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Becoming the Village: Education Across Lives

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Introduction

An old saying has it that it takes a village to raise a child. As children, we know how much we need to learn about everything and everyone in our communities to live there successfully. As we learn, we gradually become our villages: we internalize the diversity of viewpoints that collectively make sense of all that goes on in the community. At the same time, we develop values and identities: in small tasks and large projects, we discover the ways we like to work, the people we want to be, the accomplishments that make us proud. In all these activities we constantly need to make sense of the ideas and values of others, to integrate differing viewpoints and desires, different ways of talking and doing. As we participate in community life, we inevitably become in part the people that others need us to be, and many of us also find at least some of our efforts unsupported or even strenuously opposed by others.

The challenges of living in a village define fundamental issues for both education and development. In his pioneering work on intellectual development, Lev S. Vygotsky (1934/1963) introduced the basic principle that the contents of our thinking and the habits of our lives originate in our social interactions with others. What we eventually come to feel as something within us begins first as something between us. At about the same time, Mikhail Bakhtin (1935/1981) was beginning to define the broad social diversity in how a community uses language to describe and evaluate the world. This is exactly the diversity we encounter in our dialogues and social interactions with others, and which we must learn to make sense of, and make sense with, in order to live and work successfully in our 'villages'. In this chapter I want to explore what it means for education to take this social-cultural view of learning seriously.

We may prefer one particular way of working, but because we must work together, we also learn how to collaborate. Some of us prefer telling stories, others like to argue; some like to draw, others prefer building things; but we

must all learn how our words and their pictures can be combined, and how building gets connected to drawing and to telling. We become individuals who like and prefer, but we always also gradually become in a larger sense the whole village. We learn to take part by learning how parts fit together. Over time we learn that there is nothing worthwhile we can do without a tool someone else has made, without combining ways of working we're comfortable with and ways we're not but others are, without taking into account viewpoints that are unfamiliar or unpleasant, without finding a way through conflict. What we do when we learn is to enter into social activities.

It takes a long lifetime to 'become a village'. Some routines can be learned in minutes, performed in seconds, but they only make sense when integrated into activities that may last for hours and are in turn small links in chains of interdependent projects that keep the village running and changing over the course of our lives and the community's history. We easily sense who we are and what we want in each minute's action, but it takes far more work and wisdom to feel our role and know our will across the longer term of years. In this view of human development, schooling today would seem to be paying too much attention to what we study and not enough to who we become; priding itself on what it brings into the classroom but blinding itself to all it shuts out; teaching isolated literacies but not how to make them work together; and creating many meanings for an hour but few for a day and none for a lifetime.

In this chapter I will focus on how and why we must learn to integrate language, visual literacies, and action itself in order to comprehend the natural world and our human culture: to 'become our village'. I want to pose questions about how our developing personal identities and values interact with our collaborative learning and activity. I want to question easy assumptions about how our efforts in each moment come to add up to the accomplishments of the day. Most of all, I want to ask whether this view of learning as 'becoming a village' can really be accommodated by the present-day institution of the school, or whether we should begin looking at more diverse systems to support not just learning, but getting an education.

Culture, History and the Activities of Learning

Many chapters in this book discuss the basic concepts of culture, history, activity and learning. What matters most to me are the relationships among them: how do we successfully learn through participation in social activities to become members of a culture whose long history is not yet over? When we start from the concept of learning alone, we tend to think only of the person who learns and to forget that *what* we learn is how to live successfully in a world of other people, and *how* we learn is by participating in the activities of our community. When we think of learning as something that happens

now, we may forget that that learning only has value if it lasts long enough to be put to use, and that we know much less about changes in behaviour that accumulate over years than we do about what happens in a minute or an hour. I want to explore briefly in this section some important relationships among these notions of learning, activity, culture and history.

I did not choose the term ‘village’ in the title of this chapter to romanticize the complex, large-scale communities most of us really live in, but because a village is not just a collection of people: it is also a place, filled with culturally meaningful artifacts and with all the elements of a natural ecosystem, to which people also give meanings. The activities that occur in such a real community involve the participation of things as well as people: books, buildings, bacteria, tools, machines, roads and trees. What we gradually learn when we participate in village activities is not just how to collaborate with other people, but also how to make sense of and make use of every part of our communities.

We are always learning how to participate in the activities going on around us – activities that have a history as well as a meaning. The meaning comes from a culture: a particular way of doing, believing and valuing that has evolved over times much longer than any one person lives to see. Each activity connects to others in ways that depend on what is materially necessary and possible, e.g. writing to someone depends on having tools which make marks that last long enough to be read, and on the activities in which those tools were made, as well as those in which the raw materials needed to make the tools were obtained, and even on the activities that physically get what we’ve written to the people who want to read it. But each of these activities is also connected to others by meanings as well as by material necessities: reader and writer must share a common language or code; we must be able to recognize the meaningful function of an object as a tool-for-writing or an object-for-reading; making the tools and transporting what we write depends on collaborative efforts that are only possible among people who make the same general sort of sense of what each other say and do. Culture-specific meanings help us select from all the materially possible ways of writing or using clay just those that will make enough sense to other people to allow us to get on with life together. What we all need to learn is how to participate in these networks of culturally meaningful social activities: conversations, games, reading and writing, tool-using, productive work.

Participation in socially meaningful activities is not just what we learn, it is also how we learn. Even if we are alone, reading a book, the activity of reading – knowing which end to start at, whether to read a page left-to-right or right-to-left, top-down or bottom-up, and how to turn the pages, not to mention making sense of a language, a writing system, an authorial style, a genre format (e.g. a dictionary vs. a novel) – depends on conducting the activity in a way that is culturally meaningful to us. Even if we are lost in the woods, with no material tools, trying to find our way or just make sense of

plants or stars, we are still engaged in making meanings with cultural tools such as language (names of flowers or constellations) or learned genres of visual images (flower drawings or star maps). We extend forms of activity that we have learned by previous social participation to our present lonely situation.

So far this story has been fairly simple. Now it is time to consider the problems and complexity that lie beneath the surface of these ideas about learning, activity, culture and history.

The Strategy of Schooling

We do not in fact learn to participate in every activity just by participating in it. If I walk innocently into an advanced chemistry research laboratory, most of what is going on will make sense to me only as simple actions: moving objects around, mixing and combining, putting things in machines that spin, reading numbers on a computer screen, but I will have very little idea what it all means. I will not know why people are doing what they are doing, or when is the right moment to do what. I will not be able to participate effectively in these activities in the way that chemists do, just by hanging around and observing. I might even become a useful assistant and follow simple instructions, but I would still not know why they were the right instructions. Only if someone patiently began to teach me the basics of chemistry would I eventually be able to learn effectively on my own in this laboratory. But teaching the basics of chemistry is not a normal activity in such labs; everyone who works there is assumed to know all that already, and much more. We live in a community where there are many such specialized activities that are not conducted in such a way that you can learn them just by participating: designing microchips or cancer drugs, auditing investment banks, conducting psychotherapy, diagnosing diseases, writing legal opinions, and so much more.

Our community has arranged itself in such a way that in order to participate in some activities, you must first have participated in others, often in other times and places, disconnected from the primary activity – most obviously in the case of schooling. Chemistry teachers and school chemistry labs are not working chemists or research laboratories; chemistry textbooks are not much like professional scientific writing. The strategy of schooling, in fact, always runs the risk of school becoming too unlike professional practice: a bridge to nowhere. Of course this does not mean that there are not also many activities that can be readily learned just by direct participation, or that there are not also ones in which it is quite normal to teach the basics to newcomers (cf. Lave and Wenger, 1991), but for those activities we have no special need for schooling, and by and large in those activities most people are eventually successful learners, quite unlike the situation in schools today.

Culture and History

We tend to use the word 'history' mainly to refer to very long periods of time: decades, centuries, millennia. In principle, however, everything takes time to happen; every process or activity that goes through distinct changes, stages or phases, has its own history, no matter how brief. For a human life, we tend to speak of a biography, or of the trajectory of human development over the lifespan. Even the speaking of a sentence, or the teaching of a lesson, however, has such a trajectory through time, a micro-history; and we have to pose the question of how these little histories of moments and hours come to add up to the longer history of a life or a community.

The notion of 'a culture' or 'a community' or even 'a language' becomes much more complex (and interesting) when we look at it in this historical perspective. There are no known communities where all the members participate in all the activities (tell all the traditional stories, perform all the traditional rituals, do all the typical daily routines); there is always a 'division of labour' in the sense that some people do some activities and others don't. Men and women play different roles, so do younger and older members, and very often different families, clans or lineages have their own specialized stories, songs, dances, crafts, designs, etc. It is not true that members of a community normally share all their beliefs, values, habits and practices. What is true is that all the different lifeways of groups and categories and individuals somehow fit together, are organized or articulated with one another, so that the community as a whole manages to continue to function. This is not just true of modern multicultural societies; it is true of all human communities. And this state of affairs is itself a product of the community's history.

There was a historical period in the eighteenth and nineteenth centuries when, for political reasons, many governments and those who benefited most from their rule propagandized the idea that 'national cultures' were far more 'pure' and homogeneous than is ever really the case. Culture wars were fought against 'invasions' and 'corruptions' of national cultures and national languages by outside, foreign influences. 'Standard languages' were established by the powerful to pre-empt competition among the wide variety of regional, social-class and ethnic dialects that exist within the artificial boundaries of every nation-state. Among the many myths of that period that we still live with today is the belief that a high degree of linguistic and cultural homogeneity is necessary for effective communication and cooperation within a society. There are simply too many counter-examples from too many times and places in human history to take this assertion seriously. Its primary function today is still to reinforce the artificial advantages of the dominant social groups: those who have unilaterally declared that their own language patterns and activity styles should set the standard for all the rest of us.

In these and many other ways history and culture shape and prescribe what we need to learn and what ways of learning will be available to us. But

this is only half the story. What we do now and later, and what others do, makes history and culture. But how? How do the activities in which we learn determine culture and shape history every bit as much as history and culture shape what and how we learn? How do all the moments of all our lives add up to the history of a community? And what does this tell us about how learning could be different from the way it is today?

Across the Scales of Time

How do moments add up to lives? How do the brief activities of an hour add up to the accomplishments of a day, many ordinary hours and days ensure the continuity of social institutions, and the small differences of every action and moment accumulate into the radical changes of history?

Because this is a very large question, let's take it first just for the case of individual development. Imagine that a student in a classroom is engaged in a brief dialogue with a teacher that lasts maybe a minute or less. How can that experience possibly contribute to the formation of the student's personal identity? The notion of identity belongs to a much longer time-scale for characterizing people than the time-scale of short conversations. And yet an identity, a persistent belief or attitude, or even an enduring skill, must have its origins in such shorter-time events.

If we teach something, and the student learns it, does it stick? How do we know? All teachers realize that change in beliefs and identities, and the acquisition of persistent skills, takes time; more time than any one interaction or lesson. There may be 'breakthrough' moments, critical points on the pathway of development, but the pathway itself extends over a longer stretch of time. Each breakthrough has been prepared by many prior experiences, and the effects of that special moment can easily fade, or even be erased or reversed by other later events. It is only over the long haul that serious change happens.

Memory as Re-enactment

What binds one moment, one experience to another? We are accustomed to using the notion of 'memory' as our only answer to this question, but the idea of individual memory treats learning only from the viewpoint of the individual organism, and does not look at the activities in which we participate and all the people, places and things around us that help make memory work. When I return to streets in a distant city I have not visited for years, each new vista evokes memories that I could never have recalled otherwise; indeed contemporary theories of dynamical memory (e.g. Edelman, 1992) suggest that memory is not something stored like a map or picture in my brain, but is a partial recreation of my perceptions and actions, of a prior

experience of being in a place and moving through it. Remembering is a process that takes place in a system that includes both me and some parts of my physical environment. Retracing my steps from years ago with recognition of the streets is one aspect of the whole complex activity of 'walking-there', in which my brain, my muscles, my eyes and the streetscape itself are all participants. Memory is not autonomous within the organism; it is an interactive process of engagement with an environment that re-evokes past similar engagements.

From walking a streetscape to reading the wordscape of a book is a small, if historically crucial, step. As I reread a familiar text, I renew old engagements with it. The marks on the page (like the landmarks on the street) are physically co-participants in the activity of 'reading-there'. If that page is from my student notebook, those marks on paper made in yesterday's lesson, then retracing them with my eyes (or pencil) can re-evolve a whole sequence of thoughts and events from yesterday; indeed I might well start writing again at that point, taking up where I'd left off. Students do this with notes and doodles; professional writers with yesterday's first drafts. Were there no doodle, no draft, some activity would still occur, but it would not be the same one. Meaningful material objects, shaped in one moment's activity, can provide the link to another, related activity in a later moment of time. And the result is the construction of continuity on a longer time-scale than that of each momentary activity.

The human body is itself such a meaningful material object that is shaped by time, and bears the traces of our past activity. Our memories are not just in our brains, but in our muscle tone, in the chemistry of our blood, in every physiological part of us that 'remembers' or persists for times long compared to the time of the events that change them. A string on our finger, a cut on our skin, the twinge of an old injury, a sensitized allergy, just like the writing in our notebook, meet the requirements for binding us across time. Each brief event becomes linked into longer chains of events, into activities and projects, processes that take hours, days or years to unfold. The linkage is formed by every persistent feature of the body and its meaningful physical environment that lasts long enough to bridge from one such event in the chain to another.

How do we link across the scales of time, from the short time-scales of moments, to the longest time-scales of a lifetime, in making and maintaining our personal identities? And what does this have to do with learning?

Identity and its Props

An identity says something about who we are, to ourselves and perhaps to others. It is partly relational: who we are not, among the choices our community offers us. It is partly uniquely individual: who we have made ourselves

be and how we imagine ourselves to be, across many different experiences. At times we are different people: in different activities, in different domains of our lives, with different partners-in-action. But we have also learned the cultural habit of constructing a certain consistency and continuity, a core identity that links all the different people we are into some sort of unity. How do we do this across moments and events, experiences and activities?

We do it by the clothes we wear, the music we play, the books we read, the places we return to, the diaries we write, the people we see again and again, the things we tell ourselves over and over. Above all, by the things we do time and again, renewing our participation in the activities that are typical for us. In all these cases, we are making use of material cues and reminders that tend to keep us in our preferred groove, being the self we want to be.

What about school activities? Which of all the activities that go on in classrooms and schools are the ones through which we are building and maintaining an identity? Is it the rude joke we tell or the smart answer we give that means more for our identity? Does solving equations fit into the 'identity kit' (cf. Gee, 1992; Walkerdine, 1997) we are fashioning for ourselves? Does writing poetry? Analysing maps? Dissecting a frog? Playing basketball?

Identity and Learning

Identities are not phenomena of the moment, or the hour. What matters to the formation of an identity is activity that is reinforced over the long haul, and fairly frequently. An identity that is favourable to science, or to literature, or to sports, is not constructed just in science class, English or physical education. It has to be nurtured, by us and by others, in more parts of the day than a single classroom hour, outside school as well as inside, after school and after schooling. But our curricula are not designed in these terms; we believe we are teaching knowledge, rather than building character. In most education there is no real effort to integrate experiences in school and outside of school; indeed the academic curriculum all but rejects as worthless or irrelevant nearly all that happens to students outside of school.

Our identities are usually also typical of our culture and our historical period. The material artifacts that last over these much longer time-scales, and with which we interact in ways that make our identities reflect our communities and our times, have meaning for us mainly through the media of our culture's representational tools: written language and visual literacies, whether pictorial or diagrammatic. These are the media through which communities bind themselves together across the longest periods of time and with the most specific and detailed meanings, carrying the most information at the least material cost. There are of course also other persistent material media, like architecture and machines, or designed landscapes and cityscapes, that

embody less information and require great material cost, but also link the largest numbers of people over the longest times. These may, some day, be joined by today's new media: simulations and computer programs, and the multimedia and hypermedia that our technologies are making it easier and cheaper for more people to create, use and circulate widely.

Learning the Media of Social Collaboration

A lot of education today is still oriented to teaching students to read, write and use various kinds of specialized written materials, their accompanying diagrams, and sometimes mathematics. But we teach the content, not the medium. We teach students scientific and technical vocabulary, but we never point out how science systematically turns verbs into nouns and why it does so. We rarely if ever explicitly teach students how to talk science (Lemke, 1990) or how to write science (Halliday and Martin, 1993) and show them how it's different from (and like) telling a story or writing one. We barely teach students the rudiments of how to draw, considering that skill an expendable luxury, yet the construction and interpretation of complex diagrams lies at the heart of our technical civilization. If few of our students can express themselves by writing fluently in more than one register (scientific, historical, rhetorical, narrative, poetic, etc.), fewer still can express their ideas fluently through drawing either diagrams or pictures. And no attention at all is paid in the curriculum to explaining how complex meanings are expressed by combining words and graphic images.

All media are multimedia. Plain written words are not just language, they also carry meanings that are visually organized: by the choice of font, page layout, headers and footers, typography, paragraphing, etc. Much that we read, we also interpret not just verbally but also by visualizing images. A bare image likewise is interpreted in part through the medium of language. Increasingly, most of our popular and specialized genres of communication are also explicitly multimedia ones: from printed magazines, to textbooks, to webpages, to technical articles and manuals, to business documents, presentations and corporate annual reports. Cheaply printed, unillustrated fiction is one of the last single-medium genres. More obvious still are multimedia such as television, film, and the computerized animation, sound, and video hypermedia that are likely to take over from traditional media for many purposes during the lifetimes of today's students.

Students desperately need to know how to critically interpret combinations of words, pictures, maps, diagrams and specialized symbolic expressions. They need to understand that there are different conventions for doing so in different fields and in different genres. And increasingly they need to know how and when and why to combine these media to express their ideas. It is hard to say to what extent new technologies and methods of teaching will

make all students reasonably fluent in multiple media, but I think it likely that individual identities will still fit better with some media or some multimedia genres than with others.

As I said at the beginning: we may prefer one way to work, but because we must work together, we also learn how to collaborate. If we expand the multimedia mix beyond words and images and videos and animations to include the building of structures, the design of machines and the creation of human environments and activities, then the principles of how to combine all our systematic resources for making meanings that last and bind people together across time become fundamental to what education seeks to do. But what kind of educational institutions can be successful at this task?

Beyond Schooling

Students in schools today are deeply alienated from the curriculum. For many students school presents an alternate reality that bears no obvious connection to the rest of their lives. Some take it on faith that obedient conformity will lead to later financial rewards; many are justly sceptical as to whether that promise applies to them. Schools as institutions are isolated from the mainstream of both public and private life. Far from helping students to understand the village in which they live, schools become micro-villages in their own right, with their own typical activities that are only distantly related to those outside. The range of activities that occur in schools is narrow and impoverished in its diversity compared to the activities that define the reality of the larger village (see also del Río and Álvarez, this volume).

Consider an example. We have a curriculum for teaching 'science', but by that we only mean teaching students highly simplified accounts of the product of scientific activity: the descriptions and explanations that scientific activity results in. We teach students almost nothing about living, working, professional scientific activity itself. They never meet a real scientist, they never see a real scientific article, they never visit or even see a video of what happens in a real scientific laboratory or field research site. They learn nothing about the dependence of scientific activity on technology or on funding, or about how and why scientists write, calculate and draw diagrams the way they actually do. No connection is made between the science curriculum and the uses of scientific ideas in designing and maintaining the physical plant of the school, the technological infrastructure of the neighbourhood, or the local urban, suburban or rural ecosystem. The real concerns of the students, whether about drugs, sex, disease, food, clothing or music, play no part in the curriculum and no connection is made between them and the important scientific issues that underlie each of these legitimate student concerns.

What do students learn in school about the economics and politics of their own local communities? About jobs and employment, about personal finance

and legal rights, about crime and its causes? What do they learn about popular culture and its relation to older and longer traditions of fiction, art and music? About the television programmes and films they watch, the music and videos, the games they play? Where does any part of the curriculum, so proud of its 'high intellectual standards', connect in any way with the typical activities and identities of students? (Cobb and McClain and Dalton and Tharp, this volume, show how this can be different.)

If identities must be developed and sustained over time, how can schooling afford to so isolate itself from the mainstream of student identity-formation and still consider itself to have 'educational' value? If the purpose of education is to understand the complexity of the communities we live in and how to participate successfully in collaborative social activities over long time-scales, how can this happen if education continues to be dominated by institutions of schooling that isolate themselves from the rest of social life and organize learning only on time-scales measured in minutes?

Is it wrong to describe schools as buildings consisting of empty rooms where too many children and too few adults talk about or enact pale simulations of the rich and varied activities of the community around them, rather than actually observing or participating in those activities? I have already pointed out that many of the activities of a complex community cannot be learned just by observing and engaging in a 'legitimate peripheral participation' in them (cf. Lave and Wenger, 1991), but that does not justify boycotting all direct contact with life outside school. We do need times and places of retreat and contemplation to review, critique and question activity away from immediate engagement in it. But we need them in order to reflect on direct participatory experiences, not as a substitute for such experiences.

Organizationally, schools minimize the opportunity for long-term intellectual and identity development by severing the bonds between teacher and student every several months, disconnecting the study of each subject from all the others, and even dividing the day into periods defined by a clock rather than by the needs of learning. The whole point of intellectual and identity development is to learn to integrate experience over progressively longer time-scales, but the institutional arrangements of schooling seem deliberately designed to thwart this effort. How often do students get the opportunity to engage in sustained learning projects that stretch their abilities to organize activity across longer time-scales? And what kinds of projects could engage the interest and attention of students on these longer scales?

Schooling is just one, relatively recent educational arrangement. We all know that today many functions of classroom education are becoming technologically obsolete. Students will soon learn how to get information they need on any subject, including explanations and help in understanding them at their own level, from searching for sources on the internet, as they would in any really good library. The teaching of many basic concepts and skills will soon be packaged attractively in combinations of videos, animations, simulations

and interactive games that will be easily accessible (if not always cheaply priced). There will be increasing economic pressure, starting with the later grades, to spend taxpayers' money on subsidizing students' access to these packages and only paying for live teachers and classes when they can demonstrate a clear superiority of results.

New technologies can often do the job of simulating and talking about the typical activities of the community far better than the average teacher in the average classroom. Technologies will not, however, be able to substitute for direct participation, nor will they be able to replace thoughtful guidance of students' critical reflection and analysis, nor the emotional encouragement of achievement and creativity that live teachers provide. For these purposes professional teachers will always be needed, especially for younger students. Schools will become places where students and their teachers decide together what comes next: collaborative projects, participatory internships, multimedia study modules, specialized learning activities, places to see and things to do. Students will participate in online peer-discussion groups, in cross-age groups where they can learn from older students and teach younger ones, and they will also have online access to a wide range of part-time mentors who mainly live and work in the world outside schools.

Teachers will not, however, become merely managers of such multi-resource learning systems. They will be concerned with the long term, with who each student is becoming, with how all that learning adds up to an education. They will maintain contact with students over many years. They will take responsibility for posing the difficult questions: about life, about self, about social justice. Again and again, over the very long times it takes to engage seriously with serious matters. A village is not built in a day.