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Motivation in Social Constructivist Theory

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Current trends in research on motivation in the classroom are based on theories that focus on the individual's intrapsychological traits or his or her cognitive and/or affective functioning. In contrast to this individualistic perspective, social constructivist theory provides a framework for conceptualizing motivation as socially negotiated by the participants in the classroom. In such a conceptualization, motivation is inseparable from the instructional process and the classroom environment. The culturally determined joint activity between student and social context results in an internal state of interest and cognitive and affective engagement, and motivated behaviors, both of which can be considered cultural norms. Implications of this perspective for understanding motivation, classroom instruction, and research are discussed.

Motivation has traditionally been seen as a product of the intrapsychological functioning of the individual. This individualistic orientation underlies the different definitions and conceptualizations of motivation, definitions that range from drive theories such as Maslow's (1970) drive to self-actualize and Axline's (1969) drive for complete self-realization, to cognitively based theories such as attribution theory (Weiner, 1972). In some theories motivation refers to a general trait such as competence (White, 1959) or intentionality (Paris, Lipson, & Wixson, 1983). In an extension of this line of thought, studies of student motivation place the student as the agent who alone processes environmental, cognitive, and affective information; the student also generates feelings and thoughts that influence actions considered demonstrations of motivation (e.g., task behavior and achievement). Other motivational studies focus on the effects of specific variables on an indirect measure

of an individual's motivation (e.g., achievement or specific motivational constructs). For example, Eccles (1983) correlated self-concept of ability with perceived value of math, with expectancies, with plans to continue studying math, and with math grades. Morgan (1984) studied the relationship between the allocation of rewards and intrinsic interest. Benware and Deci (1984) demonstrated that subjects engaged in active learning (i.e., learning in order to use the material), showed greater conceptual understanding and more evidence of intrinsic motivation than control subjects. Bandura and Schunk (1981) explored the ways judgments of self-efficacy, a construct of motivation, helped determine behavior. These studies have looked to the individual as the locus of action and have viewed the motivational outcome as the product of the individual.

This article departs from the individualistic orientation of motivational theories. It frames motivation in social constructivist theory, and in doing so, enhances our understanding of what motivation is and how it occurs. Because social constructivism is primarily a paradigm for cognitive development, it is adaptable to conceptualizing motivation in learning situations. As such, the focus of this article is mainly on motivation in learning environments, primarily the classroom. From a social constructivist perspective, the individual no longer acts as the instigator of motivation. Rather, motivation is a socially negotiated process that results in an observable manifestation of interest and cognitive and affective engagement.

The thoughts expressed here draw on the theories and research of Soviet developmental psychologists (El'konin, 1977; Leontiev, cited in Wertsch, 1981; Vygotsky, 1978), comparative cognitive research emphasizing the situation specific nature of learning (Rogoff, Gauvain, & Ellis, 1984; Scribner & Cole, 1973), and motivational literature that links cognition and motivation (Brophy, 1983).

Thus, the purposes of this article are to establish the links between motivation and social constructivism in which it is embedded, to understand the nature of motivation, and to clarify how motivation from a social constructivist perspective operates. First, an overview of social constructivism is discussed. Second, a description of motivation as a function of social constructivist theory focusing particularly on motivation in a learning context is covered. Finally, the idea of socially constructed motivation is discussed in terms of its implications for instruction, psychology, and research.

AN OVERVIEW OF SOCIAL CONSTRUCTIVIST THEORY

... what is to be taken to be psychological process at the very outset becomes derivative of social interchange. The explanatory locus of human action shifts from the interior region of the mind to the processes and structure of human interaction. The question "why" is answered not with a psychological state or

process, but with consideration of person in relationship. (Gergen, 1985, pp. 266-275)

Evolving from research traditions in education, sociology, and cognitive psychology, social constructivism is neither new nor original. Perhaps it is best described as fashionable. The writings of Soviet social constructivists have been re-introduced by Cole and others engaged primarily in comparative cognitive research. Reflecting the growing importance of social constructivism in thinking about schools, teaching, and learning, educational psychologists such as Shulman and Carey (1984) described social constructivism as representative of a paradigmatic shift toward viewing the construction of meaning or psychological events through the reciprocal influence of individual and context.

Social constructivism has been primarily a theory of cognitive development whose emphasis shifts from the individual as meaning-maker of the interaction between individual and environment (the view of individual constructivism such as held by Piaget) to a view of collectively constructed meaning. Social constructivism can be described as socialization, a process of acquisition of skills, knowledge, and dispositions that enables the individual to participate in his or her group or society. This socialization process consists of reciprocal interactions and joint construction of meaning by the individual and others in the social context. When considered in this larger frame, social constructivism becomes the means of cognitive development, as well as the means whereby an individual learns the needs and motives underlying human relations and the modes of action necessary to interact with people, objects, and ideas in the environment. Replacing the individual as sole meaning-maker, social constructivists (especially the Soviet psychologists led by Vygotsky, Luria, Leontiev, and others) see developing cognitive activity achieved by the internalization of cultural knowledge and norms and the use of tools and signs of the culture through the assistance of more mature members of the society. Vygotsky (1978) described the process by which cultural products are transmitted as a part of the culture. Both the means of transmission of culture and knowledge and the implicit socio-cultural meaning given any event or activity shape the way we think and act.

The three key elements of social constructivist theory are (a) cognitive activity; (b) cultural knowledge, tools and signs; and (c) assisted learning. It is necessary to artificially separate these interconnected elements in order to understand the process of social constructivism and its relation to motivation.

Cognitive Activity

The term *cognitive activity* refers to the process of meaning-making, not the resulting psychological event. From the social constructivist perspectives, cognitive activity cannot be conceived of as characteristic of the person sepa-

rate from the context in which the person thinks (Rogoff, 1982). As such, it reflects the reciprocal influence of the individual and context in the production of a cognitive event. In Luria's (1962/1977) discussion of mental development, cognitive activity is developmental in nature, becoming increasingly more complex in structure as the tools and signs of culture (e.g., language) are implemented. It is shaped through association with adults.

In addition, cognitive activity shapes and regulates behavior by mediating context and behavior (Cole & Scribner, 1974). On the surface, this role as mediator between context and behavior seems similar to traditional descriptions of cognitive functioning where the child assimilates new experiences which are then "accommodated" into new mental structures. However, particular to the social constructivist view is the notion that in the process of mediation, all objects are defined in terms of their cultural significance, not in terms of physical properties. "We do not find inscribed on the object where and how it originated, how we may operate it, how we can reproduce it. Therefore, the object cannot be mastered through adaptation, through a mere 'accommodation' to its physical properties. In this process the physical properties of an object serve merely as referents for the child's orientation in his actions with that object" (El'konin, 1977, p. 550). From the social constructivist point of view, the process of mediation is a means by which the child grows intellectually and is socialized in appropriate use of objects, in other words, into culture.

Cognitive activity can be viewed in terms of Leontiev's (1981) analysis of activity in which activity is divided into three areas according to their function: (a) motive and orientation, (b) goal-directed action, and (c) operations. The function of motive and orientation is to "orient the subject in the world of object" (Leontiev, 1981, p. 146), whereas goal-directed action looks at actions on the basis of their goals, and operations refers to the conditions or means by which actions are carried out. Leontiev's use of the word *motive* is the only explicit reference the Soviet social constructivists make in their theoretical writings to an internal source that enhances, maintains, or mediates cognitive development. Motive refers to the attitude underlying an individual's efforts. It does not refer to a perception of a goal, which would be Leontiev's second area of analysis. Nor is it the "prime instigator of action" as Ames and Ames (1984) have called cognitions affecting motivation. Rather, it is more of a "conduit of action." Motive gives form and direction to cognitive activity, not impetus and strength to action. For example, the motive in an apprenticeship setting may be performance. Therefore, the emphasis may be on nonindependent learning until error free performance is achieved. In the classroom, we frequently encounter a different motive and orientation. The motive is learning. The emphasis is on independent functioning, where errors are considered to be consistent with appropriate learning behavior and competence is the outcome (Wertsch, Minick, & Arns, 1984). A goal directed action, on the other hand, may be like the goal of mov-

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ing from one place to another, which can be performed with different underlying motives such as learning or work.

The social constructivist perspective of cognitive activity differs from a Piagetian perspective in many respects. Whereas Piagetian theory represents cognitive development as a process of adaptation by the individual, social constructivist theory views cognitive development as a process that is coconstructed with another member of society. The individualist construction of meaning does not view cognitive activity as dependent on the culture of the individual. Social constructivists believe culture shapes and regulates cognition resulting in a qualitative reorganization, and that "the principle feature of this reorganization is that elementary, direct forms of activity" (or elementary psychological processes, meaning that activity resulting from direct stimulation from the environment, e.g., sensation and movement) "are replaced by complexly organized functional systems" (higher psychological functions characterized by the use tools and signs to mediate direct environmental stimuli, e.g., voluntary memory, abstract thought, and active attention) (Luria, 1962/1977, p. 66).

In summary, cognitive activity is a dynamic process which develops and becomes more complex through the assistance of a more mature member of society. It is simultaneously a product of culture, and the process that integrates culture and the individual and gives form and direction to behavior.

Cultural Knowledge, Tools, and Signs

As previously discussed, frequent reference has been made to the tools, signs, and knowledge of culture. Anthropologists have not agreed on a single definition of culture. They have looked for differences between groups, a range or distribution of certain behaviors existing in a particular group, change in certain aspects of social life, and factors that have psychological implications within and between cultures (Cole & Scribner, 1974). For the purposes of this article, culture refers to the features in a group of people, such as beliefs, social forms, knowledge, and the means of transmitting knowledge, that distinguish those people from another group.

A culture provides the context in which the tools and signs (like language and numbers), and knowledge (a body of affective and cognitive information available to an individual) are shaped. Studies concerned with the lack of generalization of capacities across situations (Brainerd, 1978; Rogoff, 1982) and research on cross-cultural cognitive development (Cole & Scribner, 1974; Rogoff et al., 1984) have demonstrated that the knowledge, tools, and signs evolving from different cultures are particular to that specific environment and function as the means of communicating cultural knowledge. As products of culture, the tools, signs, and knowledge reflect social conditions, historical circumstances, and social experiences.

Language is a clear example of a context-tied tool. For example, the language of the inner-city is different from that of Kansas farm country or from the California "Valley Girl." Bernstein (1972) reports on correlations between language and the social class into which a person is socialized. Luria (1930/1977), in writing about the environment and children's speech, states, "Social conditions play a tremendously important role in shaping speech; indeed, speech is social in nature, and communicative in both function and origin" (p. 33). Please note, the word *speech* has been translated as language in other quotations or in references to Luria's work. Luria himself qualifies his emphasis to be "on the psychological aspects of speech rather than on its phonetic and grammatical aspects" (1930/1977, p. 33). Speech and language are used interchangeably in this article.

In social constructivist theory, language is viewed as a tool of thought and cognitive activity. Bruner has linked intelligence to the internalization of a culture's tools, such as technology and symbolic systems (see Cole & Scribner, 1974, for further discussion). The thinking of a child, for example, is socialized into social, cognitive, and affective patterns. Language develops out of these patterns and functions within the cultural boundaries both as a tool of communication and as a means to shape thought. Thus, the socio-cultural environment produces language that enables an individual to use language to explain and further intellectual operations.

In summary, culture is the source of tools, signs, and knowledge that facilitate psychological processes. Indeed, even the manner in which those agents can operate is constrained by culture. Thus, language and knowledge in themselves are culturally fashioned activities as well as the means by which an individual's psychological functioning develops. Accordingly, the development of man and woman's psychological and cognitive processes is enmeshed in, created by, defined by, and limited by the opportunities that culture provides.

Assisted Learning

The third component of social constructivist theory refers to the means by which cultural knowledge and the meaning and use of tools and symbols are transmitted, transforming, as Bernstein (1972) said, the biological being into a specific cultural being. The process of assisted learning is a process of socialization, occurring through the construction and negotiation of mutually shared understandings of the sociocultural environment. In the process of socialization, individuals acquire the beliefs, behaviors, and values that predominate or are valued in a culture, thus permitting him or her competent membership in that culture (Mehan, 1979). Theorists describe assisted learning as moving from the plane of interpsychological functioning to the plane

of intrapsychological functioning resulting in a shared perception of socio-cultural elements as task, values, and norms.

Specific features of assisted learning distinguish it from other means of socialization where behavior may be viewed as cue-produced responses or the result of observational learning. In Vygotsky's description, more mature members of society interact with a child leading to the internalization of knowledge and resulting in independent behavior. Thus, the first distinguishing characteristic is that assisted learning is a process that requires the active involvement of both the more knowledgeable member of the culture and the person who is being socialized. This process has been called *scaffolding*, a term that refers to the support provided by the more experienced partner in the learning interaction to extend the child's knowledge and skills to a higher level of competence. That support may come from an adult or from a peer with whom the child cooperates in shared activity.

Scaffolding of information occurs in the zone of proximal development. The zone is the second distinguishing feature of assisted learning. Vygotsky described the zone as the difference between a child's "actual development level as determined by independent problem solving" and the level of "potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (1978, p. 86). The goal of scaffolding is to reach out to the child at the level of her or his functioning and to pull her or him along to levels beyond those the child could achieve alone. Meeting the child at his or her level of functioning and from there beginning the socialization process is a key element that differentiates assisted learning from other types of socialization.

A third distinguishing characteristic of assisted learning centers on viewing the process as a means of internalization. Whereas socialization usually refers to changes in behaviors, assisted learning involves changing the intrapsychological functioning of the individual. The goal is to transform socially or jointly held cultural knowledge to individual knowledge and to develop an internalized capacity for activity so that external social regulation is no longer necessary.

The behavioral goal of independent functioning is the fourth feature that distinguishes assisted learning from other means of socialization. Through scaffolding and the process of internalization, assisted learning is able to transfer the responsibility of meaning-making to the child. In contrast to behavioral or social learning theories, independent functioning is explicitly stated as a goal of this socialization process.

To sum up, assisted learning is a means of socialization that transfers the elements of culture by structuring information in such a way, and with the aid of a more knowledgeable member of society, as to develop independent functioning. The interactions are determined by the level of the child, and regulated in coordination and cooperation with another individual.

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In conclusion, social constructivism is a comprehensive theory that treats cognitive activity as a developmental process, and incorporates the influences of the individual differences, sociocultural conditions, and interpersonal relations. Central to this theory are the interrelated notions of cognitive activity, cultural knowledge, tools and signs, and assisted learning. As a framework for understanding psychological processes, social constructivism clarifies the relationships between cognition and culture, and delineates the means of transforming and internalizing cultural information.

MOTIVATION AS A FUNCTION OF SOCIAL CONSTRUCTIVIST THEORY

How does social constructivism allow us to conceptualize motivation? Except for the notion of motive used by Leontiev, no explicit mention is made of motivation in social constructivism. Nevertheless, the theory seems fitting. It has three dimensions that make it a suitable framework in which to consider motivation. (a) It allows for a discussion of context and cultural issues that influence motivation and how motivation is shown. (b) It allows for a discussion of intrapsychological functioning of the individual. (c) It allows for a discussion of interpersonal relations that influence, shape, and maintain motivation. These dimensions of social constructivism broaden traditional views of what motivation is and how it occurs. They also add a new element to our understanding of motivation: They offer an explanation of how motivation is displayed.

In the remainder of this article, motivation is discussed in the specific context of the school. Indeed, without context, discussions of motivation lose clarity and become abstractions of limited value. The classroom will be the context for exploring the links between motivation and social constructivist theory in which it is embedded.

The Role of Context and Cultural Issues

One of the dimensions of social constructivist theory that makes it a suitable framework in which to consider motivation is that it allows for a discussion of contextual and cultural influences on motivation. On the surface, this does not seem to differ from a trend in recent motivational research to define motivation as domain/context specific, meaning that different situations, the people in the environment and their actions, or the structure of a social situation affect motivation. In the case of different situations engendering different kinds of motivation, student motivation to learn, for example, is different from a worker's motivation. Motivation for athletic or academic achievement is different from motivation for social acceptance.

Brophy (1983) described student motivation to learn as a general disposition to learn as well as *the specific motivation that occurs in the learning situation* (italics added) where a particular melding of affective and cognitive components result in intentional or purposeful behavior. Another example of the importance of domain and context for motivation is in the work by Harter and Connell (1981), who developed their motivation research on perceived control and perceived competence on the assumption that these constructs are domain specific. Greenfield and Lave (1982) were also interested in the relation between context and motivation. They compared the characteristics of informal and formal educational settings and their influence on motivation. Set on a continuum, formal education in this culture can be characterized by a high degree of institutionalization, schooling that takes place in special buildings, at special times, conducted by specially trained personnel. On the other side of the continuum are mother and father teaching a child how to cook as she or he prepares dinner. Informal settings, they concluded, provide three elements that are sources of motivation: a task that is worthwhile, a close relationship with teacher in the context of one-to-one interactions, and a sense of social contribution that learners have when their participation has immediate consequences as in the cooking example.

Other research has examined particular factors in the environment to show how they affect motivation. For example, teachers' behaviors affect student motivation (Blumenfeld, Hamilton, Wessels, & Meece, 1983; Brophy, 1981, 1982; Brophy & Kher, 1984; Brophy, Rohrkemper, Rashid, & Goldberger, 1983). Peer relations affect student perceptions of themselves and their competence (Peterson, Wilkenson, Spinelli, & Swing, 1984). The classroom structure affects instructional-behavioral goals that affect motivation (Ames, 1984).

Motivation from a social constructivist perspective incorporates this trend to view motivation as contingent on context, but it also extends the roles of context and culture beyond that of influencing or determining how motivation will appear in children. The social constructivist perspective leads one to look at how culture shapes and transmits what people think, feel, and do. In this light, motivation, as a way people think, feel, and act, can be seen as a product of the culture. When we talk about motivation, we go under the assumption that there is a general consensus about its nature and how it is displayed. As such, it can be considered a cultural norm.

Viewing motivation in the school as a cultural norm has roots in broad general usage. In addition, both the sociological literature that regards the classroom as a culture and research in teacher thinking seem to support this view. The classroom can be considered a community with a culture within the larger community, dependent on it and related to the social and cultural norm of the larger society (Mehan, 1979). Within the culture, norms, rules, general categories, and interpretive procedures help to organize the individu-

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al's behaviors, attitudes, and cognitions (Hansen, 1979), and aid the students in becoming competent members of the culture. Traditionally, students' competent membership in the classroom culture has been organized along the dimensions of social interactions and academic content. I include a third dimension which aids the student to achieve competence: motivational norms; that is, learning how to demonstrate willingness to engage and interest. With regard to its broad usage as a norm, we frequently encounter teachers, parents, and children using the term *motivation* colloquially to describe socially desirable classroom learning behavior. In the two vignettes presented below, it is my belief that motivation would be raised as an issue in the first reactions most lay persons and professionals provide.

female

Nancy is oriented toward peers and social relationships, not schoolwork. She could be doing top grade work, but instead she does just enough to get by. She is often chatting or writing notes when she is supposed to be paying attention or working. During today's lesson, she has repeatedly turned to students on each side of her to make remarks, and now she has a conversation going with several friends. (Rohrkemper & Brophy, 1980, p. 6)

folk psychology

Joe could be a capable student, but his self-concept is so poor that he actually describes himself as stupid. He makes no serious effort to learn, shrugging off responsibility by saying "that stuff" is too hard for him. Right now he is dawdling instead of getting started on an assignment that you know he can do. You know that if you approach him he will begin to complain that the assignment is too hard and that he can't do it. (Rohrkemper & Brophy, 1980, p. 5)

These two vignettes do not portray problem behaviors that are out of the ordinary; in fact, most teachers could probably recognize these students in their own classrooms. In both of these cases, and in many like them, part of the problem these students face would probably be identified as lack of motivation. The phrase is easily used as a "catchall" referring to maladaptive or inappropriate learning behavior in the classroom. Instructors trying to find the best strategy to help these students become interested in learning, willing to engage in the task demanded of them, and involved in their own education, want their students to be "motivated."

In my interviews (Sivan, 1986), elementary, middle, and high school teachers had similar colloquial theories of motivation, despite some variation due to grade level. Those teachers identified three categories of motivation: (a) motivation to be social, where the energy and interest of the student lie in forming and maintaining social relations; (b) motivation to learn, referring to an interest, an eagerness, and active engagement in learning content for its own sake; and (c) motivation to perform, where the student's efforts are directed to performing well on a task and getting good grades. The common definitions of motivation across grade levels gives strong support to the idea of a consistent, prevalent, and normative use of the term motivation.

Further support for the reliability of teachers' judgments about motivated or unmotivated students and for the categorization of these statements as a cultural norm rests in conclusions drawn from the teacher thinking research. In his review of research on teachers' cognitive activities, Brophy (1980) stated "that teachers tend to base their judgments on the best information available and are willing to revise these judgments when new information comes along" (p. 26). If so, then the colloquial use of the category "motivated student" has developed as the prevalent, commonly held belief.

What do we gain from conceptualizing motivation as a cultural norm? The relevance for teachers seems obvious. Cultural norms are conventions that form the basis from which we make judgments about people and their behavior. They are a source from which we build expectations of children, and they were the common link when communicating with parents. Therefore, the teacher must be sensitive to his or her concept of motivation and the role this cultural norm has in biasing his or her judgment when labeling a child *motivated* or *unmotivated*. The teacher must also take parental norms into consideration when communicating. Perhaps the ambiguity inherent in using the term *motivation*, especially in cross-cultural communications, makes it imperative to explore other ways to describe what the teacher sees and is reacting to in the classroom.

Teachers' colloquial theories of motivation include a perception of cultural norms in regard to how motivation is displayed. Motivated behaviors are the demonstration of interest and cognitive and affective engagement (Sivan, 1986). For a student who is motivated to perform, motivated behaviors might consist of hand raising, active participation in discussions, getting good grades on tests, and submitting homework on time. In the context of learning a normative description of motivated behaviors indicates a specific way students engage in learning. It might be called *motivated learning behavior*. The student who is interested in getting good grades might be referred to as having *motivated performing behavior*. A particular motivated learning behavior, what has been called *intrinsically motivated behavior* (Gottfried, 1984), which is intentional or independently controlled behavior (Paris, Lipson, & Wixson, 1983), represents the behavioral norm most desirable in the classroom.

It is important to make the distinction between motivation and motivated behaviors and realize that we have expectations and beliefs about how these should appear. The case may arise when students might "act motivated" in order to be accepted by the teacher or by peers in the class. Consequently, "acting motivated" becomes a goal in itself. Or in the case of a child who seems constantly off task, the teacher may see that she or he is very interested in and engaged in his or her own learning task, is "motivated," and is not really just fooling around. By realizing that student motivated behaviors are a cultural norm, teachers can more closely examine and understand the deviations from that norm.

In conclusion, social constructivism allows us to reconceptualize motivation and how it is displayed. Within the cultural context of the classroom, motivation can be viewed as a norm, referring to the student's degree of interest and cognitive and affective engagement, while the display of interest and engagement can be seen as motivated behavior norms. As products of the culture, the colloquial conception of motivation and motivated behaviors are shaped by the way people use them, and are expressed and transmitted in the form of culturally accepted social interactions.

The Intrapyschological Functioning of an Individual

The second dimension of social constructivism by which motivation is linked to the theory is the discussion of the intrapsychological functioning of the individual. The intrapsychological processes are also receiving increasing attention in motivational research, especially with regard to the role of cognition. Evolving from an Expectancy \times Value model, motivational research is focusing on cognitions such as self-evaluations (Harter & Connell, 1981), attributions (Weiner, 1979), and cognitive and metacognitive activities. Within this trend, the terms *cognitive motivation* or *motivated cognitions* (Covington, 1983; Weiner, 1979) are increasingly used by theorists to refer to the role of cognitions in processing information and making sense of the outcomes of behavior, determining what an individual expects from his or her actions, and how he or she values the outcomes. Attributional models of achievement motivation focus primarily on the expectancy side of the equation (Maeher & Nicholls, 1980; Marsh, 1984; Weiner, 1983). Brophy (1983), on the other hand, advocates an emphasis on the value a task has as a precursor of investment and engagement.

* A social constructivist view of motivation incorporates this trend to view motivation and cognition linked; however, it would qualify the relationship between the two. Social constructivists would add that the nature of cognitions used in processing information is culturally determined (an issue addressed earlier), and that these culturally shaped cognitions influence the shape and content of motivation as it is expressed. An example of how attributes are made and the consequences of those attributions on behavior is taken from a recent article in an Israeli newspaper. In talking about the number of casualties incurred by the Israel Defense Forces (IDF) during the Lebanese War, a rabbi stated that an army service for women (there is compulsory army service for men and women) encouraged lewd behavior, and that this behavior increased the number of IDF casualties because of Divine Wrath. In fact, the rabbi's theonomous world view shaped his understanding of motivating forces in the world. This attribution, we can safely say, was not the one made by the General Staff to account for casualties.

Affect has not been adequately addressed in the cognitive motivational research. Only recently, for example, has Weiner (1980) included an affective component in his model of attribution theory. With the exception of El'konin, most social constructivists have not addressed the issue of affect in the context of mental development. El'konin (1977) said in short, that affect is a type of activity, like cognitive activity, that begins as directly emotional in nature in infancy and develops through social contact into recognizable and socially acceptable emotional activity. It develops conjointly with cognitions, and also arouses interest and engagement. Affect cannot be compartmentalized and seen as developing within the individual with no relation to other functions or without an effect on other functions. For this reason, I believe, it plays an active role, integrated with cognition in motivation. In order to motivate a student, in other words, to interest and engage the student, a teacher must address both elements.

In summary, similar to recent developments in motivational theories, a social constructivist view of motivation allows us to look at both the cognitive and affective functioning of the individual. In contrast to the view that cognitions and affect are separate and mutually exclusive functions, a social constructivist position on motivation proposes that cognition and affect merge to "hook" the interest of the child and engage him or her. In addition, the intrapsychological functioning and the affective activity of the individual is constrained by context and motivation. From a social constructivist perspective, we are able to frame an individual's cognitive and affective activity differently, to see it in the light of culture and context, and to make the connections between culture and context, motivation and cognition. Consequently, the significance of this view of motivation for our understanding of intrapsychological functioning lies in its broader focus and the general robustness of the concept of motivation that results.

The Role of Interpersonal Relations and Assisted Learning

Fundamental to social constructivist theory is the emphasis on interpersonal relations. This is the third dimension of the theory that allows a connection with motivation. According to Vygotsky (1978), psychological processes develop by internalization of culturally organized interactions. In addition, the interaction with a mature member links the social to individual functioning (Mehan, 1981). The role of interpersonal relations would be emphasized in any discussion of motivation within a social constructivist perspective. Three areas where interpersonal relations would play an important role are: (a) integrating instruction and motivation, (b) achieving motivational competence, and (c) meeting students' cognitive and affective needs at their level.

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These issues differ from those generally addressed in traditional motivational research. For example, studies from a traditional perspective might be concerned with what motivates a student. Some of the techniques that can be used include creating the appropriate goal orientation and structural organization of the classroom (Ames, 1984; Cohen, 1984; Covington & Omelich, 1984; Slavin, 1983), controlling for teacher expectations that might negatively affect student motivation (see Brophy, 1983, for a review of teacher expectations in the classroom), enhancing the students' abilities to make changes by themselves through teacher communications about motivation (Brophy et al., 1983; deCharms, 1984), providing information about control sources of students' behaviors in the classroom (Anderson, 1985), and providing explicit information about the learning tasks and cognitive activity (Roehler, Duffy, & Meloth, 1983; Rogoff, 1982). Rewards and the nature of rewards are another area that affect student motivation (Lepper, 1983; Lepper & Greene, 1978; Pittman, Boggiano, & Ruble, 1983). Marshall and Weinstein (1984) point out the need to examine the interactive effect or different elements that singly might prove motivational.

The strength of using social constructivism as a framework is that it addresses the issue of integrating motivation and instruction directly, not considering motivation of students as a group of strategies that can be inaugurated separately from or in addition to the act of instruction.

In addition, social constructivist theory addresses, in an integrated fashion, the cognitive and affective needs of the individual student at his or her own level. For example, a student needs both concrete knowledge of the classroom task, whether it be subject matter task structure, or social participation task structure. In addition, she or he needs to be willing, open to new knowledge, cooperative, and free of unusual worries (Sivan, 1986). Because each child is on a different level with regard to both knowledge and internal state, any plans to gain and foster interest and engage him or her must address both the issue of how much the child knows and what the child is feeling. Such an integration would be similar to what Paris, Wixson, and Lipson (1983) called for in their description of a strategic reader: the qualities of skill and will, that is having both the knowledge to engage in an academic task and "the motivated intent to accomplish a goal or behave in a particular manner" (p. 304). In general, the traditional motivational studies have not attempted to meet the individual student's cognitive and affective needs.

Social constructivism is able to address some of the issues raised here by means of assisted learning where a more experienced peer or a teacher assists a child at a nonindependent functioning level, pulls him or her along, and offers assistance while the child gradually develops the ability to perform independently. Assisted learning is the method by which instructional and motivational goals are integrated, the student's cognitive and affective needs are able to be met, and the child can be helped to achieve motivational com-

petence. In this way, the role of interpersonal relations in shaping and maintaining motivation is unique to social constructivism. The three ways assisted learning and motivation work together are discussed now.

Integrating motivation and instruction. The common goal of instruction and motivation is to develop an internalized capacity for activity, whether that activity is learning or performance oriented. Independent functioning requires that the students see themselves invested in the outcomes or goals and as able achievers of the goals. The problem of integrating instruction and motivation is one of developing intersubjectivity and situation redefinition between students and teachers. In other words, teacher and students develop a common understanding in regard to the motive and the goals and the pay-off of the activity so that the students desire to achieve the same outcome as the teacher. Wertsch (1984) described the process of achieving intersubjectivity and situation redefinition as a process of negotiation in which the students' and teacher's understanding of objects and events in the task setting shifts from separate points of view, to a second, temporary, intermediate level of shared understanding (that represents on the teacher's part a shift for communication's sake from his or her original position), and finally to a lasting situation redefinition or change in understanding on the part of the students.

Intersubjectivity and situation redefinition occurs through the process of semiotic mediation (Wertsch, 1984). Through both the communication patterns and the message sent, students move closer to a shared instructional goal. The message the teacher might be trying to send can be both procedural as well as motivational. For example, a teacher might show how to use fractions and provide a class with the information why the lesson they are learning is important to learn, how it will be useful to them, and what they have to accomplish in order to get a pay-off. But in order to truly integrate the instruction and motivation, the teacher's communication pattern must move the students closer to a more mature understanding by communicating on the basis of the students' terms of understanding, not from the teacher's terms. For example, talking about the usefulness of a task in the way previously described to a group of 6-year-olds may not be the most motivating. In this connection, an elementary school teacher explains the need to communicate at the student's level of understanding:

Statements you (teachers) are supposed to make like you're going to learn this because it will be very important to you later . . . it reduces you when you're talking to six-year-olds sometimes in talking in very utilitarian terms which I think are unintended outcomes they're always telling them they're going to need this in third grade or need it some other time, why not just because it's going to be really interesting and really stretch up to them and you could say to six-year-

olds, they'll see that as they get into it. I'm not sure you have to say that ahead of time. Um . . . I do think it's important to say *what* you're learning, but I'm not sure it's always important, I'm not at all sure that I agree that it's important to say *why*. Okay so one reason is this utilitarian and the other thing is that I don't think some of the reasons that teachers have may or may not be understandable to little kids and so that means you then come up with a reason that is understandable to them. (From an interview with a teacher, Sivan, 1986, p. 15)

Achieving motivational competence. Negotiating intersubjectivity and reaching a situation redefinition is also the means students can achieve motivational competence. The next example is from a third grade classroom. Viewing "hand raising" behavior as a way to show active learning has taken place and is an example of motivated behavior, the teacher explains to the students how to go about showing their efforts in a culturally appropriate fashion. She or he says, "I can't tell how many people are thinking unless their hands are up. When you think you know the answer, put your hands up." Thus the teacher initiates the students into her or his expectations of behavioral indicators of learning. She does not just say "raise your hands when you finish," but explains to the young students that hand raising behavior in this case indicates thinking has occurred. This process can be described in Wertsch's words as a purposeful "invitation to the child to redefine the situation on the adult's terms" (1984, p. 15).

Meeting affective and cognitive needs of the student. The teacher is able to combine instruction and motivation and meet a student's cognitive and affective needs within the context of assisted learning by instructing in the zone of proximal development. The zone of proximal development "is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Three characteristics of the zone promote motivation and independent functioning. It is noncontrolling, optimally challenging, and transfers locus of control to the student. The first two characteristics have been adapted from those described by Ryan, Connell, and Deci (1985) as promoting intrinsic motivation, the innate desires to be competent in dealing with the environment, and self-determination, behaving without external pressures in accord with the individual's feelings and needs.

The first characteristic of assisted learning is its noncontrolling nature. According to Ryan, Connell, and Deci, controlling events are those that pressure people to feel, think, or behave in specific ways. Assisted learning meets the student at his or her cognitive and emotional level, and interacts with the student, providing him or her opportunities to practice and gain experience

with assistance before expecting the student to be competent. Although a learning task is set, instruction does not force the student to change. In assisted learning, student and teacher are in negotiation, working together to obtain a goal that is understood by both partners to be important.

The second motivational characteristic of the zone of proximal development involves the student being optimally challenged, not frustrated with too difficult or too easy a task. Only tasks that the student can accomplish with the aid of another person are initially presented. There is a gradual shift to greater self-performance as the student becomes more competent.

The third motivating characteristic of assisted learning within the zone of proximal development regards the transfer of the responsibility for learning to the child. The following example of this transfer is taken from the transcript of a fifth grade teacher. After modeling the new learning task for the reading group the teacher continues instruction using examples from the basal text's wall chart. The reading skill being taught is finding the meaning of the unknown words by the context.

T: How would you figure that one out, Tanya?

S: Look for clues. Several days.

T: Several days is a clue. It rained for several days. That is a good clue. Whatever saturated is, it is the ground saturated, okay, that is a good clue. GO ON, I'M LETTING YOU DO IT NOW, GO AHEAD.

The teacher in this example has begun instruction by completely preparing the groundwork, or in social constructivist terms, defining the situation (Wertsch, 1984). She asks the student to describe her thinking process used to figure out the meaning of the word. Then we see the student and teacher are engaging in clarifying the situation or constructing intersubjectivity and the teacher provides positive feedback. The teacher repeats the answer, tells Tanya it was a good answer, and proceeds to reclarify and extend the reasoning Tanya uses. After giving further positive feedback, the teacher transfers the learning task as an independent learning task to the student, by saying "Go on, I'm letting you do it now."

And later the teacher encourages another student to solve another problem:

T: If you know the strategy well enough, JUST GO AHEAD AND FIGURE OUT WHAT YOU THINK DESOLATE MEANS.

These teacher behaviors are not only asking for an answer to a question. They provide information to the student, information that reflects the teacher's transfer of responsibility for the solution to the students and her expectation that they will be able to successfully complete the task.

In summary, assisted learning is the means through which we can focus on the role of interpersonal relations. In assisted learning the student is encouraged by graduated levels of assisted performance and regulated interactions to develop both emotionally and cognitively. The cues used to assist the student appeal not only to the cognitive elements of task structure, but also to cognitive and affective elements that enhance the student's interest and engagement in the task at hand. Thus, the nature of the relationship occurring between the mature member of society and the child provides a framework for motivation to be integrated into instructional practices, cognitive and affective needs to be met, and motivational competence to be achieved.

IMPLICATIONS

Using social constructivist theory as a framework from which to view motivation has implications for how we conceptualize motivation, the nature of the research questions we pose, and instruction.

Reconceptualizing Motivation

A social constructivist perspective is viewed as a socially negotiated process which results in some behavior that shows the individual's interest and cognitive and affective engagement. Deriving from the dimensions of social constructivism discussed earlier, this definition subsumes four component elements characteristic of the nature of motivation. (a) Motivation becomes inextricably linked to the learning process of the child, enabling us to say that there exists a conjunctive process of cognitive-motivational development occurring in the classroom. (b) It can be thought of as developmental in nature. It changes as the cognitive and emotional states of the student develop with the help of a teacher or more experienced peer. A nonstatic conceptualization of motivation means greater opportunities for the development of interest and cognitive and affective engagement. (c) Motivation is not only the result of individual differences, but of the social conditions at the time of learning. It is constrained by social context, the goals, wishes, and desires of both student and teacher that are not obvious in surface interactions yet give impetus to action, the setting, the time, and interpersonal relations. (d) Motivation is a means to competent classroom functioning. As a cultural norm, it is used in the classroom to define what is appropriate and what is desirable. Understanding this norm helps the student behave in appropriate motivated behaviors and thus achieve competent membership and social acceptance by either or both the teacher and peers.

Changing Focus on Research on Motivation

This view of the nature of motivation differs from traditional views. Indeed, foci of the elaboration on the nature of motivation raise different and interesting issues. For example, if motivation is developmental in nature, then perhaps the process of developing motivation can be conceptualized in a "zone of proximal development of motivation." By this I mean that just as there is a distance between independent problem solving and the level of potential problem solving which is bridged by adult assistance and guidance, perhaps motivation can be described in terms of independent level of motivational functioning and potential level of motivational functioning, such that adult assistance can move the child beyond the level of independent interest and cognitive and affective engagement. Conceptualized in this fashion, questions of process—how change takes place, how internalization occurs, and how the impetus for activity functions—can be addressed. In addition, instructional issues can be raised. For example, the question can be asked: At what levels of knowledge, experience, and maturity is this child functioning? What elements of a motivational-instructional repertoire can be adapted by the teacher to appeal to the student's interest at that particular level?

The elements of context, culture, and cultural norms that are important in the social constructivist perspective of motivation raise interesting questions as to the role these elements play in creating, shaping, and maintaining motivation in the classroom. When motivation is considered a cultural norm, for example, questions can be asked about what different populations value, and how differing social norms inhibit or facilitate the teacher's efforts to integrate motivation and instruction to meet the students' cognitive and affective needs. Being contingent on culture and context for how it is shaped, cross-cultural studies might investigate interactions resulting in motivated behaviors or a comparative examination of what is considered motivated behavior.

Instruction

Perhaps the most important implication of a social constructivist view of motivation is what it means for the classroom teacher. The nature of instruction changes. It requires more structuring and individualization. Teachers would have to approach the task with a greater awareness of each student's zone of proximal development and adapt instruction to the individual's needs. Scaffolding of learning tasks with a view to cognitive as well as affective components is essential. The task of instruction changes from a unidirectional activity, from teacher to student, to a bidirectional or even multi-

directional activity that reflects the process of gaining intersubjectivity and ultimately situation redefinition on the part of the student. This methodology with the strong integration of motivation and instruction seems especially appropriate for the instruction of special needs children. Perhaps this is an avenue that warrants further exploration.

In addition to changing the actual instructional methods, the teacher will have to reexamine the underlying motive that guides his or her instruction. As discussed earlier, the motive for instruction may be competent performance or independent functioning. Competent performance emphasizes guided learning with no opportunities for chance error. Independent functioning, on the other hand, allows the student to make errors until competence is achieved. Both instructional processes can be considered within the social constructivist frame. However, the goal of competent performance may be less motivating than independent functioning in the context of classroom life because it is essentially a controlled learning environment. Consequently, the motive of instruction, according to Cazden (1981), precedes competence. In terms of actual instruction, this means that practice activities should be a learning tool where errors are accepted and the teacher's expectations are not for 100% correct answers. This might mean a change in grading practices as the kinds of activities seen as real measures of competence to be graded are distinguished from performance/practice activities.

Of course, looking at the instructional implications of motivation in social constructivist theory raises numerous questions. An important question is: Can the process of social negotiation of motivation be operationalized? This would enable teachers to be trained to negotiate and process, not impose, knowledge with their students. It would also enable the manipulation of classroom variables such as changes of students' behaviors and perceptions of interest in relation to changes in teacher's structuring or scaffolding of the task.

A Comment About Methodology

As a dynamic, interactive process, the social constructivist approach to motivation seems to be most compatible at first glance with an ethnographic type methodology that would examine the relations between setting and persons, looking at those things in the context that give meaning to the individual and influence people to do things. Such a methodology would also be able to capture the interlocking network of thoughts and feelings, words and actions, explicit and private goals of a particular student, as well as other students in the classroom and the teacher. Without going into detail about the different techniques available to the ethnographer or the relative strengths or weaknesses of the methodology, it suffices to say, there is a place for ethnographic techniques in the study of motivation in the social constructivist

view. There are, however, appropriate instances when quantitative methodology adds an important dimension. The problem, perhaps, is not which is the best way to study motivation, but which method best answers the particular question being posed.

SUMMARY AND CONCLUSIONS

Motivation is intrinsic to social constructivism. The theory seamlessly joins cognition and motivation in instruction, just as instruction and learning interface in a dynamic and fluid conjunction. In the interfacing of both learning and instruction and cognition and motivation, two simultaneous processes occur, one from the instructional plane and the other from the learning plane. The teacher mediates external stimuli into an acceptable and intelligible format for the student (Feuerstein, 1980). Instruction becomes a process of guiding a student into an encounter and engagement with thoughts, beliefs, skills, and feelings. At the same time, the learner filters or mediates the instructional (cognitive-motivational) stimuli through his or her cognition and affect, as well as aptitude, expectancies, prior knowledge, and experience (Peterson, Swing, Braverman, & Buss, 1982; Winnicott & Marx, 1980). Influencing the reciprocal process of construction of a cognitive motivational frame are the contextual realities of setting, social relationships, and personal agendas. Together, teacher and student construct knowledge and give an intrinsic value to the learning process.

The significance of this conceptualization of motivation in the classroom lies in the nature of social constructivist theory, for the concept of motivation takes on the characteristics of the theory from which it has evolved. As such, the possibilities are many for flexible analyses of motivation issues (e.g., the process of constructing motivation and the form in which motivation appears) and for documenting both the microgenetic and ontogenetic development of motivation.

ACKNOWLEDGMENTS

I am grateful to Jim Gavelek for providing the impetus for this article, to Doug Campbell for reading the original draft and discussing these ideas with me, to the IRT graduate assistants for their informed and insightful discussions with me, and to Linda Anderson for her many valuable suggestions.

This work is sponsored in part by the Institute for Research on Teaching, College of Education, Michigan State University. The Institute for Research on Teaching is funded primarily by the Program for Teaching and Instruction of the National Institute of Education, United States Department of

Health, Education, and Welfare. The opinions expressed in this article do not necessarily reflect the position, policy, or endorsement of the National Institute of Education (Contract No. 400-81-0014).

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