Every age is an age in transition, since both societies and the individuals who constitute them are involved in a constant process of change and development. In most ages, nevertheless, change has been resisted: both in the home and in the wider community, the emphasis in child-rearing and in education has been placed on learning and conforming to the values of the elders and on mastering and reproducing the knowledgeable skills developed over preceding generations. Such enculturation of the young is, of course, essential to the successful continuation of any society and the wisdom of the past should not lightly be discarded. Provided that the ecological niche in which a society finds itself remains relatively constant, understandings gained in the past are likely to continue to be helpful in the present and into the foreseeable future.

There are, however, disadvantages to the emphasis on the achievement of continuity through the maintenance of stability, particularly when the larger environment is engulfed in changes that pose challenges for which the past does not provide ready solutions. Such is the case at the present time. The events of the last hundred years, and in particular, the increasing pace of advances in technological expertise for exploiting the earth's resources, and the conflicts to which the desire to control these resources have given rise -- have radically changed the environment in which human beings live their lives, and on a global scale that has left no society untouched. In these circumstances, it is clearly no longer sufficient to look only to the past, nor to assume that the cultural institutions we have inherited from previous generations are adequate to resolve the problems that face us in the
present. To ensure the continued healthy existence of our societies and of the planet that we inhabit, we need to reevaluate our cultural inheritance and be willing to transform it, where necessary, in order to better meet the challenges that we face now and in the years ahead.

There is widespread agreement that certain aspects of contemporary life are not satisfactory. Although there is less agreement on how to improve them. Among the most serious are, first, the irresponsible exploitation and consumption of the earth’s natural resources in a manner that is creating pollution of all kinds and rapidly increasing the risk of the planet becoming no longer capable of supporting the many forms of life, including human life, that have evolved on it over millions of years. Second, and closely related, are the serious inequities that have been created between societies by a history of conquest and colonization; these are currently being exacerbated by the assumption by some groups of their right to own and consume a disproportionately large proportion of the earth’s material and symbolic resources, while condemning other groups to abject poverty, malnutrition, ill-health, and lack of educational opportunities. These inequities also exist within nation states, both in the form of longstanding forms of discrimination based on caste and class, and in the form of economic exploitation of the increasing number of migrants who flee from poverty and various forms of oppression in their native lands in the hope of securing a better life for themselves and their children.

At one level, because of their scale, these problems require political solutions. However, for equitable and responsible relationships to be created and maintained between humans and their natural environment and among the diverse groups that make up the earth’s human population, it will take more than the efforts of politicians. While competition is the prevailing ethic, politicians, however personally well intentioned, can do little to change the rules of what is generally conceived as a zero-sum game. Until those that they represent have a will to bring about change, based on their understanding of the issues at stake, there is little hope of escape from the competition between vested interests that currently characterizes political negotiations in both local and international arenas.

Unfortunately, as the scale of political issues grows from local to national to international, the degree of public involvement decreases sharply. In response to the apparent ineffectiveness of individual action or expression of opinion, the prevailing attitude, particularly among the young, seems for the most part to be one of apathy or indifference. But this lack of personal involvement and commitment is perhaps not surprising, given the way in which people are encouraged to spend their time. No longer, as in the nineteenth and early twentieth
centuries, do societies for self-improvement flourish, nor, for the majority, does participation in church-organized activities hold much appeal. Instead, when they are not working — often for very long hours — to earn a living, the major pastimes in which people in the more affluent societies increasingly engage are shopping and watching soap operas on television.

It may be objected that the foregoing picture is unduly pessimistic or that it implies that there was an earlier period in human history when there was greater public participation in decision-making or a more widespread concern for issues beyond the purely local. However, that is not the point. For never before in human history has it been possible to know so much about what is happening in different parts of the world, nor have the repercussions of decisions and actions in one community ever had such far-reaching effects on others. From sweat-shops in South-East Asia to famine in Africa, and from the despoiling of equatorial forests to rising sea-levels world-wide as a result of global warming, we should no longer be able plead ignorance as a justification for denying responsibility for the lives and welfare of those beyond our immediate community.

The Role of Education in Changing Society

Earlier, it was suggested that we need to reevaluate and, where necessary, transform our cultural institutions. While I believe that all our institutions need to become more truly democratic, I shall limit discussion in this paper to the kinds of transformation that are needed in public education, because that is likely to be the institution of greatest concern to the readers of this journal. It has, of course, frequently been argued, on the one hand, that “education cannot compensate for society,” and, on the other hand, that no real improvement in the quality of education can be achieved until society is willing to devote more resources to the provision of educational facilities and to the preparation and remuneration of the teachers who have responsibility for what happens within them. While both these arguments undoubtedly have considerable force, they should not be used as justification for accepting the status quo and for refusing to make the best use of the resources that are available and of the best knowledge that can be obtained about how to do so.

But a more important reason for seeking to transform education is that it, more than any other institution, except, perhaps, the family — bears responsibility for the development of the hearts and minds of each new generation. What young people learn in school can provide a strong foundation of values, purposes and knowledgeable skills that prepare
them to continue to develop their interests and talents over the whole course of their lives, so that they are able to make wise decisions and to act effectively in ways that contribute to the welfare of others as well as themselves and, in so doing, to contribute to the continuing transformation of all the institutions in which they participate.

As is increasingly being recognized, such a conception of the role of education in contributing to the transformation of society requires a rethinking of the learning goals that schools propose and of the experiences that they provide to achieve them (del Rio & Alvarez, 2002; Wells & Claxton, 2002). In the following sections, I shall discuss some of the major problems that stand in the way of schools playing the transformational role that they could do and I will then go on to describe some initiatives that communities, schools and universities are taking to overcome these problems.

Some Problems Facing Schools

Viewing schools in relation to the larger societal challenges that were outlined earlier, there seem to be three major problems that urgently need to be resolved. These correspond to the three major components of learning and development that is oriented to effective and responsible action: social relationships, constructing understanding, and the affective underpinnings of motivation and engagement.

Worldwide, there are inequities in the opportunities that students have to succeed in school and, on that basis, to go on to some form of advanced, tertiary education that will equip them both to enter professional employment and to take on leadership roles in their communities. Whether based on ethnic origin, caste or class membership, religious affiliation, status as immigrants unfamiliar with the language of instruction, or categorization as handicapped either physically or intellectually, large segments of the school-age population are treated as inferior and incapable of academic success and, for this reason, excluded from the more challenging programs of study. These forms of discrimination both curtail students’ opportunities to achieve their individual potential and give rise to antagonisms between the individuals and the groups so categorized that create tensions within the schools and also serve to perpetuate the social and economic inequalities within the larger societies of which, along with their families, they are members.

The second problem concerns the way in which successful school learning and teaching are conceived. Unfortunately, they are all too often interpreted, in practice, in terms of teacher transmission of
predetermined, disembedded items of knowledge and skill, which students are then expected to memorize in order to demonstrate their acquisition of the prescribed subject content, with little or no attention given to the utility of what they are learning. This approach to teaching and learning has been characterized as the “banking” conception of education (Freire, 1970), since learning is undertaken mainly to acquire capital in the form of high grades, which can subsequently be exchanged for privileged further educational opportunities or for prestigious and financially rewarding occupations. Such schooling does little to prepare students to fulfill their human potential, nor does it develop the dispositions for lifelong learning, effective problem-solving in action, or thoughtful and responsible decision-making.

Ideally, learning should be an intrinsic aspect of undertaking activities that lead to enhanced understanding and, as a result, to effective and responsible action both within and beyond the school (Lave & Wenger, 1991). In my view, curricular activities are most likely to achieve this goal when they have a clearly recognizable relationship to students’ interests and concerns and provide opportunities for them to: share responsibility for the activities in which they engage; show initiative, take risks and learn from their errors as well as from their successes; and collaborate with others in jointly undertaken activities in which they learn from and teach each other as they attempt to resolve the problems, both practical and intellectual, that inevitably arise.

The third problem, that of the absence of intrinsic motivation, demonstrated in students’ lack of commitment to, and engagement in, the activities they are asked to carry out, stems in large part from the first two. However, it also stems from the general ethos of many traditional classrooms, in which students work individually in competition with each other on tasks that are determined by the teacher on the basis of an externally prescribed curriculum, and where learning is seen as work to be performed under duress rather than as an opportunity to explore and come to understand those aspects of the world and their place within it that are relevant to their own goals and their developing identities (del Rio & Alvarez, 2004).

As an increasing number of educators are coming to recognize, however, the theory of learning and development proposed by Vygotsky (1978, 1987) can provide a helpful framework within which to address these problems and seek for effective solutions. In the following sections, therefore, I will give a brief sketch of Vygotsky’s theory and then describe some current endeavors that are based on his ideas.
Perhaps the two most important ideas about learning and development that have influenced thinking about education in the last hundred years are, first, that what people learn builds on what they already know and understand and, second, that most of what they learn, including the cognitive strategies for utilizing information, are appropriated from other, more expert members of the culture. The acceptance of the first idea, referred to as constructivism, owes much to the work of Piaget; the second, which adds the important social element of learning through engagement in joint, purposeful activities, was made salient by Vygotsky. Putting the two ideas together, we can express the basic insight in the following simple aphorism: /Who we become depends on the company we keep and what we do together/. The validity of this insight can be easily demonstrated from what is known about how children learn their mother tongue. At birth, they are biologically equipped with the required vocal and auditory apparatus and a predisposition to treat other people as intentional agents like themselves (Tomasello, 1999). During their early years they gradually come to understand that the utterances of those who engage with them in a shared activity are intended to influence their attention to, action on, or knowledge about some aspect of the activity. On this basis they attempt to interpret the meaning of others' utterances and, through a combination of imitation and emulation, they learn to use similar utterances in appropriate situations and come to understand the world in terms of the linguistic categories and structures of everyday conversation.

Vygotsky spent much of his adult life investigating the relationship between learning and development and was able to draw several further conclusions. First, the way children come to think, remember and reason depends on the model that is provided in the interactions that they engage in with others; and, second, that in appropriating the models provided by others, children transform both their ability to participate in joint activities and the ability to think for themselves. Furthermore, since the particular range and sequence of models that children appropriate varies from one individual to another, each individual develops a unique repertoire of cognitive and communicative resources, which means, in turn, that they are able to make unique contributions to the joint solution of problems that arise in relation to unfamiliar activities and situations. Finally, he gave considerable attention to the role of more expert others, i.e. parents, teachers, peers in assisting children's development. This led him to propose that the ideal form of assistance is oriented to the learner's zone of proximal development, with respect to the task in which they are jointly engaged; that is to say, the assistance should be focused on what the learner is not yet quite able to manage on his or her own and should have as its
aim that the learner appropriate the relevant knowledge or skill so that he or she is subsequently able to perform the task autonomously.

Vygotsky's short working life coincided with the ferment of intellectual activity that followed the Russian Revolution. His ideas were strongly influenced by Marxist thinking and the theory he developed was intended not just to describe human development but to do so with the aim of enabling people to transform society for the general good. It is for that reason, in part, that his theory continues to be relevant seventy years after his death. But his theory also continues to be relevant because the explanation he offered of the processes of development and their universal applicability has been supported in general terms by subsequent work. However, the situations in which we read his work today are very different from those that obtained in post-revolutionary Russia and so, in appropriating his ideas, we have to transform them in order to effectively bring them to bear on contemporary problems. But that is, I believe, how he would have wished us to read his writings. Theories are not true statements about the way the world is but tools for thinking with in solving problems; and, as with any other tools, they need to be adapted and modified to best suit current purposes. Used in this way, his seminal ideas can continue to provide assistance as we grapple with the issues that face us today.

In the remainder of this paper, I will discuss some educational projects inspired by Vygotsky's ideas that, in my view, provide valuable suggestions as to the kinds of changes that we should aim for in the effort to transform the institution of education.

Creating Communities of Learners

One of the strongest messages from cultural historical activity theory (as the expanded version of Vygotsky's theory is called) is that, both over the millions of years of human biological and cultural evolution and development and over the developmental trajectories of individual lives, in order to progress toward the achievement of our full potential we need to interact with each other in our local communities. This naturally occurs every day, at home and at work, as we engage together in purposeful activities and collaborate in finding solutions to the problems and challenges that inevitably arise. Such joint participation is critical in providing support and assistance for those who are learning to use the tools, knowledge and practices by means of which the activity is carried out. But the assistance does not flow only in one direction. Most often, in everyday life, the participants in any activity have varying kinds of expertise, and by collaborating in solving problems, they learn with and from each other and are able to
achieve better results than each might have done alone. This is one of the strongest arguments for democratic decision-making, whether in national government or in local community affairs.

In recent years, the importance of democratic community building has also begun to be recognized in a growing number of school classrooms. This can take a variety of forms. One is the practice of holding regular class meetings to discuss how the classroom should be organized and to resolve any problems that have arisen in the social relations among the students (Donohue, 2001). A second form of community building can center around the practice of "buddy reading," in which students in one class pair up with a younger class to provide support in learning to read. In this practice, the older students plan together how they are going to work with their younger buddies and, as Ziolkowski (1999) recounts, this has the very beneficial effect of creating friendships, both between older and younger students and among each age group. The same benefits can also occur when a class prepares an exhibition or demonstration of work they have been doing for presentation to their parents and to other classes in the school.

Even more rewarding are efforts to create communities involving the whole school, although these are much rarer, probably because of the difficulties involved in persuading teachers across many grade levels to work together and because of the managerial view of their role held by the majority of school administrators. For such innovation to occur, it seems that it requires a strong influence from outside the school to create the enthusiasm necessary to set the process in motion, as is shown in the following examples.

My colleague, Barbara Rogoff, was involved in such a community school when her own children were students. In the book that she and some of the teachers and parents recently published (Rogoff, Goodman Turkanis, & Bartlett, 2001), they describe how the school came to be set up on the principle of parent and teacher collaboration and how this positively affected the students. "Enthusiastic involvement in their learning and greatly enhanced parents' and teachers' satisfaction in working collaboratively for the benefit of the children."

At the time when I was invited to be a guest speaker at conferences held in Barcelona and Vitoria in April 2003, the school just described was the only case that I knew of where parents and teachers were jointly involved in the schooling of their children. It was a great pleasure, therefore, to learn about the Learning Communities Project in Aragón, Catalunya, and the Basque Country and to meet with some of those who have been involved in this project. Since then, I have had the opportunity to learn more about the ways in which involving the whole
community in reenvisioning the sort of school they wish to have and working together to achieve their vision radically change the social relationships within each classroom and among all the adults who share the responsibility for the students. I learning and for the running of the school. With parents and volunteers helping in classrooms, the opportunities for all to learn through dialogue in interactive groups is greatly increased. I have also learned how creating Learning Communities can revitalize a whole community or town and improve relationships across divisions within the wider community created by social, cultural and linguistic differences (Soler-Gallart, 2004). These projects are clear evidence of how community building can empower all the participants and, as Vygotsky proposed, create effective, democratic learning opportunities for all who are involved.

Learning through Dialogic Inquiry

So far in my career, I have not had the opportunity to be involved in the sort of educational transformation that is involved in the creation of community schools of the kind pioneered by the Learning Communities Project. However, I have been involved for many years in collaborative work with teachers to explore how to make inquiry-oriented dialogue the basis for empowering learning and teaching in the classroom (Wells, 1999, 2002). The impetus for my desire to work with teachers rather than to lecture them arose from the longitudinal study of children's learning of language and learning through language that I and my colleagues carried out in Bristol, England between 1972 and 1984 (Wells, 1986). From that study I became convinced that the most powerful learning occurs when, as Vygotsky proposed, people interact in the course of purposeful joint activity. This was clearly the most successful situation for children to learn to talk; but it gradually became apparent that this was also the most successful situation for their learning about the world and their place within it. However, what I discovered when 32 of the children in the study were observed over the course of their primary education was that the kind of opportunities for learning through exploratory talk (Mercer, 1995) that occurred frequently in many homes were almost entirely absent from the classrooms in which they were being educated. Since then, I have been working with teachers to find ways of creating classroom communities in which such opportunities are at the heart of the curriculum.

Along the way, I have been strongly influenced by a number of university-based projects that have rather similar goals (Brown & Campione, 1994; Palincsar et al., 1998; Scardamalia, Bereiter, & Lamon, 1994). In each case, the researchers have attempted to create classroom communities in which, within a teacher-selected theme or curricular
topic, students have some choice in the topics they work on and are encouraged to ask questions about issues that, for them, are of real importance and to try to make answers to them. In each case, too, the students are encouraged to pursue their inquiries in small collaborative groups and to bring what they have discovered and learned to whole-class discussions in which they engage in “knowledge building,” attempting together to reach common understandings that are superior to the individual understandings with which they started (Bereiter, 1994).

While I admire and have learned from the work of these researchers, I am not convinced that their approach is the best way to proceed in the attempt to bring about the transformation of schools for which we are all aiming. The problem, as I see it, is that, while inquiry is promoted among the students and collaborative knowledge building is encouraged as the means for their individual learning, the teachers themselves are not fully involved as inquirers into how to create such powerful learning environments, since this role is retained by the university researchers. In my own work, therefore, I have attempted to create overlapping communities of inquiry in which the teachers are pivotal members. On the one hand, they try to adopt an inquiry orientation to the curriculum and to organize classroom activities that enable students to work together on self-chosen or negotiated questions that involve both “hands-on” and “minds-on” investigation and to engage in knowledge-building discussions. And on the other hand, they themselves belong to a community of inquiry, made up of teacher colleagues and university educators, in which, through action research, we seek both to better understand the dynamics of classroom communities of inquiry and at the same time to use our developing understanding to improve our practice. As teacher researchers, we also take opportunities to share our work, not so much to tell others what to do and think, but rather to share the professionally and personally rewarding experience of working together and to invite and encourage others to adopt the same approach (Wells (Ed), 2001).

Space does not allow me to describe any of the individual discoveries we have made. However, one important development is worth mentioning. Quite by chance, one of our members found herself involved in conducting a collaborative inquiry /with some of her students/ into the strengths and weaknesses of their whole-class knowledge building discussions, with the simultaneous aim of improving them. As she reports, the empowering effect on the students of being involved as co-researchers was remarkable and was clearly seen when they addressed an audience of 200 prospective teachers in order to share with them what they had learned about effective inquiry-based learning and teaching (Hume, 1998). As a result of her experience, the whole teacher research group undertook to further explore the benefits of co-researching with their students and,
with the aid of a grant from the Spencer Foundation, they carried out and have reported some very worthwhile investigations (DICEP, 2003).

Putting It All Together

Although not explicitly mentioned in the previous two sections, there is one underlying component that is both an outcome and a prerequisite for the successful functioning of both individuals and communities. This is the role of affect, or feeling, which provides the motivating energy to engage fully in any sort of endeavor. Vygotsky was very clear about the centrality of affect in intellectual activity and in participation in joint activity (Mahn & John-Steiner, 2002) and, interestingly, his ideas are being confirmed by contemporary work in the neurosciences (Damasio, 2003). Because human beings are both biological and social organisms, their physical and mental wellbeing are dependent on positive emotions that derive, to a large degree, from successful activity with other people. Jointly undertaken endeavors that lead to valued outcomes generate positive feelings which, in turn, provide the energy and motivation for continued participation. Thus working together to create or improve some object, a well-functioning school, a theoretically convincing explanation, or a compelling performance or presentation, both energize people to take on new challenges and, in the attempt to meet them successfully, provide powerful opportunities for learning new knowledgeable skills and developing new understandings.

Both the Learning Communities and the Communities of Inquiry are achieving success because they generate and harness the positive emotions that motivate commitment to, and engagement in, activities that the respective communities consider important for their individual and collective development and wellbeing. However, the two types of community have somewhat different emphases. In the Learning Communities, as I understand them, the effort is to involve all the stakeholders in working together to create better schools for their children, and the energy that empowers them derives from the satisfaction that participants from many different social, cultural and educational backgrounds experience in collaborating effectively to achieve this object. In Communities of Inquiry, while still drawing energy from successful collaboration, the object is to develop the dispositions of lifelong learning and inquiry and to enhance students' confidence in their ability to solve intellectual as well as practical problems in the interest of enhancing understanding of the issues and questions addressed and of developing the ability to act effectively in the world for which they will in due course assume responsibility.

Clearly, these two types of community are complementary approaches,
rather than competing alternatives, in the effort to transform classrooms and schools and, through them, the institution of education. If we were able to integrate their purposes and the energies of all participants, including parents, teachers, administrators, support staff, other community members, as well as the students whose social, intellectual and affective development is the focus of these collaborative endeavors, the schools of the future could indeed make a significant contribution to the transformation of the institutions of the larger societies in which they are embedded and, in this way, help to create a better world for future generations.

References


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