Constructivism, Knowledge, and Manipulation

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The aim of this essay is to discuss and evaluate two dominant structuring models for educational systems which for lack of better terms may be called the traditional and the progressive models. The controversy between the traditional model of teaching based on the structure of knowledge and the progressive one, which aims to avoid socializing children into predefined roles and fixed forms of knowledge, is more complex than is often recognized. On the level of rhetoric, the traditional model is standardly characterized as rigid with highly authoritarian educators and passive students. In contrast, progressive educational systems are characterized as cooperative, flexible, respectful of individual students, creativity enhancing, and individualizing rather than socializing. I am not here concerned with discussing the empirical issue of what traditional schools or progressive schools are actually like. I am interested in discussing educational models standardly thought to be represented by these two systems and the implications of these models for education. The focus is not on the surface structures of these models, but their deep or hidden structures.

THE TRADITIONAL MODEL

There are various ways of characterizing the traditional model. In this essay I shall focus on the following five aspects it is said to possess: (1) a receptive view of learning, (2) foundationalism about knowledge, (3) a highly didactic form of pedagogy, (4) epistemic authority, and (5) a social distance between the teacher and the student.¹

- (1) Learning consists of receiving and preserving knowledge. The world of knowledge is composed of pre-existing theoretical forms into which the child must be initiated. Educational development consists of the child moving away from the concreteness of her immediate world toward increasingly abstract theoretical forms. Educational achievement consists in progressing toward increasingly specialized and highly discipline-bound subject-matter, and is measured in terms of objective evaluative criteria such as behavioral objectives.
- (2) The criterion of correct knowledge is that it describes reality as it is. This is based on a realistic view of the world as independent of people's conceptions and opinions. The ultimate criterion of knowledge is reality, which is independent of the various ways that people perceive or conceive it.
- (3) The teacher's mastery of pre-existing thought forms legitimizes a highly didactic form of pedagogy. One of the teacher's main tasks is to assess the growing congruence of the child's thought forms with pre-existing standards. The role of the learner is passive and it is the task of the teacher to transmit knowledge unchanged to the student.
- (4) The teacher has epistemic authority. It is the task of the teacher to guide students to use appropriate methods for acquiring knowledge. Although the teacher

has to relate new knowledge to the capacities and the knowledge that the student already has, the student's subjective views are not regarded as inherently valid.

(5) Overt authority creates a distance between the teacher and the student which hinders identification. Since identification is a precondition for internalization, open authority makes it more difficult to mold the student's personality effectively. A crucial characteristic of the traditional model is the development of a high degree of privacy. The progress toward abstraction means a greater discontinuity between the educational setting and the non-educational environment. Emphasis on increasingly abstract rationality makes emotions and feelings seem irrelevant in educational settings and thus makes their expression less likely. This means that educational settings typical of the traditional model are not optimal for effective socialization, since the necessary conditions for the flourishing of strong identification patterns are not met.

THE PROGRESSIVE MODEL

Progressive educational systems pose a challenge to traditional education with their model which combines five elements: (1) a constructivist view of learning, (2) a constructivist view of knowledge, (3) a highly interaction-oriented pedagogy, (4) avoidance of open use of authority, and (5) a close relationship between the educator and the student based on equality rather than authority.

(1) According to the constructivist approach, the child is primarily a subject, that is, a being who is actively involved in constructing and arranging her knowledge of the world in terms of personally relevant interpretational schemata. The child's most relevant characteristic for educational settings is curiosity. Learning is a process in which the student actively constructs her own knowledge structures, a picture of reality and her place in it, by selecting and interpreting the feedback she receives. Earlier structures of knowledge guide the way she focuses her attention and interprets the information she receives. Learning involves a reconstruction of the picture of reality on the basis of existing knowledge.

Although educational achievement is measured in terms of the distance from the starting point to the present level of development, this is a highly individualized measure. The child is essentially treated as a self-regulative being insofar as she controls the sequence and pace of her experience — and in many cases the contents as well. Such evaluation will be more diffuse, non-quantifiable, highly subjective, and more holistic in tone since all dimensions of the student's subjectivity are regarded as worthy of concern in the educational setting.

(2) The world of knowledge is composed of thought forms which are in a constant process of construction. According to the constructivist view of knowledge it is not possible to acquire objective knowledge about the world as it really is. Michael Devitt describes constructivism as follows:

The only independent reality is beyond the reach of our knowledge and language. A known world is partly constructed by the imposition of concepts. These concepts differ from one (linguistic, social, scientific, etc.) group to another. Each such world exists only relative to an imposition of concepts.²

There is no objective knowledge. That is why individuals may justifiably construct different epistemic structures. Their validity should not be assessed on the basis of their success in describing the assumed objective reality, but on the basis of how well they serve the purposes of their creators. Epistemically valid are constructions which help their creators to realize their ends and to act successfully. People using different concepts categorize the world in different ways and live in different worlds which cannot be rationally compared.

- (3) The constructive nature of human knowledge and the value of intellectual initiative legitimize a pedagogy which is highly interaction oriented. One of the educator's main responsibilities is the heuristic channeling of the pre-existing curiosity of each individual student. Successful pedagogy consists in the ability of the teacher to apprehend and recreate the intentionality and subjective reality of the students so as to provide greater individual stimulation.
- (4) The progressive model refrains from overt authority which is regarded as educationally unjustifiable mental violence or ideological imperialism. A student acting under the fear of punishment or hope of reward loses her authenticity.

This view does not accommodate the idea of the teacher's epistemic authority, since knowledge is not objective. The way the teacher constructs her epistemic world is colored by her own subjectivity. The teacher's attempt to transmit her own epistemic constructions to the student involves a kind of epistemic imperialism. Instead, the student should develop her capacity to perceive the world independently and to construct her own epistemic structures from her own perspective.

(5) The progressive model attempts to create close and confidential relationships between the teacher and the student. When an individual is educated in a structure dominated by the progressive model, she experiences very little privacy. Educational settings are not discontinuous with daily life as the progressive model does not necessitate a move away from concreteness. As the student is encouraged to express her needs, feelings, and choices, the educator has ready access to the affective dimension of the student's personality. In addition, schools which utilize the progressive model have strong community ties as well as close relations with the associated family structures. This leads to much more fluid boundaries between these areas and a corresponding decrease in privacy. The lack of privacy together with an atmosphere of mutual social trust makes the socializing potential of progressive education far greater than that of the more traditional approach.

WEAK AND STRONG SOCIALIZERS

It can be convincingly argued that any educational structure will to some extent be involved in the process of socialization. The curricular, the pedagogical, and the evaluative structures function to sensitize individuals to encountered reality and to desensitize them to others.³ That is, at a quite subconscious level the educational setting makes the students feel certain ways of looking at and conceptualizing reality as more relevant and appropriate than those that are not utilized by the educator, since the educator functions as a model in educational settings.

Even though socialization cannot be avoided, whichever educational approach we choose, we might still want to minimize the degree of subconscious molding in

order to maximize the potential for the development of individual autonomy. That is, we might want to expand the area of conscious choice, of rational judgment, at the cost of subconscious commitment. The relevant question concerns how this can be accomplished.

The traditional model is based on the teacher's epistemic authority and the assumption that it is possible to acquire objective knowledge. The attempt is to teach ready-made models of knowledge to students. This seems like an uncreative and indoctrinative model of teaching. On the other hand, its formal, knowledge orientated approach makes emotional expression less likely and disconnects the school environment from home, so that its effectiveness in molding personality is weak.

The traditional model sets out to structure the students' conceptions to correspond with fixed forms of knowledge and in that sense its aim is to make students conform. However, its formal, knowledge-orientated approach provides for so much privacy and discontinuity from the social environment that it is a weak socializer. In that way paradoxically it works towards more autonomy.

The progressive model respects individuality and autonomy and creates preconditions for the development of individual thinking because of its constructivist orientation to teaching. However, since it combines, at least in its radical form, the constructivist model of learning with the constructivist view of knowledge, it cannot account for the relationship between individual constructs and reality. It assumes that the individual cannot know the relationship between her representations and reality. She can only give an account of the way that the world appears to her. There are supposedly no criteria for assessing the truth or falsity of different constructs. In its extreme form this leads to solipsism, the claim that each person occupies a different world consisting of her images of the world.⁴

Since the progressive model respects individuality and subjectivity it creates a climate of social trust and affective expression. While doing so it exposes the students to strong socializing influences and potential manipulation. The result may be a lack of privacy and autonomy. The community, paradoxically, can take over and start to dominate the individuals by being in intimate touch with their deepest emotions and feelings.

It is possible to argue that so-called conservative socializing procedures are actually weak socializers and that more progressive ones are potentially much stronger ones. As internalization is central in socialization, and identification is its most important psychological process, it follows that successful socialization depends on factors like social trust which enhance identification. This means that precisely the distance between teachers and students in traditional schools makes them weak socializers. On the other hand, insofar as schools emphasize interaction, cooperation, community, and social trust, they are potentially much more effective socializers.⁵

The most central psychological mechanism operative in such a process of internalization is the process of identification. This process involves becoming like another person in relevant respects in order to meet standards of conduct and perform

social roles as the others do. This process involves a comprehensive molding of personal identity. In order to socialize a child successfully, the educator has to set up environments in which the mechanisms of identification can be optimally employed. The most important single element found to enhance the process of identification is a positive, warm relationship characterized by social trust which develops between the child and the socializing agent. This means that educational environments characterized by social trust will be effective socializers.⁶

The fact that the progressive approach wants to avoid open authority forces it to resort to various forms of anonymous authority, because complex social settings tend to disintegrate without guidance. Anonymous power molds individual consciousness subconsciously without providing the individual with rational means to assess or even to be conscious of this molding. This method of molding is based on the influence of certain habits, attitudes, practices, and ways of symbolizing and conceptualizing reality. The recipient internalizes the values inherent in these practices and attitudes as self-evident, without seeing alternatives to them. This involves a subconscious, non-rational shaping of an individual's consciousness. In this way society produces individuals who suppress and inhibit anti-social behavior at a subconscious level. They have been instilled with a set of emotional responses which serve primarily as inhibitors of anti-social actions.⁷

THE PROBLEM WITH THE CONSTRUCTIVIST VIEW OF KNOWLEDGE

It seems, therefore, that both the traditional and the progressive models have their problems. The problem with the traditional model is that it understands teaching as a mere transmission of knowledge. The problem with the progressive model is that it loses the connection between epistemic constructs and the world. It is possible, however, to alleviate these problems by combining the positive aspects of each model. First, there is reason to reject the constructivist view of knowledge in favor of a moderate foundationalism and commonsense realism.

According to the constructivist view of knowledge, it is not possible to know anything about the world as it really is, but only about how the world appears to human beings. The constructivist view of knowledge is based on an internalist perspective, which Hilary Putnam describes as follows:

"Objects" do not exist independently of conceptual schemes. We cut up the world into objects when we introduce one or another scheme of description. Since the objects and the signs are alike internal to the scheme of description, it is possible to say what matches what.⁸

This contradicts commonsense realism which assumes that the material world exists independently of the human mind and that we can have adequate knowledge about it. Stones, trees, animals and human beings exist independently of what we think about them. It is possible to assess various conceptions about the world by how well they help us to approach the right description. Even though different people from different starting points create different theories, they can be assessed by criteria which are in principle objective. It is meaningful to teach systems of knowledge although they change and develop with the progress of research.

Second, the constructivist view of learning does not logically presuppose the constructivist view of knowledge, contrary to what radical constructivism assumes.⁹

The fact that people have different conceptions and that they structure reality in different ways, does not mean that it would not in principle be possible to assess their validity and to approach an ever more exact conception of reality. According to realistic constructivism the process of constructing knowledge happens in interaction with the world. ¹⁰

The constructivist view of learning is therefore logically distinct from the constructivist view of knowledge. The former concentrates on describing the psychological processes by which the student constructs her epistemic conceptions. For example, observational knowledge is based, in addition to the stimuli coming from the external world, on the conceptual models employed by the observer. The way objects are perceived depends on the observer's background knowledge, concepts, and expectations. Careful observations may sometimes force a person to correct her original views. On the other hand, it may be difficult for a person who lacks a relevantly nuanced conceptual system to observe certain features of the world. The fact that learning is a constructive and creative process does not mean that the world of which knowledge is acquired is dependent on the learner. The constructivist view of learning is compatible with commonsense realism and moderate foundationalism. Realistic constructivism, understood in this way, is a philosophically more plausible position than radical constructivism, which assumes that the world exists only in people's minds.

It is, therefore, possible to promote individual autonomy as emphasized by the progressive model and take into account the constructivist nature of learning, even though we reject the constructivist theory of knowledge, and prefer open to anonymous authority. The fact that the learner's way of perceiving and conceptualizing reality presupposes her active, constructive contribution does not mean that the nature of reality is dependent on how she perceives it. The freedom of the student is not in any meaningful sense restricted by the fact that reality does not depend on how she conceptualizes it. The fact that learning is an active constructive process does not mean that mere student activity is sufficient to guarantee learning. Student activity ought to be guided in ways which make learning planned and meaningful. The teacher who lets the students' shifting objects of interest determine the progress of the lesson has replaced learning with mere activity.¹¹

A model of education functioning without any authority is not necessarily more progressive than an educational model based on legitimate authority. ¹² Facts do not support the assumption that children develop best without guidance, even though the child's curiosity and self-directed learning are central educational resources. Teacher authority may be justified by its benefits. The directives given by an authority may often justifiably replace individual reasons since these directives enhance cooperation. The teacher may, of course, use her authority more or less reasonably, and her way of doing it may be legitimately subjected to criticism.

The teacher has more possibilities to influence the child than the child has to influence the teacher. To hide this inequality in power and to create the illusion of equality promotes covert use of power and manipulation. Open authority diminishes the need for hidden manipulation and makes it possible for the child to assess ways in which power is exercised over her.

A system based on authority does not prevent the development of confidential ties between the educator and the student, although it brings out the difference in their respective positions. The danger of manipulation may be diminished by making everyone aware of the power structures controlling the educational situation. The effectiveness of subconconscious forms of influence may be diminished by making students aware of the dangers involved and by developing a critical awareness and capacity for self-reflection. The possibility of manipulation may also be diminished by emphasizing those forms of acquiring knowledge which subject views to rational and experiential testing. A rational approach to authority is part of democratic education. Democracy is a social system which is not based on compulsion but on the consent of the citizens. The consent of the citizens is the foundation of systems of governance and roles of authority which make it possible to take care of common issues. To understand the rationale of authority does not hinder the development toward individual independence.

Conclusion

Some of the problems encountered by progressive education are due to its defective views about knowledge and authority. The constructivist view of knowledge is only apparently individualizing. In actual fact it undermines one of the foundational defenses that a person can have against manipulation. Constructivist approaches to learning are more appropriately combined with a moderate foundationalism about knowledge which recognizes the dependence of our constructs upon reality.

The refusal to employ open authority is democratic only in name and betrays an inadequate understanding of the dynamics of authority. The lack of open authority tends to lead to the use of anonymous forms of power which are more manipulative than open authority. The open use of authority creates a distance between the teacher and the student which makes it easier for the student to recognize the ways in which the teacher is trying to influence her.

^{1.} In my account of the two educational models I have used material from the following sources: Graham D. Hendry, "Constructivism and Educational Practice," *Australian Journal of Education* 40, no. 1 (1996): 19-45; Kathryn Morgan, "Socialization, Social Models, and the Open Education Movement: Some Philosophical Considerations," in *The Philosophy of Open Education*, ed. David Nyberg (London: Routledge and Kegan Paul, 1975); and Richard S. Prawat, "Teachers' Beliefs About Teaching and Learning: A Constructivist Perspective," *American Journal of Education* 100, no. 3 (1993): 354-95.

^{2.} Michael Devitt, Realism and Truth (Oxford: Blackwell, 1991), 235.

^{3.} Morgan, "Socialization, Social Models, and the Open Education Movement," 129ff.

^{4.} C. Tolman, "Metatheoretical Constructivism: A Materialist Evaluation," *Canadian Psychology* 80, no. 3 (1980): 7-13.

^{5.} Morgan, "Socialization, Social Models, and the Open Education Movement," 121-23.

^{6.} Ibid.

^{7.} Morgan, "Socialization, Social Models, and the Open Education Movement," 119-20, 138 and Robert Sigel, "Assumptions about the Learning of Political Values," in *Psychology and Politics*, ed. Leroy N. Rieselbach and G.I. Balch (New York: Holt, Rinehart, and Winston, 1967), 74, 79-81.

- 8. Hilary Putnam, Reason, Truth, and History (Cambridge: Cambridge University Press, 1981), 52.
- 9. Ernst von Glasersfeld, Radical Constructivism: a Way of Learning and Knowing (London: Falmer, 1995).
- 10. Hendry, "Constructivism and Educational Practice," 19-20.
- 11. Prawat, "Teachers' Beliefs About Teaching and Learning," 367-71.
- 12. Compare, for example, Hendry, "Constructivism and Educational Practice."