

# Education and the appropriation of local reality

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**I**N THE MUNICIPALITY of Pintadas in Bahia, a small city far from the modernity of asphalt, nearly half the men travel every year to the Southeast to cut sugar cane. A partnership between the dynamic mayor, some producers and people with a vision of local needs allowed those who were looking for work in distant places to then return to the construction of their own city. It began with a partnership between the local Secretary of Education with a university of Salvador to work out a basic sanitation plan for the city, which reduced health costs, freed up land and budget for production, and so on. The generation of knowledge about local reality and the promotion of a proactive attitude for development is an evident part of an education that can become a scientific and pedagogical instrument for local transformation.

The initiative began with a mayor elected by a network of social organizations, thus directly bound up with the community's needs. As retribution the governor ordered the closing of the only bank branch of the city. The response of the community was to reactivate a local credit cooperative, going on to locally finance a large part of the initiatives.

What was the relation between this and education? The developers of these initiatives realized that Pintadas is located in a semi-arid region, and that the children have never had a class about semi-arid, about the limits and potentialities of their own reality. Today semi-arid is taught in the schools of Pintadas. It is natural that teaching that allows children to comprehend their region, and the difficulties of their own parents in diverse professional spheres stimulates the children and prepares citizens who will see education as an instrument for the transformation of their own reality.

In Santa Catarina, under the guidance of the late Jacó Anderle, the program "My school, My Place" was developed. It is a systematic orientation of local reality in the school curriculum, involving not only training of teachers – who, in general, in their own training, also lacked knowledge of their regions –, but the development of teaching materials, articulation of curricula of several fields, and so on.

The region of São Joaquim in the south of the state of Santa Catarina was a poor area with few producers and few expectations, and the indicators of human development were the lowest in the state. As with other regions of

the country, São Joaquim and the neighboring cities hoped that development “might arrive” from outside, in the form of investment by a large company, or a government project.

Within a few years various residents of the region decided they were not going to wait and opted for another means of solving their problems: confronting them by themselves. They identified the various characteristics of the local climate which were verified to be especially favorable to fruit growth. They organized themselves, and with the means at their disposal formed partnerships with research institutes and cooperatives, opened marketing channels so as to not to be dependent on intermediaries, and today constitute one of the most rapidly developing regions in the country. And it was not from depending on a large corporation that from one day to the next can move to another region: they rely on themselves.

It is important to think of the educational dimension of these processes. There were times, with the recommendation of World Bank, when what was called at the time “education for development” was promoted. The vision restricted the curricula by focussing on more “practical” knowledge for the training of people useful for companies,. Today this tendency shows up in large private institutions, like the U. of Phoenix, in the United States, a for-profit university traded on the Stock Exchange that eliminated humanistic vision and teaches what is characterized as *marketable skills*. It goes against the current, the old dichotomous line between theory and practice.

This vision that we can be owners of our economic and social transformation, that development needs not wait, but can be done, constitutes one of the most profound changes that are taking place in the country. It removes us from the attitude of critical spectator of an always inadequate government, or from passive pessimism. It gives back to the citizen the understanding that his destiny is in his own hands, since there is a dynamic local social culture generating synergy among various efforts that facilitates the process.

The idea of education for local development is directly tied to this understanding and to the need of preparing people for tomorrow who can take an active part in the initiatives capable of straightening their paths generating constructive dynamics. When we try to foster initiatives of this type today, we notice that it is not only children, but adults as well who lack a range of knowledge from the origin of their own street’s name to the potential of the subsoil of the region where they were raised. In order to have an active citizenry, we have to have an informed citizen, and this begins early. Education should not only to serve as a springboard for a person to escape from his region: it should give him the knowledge needed to help transform it.

In a region of Italy we visited a city where there was a bas-relief of the city itself and of the neighboring regions on the ground of its Central Square, allowing people to visualize the buildings, the major roads, the design of the

local waterways, and so on. Among other uses, teachers use the Square to discuss the territorial distribution of the main economic areas with children, showing them how pollution spreads from a single point throughout the city, and so on. There are cities that produce a local atlas so that children can understand their surroundings, others are making the production of indicators more dynamic so that local problems can become more comprehensible and easier to incorporate into the school curriculum. The means are numerous and varied and we detail them in the present text, but what is essential is this attitude of considering that children can and should assimilate them, through organized knowledge of the territory they call home, and that education has a central role in the performance of this plan.

There is an important pedagogical dimension to this focus. By studying the reality that they know by experience in a scientific and organized rather than fragmented manner, children can better assimilate their own scientific concepts, since it's their own reality that starts to make sense. On studying the migratory dynamics that resulted in the building of the city where they live, for example, they go on to see science as an instrument for the comprehension of their own life and the life of their family. Science comes to be assimilated and is no longer merely a school obligation.

### **Globalization and local development**

When we look at the press, or even technical magazines, it seems that everything is globalized; all we hear of is globalization in the world financial casinos, in the transnational corporations. Globalization is an unarguable fact, directly connected to current technological transformations and to the concentration of economic power in the world. But not everything has been globalized. When we look at the simple but essential dynamic of our lives, we find local space. Thus, the quality of life in our neighborhood is a local problem, involving paving, the drainage system, and the neighborhood infrastructures.

This reasoning can be extended to innumerable initiatives, like that of São Joaquim cited here, but also to practical solutions, like the decision of Belo Horizonte to pull the school lunch snack contracts from the hands of the large intermediaries, contracting local family growers to supply the schools, which dynamized the city's employment and economic flow, besides noticeably improving the quality of the meals—which included clauses about agrottoxins – and promoted the building of social capital. Essentially the quality of water, of health, of collective transport, as well as the richness or poverty of cultural life depends on local initiative. In the end, a great part of what constitutes what we today call quality of life, – even possible suffering from its impact – doesn't depend much on globalization: it depends on local initiative.

The growing importance of local development may be found today in numerous studies, from the World Bank, the United Nations, from university

researchers. Initiatives like those previously mentioned have been regularly studied. The program Public Management and Citizenship, for example, developed by the Getúlio Vargas Foundation (FGV) of São Paulo, has nearly 7500 accounts of this kind registered and studied. CEPAM, which studies the local administration of the state of São Paulo, follows hundreds of examples. The Brazilian Institute of Municipal Administration (Instituto Brasileiro de Administração Municipal) (IBAM) from Rio de Janeiro follows experiments throughout Brazil, as does the Polis Institute (Instituto Polis), from Bank of Brazil Foundation (Fundação Banco do Brasil) which promoted the Social Technology Network (Rede de Tecnologias Sociais), and so forth.

It is interesting to note that however much globalization develops, more people are recovering their local space and seeking to improve the conditions of life in their immediate surroundings. Naisbitt, an American researcher, came to call this two-way globalization and localization process the “global paradox.” In reality, our citizenry performs on diverse levels, but it is at the local plane that participation can express itself in the most concrete manner.

The major difference for municipal districts that take the reins of their own development is that in place of being passive objects in the globalization process, they go on to direct their involvement according to their own interests. Promoting local development doesn’t signify turning one’s back to broader processes, including the worldwide: it means utilizing diverse territorial dimensions according to the interests of the community.

There are touristic cities, for example, where a giant of industrial tourism occupies an immense part of the seacoast, relegates the local population to the interior and earns money from the natural beauty of the region to the same degree in which it deprives its inhabitants.

Other municipal districts have developed sustainable tourism and take advantage of the growing tendency to look for more restful places, with simple but pleasant inns, assisting rather than dismantling pre-existing activities like sport-fishing that in addition become attractions. *Resort* tourism as much as sustainable tourism partakes of the globalization process, but the second option brings enrichment of the communities which continue to be in charge of their development.

With the growing weight of local initiatives it is natural that from education one can not only hope for general knowledge, but also a comprehension of how general knowledge manifests itself in possibilities of action in the local plane.

### **Urbanization and social initiatives**

A good part of the passive attitude of “waiting” for development owes to the fact that Brazilian urbanization is still very recent. In terms of overall size we were two-thirds rural population in the 1950’s; today we are 82% urban population. Urbanization profoundly changed the form of society’s

organization in terms of its needs. A family in the field can individually resolve its own problems of water supply, trash, fruit tree production, transportation.

In the city it isn't viable for everyone to have his own well, if only because the densification of the population provokes pollution of the underlying water table by black waters. Transportation is to a great extent collective, provisions require commercial roads, houses need interconnections through networks of water, sewage, telephone, electricity, frequently with fiber-optic cables, not to mention the network of streets and sidewalks, collective cleaning services and trash removal, and so on. The city is a space in which a system of collective consumption in a network is predominant.

In dense urban space, the dynamics of collaboration come to predominate. It isn't enough for one resident to take measures to end the dengue mosquito if a neighbor doesn't collaborate. The pollution of a brook is going to affect the population that lives along the river.

Thus while the quality of life in the rural era depended to a great part on individual initiative, in the city a social initiative that involves many people and the informed participation of all has become essential.

Step by step the rural surroundings have become ever more articulated with the urban area, as much from movement of farms and the urban population's rural leisure as by rural activities that are complementary to the city, as is the case with food supplies, rural families with income derived from urban work, or by the necessity of decentralized education and health services. Thus a space of articulated complementarities is generated between the field and the city. Where before we had a clear division between the "rural" and the "urban" what has appeared might be called "rurban."

In the territory thus constituted, people come to identify with community and to collectively address common problems. This "learning to collaborate" becomes sufficiently important to be classified as a capital in the form of social capital, a "wealth" for each community. In other words, if enrichment and the quality of life formerly depended, for example, directly on a rural property and the strength of the family, quality of life and development in the city are going to depend increasingly on the intelligent capacity for organization of complementarities, of synergies of the common interest.

And it is in this plan that the immense richness of local initiative is pointed up: since each locality is differentiated according to its degree of development, the region where it is situated, its traditional culture, the predominant activities of the region, the availability of the natural resources - the solutions will have to be different for each one. And only people who live in the locality are those who know effectively, who really know which are the most urgent needs, the principal underutilized resources, and so on. If they don't take initiatives, it is unlikely that anyone will do it for them.

Brazil has nearly 5,600 municipal districts. It is not feasible for the federal government, or even the state government, to know all the problems

of so many different places no more than it is in the hands of some large corporations to resolve so many issues, even if they had interest in doing so. In a certain sense, municipal districts form the “blocks” with which the country is built and each block or component has to organize itself in some adequate manner according to its needs, for the entire conjunction– the country – to function.

Thus we go from a traditional dichotomous vision based on state or private organizations, to collaborative visions in the territory. The innumerable organizations of organized civil society, NGOs, community-based organizations (CBOs), special interest groups all make up part of this confluence of a society that gradually learns to articulate interests that are differentiated, but in spite of which still have complementary dimensions.

Education cannot limit itself to composing a kind of basic stock of knowledge for each student. People that live in a territory have to go on to know common problems, alternatives, potentials. School thus becomes an articulator between the needs of local development and corresponding knowledge. This is not to consider it as differentiation by discrimination, in the sense of “poor schools for the poor:” It is considering education as being more liberating to the extent to which it assures new generations the instruments of intervention over their own reality.

### **Information, education and citizenship**

The American researcher Hazel Henderson presents an interesting image. Let us imagine a cluttered traffic pattern in a region of the city. One of the solutions is to let each one do as he wants, a type of exacerbated liberalism. The result will probably be that everyone will look to maximize their individual advantage, generating a monster traffic jam, since the tendency is to occupy all empty space, and the majority is going to behave similarly. Another solution is to place guards to direct the flow of traffic in an imperative manner in order to untangle the region. The solution might be more interesting but it doesn’t respect the different options or even the destinations of various drivers. A third way out is to leave the option to the citizen, but making sure by means of radio or video panels that there is enough information about the location where the bottleneck is occurring, the estimated time of delay and the options. This type of democratic but informed decision allows intelligent behavior from each individual according to their interests and their particular situation, and at the same time serves the common interest.

We will naturally always have a little of each option in the various ways of organizing development, but what is particularly interesting to us is the third option, since it shows that besides the first example of “anything goes,” or the second of “do what I say,” there can be organized and intelligent forms of action that are respectful of freedom without people needing to be ordered about. In other words, a good knowledge of reality, solid systems

of information, transparency in spreading the word can allow intelligent initiatives on everyone's part.

Some time ago the city of Porto Alegre put onto digitized maps for the issuance of permits all the information about economic units of the city that are registered at the Treasury Department. When, for example, a merchant wants to open a pharmacy, the map shows him the distribution of pharmacies in the city. With this the merchant can locate the areas where there are already pharmacies, and where they are lacking. Thus well-informed, the merchant is able to situate his pharmacy where there are people who are in need, better serving his own interests and offering a more useful social service.

In other words, a coherent system of numerous initiatives of a city, of a territory, depends strongly on a well-informed population. The tendency today is that only some politicians or local economic heads have information, and are then able to dictate their programs to the city. Thus a central premise for development is the democratization of knowledge of the territory, of its more varied dynamics. And where is the citizen going to collect knowledge about his region if the discussions about the city appear only once every four years in election debates?

In this context a recent report from an NGO that works on the control of public money, the Institute of Socio-Economic Studies (INESC) proves interesting:

The fact that we have a society with a low level of schooling constitutes one more challenge, not only to improvement of schooling, but also to education of citizenship, so that citizens know their responsibilities and know how to command their legislators and the public power in general, toward transparency, to the deconstruction of numbers that they don't understand. In spite of this, and although we lack a culture of social power disseminated through the population, many citizens exert social control extremely effectively because they have a notion of priority and make comparisons in terms of political results principally when they note irregularities in the Councils, even without knowing how to read and even when their own political structures attempt to disqualify them. The more this information is monopolized, or obscure and confused, the less is the capacity of society to participate in state influence, which ends up weakening the notion of democracy, which can be measured by the flow, quality and by the quantity of information that circulates in society. The great challenge is to achieve transparency in the sense of empowerment, which means finding instruments for the population to understand the budget and oversee public power. 1

The objective of education is not to develop traditional concepts of "civic education" with moralism smelling of mildew, but to permit the young to have access to the basic data of the context by which their lives will be

regulated. Understanding what is happening to public money, what are the indicators of child mortality, who are the major polluters of their region, what are the greatest potentials for development – all this is a question of basic social transparency. This is not to consider the “practice” relative to the theory, but as a concrete underpinning to the theory itself.

### **The partners of local development**

An education that involves a better comprehension of local reality in its modes of educating will have to organize partnerships with various social agents who construct the local dynamic. In particular, the schools, or the local educational system in a general sense, will have to connect themselves with local and regional universities to elaborate the corresponding material, organize partnerships with NGOs that work with local data, know the different community organizations, interact with diverse segments of public activity, look for support from the institutions of the “S” system - SEBRAE or SENAC, and so on.

The process is double edged, since, on one side, it enables the school to prepare people to be future professionals with a greater comprehension of the existing dynamics, and on the other, enables these dynamics to penetrate the educational system itself, thereby enriching it. Thus, the teachers will have greater contact with various spheres of activities, in a sense becoming scientific and pedagogical mediators of a territory, of a community. The re-qualifying of the teachers that this implies could be very rich, since they will naturally be able to confront what they are teaching with experienced realities, and in a certain sense be put in the same position as the students, who listen to the classes and encounter the difficulties in making the bridge between what is taught and the concrete reality of their daily situation.

The impact in relation to motivation, for all, can be great, above all for the students who are always told “one day” they will understand why what they study is important. The student who has learned in historic and geographic terms how his city and his own neighborhood has developed, will have a greater capacity and interest in contrasting this development with the process of urbanization of other regions, of other countries, and will understand better the theoretical concepts of the demographic dynamics in general.

Even changes in pedagogic proceedings are involved, since there is a difference between making students write down what the professor says about D. Carlota Joaquina, and in a scientific manner organizing the practical but fragmented knowledge that is present in students’ minds. In particular it would be natural to organize discussions on a regular and not merely sporadic basis that involve students, teachers and professionals from diverse areas of activities, from community leaders to bank managers, union members to businessmen, from liberal professionals to the unemployed, and support these systematic contacts with scientific material.

In the knowledge society to which we are rapidly evolving, all– and not only teaching institutions– are faced with the difficulties of struggling with much more knowledge and information. Companies regularly conduct programs for re-qualifying workers, and operate today on the basis of the concept of *knowledge organizations*, or *learning organizations*, along the line of permanent learning.

The time has ended when people first study, later work, and still later retire. A relationship with information and knowledge is increasingly accompanying people through their lifetime. It is a profound disjunction between the chronology of formal education and the chronology of professional life.

In this sense, all organizations, and not only schools, turn into institutions of learning, considering anew the data from reality. The school needs to be articulated with these diverse spaces of learning in order to be a partner in the necessary transformations.

One interesting example comes to us from Jacksonville, in the United States. The city annually produces a Quality of Life Progress Report ([www.jcci.org](http://www.jcci.org)), an evolving summary of its quality of life, evaluating health, education, security, employment, diverse economic activities, and so on. This report is produced with the participation of the most varied partners and permits the insertion of scientific knowledge of reality into the daily life of the citizens. Teaching how to employ knowledge in an organized manner is the vocation of the world of education. Should it stand on the sidelines of efforts of this type?<sup>2</sup>

Necessary partners have become regional universities, businesses, the “S” system, various branches of city hall, environmental NGOs, community-based organizations, local media, the local representation of IBGE, from Embrapa and other research and development organisms. In the final analysis there is a dispersed and underutilized world of knowledge that can become prime material for differentiated teaching.

What we are seeing is a school a little less oriented to formal lessons on general knowledge, and a little more oriented toward organizing networking between the various spaces of knowledge that exist in each locality and in each region; and educating the students in a manner that will enable them to feel familiarized and inserted into this reality.

### **The impact of technologies<sup>3</sup>**

The feeling of solitude of the teacher facing his class with its fifty minutes and a slice of predefined knowledge to transmit is impressive. Some are better, some worse in this endeavor, but in the conjunction of this sectioned universe it has little correspondence with the student’s motivation and makes it more difficult for an individual teacher to modify the procedures. This raises the interesting situation of a great number of people in the

educational area wanting to introduce modifications at the same time that few changes actually occur.

Its a kind of institutional impotency in which the cog has difficulty changing something to the extent that it depends on other cogs. The systemic change is always difficult. And above all, individual solutions are not enough.

One of the paradoxes we confront is the contrast between the depth of changes in the knowledge technologies and the little that has changed in pedagogical procedures. The malleability of knowledge was and is being profoundly revolutionized. Putting aside various exaggerations about “artificial intelligence,” or the natural uneasiness of the uninformed, the reality is that computer science, associated with telecommunications, allows:

- storage of gigantic quantities of information in a practical form, on disks, on hard disks and laser disks, or at web address. We are speaking of hundreds of millions of units of information that can be put in the pocket, and of universal access to any digitized information;
- processing this information in an intelligent manner, permitting the formation of social and individual databanks for simple and practical use, with the elimination of bureaucratic routines that paralyze scientific work. Researching dozens of works to know who said what about a particular subject, “navigating” between various opinions, becomes an extremely simple task;
- transmitting information in a highly flexible form via the internet, in a cheap and precise manner, inaugurates a new era of knowledge communication. This implies that data from any library of the world can be accessed from any classroom or residence, or even that a conjunction of schools can transmit scientific information from one to another, or a conjunction of regional institutions in articulated educational networks;
- easily integrating a fixed or animated image, sound and text surmounts the traditional division between a message read in a book, heard on radio or seen on a screen, actually involving the possibility of any school becoming a powerful local articulator of knowledge.
- handling the systems without being a specialist: the time when a user was required to learn a “language” or simply had to stop thinking about the problem of his scientific interest in order to think about how to handle a computer has ended. The generation of *user-friendly* programs makes the process a little more complicated than learning to use a typewriter, but also requires a change in attitudes toward knowledge, a cultural change which is frequently complex.

What we are saying here is quite obvious and well known, and what we want to note is that we are facing a universe that is being laid open with

vertiginous rapidity, and which will be an everyday universe for people who are being prepared today.

Only now, however, are people beginning to realize the implications of the falling costs of first rate equipment, with enormous data storage capacity, printer, scanner, and above all world wide connectivity.<sup>4</sup>

There is a potential for a radically improved democratization of support to professors, and of a raising of standards enabled by technologies today of the overall conjunction of the educational world in the country. The fight for this democratization is becoming essential for systemic change that surpasses the level of initiative of an individual educator or of an individual school. There is no doubt that the educator still frequently faces more dramatic and elementary questions. But the practical implication that we see facing a parallel existence of a rich potential and dramatic restrictions caused by poverty, isolation and the like, is that we have to work in “a dual time frame,” doing the best possible in the insufficiently developed universe that constitutes our education, while rapidly creating the conditions for “our” utilization of the new potentialities that arise.

In considering the local implementation of technologies for serving education, the example of Piraí, a small city in the state of Rio, is important. Starting from a municipal initiative the project involved making agreements with companies that manage retransmission towers for TV and cellular telephone signals to install retransmission equipment for internet signals by radio. Thus coverage of the entire municipal territory is assured. Beginning from several reception points, a distribution of the broadband cable signal was made providing access to all of the schools, public institutions, and companies. Since the management of the system is public, it used the difference in rates so that the greater amount of profit from companies would underwrite home access, and today any modest family can have access to broadband internet for R\$ 35 per month. Credit agreements with official banks allow purchase of private equipment at low interest rates. The practical result is that the entirety of the municipality “bathes” in the internet space, generating a greater systemic productivity from everybody’s efforts, besides the change in young people’s attitudes, greater work facility for the teachers who have the possibility of access at home, and so on.

What we have today is a rapid penetration of technologies and a slow assimilation of the implications that these technologies can bring to education. Thus two not well articulated systems are brought together and frequently we see schools that lock computers in a room or the “laboratory” instead of putting them to use in a dynamic pedagogic rethinking.

### **Education and management of knowledge**

At the risk of saying the obvious, but for the sake of systematization, we can consider that, in relation to knowledge management, the new points of reference or more significant transformations would be the following:

- it is necessary to rethink in a more dynamic form and from new points of focus the question of what to teach: even in a specialized area no one can learn everything anymore; the choice between a "fully stuffed head or a well-organized mind," what Montaigne called "*une tête bien pleine ou une tête bien faite*," leaves us few options;
- in this universe of knowledge greater importance is assumed in relation to methodologies, learning to "navigate," thereby reducing even more the conception of transmitting a "stock" of knowledge;
- the notion of a specialized area of knowledge, or a "career," constantly becomes more fluid when the engineer is continually required to have more comprehension of administration, when any social scientist needs a vision of economic problems, and so on, besides putting scientific corporativism into question;
- the knowledge timeline is being deeply transformed: the vision of a man who first studies, later works and then retires becomes increasingly anachronistic, and the complexity of various timelines increases;
- the role of the student is profoundly modified, since he needs to become the subject of his own development, in the face of the differentiation and richness of the different knowledge environments he will participate in;
- the struggle for access to the knowledge environments is even more deeply tied to the recovery of citizenship, in particular for the poor majority of the population, as an integral part of the conditions of life and of work;
- finally, far from attempting to ignore the transformations or of acting in a defensive manner in the face of the new technologies, we need to penetrate the dynamics in order to understand in what manner their effects can be reoriented toward inclusion, a re-balancing process for the society when today polarization and inequality tend to be reinforced.

In a general manner, all these transformations tend to overwhelm us, frequently generating strong resistance, feelings of impotence, inarticulate responses. Taken together, however, there is the essential fact that the new technologies represent a radical opportunity for democratizing access to knowledge.

The key-word is *connectivity*. Once the initial investment in broadband access is made in a school or a home, the totality of digitized knowledge of the planet becomes accessible, representing a radical change, particularly for small municipalities, isolated regions, and in reality any poorly equipped segment, even in large cities.<sup>5</sup> When we look at what exists in general in school libraries and at the poverty of bookstores, – centered on books of self-help, translated books about how to earn money and make friends, besides more

foolishness— we can understand the extent to which taking adequate advantage of connectivity can become a radical mode of democratization of access to more significant knowledge.

At the same time, this connectivity allows even small community organizations, NGOs, small companies, and relatively isolated research centers to articulate themselves in a network. The problem of “being big” is already ceasing to be essential when being well-connected pertains to the interactive web.

In other words, the era of knowledge requires much more updated and inserted knowledge of local and regional significance, and at the same time the technologies of information and communication are making access to this knowledge more viable. In a certain sense education needs to organize this transition and prepare children for the world that really exists.

### **The local educational challenge and municipal education councils**

A school director in general is overloaded with day-to-day problems, with a strong vision of the immediate, and little time to see more broadly. The teacher faces the management of the classroom, and frequently is highly focussed on the discipline he teaches. In this sense, the Municipal Education Council, bringing together people who at the same time know their municipality, their neighborhood, and the broader problems of local development, and the regional school system, can become a radiating center for the construction of broader local and regional scientific enrichment.

These visions imply, without doubt, a creative attitude on the part of the board members. A document addressed to the Council Head formally stresses the underpinnings of these initiatives:

It is important to say that the Council performs an important role in the search for pedagogic innovation that gives value to the teaching profession and motivates creativity. On the other side, it can polarize audiences, analyses and studies of educational politics of the school system. Finally, it is important not to forget the legal and ethical underpinnings of their attributions in order to establish legitimacy in the face of society and public powers. In this light, the council member will be seen as a manager whose nature refers us to the verb “generate” and generate means to generate the new: a new design for municipal education consonant with the most authentic democratic and republican principles.

Another document, by Eliete Santiago,<sup>6</sup> asserts the role of the Municipal Councils of Education as “society’s manner of participation in the social control of the state. It configures itself as a space for effective discussion of educational policy and consequently its control and proposed evaluation. As a result of its deliberative character the expectation is in this sense for

its increasing capability as consultant.” This involves “the organization of school space and time and curricular time with emphasis on distribution, organization and use, and the results of learning with an emphasis on the knowledge of innovative experiences.”

The program “Sustainable Municipal Educators” was generated in the Minister of Environment’s wing together with the Minister of Cities, which not only allows inserting a new vision into the schools as much involved with studying local problems as also assigning responsibility and making infants and juveniles protagonists in relation to their environment. Thus, for example, the schools can contribute to elaborating regional indicators and systems of evaluation for monitoring and evaluating environmental conditions.

The program “Sustainable Municipal Educators” proposes the building of dialogue between various organized sectors and boards, with projects and actions developed in the municipalities, river basins, and administrative regions. At the same time it proposes providing an educational focus by which citizens can become publishers/educators of socio-environmental knowledge, preparing other publishers/educators, and multiplying successively in a way that the municipal district becomes an educator for sustainability.<sup>7</sup>

School responsibility in this process is essential because a generation of people needs to be developed who effectively understand their own environment: the same document asserts that

all of us are responsible for the building of sustainable societies. This means promoting the value of the territory and the local resources (natural, economic, human, institutional and cultural), which constitute the local potential for improvement of the quality of life for all. In order to arrive at the sustainable developmental modality adequate for the local, regional and planetary condition it is necessary to know this potential better.

In the municipal district of Vicência, in Pernambuco, we find the following statement: “education is the main condition for local sustainable development. On this basis, the Secretary of Education of the Municipal district initiated the project “Rural Schools, Constructing Local Development,” with a view toward improving the quality of teaching and consequently, improving the life quality of the rural communities.” The project allowed a “methodological differentiation in order to contribute to better comprehension of the true exercise of citizenship. The objective of the project is to turn the school into the center of knowledge production, contributing to local development.”<sup>8</sup>

These are visions that are going to solidify gradually, with experiences that seek in a differentiated form, according to the local and regional realities, practical roads for allowing education a much broader role as generator of

knowledge for local development and preparing a new generation of people knowledgeable in the challenges they will have to confront.

There is no “cookbook” for this type of proceeding. In some municipalities the central problem is water; in others, it is infra-structure; in still others, it is security or unemployment. Some can take advantage of a company with clear vision, others connect themselves to regional universities. There are cities with mayors willing to help with integrated and sustainable development; there are others in which the comprehension of the value of knowledge is still only beginning, and where the authorities think that developing a municipal district consists only of inaugurating works. Each reality is different, and there is no way to escape the creative work to be developed by each municipal board.

This said, we present some suggestions in the following to serve as points of reference, based on knowledge of things that worked and others that went wrong, with the intention not of providing a recipe but inspiration.

In quite practical terms, the suggestion is that the Municipal Education Council organizes these activities along four lines:

- Establish a center of support and initiative development for insertion of local reality into school activities;
- Organize partnerships with various local agents able to make contributions to the process;
- Organize or develop knowledge of the local reality, taking advantage of the contribution of local and regional social agents;
- Organize the insertion of this knowledge into the curricula and the diverse activities of the school and of the community.

Establishing a *support center* is essential, since without a group of people willing to assure that the initiative reaches practical results, it will be difficult to make progress. The Council can name a group of more interested councilors, draft a first proposal or vision, and associate some teachers or school directors with the initiative who want to put it into practice. It is important that there be a coordinator and a deadline.

Regarding *local agents* the vision to be worked on is of a continuous network of support. Many institutions today have knowledge production as an important dimension of their activities. Here we are obviously considering the local or regional colleges or universities, companies, the regional branches of IBGE, of institutions like Embrapa, Emater and others, NGOs which work with particular dimensions of reality, community organizations.

The objective of the network is not simply to collect information, with a view to a great data bank, but rather to ensure that it will be made available, that it will circulate among the various social agents of the region, and above all that it will permeate the school environment. In the City of Santos, for example, a City Documentation Center was created, funded through the city budget, but directed by a board that involved the four deans of the major

local universities, four representatives of civil society organizations and four representatives from the mayor's office. The objective was to avoid having information about the municipality "appropriated" and transformed into a white book and to guarantee access and circulation. The diversity of the solutions here is immense, since they range from powerful metropolitan centers to small rural municipalities. What is essential is to take into account that all local social agents can produce information in some form, and that this information, organized and made available, becomes valuable for all. And for the local educational system, in particular, it becomes a source of study and learning.<sup>9</sup>

The municipalities particularly deprived of adequate infra-structure can partner with regional scientific institutions and present support projects at higher levels of involvement. There are municipalities that also appeal to inter-municipal articulations, as is the case with consortia, whose efforts can thus be reinforced.

Organizing *local knowledge* normally does not involve producing new information. Diverse departments produce information, as well as companies and other entities mentioned. We also have basic information today that is organized by municipalities, by IBGE, in the corresponding Ipea/Pnud project, and other institutions, with diverse methodologies, and only slight articulation, but which could serve as a base. This dispersed and fragmented information should be organized to serve as a point of departure for a series of studies of the municipality or region.

Equally underutilized today there are even in little-studied regions old consulting reports, monographs in the region's universities, travel accounts, anthropological studies and other accumulated documents which can become precious from the point of view of generating comprehension of the reality in which they live from the standpoint of a new generation.

Without recourse to expensive consultants, it is sufficiently viable today to charter the methodological support for the organization and systematization of this information, elaboration of teaching material, supporting texts for reading, and so on.

The insertion of *local knowledge in the curriculum and in school activities* implies a significant modification relative to school routine which is more inclined to general primers that are repeated time and again. Inserting the local knowledge that the teachers still lack is the central difficulty. In this sense it seems reasonable, while organizing the production of support material for the teachers and students – the diverse information and studies about local and regional reality – to gradually start insertion of local reality into the studies through greater contact with the local professional community.

There are schools today that conduct "field work" in which students with clipboards visit a city or a neighborhood. These are useful but formal activities and not very productive when they aren't accompanied by systematic construction of knowledge of the regional reality. Nowadays any city has

community leaders that can present the oral history of their neighborhood or of the region they came from, businessmen or technicians in various areas, managers of health or even of schools that can express the reality of the difficulties of supervising social areas, farmers or agronomists who know a lot about local soil and its potentiality, and so on, artisans that can even attract young people to learning, and so forth.

An important dimension of the proposal is the possibility of mobilizing students and teachers to research the locality and region. This type of activity not only ensures assimilation of concepts but also intersections of knowledge between diverse areas, rearticulating information in the schools that are segmented into disciplines.

In other words, it is necessary to “rediscover” the sources of knowledge that exist in each region, ascribing value to them and transmitting them in an organized manner for future generations. Technical knowledge is important but it has to be anchored in the reality that people live in, such that its broader dimensions can be better grasped.

## Notes

- 1 INESC, “Transparência e controle social”, 2006.
- 2 “Jacksonville – Quality of Life Progress Report: A Guideline for Building a Better Community” (available at: <<http://www.jcci.org>>).
- 3 We developed this theme in the book *Tecnologias do conhecimento: os desafios da educação* (Petrópolis: Vozes, 2005 – Available at <<http://dowbor.org>>).
- 4 Availability of a basic computer for around 100 dollars, the aim of a series of international organizations, is in the state of rapidly materializing; solutions of general availability of broadband access as in Pirai (projeto Pirai-digital) show that putting schools on the same basic technological level became rigorously viable in a short time. The legal framework intended to provide internet access to all the schools of the country, with the resources of FUST, is in discussion.
- 5 There is a worldwide battle in the field of intellectual property, with various world corporations trying to make knowledge in general less accessible, through various types of protections. There is a strong countercurrent in the line of free access to knowledge. See, in this respect, the book of Jeremy Rifkin, *A era do acesso* (São Paulo: Makron Books, 2001).
- 6 Eliete Santiago, *Direito à aprendizagem: o desafio do direito à educação* (texto preliminar).
- 7 Ministério do Meio Ambiente – Programa Municípios Educadores sustentáveis – 2ª Edição, Brasília, 2005, 24p.
- 8 A report sent by Prof. Peter Spink, of the Programa Gestão Pública e Cidadania, FGV-SP, São Paulo; the program has followed similar experiences in Araraquara (SP); São Gabriel da Cachoeira (AM); Turmalina (MG); Sento Sé (BA); Três Passos (RS); Mauá (BA) and others. Access from: [inovando@fgvsp.br](mailto:inovando@fgvsp.br)
- 9 There is an old and sterile debate over the superiority of theory or of practice. In reality, there is no pedagogical superiority in the teaching of more abstract

conceptual visions relative to concrete local knowledge: it is a false duality, since it is in the interaction that the capacity to learn and handle their own abstract concepts is generated. This false duality has given place to absurd simplifications like “in practice theory doesn’t function,” thereby jeopardizing the theoretical apprehension of the problems.

*ABSTRACT* – It is essential for children to feel that the years they spend in school help them understand the reality they face in their daily lives. The child, more than an adult who has had the opportunity of visiting different regions, interprets the world in comparison with the city or neighborhood where they live. Their reference space is local space. Although it is prudent to forbid children from playing in a stream in the city, it only generates fear. Understanding how the streams flow and the concrete sources of pollution allows them to anchor abstract knowledge in living reality, and much later understand management of the waterbasins. Learning this representation based on their own neighborhood and the streets they know, will avoid having them later become adults who know how to memorize material in a geography class but be unable to orient themselves by reading a map, who know the length of the Nile but are incapable of reading a city map as an adult and who never studied the potentials and problems of the reality they will have to face. We are talking about a major investment, capitalizing on the child’s motivation for learning about what is around them, so they may much later be adults who know the origin of the cultural traditions that constitute their city, its economic potential, its environmental challenges, the rightness or irrationality of its organization as a territory, its social disequilibrium. Uninformed people do not participate, and without participation there is no development. Besides, how can we expect adults to participate in the development of their regions if they have never studied anything about them? We will consider the example of a small area in the Northeast, Pintadas, where children are now taught the characteristics of “semi-arid,” i.e., the actual problems in dry regions of agriculture, watersheds, environment and so on. We consider how to close the immense gap at an early point in education between formal curricular knowledge and the world in which each person develops. The author of this paper is an economist who in an era of knowledge economics is convinced knowledge needs to be shared in a more equitable manner. Teaching children to understand their own space can be a powerful instrument for stimulating children’s interest and promoting citizenship in adults.

*KEYWORDS* – Local Development, Participation, Local Education.

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