 105-134.

Gardner, H and Nemirovsky, R. (1991), From private intuitions to public symbol systems: An examination of the creative process in Georg Cantor and Sigmund Freud, Creativity Research Journal, 4, (1), 1-21.

Goodman, N. (1981), Languages of Art, Hackett, Indianapolis, pp. 81-85.

Guilford, J.P. (1967), The Nature of Human Intelligence, New York, McGraw-Hill.

Guba, E.G. (1978), Toward a methodology of naturalistic inquiry in educational evaluation, CSE Monograph Series in Evaluation Number 8, Los Angeles, Center for the Study of Evaluation, University of California.

Guba, E.G. and Lincoln, Y.S. (1985), Naturalistic Inquiry, Beverly Hills, Sage Publications.

Holy, L. and Stuchlik, M. (1983), The inference of notions, in *Actions, Norms and Representations*, Cambridge University Press.

Kant, E. (1989), A theory of aesthetic judgement, in G. R. Dickie, R. Sclafani, and R. Roblin, (Eds), *Aesthetics a Critical Anthology*, 2nd edition, New York, St Martins, pp. 287-305.

Kennick, W.E. (1979), Creative acts, in W.E. Kennick, (Ed), Art and Philosophy, New York, St Martins.

Karmiloff-Smith, A. (1991), Taking development seriously, Beyond Modularity, The MIT Press.

Lincoln, Y. and Guba, E. (1985). Naturalistic Inquiry. Beverley Hills, Sage.

Lowenfeld, V. (1949), Creative and Mental Growth, New York, Wiley and Sons.

Manning, P. & Cullum-Swan, B. (1994). Narrative Content and Semiotic Analysis in Denzin, N.K. and Lincoln, Y.S. (Eds). *Handbook of Qualitative Research*. California: Sage.

Nietzsche, F. (1968), The will to power as art, (W. Kaufmann Ed and Translation), New York, Random House

Norris, S. (1992), Introduction: The generalizability question, in S. Norris, (Ed), *The Generalizability of Critical Thinking*, New York, Teachers College Press.

Oxman, R. (1999), Educating the designerly thinker, Design Studies, 20, 105-122.

Pariser, D. (1995), Lautrec-gifted child artist and artistic monument: Connections between juvenile and mature work, in C. Golomb, (Ed), *The Development of Artistically Gifted Children*, New York, Lawrence Fribaum

Perkins, D.L. (1994), *The Intelligent Eye: Learning to Think by Looking at Art*, Santa Monica, CA, Getty Center for Education in the Arts.

Perner J (1991) Part 1 Representation, in *Understanding the Representational Mind*, The MIT Press.

Piaget, J. (1971), Genetic Epistemology, New York, Norton and Company.

Punch, M., (1994) Politics and ethics in qualitative research, in N.K. Denzin and Y.S. Lincoln (Eds.) Handbook of Qualitative Research. Beverly Hills: Sage Publications.

Spradley, J.P. (1979), The Ethnographic Interview, New York: Holt, Rinehardt and Winston.

Spradley, J.P. (1980), Participant Observation, New York: Holt, Rinehardt and Winston.

Stein, M. (1966), Creativity and culture, in E.W. Eisner and D.W. Ecker, (Eds), Readings in Art Education, Massachusetts, Blaisdell.

Torrance, P.E. (1969), Creativity, Belmont California: Fearon Publishers.

Vygotsky, L.S. (1967) The problem and the approach, in *Thought and Language*. Massachusetts: The MIT Press.

Vygotsky, L.S. (1978), Zone of proximal development: A new approach, *Mind in Society*, Harvard University Press.





U.S. Department of Education Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



NOTICE

Reproduction Basis

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)

