Published in
International Journal of Educational Research 13, issue 6, 575-580, 1989
which should be used for any reference to this work

SOCIAL FACTORS IN LEARNING AND TEACHING: TOWARDS AN INTEGRATIVE PERSPECTIVE

ANNE-NELLY PERRET-CLERMONT and MARIA-LUISA SCHUBAUER-LEONI

Learning: A Fundamental Psychological Process

The contributions of this special issue all illustrate, from different perspectives, the important impact of social factors on learning and development. Context, relationships, social interactions, cultural meanings, language and man-made tools or strategies are all relevant features of systems of cognitive and social activities in which the development of thinking and the transmission of knowledge can be observed. The empirical research reported here range from the description of minute interdigitation of socio-cognitive coordinations to the more global impact of school achievement on social identity with special attention also given to the interdependence of learning and social practice and to the relevance of ritualized patterns of interactions to the acquisition of algorithmic procedures.

Learning is a fundamental process of human life, involving actions and thinking as well as emotions, perceptions, cultural categories and symbols, social representations and strategies. Although often described as an individual process, learning is also a social experience with various partners (parents, siblings, teachers, peers, etc.) embedded in popular and erudite traditions and transmitted via long chains of social relationships and institutions (families, churches, schools, social communities, professions, languages, literature among others).

Learning has consequences for the mind but also the identity and the expression of personality, for the forms and organization of socio-affective relationships, for the transmission and honing of skills and know-how, for knowledge and memory, and for making sense of the dramatic events of life. But all these developing elements affect learning in turn to such an extent that the social dimension should not be considered just as a mere supplementary set of variables affecting processes that are already very complex *per se*. The social dimension appears in the research presented in this issue as a 'constitutive ingredient' of what is learning, what triggers learning and what is at stake in the learning/teaching endeavor.

A.-N. PERRET-CLERMONT and M.-L. SCHUBAUER-LEONI

Learning Does Not Take Place in a Social Vacuum

Using Doise's concept of 'levels of analysis' (1982), we can distinguish four types of questions that can be asked when investigating the social dimension of learning and development.

Gilly and Rubstov both pose important questions (but in different ways) concerning the nature of the intrapsychic development that occurs via learning: Is the subject developing some kind of inner structure (as Piaget suggests)? Is the subject exercising or revealing innate competencies? Or is he/she acquiring procedures and strategies and gaining control of their monitoring? Or is it a matter of socialization of discourse processes or of interiorization of symbolic tools and transactions (in a Vygotskyian perspective)? Or are subjects transforming gestures and conversations into symbolic interactions (as predicted by G. H. Mead's theory)?

The observations of such cognitive processes also lead us to the analysis of a second type of question pertaining to the context of interpersonal relations in which such intellectual activity takes place: What are the possible causes and consequences of different types of social, didactical, professional or daily encounters of the understanding and/or mastery of skills, reasoning, procedures, symbolizations, social transactions, etc.? In particular, do special types of symmetrical or asymmetrical relations of confrontation, guidance, monitoring or teaching differently affect cognitive processes? Does learning occur in all these cases and does 'learning' have the same meaning throughout? Or is learning a matter of simple mnemonic training? Or of model imitation? Or does learning require deeper processes? Has learning something to do with the emergence of new understandings and how do peers' and/or tutors' behaviors affect understanding? What kind of social relationships induce which kinds of learning? We have already considered these issues within a general socio-cognitive approach to learning and cognitive growth (Perret-Clermont, 1980; Perret-Clermont & Schubauer-Leoni, 1981; Schubauer-Leoni & Perret-Clermont, 1980, 1985; Hinde, Perret-Clermont, & Stevenson-Hinde, 1985; Perret-Clermont & Nicolet, 1988). The authors of the present issue give us the opportunity to consider these processes at work in the specific context of didactic transactions in the classroom. We discover then that the social relationship between teacher and pupil structures the form of their discourse and its object: The child is keen on understanding not only the task in itself but also the meanings that the adult conveys to the situation in presenting such a task (Schubauer-Leoni, Bell, Grossen, & Perret-Clermont, this issue). The teacher uses his/her position differently depending on the type of learning that he/she wants to promote, Voigt offers evidence of the functions of specific routines of the acquisition of arithmetic skills.

But these interpersonal transactions do not take place in a social vacuum. Roles, school curricula, assessment practices and social representations contribute to the definition of expectations, behaviors, values, and judgments. A third level of analysis concerning intergroup and positional factors and a fourth level concerned with the cultural and ideological structurization of meanings can be considered. How do partners of these learning transactions feel about what is going on? Do they share a common understanding of the meanings, relevance and usefulness of the skills taught? Do the social representations of the teaching/learning process affect its outcome? In different ways, Robinson and Woods illustrate how the position of the learner is not only related to his/her performances but also connected with his/her sense of identity and perception of the

school universe. Woods illustrates how changes in group relationships within a school activity can create opportunities for both teachers and pupils to establish open and relevant procedures for obtaining information. Carraher presents data showing the discrepancies between children's in-school and out-of-school mathematical activities that suggest the importance of goals in structuring meaning and scaffolding problem-solving strategies. Robinson, in his international survey, formulates hypotheses about the role of culture in pupils' attributional attitudes towards success and failure in school. Emiliani and Molinari present evidence on the impact of professional roles on mother's social representations of their children's learning and development.

Further Questions for Research on Teaching and Learning

We have shown in the above sections that the actors (teachers, mothers, children) of the institutional scene are imbedded in social contexts that can be analyzed at different levels. At this point, we are faced with an important supplementary factor: Researchers themselves do not operate in a social vacuum when they study teaching and learning processes and their own cultural and ideological presuppositions contribute to the definitions of the boundaries of the reality that they study. In particular, researchers, like other social actors, have a personal experience with learning, including interpersonal relationships concerning knowledge (schooling, family traditions, current scientific context, etc.). They occupy specific social positions in relation to the educational context and have their own cultural and ideological backgrounds. As researchers, it is evidently difficult to decentralize ourselves from our own perspectives. Our professional role naturally inclines us to believe that learning is a good thing, that thinking is a highly valuable activity to promote. The question here is not whether we are right or not. However, as some decentralization is possible, a deeper understanding of the teaching and learning process could be gained from a consideration of how different persons, professional roles, groups, and communities, from different social and cultural backgrounds, relate to those processes and activities. It is from this viewpoint that we would like to reconsider a few questions raised by the studies of the present issue that still remain unanswered and hence open for further inquiry.

First: What is at stake in learning? What is the motivational nature of learning difficulties? Different socio-cultural groups believe that different things are worth learning. In schools, motivation created by the perceived usefulness of knowledge taught is not as prevalent as it would seem. On this point, Carraher's studies raise important issues and Wood's report to alternative school experiences indicate directions for further study.

We also wonder if sufficient attention has been paid to the observation of the conditions in which learning and teaching is pleasant or unrewarding, brings joy or pain? 'Learning' and 'teaching' need definitions and these are terms that necessarily vary according to culture. Yet Robinson has observed in quite different cultural contexts that fulfilment is not pupils' common perception of school outcome. Robinson's study indicates the pain of failing or of rating low in social comparisons. There is also the epistemological and affective difficulty of becoming aware of certain facts or of verifying the truth of certain assertions. In some ways, learning makes it possible to extend one's mastery of the environment. However, thinking also confronts us with the limits of our actions and thoughts in the face of unmasterable events (thunderstorms, earthquakes, diseases, etc. —

and death). Under which psychological conditions can one assimilate certain information in a masterable way and what are the consequences of the assimilation of such knowledge? When do individuals or groups accept their ignorance and wish to learn — what and what for?

This raises a fundamental epistemological question: What is knowledge? From the observation of what is learnt in schools and families emerges a new question: What do different groups believe should be taught at school? Certainly, there are great variations between groups and cultures depending on social and professional traditions and the kind of life for which children are prepared. How do these different social groups deal with the psychological costs of learning? Do they adjust them against anticipated gains (and what kind of gains)? On what type of information is their attention focused and from which aspects of reality do they try to abstract? Research has repeatedly shown important social class, sex, and cultural differences in school performance. The causality of these discrepancies is not simple and the understanding of these results demand further detailed study. Woods, Schubauer-Leoni *et al.,* and Carraher have found evidence in their data of complex mechanisms through which social differentiation occurs in teaching and learning. Looking closely at the interdigitation of these socio-cognitive processes, we observe that thinking as a mechanism underlying learning and teaching is a much more complex socio-psychological reality than what is accounted for by cognitive theories.

The right to have one's own independent intellectual approach ('autonomous thinking'), to gain pleasure in study and inquiry is not so easily recognized in the daily practice of schooling, especially for 'lower stream' pupils. Exploring certain questions and keeping certain information in memory require emotional security and social freedom. This is not the case when teachers let pupils think that responses diverging from the teacher's perspective indicate some kind of marginality that can lead to the exclusion from the main stream of the school. Mothers do likewise when they let their children believe that when they don't agree they are not 'nice'. This type of blackmail is usually unconscious but it does create great difficulties in learning and in the child's access to knowledge. Acknowledging the specific psycho-social characteristics of learning environments is an important endeavor for educationalists. It could help to identify barriers to be removed and create task-centered relational contexts that could promote reflective and information-seeking activities in which learning is meaningful. Yet exactly what is 'autonomous thinking'? This concept needs a definition which would also vary from one context to another, not only due to different value systems underlying these definitions but also because, as we have tried to demonstrate experimentally elsewhere (Perret-Clermont, 1980 and further studies), cognitive activity is most likely to develop within specific social interactions and relationships. Thinking, in turn, can lead persons and groups to understand differently conflicts and dependencies of all types and to account differently for relationships between individual activity and group or cultural structuralization.

Teaching is often conceived as an activity of transmission of acquired knowledge to 'new' minds. But this representation of the teaching/learning process is not the only possible one. For instance, the promoters of modern education refuted this '*tabula rasa*' approach and advocated an understanding of the child as the principal author of his own development. Others claim that a child could never reinvent by himself all knowledge of humanity nor the basic cultural tools that he needs in order to survive in a complex social environment. These tools have a history reflecting all sorts of social relationships and

practices. When are different actors (parents, teachers, pupils, professionals, etc.) inclined to adopt a given representation of the teaching/learning process rather than another?

In several languages the teacher is called 'master' ('maître', 'maestro', 'Meister', etc.). Emphasis is thus put on the hierarchical relationship established between an adult who knows and has the power and a pupil who depends on him for learning. Obviously the teacher is invested with a social and cultural responsibility that the pupil does not share to the same extent. This asymmetrical perspective tends to induce researchers to underestimate the two-way processes that regulate communication between teacher and learner. It also contributes to the identification of knowledge with social status and power and thus reinforces defensive patterns of behavior in teachers (and students) who are required to hide their ignorance in order to protect their social position and role from negative evaluations. This asymmetrical representation of the teaching/learning process does not trigger pupils' motivation to become interested in the subject matter he is presented with. In such a power relationship, how can one sort out what is due to a cognitive interest rather than to an emotional fear of repression or a search for prestige? In light of the studies presented in this special issue, learning appears, not so much as an isolated specific activity of the individual, but rather as a complex result of collective acts. Learning occurs within specific types of social interaction which are themselves organized within wider socio-cultural networks.

'Learning' is always the learning of something: history, mathematics, agriculture, trade, sheep breeding, literacy, engineering, computing, biology, etc. And in all these subjects, the skills, information, know-how, strategies, notions, reasoning, etc. are specific to a large extent. These objects to be learned affect the teaching/learning process in specific ways and further research is needed in order to observe more thoroughly how these cognitive transactions of specific objects affect not only learning and modes of thinking, but also the identities of the learner and the teacher, their investments in specific types of activities and the types of social relationships that they will (or will not) establish with other 'epistemic subjects' of their environment.

Current research on learning and teaching is at an interesting interdisciplinary cross-roads of cultures. It can observe the processes and circumstances in which members of different social groups transmit their knowledge more or less successfully. Up to now, most attention has been focused on school contexts, but also, to a lesser extent, on the family. Some of the contributions in this issue focus on the most widespread modalities of teaching and learning while others are concerned with the identification and exploration of other possible ways. These data reflect the diversity of these endeavors and raise new questions. These questions are, to a certain extent, a metareflection on previous ones: How is learning understood, desired, and invested by different social groups and under which circumstances are different teaching modalities perceived by actors as having the desired effect?

Acknowledgements—We would like to thank the Swiss National Research Foundation whose research grant (1.372-0.86) sustained our present work. We also extend our deep gratitude to Nancy Bell for her constructive contribution to the editing of this special issue.

References

Doise, W. (1982). *L'explication en psychologie sociale.* Paris: Presses Universitaires de France.

Hinde, R., Perret-Clermont, A.-N., & Stevenson-Hinde, J. (Eds.) (1985) *Social relationships and cognitive development.* Oxford: Clarendon Oxford University Press.

Mead, G. H. (1934). *Mind, self and society.* Chicago: University of Chicago Press.

Perret-Clermont, A.-N. (1980). *Social interaction and cognitive development in children.* New York: Academic Press.

Perret-Clermont, A.-N., & Nicolet, M. (Eds.) (1988). *Interagir et connaître.* Cousset (Fribourg, Suisse): Del Val.

Perret-Clermont, A.-N., & Schubauer-Leoni, M.-L. (1981). Conflict and cooperation as opportunities for learning. In P. Robinson (Ed.), *Communication in development* (pp. 203–233). London: Academic Press.

Piaget, J. (1950). *The psychology of intelligence.* New York: Harcourt Brace.

Schubauer-Leoni, M.-L., & Perret-Clermont, A.-N. (1980). Interactions sociales et représentations symboliques dans le cadre de problèmes additifs, *Recherches en Didactique des Mathématiques,* 1, 3, pp. 297–343.

Schubauer-Leoni, M.-L., & Perret-Clermont, A.-N. (1985). Interactions sociales dans l'apprentissage de connaissances mathématiques chez l'enfant. In G. Mugny (Ed.), *Psychologie sociale du développement cognitif* (pp. 225–250). Bern: P. Lang, Collection Exploration.

Vygotsky, L. S. (1934). *Thought and language.* Cambridge, Massachussets: M.I.T. Press.