The Role of Teachers' Personal Practical Knowledge in Effecting Board Policy. Volume IV: Teachers' Personal Practical Knowledge and Race Relations.


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Teachers' utilization of personal practical knowledge in effecting school reform was analyzed in a three-year project in a Toronto inner city elementary school. The major unit of study was the school, investigated through the eyes of people responsible for school policy. The study focused on the school board's Race Relations Policy and Inner-city Language Development Policy, and is presented in four volumes. Participant observers noted the activities of the principal, teachers, and one teacher in particular to determine the key factors affecting their practice in school and classroom. Then these practices were explained in terms of the staff's personal knowledge. This fourth volume, which contains three chapters, deals specifically with the Race Relations Policy as it is put into practice. Chapter 11 (following from chapter 10 in volume 3) examines the implementation of the policy from the perspective of personal practical knowledge. Chapter 12 shows how personal and cultural narratives are expressed and how they interact. Chapter 13 summarizes personal practical knowledge as practitioners' way of knowing their school and classroom, and as the determining influence on practice, especially as it concerns race and ethnic relations. (MCK)
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GENERAL INTRODUCTION

This study develops the concept of teachers' personal practical knowledge through a three-year project undertaken in a Toronto inner-city elementary school. Using the method of participant observation, researchers carefully noted the practices of the school principal and teachers, focusing on one teacher in particular, to determine the key factors affecting their practice in school and classroom.

The central purpose of the study is to deepen our understanding of the practice of education by illuminating the actions of practitioners. What teachers and principals do in their schools is explained in terms of their personal practical knowledge, a concept that includes the associated notions of image, narrative unity, ritual, and rhythm. These notions arose out of the researchers' close interaction with school practitioners over the period of study. The results of the project have important implications, not only for an understanding of practice, but also for an insight into how practitioners view school board policy and how they go about implementing it.

This report is organized into four volumes with a combined total of thirteen chapters. Volume I, entitled Problem, Method and Guiding Conception, contains four chapters. Chapter 1 provides an overview of the study, Chapter 2 gives a detailed summary of its activities, and Chapter 3 provides an account of its methodology. Chapter 4 presents an analysis of the various "images" people have of the relationship between theory and practice, and draws on the researchers' experiences in the present study to show how the images held by board and school personnel influenced its shape and direction.

Volume II, Development and Implementation of a Race Relations Policy by the Toronto Board of Education, deals with the specific policy selected for purposes of this study -- the Race Relations Policy. A history of the development of the policy is given in Chapter 5, along with an analysis and discussion of the concept of race that emerged during the process of development. Chapter 6 presents a detailed account of the implementation of the policy, describing the activities of the Race Relations Committee and interpreting its work as an agent of policy implementation. As well, the chapter describes the actions taken by board officials to ensure that the policy was reflected in the curriculum materials used in classrooms.

Volume III, Personal Practical Knowledge, develops the central concept of the study and introduces several associated concepts. Chapter 7 introduces the notion of personal practical knowledge, built up through close observation and interpretation of events in the inner-city school under study. Various associated concepts -- image, narrative unity, and ritual -- are
subsequently introduced to help explain their actions. The notion of image as a personal knowledge construct exerting a powerful influence on practice is developed in Chapter 8 in connection with one teacher's image of the classroom, and further elaborated in Chapters 9 and 10 in connection with the principal's image of community. Chapter 9 also discusses the function of rituals and personal philosophies in school practice, and Chapter 10 develops the concept of narrative unity as a way of giving an account of a principal's school practices. The concept of narrative unity is then broadened to include cultural narratives, which provide a context for personal narratives. These notions are used to shed light on the relationship between school and community.

Volume IV, *Personal Practical Knowledge and Ethnic Relations*, begins with an account of the Board's Race Relations Policy as it is put into practice in the school under study, using the perspective of personal practical knowledge (Chapter 11). Chapter 12 shows how personal and cultural narratives are expressed through cycles and rhythms, which find their place in the interaction of these narratives. Cycles are shown to have an affinity to the broader societal context, and rhythms to the personal world of the individual. The role of cycles and rhythms in modulating school and community relations is described. Finally, Chapter 13 summarizes personal practical knowledge as the way that practitioners "know" their school and classroom and the determining influence on how they deal with matters such as race and ethnic relations. The chapter closes with recommendations for using the knowledge gained in this study to enrich classroom practice.
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Chapter 11
THE POLICY IN THE SCHOOL

In this final volume, we undertake the task of giving an account of the Race Relations Policy in Bay Street School from the perspective of personal practical knowledge. Our question here is, "How do we see the Race Relations Policy in the practices of the staff at Bay Street School? In order to answer the question, we need to summarize briefly our perspective on inquiry into schools.

11.1. THE NARRATIVE PERSPECTIVE ON INQUIRY INTO SCHOOLING

Our research seeks to give an account of school practices in terms of the participating individuals' narrative unities. Narrative unity has been defined in this study as a continuum within a person’s experience; experiences are made meaningful through the unity they achieve for the person. Unity means the union, in a particular person in a particular time and place, of all that he has been and undergone in his own past and in the past of the tradition which helped shape him. Johnson, in a review of our work, remarks that understanding classroom practice "would involve examining the images and metaphors that structure, not just teacher's classroom knowledge, but also the personal knowledge and human affairs, personal past history, and so forth that any teacher brings into the classroom experience. That is, we need to begin looking at the dominant images and metaphors of the teacher's entire world, in and out of the classroom" (1984).

This notion of narrative unity and what it entails in inquiry expresses the narrative perspective on inquiry into schooling. We understand classroom actions as events invested with meaning through the images and metaphors developed through the teacher's narrative of experience.

The method is one in which increasingly more complex narratives are written. These are based on daily observations, interpretive accounts of them,
and dialogue with participants focused on narrative antecedents to events described in the accounts. The data, gathered by participant observation, interview and text analysis methods, become telling as they acquire meaning within the context of the developing narrative. It is not easy to predict what will pass as telling data, nor is it easy to justify data gathered as telling. Any item of data, considered in isolation, could provide evidence for any number of possible narrative unities. The justification for the use of any item thus depends on the plausibility of the written narrative, and this plausibility depends, in part, on the way in which a complex web of observation and interview data is woven into the account.

The power of the perspective to shape the inquiry is seen in the non-judgmental character of the narratives presented. The meaningfulness of an act is reconstructed in terms of personal and social narrative history. For some readers, the narrative perspective appears unsatisfactory, since teaching actions which distress them are treated in the work as meaningful. The goodness of a particular act is judged from the teacher's perspective; judgment of an act's social and educational goodness according to external standards is outside the frame of reference of the narrative perspective. In our work, individual acts are never judged. But the continuing act of inquiry within schools, and the resulting understandings, are set within a particular dialectical view of school reform.

11.2. THE RACE RELATIONS POLICY IN BAY STREET SCHOOL AND PERSONAL PRACTICAL KNOWLEDGE

From our perspective on inquiry into schooling, we do not "see" the policy in Bay Street School. We see Bay Street School and its practices, including those touching on the board's Race Relations Policy, in terms of the participants' narrative unities. The research did not begin with school board policy intentions and follow with a search for school accomplishments. We could, however, envision such a study in Bay Street School. We could have begun with the intentions of policy developers and central office personnel and used these as a yardstick to measure the achievements of Bay Street School. In such a study, we would have looked for such things as school procedures for handling racial incidents, procedures for screening new books for racial and
sexual bias, and new programs fostering racial and ethnic integration. We have not done such a study.

The study we did do began with actual school practices rather than with policy. We looked at these in terms of the individuals' personal practical knowledge. We were concerned with their narrative histories and with the experiential underpinnings of the practices we observed. Policy played a role in that it formed a part of the teachers' theoretical environment, and was thus part of their history. Our interest was in the ways teachers pursued their practical ends in the context of the policy.

While the policy as a document is not in evidence in the school, we are sure that if we asked to see it, various staff members could retrieve copies from shelves and drawers. But the policy as it is lived out in the lives of those who participate in Bay Street School is very much in evidence. It is manifested in the rhythms and cycles of the school and in the practices of teachers who try to "connect" with the narrative unities of students of all racial and ethnic origins. These topics are treated in depth in Chapters 12 and 13.

Within the school, we see the policy expressed in ways we would not have anticipated when we began. From our narrative perspective, however, we are not surprised when we see how the policy finds expression in individual teacher's practices. We understand practices in terms of the teacher's narrative history embedded within cultural and historical narratives. When we see Stephanie using new books that portray children of different races in the Canadian culture, we can see the results of the Race Relations Policy, for we know that the community consultant for the Human Rights Leadership Project had made suggestions on appropriate literature. We could assume a simple causal relation. However, we understand Stephanie's practices within her narrative history and we see her use of the literature as the beginning of a new interconnected narrative unity. The new practice, from our perspective, forms part of Stephanie's narrative. Chapters 12 and 13 develop these ideas further.
Chapter 12

CALENDARS, CYCLES, HABITS AND RHYTHMS:
THE CELEBRATION OF DIFFERENT CULTURAL TRADITIONS

This chapter develops the concepts of "cycles" and "rhythms" as part of personal practical knowledge. The central actors in this account are Phil Bingham, Bay Street School principal and Stephanie Winters, a primary division teacher in the school.

12.1. THE CHINESE NEW YEAR AT BAY STREET SCHOOL

The stage is set in this chapter by the school's celebration of the Chinese New Year, January 25, 1982. Readers of Chapters 9 and 10 will know that the Chinese community was at the centre of a school-community crisis. Try to imagine the high level of activity these notes portray and the extent to which the celebration disrupts school activities and classroom programs.

I was struck with the high level of enthusiasm around the Chinese New Year. There was a lion dance in the morning with a group of students in traditional costume, a highly elaborate lion's costume with a papier mache head and a couple of papier mache masks and drums. These children paraded through the school visiting classrooms. Phil was with them carrying cabbage as the traditional offering. We saw this parade outside of Ruchama's classroom. Ellen was having a Chinese New Year party in her classroom and Brenda told us that she was taking her students through Chinatown. Stephanie was having the students read Chinese stories; they were working on Chinese expressions; they painted a large cardboard dog because it was the Year of the Dog; they were making Chinese lanterns and there was considerable activity around this. Ellen's classroom had a Chinese meal and various Chinese treats. Both classrooms had an emphasis on the little red envelopes that contain money and are given to children on Chinese New Year. Ellen also had her students figure out what year they were born in the Chinese calendar. (Notes to file, January 25, 1982).

In these notes we see a full-dress traditional Chinese New Year parade in
the halls; we see teachers having a Chinese New Year party; we see teachers organizing art and language arts programs and involving children in writing and making activities around the celebration; and we see children eating traditional foods and receiving traditional gifts. We even see a mathematics lesson as pupils calculate their year of birth on the Chinese calendar.

These school events parallel annual city and community celebrations: a gala parade through Chinatown, well-attended and televised; elaborate Chinese feasts, community centre parties with food and gift-giving, and smaller family celebrations.

Having spent a year in Bay Street School, we had come to expect such school events as the Chinese New Year celebration. Indeed, given Clandinin's work in Stephanie's classroom and our observations of the principal, Phil, we would have been surprised at the lack of a celebration. Some six months earlier, for example, in a discussion on the school calendar, Phil made reference to wanting to know when and how various ethnic groups celebrated their holidays.

Phil then said he wanted to discuss Duwalli, the East Indian Festival of Life, with Cynthia. He drew out an almanac, in the form of a school calendar, from the Red Deer Community School. He marked Duwalli into his own book. He then said he wanted to find out how one should go about celebrating this event. (Notes to file, October 22, 1981).

To our knowledge, no teacher objected to these celebrations and to the disruption they created. But it is easy to imagine critics who would view them as little more than window dressing, a high profile activity designed to gain favour with the Chinese community and to draw favourable board attention for promoting Race Relations and Multiculturalism policies. One teacher from another school did, in fact, make such remarks about similar activities in a board-sponsored race relations training session. In this teacher's view, sprinkling cultural events throughout the school year contributed little to improving race relations.

If one had only a passing acquaintance with Bay Street School, its principal, and teachers such as Stephanie, one might interpret its Chinese New Year celebration this way. Our interpretation of the celebration and of Phil's
urge to extend the calendar of celebrations is, however, to see them as an expression of his image of community. This deeply held image grows out of the narrative of Phil's life, rooted in a small island community and intensified during his career as a community-oriented teacher and administrator. It is an image which places community before school and construes both in community terms. The image has an organic unity in that as part of the community, the school functions to serve it.

With this interpretation it is easy to see why we expected the Chinese New Year celebration in Bay Street School. We expect a principal living out this image to initiate such events; to go to the trouble of borrowing, at some financial risk, elaborate, authentic costumes; to convert the school, for a day, into a Chinese community and, in an important sense, to make the school into a community centre. We are not surprised that Phil encourages teachers and children to visit Chinatown and to bring the Chinese community into the school. He is not concerned with window dressing; this is the way he lives out his idea of a school and its relationship to the community.

However, we remind readers of the confrontation between the school and its Chinese community. We explained the anomaly of a community-oriented principal in conflict with a community group by arguing that the principal and community each has different notions of schooling embedded in their own historical and cultural narratives. These narratives lead to different images of schooling and of the school's relationship to the community. Where those differences collide, confrontation occurs.

The problem with this explanation is that we are left with mere confrontation; different narratives yield different personal practical knowledge and differences with no basis for resolution. The ideas of image and narrative unity might, in fact, lead us to expect irreconcilable conflict. Yet schooling does go on; crises are resolved; and, by and large, rough edges are smoothed out and the school proceeds through its annual cycle. Thus a new problem for inquiry is presented: how to reconcile the crisis involving a particular community group with school celebrations of the traditions of that group. How is it that something so intense passes, that the community group's culture is celebrated, and that the business of schooling proceeds?
One way of interpreting this "calming of the waters" is that those in positions of authority, the principal, school-community relations officers, superintendents and the Board, have silenced criticism and have brought the school into line. But interpretation of these events in terms only of power and dominance is inadequate. If, however, we reexamine the events in the light of the points of tension noted, what we see is a cultural expression of personal practical knowledge in the form of cycles and rhythms. The cycles of the community and its rhythm and the cycles of the school and its rhythm momentarily clash, proceed through a period of friction, and return to harmony. To develop this understanding we return to the Chinese New Year celebration and to our ideas of cycles and rhythms. We begin with their simplest form, calendars.

12.2. CALENDARS AND CYCLES

So far, our interpretation of the school's Chinese New Year celebration is in terms of Phil's imagery. In what follows we shift our interpretive stance from the personal to the cultural to view events, in part, as the expression of a cultural calendar.

What do we mean by a calendar? All boards of education have a calendar marking a series of culturally defined events, such as the Christmas and Easter recesses, Thanksgiving Day, and so on. Additional cultural events are added to the board calendar at each school. The resulting list of formal and informal school-wide events marks the school's year and constitutes the school calendar. This calendar has similarities to the familiar kitchen calendar, in which the days and weeks are marked by mainstream cultural holidays and others. We personalize our own calendars by marking on them additional events important to us. Similarly, the Bay Street School calendar is "personalized" by Phil and other school members in terms of Bay Street's specific community. Just as the kitchen calendar is common to us all, so too the board calendar is common to all schools in a board. And, just as in our private lives we add our own events to the kitchen calendar to make up our personal one, so too Phil adds local cultural events to make up Bay Street's calendar.

These reflections on general and "personalized" cultural calendars
suggest the possibility of discord. Consider that the school board calendar must be followed regardless of the teachers' and students' cultural traditions. It is given to the school by the dominant culture and dictates the organization of the school year. For many, however, the cultural events represented in it have little or no connection to the narrative embodiment of their own culture. This is particularly true in the inner-city environment of Bay Street School, where so many different cultures are represented. Whatever meaning the "mandated" cultural events have for minority groups is necessarily constructed out of sources other than the cultural traditions which gave rise to them. Their meaning becomes an "observers' meaning". Just as Canadian-born Irish might say, "Isn't the Lion Dance interesting?" and thereby miss almost entirely its cultural meaning for the Chinese community, so too many Bay Street School members might say, "Isn't Christmas interesting?" For teachers and others who are members of the majority culture, the personalized calendar is a fine-tuned version of the general one. But for members of the minority culture, the two calendars may be out of harmony; some of the general holidays may hold little meaning for them, while their own may be celebrated at the displeasure of the board.

Other sources of disharmony in school calendars are the cycles superimposed by the board on the cultural calendar. There are cycles of professional development days, mandated by the board (three in each semester at Bay Street); evaluation cycles, (December, March and June); the daily cycle of bells announcing beginning and ending times for the day, recess and lunch break; and the program "day" cycle which, at Bay Street School, is a six-day cycle.

Cycles are sequences of events in a calendar which have beginnings, middles and ends. The end brings one back to the beginning and the cycle repeats. For example, the yearly cycle of school terms brings one back to the beginning term following a summer recess, and day six leads directly into day one in the "day" cycle. Cycles have a sense of steps regardless of persons. Indeed, this is the most striking feature of cycles from the point of view of the personal knowledge of school participants.

Cycles normally have logical meaning from an external, objective point
of view. The "day" cycle, for example, may reflect the need to restore periods lost on holidays, which tend to fall on Friday and Monday, so that a proper balance is obtained. Cycles, therefore, may be objectively logical, and their meaningfulness also objective. Their objective origin may be in the culture, as with calendar holidays, or in the school program, as with the "day" cycle. The extent to which this objective meaning of cycles acquires personal, subjective meaning for a teacher depends, in important respects, on the teacher's rhythms. Rhythms, as we shall show, are important in defining personal rationality.

Indeed, externally imposed cycles frequently conflict with personal teaching rhythms. Consider, for example, the incongruity between a six-day cycle and a five-day week. Because they are so deeply embedded in North American culture, five-day weeks are part of our rhythms of living. We have a sense of Monday beginning the working week and Friday ending it (even though the calendar week begins on Sunday). But in schools, Monday may just as easily be the end of the six-day cycle as the beginning. Teachers and students are forever checking their books to determine the cycle's "day", and the "day" is prominently displayed in the school office and on blackboards to remind those who forget. The reason for all this checking, of course, is that the cycle, objectively defined and imposed, contains little personal meaning in the lives of school participants. Teachers have little "sense" or feel for the program "day". But it is a rare teacher who does not "feel" that it is Friday and that the end of the school week is approaching.

This incongruity teachers feel with the cycle shows up in the curriculum. Teachers tend to plan curriculum in terms of the year, the months, and the weeks. For many, even lessons have a rhythm connected to the week; spelling lessons, for example, often begin with new words on Monday, exercises through the week, and a test on Friday. The six-day cycle throws rhythms such as these out of phase.

In order to illustrate further the notion of cycles and rhythms and to explore their interaction, we trace another event in the life of Bay Street School, the lengthened school day.
12.3. THE LENGTHENED SCHOOL DAY IN BAY STREET SCHOOL

The next set of field notes describes an early May, 1982 staff meeting in which the board of education's directive changing the length of the school day for the 1982-83 school year is raised. For several years the board had adopted a flexible interpretation of the government's definition of the school day, the upshot of which was that Bay Street school had one-half hour less between opening and closing bells than intended by government legislation. The government was now requiring the board to comply with the legislation. When the staff discussion took place, Bay Street's school day began at 9:00 am and ended at 3:22 pm, with 90 minutes for lunch, a 20-minute morning recess and no afternoon recess. During the staff meeting, several controversial staffing models were debated. The quiet, relatively accepting response to the change in the length of the school day gives little hint of the significant school effects it brought about.

Jane then said that they needed to consider the original model. She said when we are voting on that you must consider that we are also voting on the length of the school day.

Roger Jones said something about objecting to Board policy and Jane said that all we can vote on is the opening and the closing times. She said that we can decide on those hours.

By this time it was already well after one o'clock. This had been the first mention of the hours of the school day. Roger asked if they were voting on the two recesses for the senior school and Jane said "no."

Phil then spoke for a couple of minutes. He said they had to look at the problem of time. He said 9 to 4 were the hours they (the staffing committee) had come up with and 5 hours were mandated. He said they also needed to allow for a 40 minute uninterrupted lunch hour and they needed to have two recesses in the elementary schools. He explained to me in an aside that the 5 hour school time period, the 2 recess periods, and a 40 minute uninterrupted lunch period were government policy and the Board was now putting it into effect. (Notes to file, May 5, 1982).

The staffing committee's model and proposed alternative models occupied most of the meeting. It was not until the end of the meeting, after some teachers had already left, that the issue of the lengthened day was raised. This was not the focal point of staffing committee discussions or of the May 5 meeting. As events unfolded in the new term, however, this apparently smaller matter became significant in the teachers' day-to-day work lives.
What was on the staff members' minds in May, 1982 relative to the lengthened day was new government legislation on school finance for all boards in the province. Bay Street's board of education offered special inner-city programs which were, in many people's view, jeopardized by the new legislation. Because Bay Street's board is one of the largest in the province, many felt that the legislation was aimed directly at bringing its programs into line with those of other boards. The lengthened school day was seen by Bay Street teachers, and others in the board, as simply another sign of the provincial government's crackdown on the board.

This perceived crackdown and the apparently unsympathetic attitude of the government toward the board troubled the teachers. See, for example, Roger Jones' comment in the field notes. The teachers did not consider the possible effects of the changed school day on their school life. Even our own reaction was more or less one of impatience. This was the second year that we had attended staff meetings, and we felt we had learned little new at this one. In fact, we were in the school that day for an entirely different purpose, namely, to discuss a working paper with the principal and the curriculum resource team. As events will show, our first impression of the meeting was entirely wrong.

In tracing this event through our field notes, we move forward to September and immediately see how significant the change in the school cycle is for individual teachers. In our first visit to the school on September 10th, 1982, school hours are very much on people's minds. Our field notes of that day are filled with comments about the issue. The following notes describe projected and actual consequences as teachers encountered the changed cycle.

In the first field note below, the effect of the shortened lunch hour break on teachers' planning and programs is raised.

In connection with this we did chat about the longer school hours. I said something about whose ruling that was and Cynthia said that it was from the government. She said she thought that with the longer hours that teachers would not be inclined to work on their lunch hour. She mentioned going to pick up films and drop things off and arrange trips and so on. I made a comment about the amount of time to take a break at lunch time and, for example, to go out to eat lunch. She said, "Oh that just couldn't be done at all". (Notes to file, September 10, 1982).
In the next field note, the effect of the afternoon recess on young children's teachers is noted.

*In connection with this there was a discussion about the school hours. I said something about the longer school hours and they were talking about how long the time period after recess was in the afternoon. We talked about the difficulty of getting young children like Stephanie's done up in their snowsuits to go out for two recesses.* (Notes to file, September 10, 1982).

In the third segment, one of the resource teachers suggests how teachers could use the time period following afternoon recess.

*Judy said that the longer school hours may well be a boon in the long run even though it's a pain in the short run. She said that would free the teachers to perhaps think about doing activities or reading a story in that last hour of the day.* (Notes to file, September 10, 1982).

Later in September the sense of disruption is stronger. Individual classroom disruptions now spill over into the school. In the following note the Cabinet (the school decision-making body) and school committee structure are seen to be in jeopardy.

*On my way to the library I met Al in the crosshall who was embarrassed to have me spotting him coming in. He said he was coming in at 9:30 and then launched into a discussion of how he'd been out until 8:30 last night preparing materials for his class. Apparently intense discussion took place between him and Ellen who was objecting to the increased time and its effects. When we got to the library Cynthia had coffee for us. There was more discussion of the effects of time.*

*When meetings are called, as with the cabinet meeting last night, they begin at 4:00 and people are worn out. Phil tried to get last night's meeting through quickly when, as I take it, the main item was the committee structure and it was over about 4:40.* (Notes to file, September 21, 1982).

The disruption these notes capture was general throughout the school. Everyone with whom we talked felt the effects of the new cycle. The comments on the cabinet meeting are particularly striking since these meetings, while always scheduled for 3:45 pm, had normally started about 4:00 pm. With the 3:22 pm dismissal time, teachers had straightened up their classrooms, taken a washroom break, grabbed a cup of coffee and chatted in the halls, with the result that the meeting would inevitably start about fifteen minutes late.
However, the idea of its officially starting at 4:00 pm was enough to make people feel that the day would be too long for them to get home at a reasonable time. Eventually, we saw the demise of the cabinet; it held its last meeting on November 2, 1982.

12.4. CYCLES AND RHYTHMS

In reviewing these notes, for May, 1982, when the change is first noted and, for September, 1982, when its effects are first felt, we are struck with how small the change is and yet how much teachers felt it. Only thirty minutes are added to the school day, and everyone accepts that the government is simply bringing Bay Street's board into line with others. But the effects felt are significant for teachers.

Our observation is not intended as a criticism. It is, instead, intended to draw attention to the notion that, for a teacher, knowing the school day is a rhythmic knowing. One becomes part of, and helps establish, a school rhythm and the rhythm, in turn, lends a sense of appropriateness to activities. When the rhythm is disrupted, there is a feeling that things are out of balance, that harmony has been lost. From our theoretical perspective we view this sense of rhythm as part of a school practitioner's personal practical knowledge. Rhythm is acting in concert with others around a set of repetitive, cyclic school events. In this case, the daily cycle is the event around which a rhythm becomes established, giving rise to a teacher's feeling that "The day is going well", "It's time for a break and relaxation", or "I can take a few minutes and organize my room before going to the meeting".

It is not, of course, simply that teachers felt the disruption of something rhythmic. There are practical aspects to the changed cycle. An afternoon recess provides an easy transition to quiet reading and reflective exercises in elementary classrooms; more time is given to preparing children for going home (readying the rubbers, putting on the snow suits, collecting the bags, and organizing the children's homework), and children are cleared from the classrooms and school more promptly at the 3:45 pm buzzer. One of the most telling results of the new cycle was the rescheduling of the cabinet meeting; its eventual demise was due, in part, to the changed school day cycle.
The many small changes brought on by the lengthened school day add up to a daily cycle quite different in its sequence of events. Acting out the events in the new cycle feels disharmonious; it violates the teacher's personal logic -- her way of knowing the day. Our interpretation of the teachers' complaints and their changed practices is that the altered cycle interfered with the personal rhythms they had established in their school lives: arriving at school; getting ready to teach; teaching; taking recess; teaching; having a lunchtime meeting; teaching for an afternoon; straightening up the classroom and relaxing; and going to a meeting if called. This school day, known through a teacher's rhythms, no longer existed.

12.5. HABITS AND CYCLES

The observation that small changes in the daily cycle may be felt as disruptive to one's routine is confirmed by common experience. Rising an hour later, beginning dinner a half hour early, and attending an early Sunday church service inevitably lead to comments on the rhythm of the day, such as: "I felt like I was behind all day", "I can't get my newspaper read before dinner, and the evening is shot when I do finish it", "I felt like I had a whole day to do exactly what I wanted". We know our days rhythmically and we know that small changes in our daily cycle disrupt the day's harmony. But what is it about these changes that is so significant to our personal knowledge?

We believe that in schooling, as in our more common experience of daily living, parts of the day are acted out, day after day, in a more or less fixed pattern. The repetition, set in the context of a daily cycle known rhythmically, takes on the character of a habit. Habits both organize action, as Skilbeck (1970, p. 27) notes, and generalize action, as Peirce notes (1848a, p. 179). Partly because of these services, habits are satisfying. For instance, in the tying of a shoelace, numerous specific acts must be properly sequenced and organized for the bow to be tied properly. A child is taught the sequence as parents and teachers help the child's fingers proceed through the necessary motions. During the learning process the child must pay attention. The service habit performs is to permit this process of shoe-tying eventually to take place with minimal awareness. The body proceeds through the necessary actions without paying attention. The habit is generalized in that different kinds of shoes, put
on various times of the day, for different purposes and with different kinds of laces, can be tied with equal ease. The habit is sufficiently general to function in various circumstances.

A habit, then, is satisfying in several respects. It permits one's mind and even parts of the body to do a second task while the habit is performed and it permits this to occur in a variety of situations. Thus, a teacher might maintain the flow of a lesson while performing her habits of classroom control and discipline: a smile here, a raised hand there, a bodily attitude another time. Furthermore, the teacher can do this at different times of the day and in different instructional settings, for example, in reading a story or in working with individuals at their seats.

But there is more at work in the performance of a habit, as evidenced in the strong feeling of disruption observed in Bay Street School in response to the lengthened school day. Habit has two additional important characteristics. The first is related to the commonplace notion of a habit as "ingrained", as something requiring more than conscious decision if it is to be changed or displaced. Think of the cigarette smoker who adopts stimulus-response techniques to identify the circumstance under which the habit is most often called forth, and of the elaborate techniques adopted to support his decision to stop smoking. It is commonly acknowledged that part of the reason this habit is so "ingrained" is its chemical basis. The biological basis for drug habits is, of course, striking. But it is not only drug habits which are "ingrained" in the body. Most habits are. There are modifications of nerve and muscle which embody the habit. Bentley (1950) asserted the bodily basis of habit when he wrote that "inquiries into habit are inquiries directly into muscular patterning and do not need assignment to powers and capacities developed in other than muscular terminology" (p.335). Accordingly, when we say a habit is "ingrained" we are pointing to its embodiment.

In this sense, habits vividly convey the idea of bodily knowledge so important to our understanding of personal practical knowledge. The habit is in the body and may be performed without conscious forethought, control or direction. The body responds to, and acts upon, the situation: the hand is raised for silence without conscious decision; the smile is spontaneous to
encourage a child; and the eyes are narrowed and a frown automatically appears to discourage a long-winded student. In these cases the body is responding to the situation and is performing the habit as needed, without reflection and decision.

These examples illustrate the second additional feature of importance in understanding the power of habit. In the examples, the classroom situation called forth the habit. Habits, then, are not merely pathways of response but are also a predisposition to action in certain situations. In the smoking case, of course, the predisposition becomes an obsession or a compulsion. Dewey (1930) referred to habits as "active capacities to re-adjust activity to meet new conditions" (p. 47). The thwarting of a habit creates a sense of unease. Imagine a person whose habit is to tie his shoelaces before going to breakfast being required for a week to proceed to the breakfast table with his shoelaces untied; or imagine a teacher required, in class, to smile when she habitually frowns and vice versa. We can imagine the first person shuffling his feet under the table and unconsciously running his hand down to his shoe. The teacher might well become so wooden that facial expressions would be clumsier and more contrived than those of a high school student acting in her first dramatic part. In these cases, the frustration felt at the inability to perform the habit is out of proportion to the satisfaction achieved in its ordinary application. Indeed, the values of the habit are noticed more in its withdrawal than in its performance.

Habits, then, are not the simple repetition of actions they might appear on first glance. They serve purposes both in the act and in freeing the agent for other acts. Furthermore, habits are not merely action sequences but are embodied and contain predispositions to kinds of situations. People derive satisfaction from habits and experience dissatisfaction when they are blocked.

At Bay Street School, there are various habits attached to each part of the daily cycle, for example, the before-class coffee break, the tidying up of the teacher's desk at day's end, and so on. Many small habits built around the cycle contribute to the rhythm. When the cycle is changed, some of these habits are no longer appropriate, for example, the lengthy lunch-hour walk, even though the situation and predisposition to act remain. Other situations, such as preparation for the afternoon recess, are new and require new habits. The
rhythm is disrupted. Consider, as an example, the end of Stephanie’s school day.

With the original cycle and its 3:22 pm dismissal time, Stephanie had a fairly indeterminate conclusion to the day. The buzzer rang and students might then put their books away, and get on their boots and coats. Some would stay and help Stephanie tidy the room while others finished assignments. Stephanie would help children dress and might straighten her desk. It was normally 3:45 pm before her class was cleared of students. During this time Stephanie felt free to talk with students, wander down the hall and talk with a colleague, and do other unscheduled but necessary professional things. It was her habit to use this time both to relax personally and to relax with children who stayed behind. This day-end habit was part of Stephanie’s daily rhythm. She sensed that, for her, this was the way to end the school day. If a meeting was called or if she had a class at graduate school, this transition still took place. With the new dismissal time, expressing her day-end habit meant that personal matters scheduled for after-school hours, such as attending graduate class, shopping and preparing dinner, were pushed back in time.

This interaction of the professional with the private operates as a barrier for Stephanie and for other teachers. Teachers did not feel they could easily push back their school day without their private rhythms being interrupted. Scheduling a meeting at 4:00 pm meant 4:15 pm if people were to act out their day-end habits and this, in turn, meant that they began their private, less school-related activities later. The shoe was too tight. The professional rhythms and the private rhythms rubbed and neither were given up. Eventually, it was the after-school professional activities, such as the cabinet meeting, that were sacrificed.

The events surrounding the lengthened school day have important implications for those concerned with implementation. Who would have imagined that modifying the cycle of the day would have an effect on the decision-making structure of the school? With an understanding of personal practical knowledge and its significance in the lives of teachers, we gain insight into the intricacies of how a structural change implemented in a school can interact with teachers’ personal practical knowledge and how powerful that
knowledge can be in adjusting parts of the environment to suit its needs. As the theologian Crites remarks in writing on the narrative quality of experience, for a man undergoing a social revolution, "His style must change steps, he must dance to a new rhythm" (Crites, 1971, p.307).

12.6. CALENDARS, CYCLES, RHYTHMS AND HABITS IN THE SCHOOL: THE AESTHETICS OF PERSONAL PRACTICAL KNOWLEDGE

So far, our inquiry has led to two principal ideas, rhythms and cycles. We posited the idea of rhythms to account for the disruptions that occurred with change in the length of the school day. Why did the change not occur smoothly? Our answer is that in each teacher's life there are personal rhythms that give a sense of harmony and balance to the day's events. When something minor disrupts the rhythm, the effects felt far exceed what might be predicted from an inspection of either the intended or actual changes. This observation helps account for the fact, known to us all, that it is often easier to change something big in our lives than something small. A teacher, for example, may have more pronounced reactions to a change in the cycle of the day than to a sabbatical in which she attends graduate school, or to a secondment where she transfers into a non-teaching role. What happens in these cases is that the new situation carries with it a clear-cut requirement to change one's general rhythm of living. A teacher knows that the rhythm of the day will be different for her when she becomes a principal or enters graduate school. Indeed, "settling in" to a situation of this scope consists in part of an active search for a new schedule, a cycle that feels right. Inevitably, people in such situations describe themselves as "getting into the swing of things" as the cycle takes shape and rhythm is established. But when minor change is encountered in one's practical life, it may modify parts of the cycle and interfere with the rhythm in such a way that the effects are felt as disruptive.

Just as our notion of rhythm grew out of our inquiry into cycles, we see cycles connected with the commonplace notion of a school calendar. Calendars are, in effect, an embodiment of cultural cycles. These cycles are fixed in the general cultural calendar which, in turn, is modified to create a specific school calendar. The school calendar, then, defines various school cycles, all of which are given to school participants. Derived as it is from the dominant culture, the
school calendar may have little meaning for an individual. Many people whose cultural traditions differ from the mainstream ones are not represented in either the general cultural calendar or the school one. However, even for members of the dominant culture, aspects of the cycle, such as Sunday rather than Monday beginning the week, may have lost their original meaning.

Cycles and rhythms are two different things. Rhythms are personal and may be more or less close to the school's cycles. These rhythms, which we so clearly sense in the disruption caused by changes in certain cycles, are built up out of personal habits associated with cycles. Cycles are easily seen; they are written on paper, written into calendars, and posted on the wall. Rhythms are felt, not seen, becoming most apparent at moments of friction and change.

Our first intimation of the power of rhythms in teachers' personal practical knowledge came in Clandinin's work with Stephanie. By tracing rhythms within one teacher's narrative, we gain a sense both of their cultural and historical roots at the same time as we view their embodiment in the person and in her teaching actions. In this sense, cycles constitute the cultural context for rhythms, which are cultural, personal and expressive.

12.7. RHYTHMS IN STEPHANIE'S PERSONAL PRACTICAL KNOWLEDGE

Stephanie's classroom visually reflects the cycle of school holidays. Its walls and windows blossom as holidays such as Thanksgiving, Christmas and Easter approach. Following each holiday, the classroom wilts and activities change. The manifestation of Stephanie's rhythms in the cycle of school calendar holidays is continuous. This rhythm is not noted in the school calendar, but is felt in the classroom in the sense of building toward a climax. The climax is followed by a feeling of letdown and respite, a period of low excitement, followed again by a sense of expectation as enthusiasm builds towards the next peak. All of this is contained in the way Stephanie organizes materials and student activities. We see her rhythm at work in the following field notes, written in October of 1981 as Stephanie was planning for the Fall holidays, Thanksgiving and Hallowe'en:

At one point in the morning, Stephanie sketched out a rough plan of
the next few months. She said that after Thanksgiving came Hallowe’en. It would not be until November that they came back to leaves. She wanted to make sure that there would still be some leaves around when it came time to do them. She mentioned doing the wax paper as well as shading the leaves. Somewhere in there she also wanted to do the apples. (Notes to file, October 5, 1981)

This note fairly represents Stephanie's frame of reference for curriculum planning. When she imagines a program of studies, she first thinks of the forthcoming holidays and considers the sorts of activities appropriate to them. (As an aside, we note that while teacher education programs tend not to look at "curriculum planning rationales" in terms of annual cycles, for this teacher and, we believe, for many, these personal events are the principal ones by which they know the school year.)

The rhythmic sense of Stephanie's planning is evident in our notes on the transition from Hallowe’en to Christmas. One month later we note:

When we were chatting Stephanie told me that Connie, the other Grade One teacher was coming in that morning to observe. Stephanie said she did not know why she was coming. Stephanie said she did not have anything special ready and she tried to tell Connie that she was all Hallowe'ened out... Later that morning, Stephanie asked the students to tell what they were dressed up like for Hallowe’en. After a few minutes of this, she asked them what else had happened on the weekend. She wanted them, of course, to say that it had been the Santa Claus parade. Stephanie had told me earlier that she had gone, by herself, to watch the Santa Claus parade. One of the children finally guessed it and actually quite a few children had gone to the parade. At one point while the children were not answering Stephanie's questions, she looked up and Connie made some comments about how patient she was and how that was a real problem for her as well. (Notes to file, November 2nd, 1981).

The transition at work in the two parts of this field note give a graphic picture of the rhythmic "down time" at the end of one cycle combined with the building sense as she moves into the next. Stephanie would rather not have the visiting teacher into her classroom because the Hallowe'en classroom had wilted. But she was carefully prepared to capitalize on the students' inevitable tales of the Santa Claus parade that weekend to give her an opening to move forward rhythmically within the inevitable cycle. (An interesting addendum to this observation is that the Santa Claus parade folded financially, was taken over by the city government, and rescheduled two weeks later in November for
subsequent years. Stephanie was disturbed because the new time disrupted her rhythm.)

12.8. STEPHANIE'S HABITS IN THE CYCLE OF SCHOOL HOLIDAYS

We have identified four habits in Stephanie's classroom rhythm. They take place in an order such that an external observer would see a cycle. The habits repeat as each holiday is celebrated and the next one planned. But for us, and for Stephanie, we see in this repetition a rhythm which has an order and meaning exceeding that contained in a cycle. Whereas a cycle could be interrupted by adding or subtracting a habit, a rhythm cannot, since it is too connected from beginning to end and to the ebb and flow of events. Two things are at work: first, the annual cycle of cultural second, a set of Stephanie's habits performed in the interval between each holiday. The habits are not cyclical in the sense of one giving rise to the other, but they do repeat for each cycle. Each time the cycle occurs, the habits are set in motion.

The examples chosen to illustrate each of the four habits are drawn from Stephanie's Hallowe'en celebration. Similar examples could be offered for other celebrations.

12.8.1. The Habit of Transforming the Classroom

On the morning of Monday, October 26th, 1981 the room had been transformed for Hallowe'en.

I was immediately struck by how much had happened in the room over the weekend. The farm display at the back was set up; the pictures were off the back wall; there were criss-crossed clothes lines hanging from the ceiling with Hallowe'en displays; the Hallowe'en words were up for display; the front board displays were all arranged; and the math centre was cleaned up. (Notes to file, October 26th, 1981).

These notes capture Stephanie's habit of remaking the classroom for each celebration. She comes in on the weekend and does much of the work herself. Students, of course, add their own work to it as the cycle of events proceeds. This habit comprises a number of activities: the weekend redecoration, taking things off the walls, adding student work to walls and windows, and giving special attention to the door. Stephanie's room is at the end of a long hall and
her door, elaborately decorated for the celebration, is left open so that it may be seen by anyone coming down the hall.

12.8.2. The Habit of Organizing the Curriculum Around a Celebration.

The following field note describes an event occurring later the same day. The mathematics curriculum is at issue. We note:

*She was working on the concept of "more than" and "less than." They were working on this activity using pumpkins. She was going to have them do a cut and paste exercise with the pumpkins.* (Notes to file, October 26, 1981).

The organization of the math curriculum around Hallowe'en is similar to most of her curriculum planning activities. For example, the "Boo" books, which became the basis for the language arts program that week, were started. This habit is expressed in several activities throughout the time leading up to the celebration.

12.8.3. The Habit of Counting the Days to the Next Holiday.

In Stephanie's classroom, each school day begins with a class discussion of the day of the week, the month, the date, and the weather. In the following note this "date and weather" discussion focusses on Hallowe'en:

*Stephanie's discussion with the students around the number of days left until Hallowe'en took up until recess time. She was just showing them their number books and showing them how to go about making the pumpkins when the recess bell rang. They changed quickly and went out for recess.* (Notes to file, October 26, 1981).

This habit contributes to the sense of building up to the celebration, as each day's countdown is marked.

In effect, Stephanie has an Advent calendar for each of the holidays. In her classroom, of course, there is a class Advent calendar leading up to Christmas, and the children take turns opening the window for each day. A class discussion on what they find inside the window helps the excitement build.
12.8.4. The Habit of Climaxing with a Party.

Each celebration reaches its peak with a party. In an interpretive account written to Stephanie several months after Hallowe’en, Clandinin wrote the following:

*My next day in your room, Friday, October 30th, 1981, was the culmination of the week of Hallowe’en activities. Your enthusiasm for taking part in the festivities and the extent to which you go to make the celebration memorable were remarkable to me. The children brought in foods; you had me cook the pumpkin seeds and later I took over the class while you left to gather more party supplies. In checking my notes I find that I wrote: "When I arrived back in the classroom, several children were hanging balloons, Wallace’s table was being covered with a black tablecloth made of crepe paper, Gail and another student were sorting apples for bobbing and there was much party activity going on."* (Field notes, October 30th, 1981; Interpretive Account, January, 1982).

The habit of holding a party consists of "build-up" activities on the days preceding it, a morning spent in preparation of the party, and an afternoon party. The chaos is cleaned up the next morning.

12.9. HABITS AND RHYTHMS

Our inquiry into cycles and rhythms led us to the terms, "calendar" and "habit". We have already described our notion of calendars as the physical embodiment of cultural cycles. Analogously, we view habits as the personal expression and embodiment of rhythms. Although no one habit expresses a rhythm, rhythm is composed of a number of habits, which keep the rhythm going, as it were. Once established, however, a rhythm leads to the development of new habits. From this perspective, habits can be viewed as "minded practices", expressions of personal practical knowledge, of which rhythm is a part.

Furthermore, we picture habits as a kind of bridge between cycle and rhythm. A cycle, such as Bay Street School’s 9:00 am - 3:22 pm day with its recess and lunch breaks, leads teachers to form habits, and eventually contributes to their rhythms. Crossing the bridge this way takes us from fixed cultural cycles to personal habits, and thence to the development of a comfortable and satisfying rhythm. However, as we shall illustrate below, the
bridge also takes us from rhythms to cycles. Rhythms, as personal practical knowledge, lead to certain classroom habits and these eventually contribute to a cycle. We shall argue that a rhythm is an expression of some part of a person’s narrative unity, arising out of his or her past and embedded in cultural and historical narratives. The picture that emerges is one of an intimate connection between the social and the personal -- a connection that was the point of departure from Chapter 10 on "Image and Narrative Unity". The closing paragraphs of the chapter observed that personal practical knowledge could not be interpreted in personal terms alone but has a social context as well.

The cultural origin of Stephanie’s classroom planning rhythm was discerned by a colleague some two thousand miles distant from her school, reacting to interpretive notes on Stephanie’s school year as a cycle. He wrote:

...the school year being a cycle of big events, Fall, Thanksgiving, Hallowe’en, Christmas, Snow, and so on. I would like to ask whether the author might see Stephanie and ask her whether this isn’t a reflection of the way in which the Jewish religion tends to make Jews think of the year as divided by holidays. Incidentally, there are many such and several of the ones the author mentions like Thanksgiving, Christmas and so on have their Jewish correlates. So, the family Judaism that she represents may have been another factor in contributing to the images which control her judgments. (Schwab, personal communication, 1983).

Stephanie is Jewish. She lives out her Jewish cultural narrative by celebrating the High Holidays, which, in fact, take precedence over the school calendar. For instance, she takes a two-day leave for the celebration of Rosh Hashanah. Our notes in September, 1980 show that:

She feels quite badly about leaving the class while they are being reorganized but she refuses to give up her holidays. She made some comment about not giving up her religion for this. (Notes to file, September 28, 1981).

This note demonstrates the significance of cultural events in Stephanie’s rhythm of living. In this particular case, when Bay Street’s classes are undergoing their annual reorganization in September, the cultural rhythm conflicts with the school cycle. But, for Stephanie, this is unusual. Instead, for the most part, she is able to accommodate her school planning to the rhythm.
Indeed, somewhat as Phil did in creating a school cultural calendar, Stephanie translates her own culture into a more refined and complex class rhythm in which significant cultural events for students occur as part of the curriculum planning process. The following field note is illustrative.

In honour of one Greek child in her class, Stephanie had a minor class celebration to mark the Greek Orthodox Easter. According to our notes:

A little girl called Dimitra came back to Stephanie and said that she would not be in school on Friday because it was her holiday. Stephanie said, "Oh, that's when you have your holidays, is it?" "Yes" she said. Stephanie said the little girl was Greek Orthodox and it is the start of their Easter holiday. (Notes to file, April 21, 1981).

Stephanie encouraged the child to bring cake to the classroom and, on the following Monday, the cake was shared and the child's holiday "officially" acknowledged.

The rhythm is the personal knowledge, the "mindedness" behind Stephanie's habit of acknowledging and celebrating not only the main school holidays but also the holidays of special importance to her pupils, who are of diverse cultural origins. As a result of this habit, Stephanie contributes to the school cultural calendar and its cycle of events. Crossing the bridge this way, then, we see that individual rhythms contribute to the cycle of holidays contained in the school calendar.

12.10. THE CHINESE NEW YEAR CELEBRATION AS AN EXPRESSION OF RHYTHMS

The January 25th, 1982 notes quoted at the beginning of this chapter show how involved Stephanie was with the Chinese New Year, both in her classroom and in the school. Her participation was not merely the result of being caught up in the excitement of a visually sensuous event, but was an expression of her personal practical knowledge, of her cultural rhythms as expressed in her classroom rhythm. The large number of Oriental pupils accentuates Stephanie's habit, and the result is the gala New Year celebration.

Stephanie's celebration of the Chinese New Year exhibits the same habits and pattern of events as described in section 8. The habit of
transforming the classroom begins in early January as the remnants of the Christmas celebration are dismantled and Oriental materials take their place. The January 25th field notes illustrate a variety of ways in which Stephanie expressed her habit of organizing the curriculum around the Chinese New Year. The countdown of days proceeded according to habit, and the usual party was held, complete with "shrimp chips" cooked in the classroom. Stephanie's activities paralleled, and gave life to, the school-wide activities with which we introduced this chapter.

Following an account of our understanding of the school rhythms, we shall return to the original inquiry: to understand how the school was able to operate normally following its conflict with parts of the Chinese community.

12.11. SCHOOL CYCLES AND RHYTHMS

Our account so far places calendars and cycles in the school and habits and rhythms in the person. But there is also a commonplace sense in which we can say that a school has a rhythm. People often refer to the rhythm of the school day and the school year, and teachers comment that each school seems to have its own rhythm. In this sense, there is an analogue with personal rhythms. We are reminded here of Dewey's notion of an individual as an organic entity and of a society as an organic union of individuals. The school can be thought of as an organic unit; this notion helps make sense of the observation that within each school one can feel a particular sense of harmony and balance in the rhythm of activities.

Our purpose here is to demonstrate through our inquiry into Bay Street School how school rhythms are created. We imagine that a school rhythm is created out of the particular way its cultural calendar is constructed and celebrated, the cultural make-up of the community from which the pupils are drawn, and the cultural characteristics of the teachers. We have shown that the particular mix of Phil's school cultural calendar, Stephanie's cultural origins, and the Greek and Oriental community all contribute to Stephanie's rhythms. These elements also create the school rhythm. It is a rhythm constructed out of individuals acting in concert. There is some commonality in habit; since the cycle is fixed, bells ring and recesses occur at the same time for everyone. There
is a commonality too in that most teachers participate in celebrating the school's cultural calendar. These commonalities contribute to the rhythm of a particular school.

The idea of a school rhythm does not imply that everyone will adapt to it or that undue conformity is expected. Each individual's personal practical knowledge, arising from his own narrative unity and the narratives of his culture, create individuality. Similarity and difference, participation in the school rhythms and acting outside them, are all part of the life of the school. Still, the rhythmic feel of a school is well known to teachers and students; researchers too acquire a "feel" for the rhythms, cycles and habits that make up a school's life. That is why it is possible to have a teacher say, "I feel out of synch with the school". This sense of being in or out of "synch" is a way of expressing an incompatibility between one's personal rhythm and that of the school; somehow events proceed in a way that is jarring, yet difficult to pinpoint. Just as the Bay Street teachers would be hard pressed to explain to an outsider why they felt disturbed by the modified school day, so too a teacher would find it difficult to give an explanation of why she felt "out of synch". The explanation is that the school rhythm, like that of an individual, is organic and does not have a concrete expression as do cycles in the school calendar.

12.12. THE SCHOOL-COMMUNITY CRISIS REVISITED

We now return to the incongruity between Bay Street's confrontation with its Chinese community and its celebration of the Chinese New Year. For us, the celebration characterizes the normality of the year's progress. We do not plan to explain away the tension in the confrontation. It is there. But so is the calm and orderly progress of the school year. Our notion of cycles and rhythms helps our understanding of this apparent anomaly.

Rhythms and cycles are as much a part of teachers' personal practical knowledge as are their images and narrative unity. Teachers "know" the school through images, personal and cultural narrative unities, cycles and rhythms. They have images of schooling which "mind" their practices. The meaning in the images derives from their personal and cultural narratives. They also know the school cyclically and rhythmically; they know it as a cycle
of months, weeks and days, and as a cycle of cultural holiday events associated with the calendar. These ways of knowing the school constitute, in part, their personal practical knowledge of schooling.

We reaffirm our understanding that personal narratives are the ground on which personal practical knowledge is built. This personal knowledge contains both personal and social material. The core of one's narrative is personal; a person lives her narrative, not the narrative of her culture. But the first is embedded in the second. A person's imagery and narrative origin are modulated by the cultural narrative and its rhythm and cycles.

The power of cultural rhythms to moderate and smooth out personal and social action is evident in our account of Stephanie. She is a Jewish teacher in a school with an essentially Christian school calendar with a cycle of Christian holidays and rhythm. The rhythm she lives and knows is not strictly one or the other. She expresses the rhythms of her culture while accommodating the cultural holidays of others. The result is an harmonious living out of the school year in such a way that her own personal and cultural rhythms, and those of her students, find expression in her classroom. Clandinin (1983) shows how Stephanie's narrative is crystallized in her "classroom as home" image, in which the idea of a home is dominant and is expressed in classroom practices such as the making of things, personal relationships between class members, and the choice of curriculum activities. The account of Stephanie's classroom in terms of image is incomplete without an understanding of the cycles and rhythms described in this chapter. The rhythms allow us to account for the ebb and flow of Stephanie's classroom in a way that the image alone cannot. Similarly, our notions of the rhythms of Bay Street School and its staff aid our understanding of the image of community at work.

We have not, of course, fully explored the relationship between tensions within individuals and between school and community, on the one hand, and the harmony evident in an individual, a school and culture, on the other. Tension and harmony seem always to be simultaneously at work in the practical life of individuals and schools. Tension is the expression of a life force which keeps the individual and the school moving; harmony ensures that the tension does not become personally and socially disruptive. Tension and
harmony follow a pattern within individuals and within the school: at some times, personal tension is high and harmony is abandoned, at others, tension recedes and harmony reigns. In the school-community crisis and the Chinese New Year celebration, we see the ebb and flow of tension and harmony.

One of the ways a teacher creates a balance between tension and harmony in a classroom is through the creation of habits and routines. In this chapter we briefly described some of our thoughts on habit and rhythm. A subsequent phase of our study will explore a teacher's rhythms as expressed in routines and habits, and show how a teacher uses routines such as the countdown to Hallowe'en to inculcate children into her rhythms. We shall show how these classroom actions are also a way in which children are inculcated into the rhythms of society.

Teachers, we feel, want children to become knowing members of the classroom through sharing in the teacher's personal practical knowledge. They therefore want children to learn the routines and thereby become part of the rhythms of both teacher and school. In this process, tension and harmony both play a role; if the children do not share in the teacher's knowing, the rhythms cannot be expressed and discord results. The nature of routines in classrooms will be further explored in our subsequent study.
REFERENCES


Clandinin, D.J. and Connelly, F.M. Teachers' personal practical knowledge: Calendars, cycles, habits, and rhythms. Paper read at the curriculum planning conference, Haifa University, April, 1984.


This chapter links conceptual modes of knowing to the experiential modes observed in the classroom. Our account of experiential modes of knowing is illustrated with research notes from Stephanie's classroom on what we call "the gingerbread boys episode". The experiential terms for thinking about modes of knowing within classrooms (narrative unity, image, and rhythm) that were introduced in earlier chapters are further developed and summarized. Finally, their application to practical classroom matters is considered.

13.1. RELATION OF MODES OF KNOWING TO SCHOOL PRACTICE

How the various modes of knowing (aesthetic, intellectual, intuitive, etc.) are seen to relate to school practice depends on the perspective adopted, that of the theoretician of modes of knowing or that of the practitioner of teaching and learning. In educational inquiry the tension between these two perspectives has stimulated diligent efforts to enhance practice through theory, and vice versa. Despite these efforts, the tension remains, as most of us working in the field of education can testify. Our own experience is illustrative. Those of us who were philosophically trained in the modes of knowing, and then worked in schools, making, as the anthropologist Geertz (1973) says, "Our own construction of other people's constructions of what they and their compatriots are up to" (p.9), have an unsettling sense of living with conflicting perspectives.

When in the study of philosophy we reflect on inquiry into the experience of knowing, the theoretical structure "modes of knowing" makes sense to us; in
the context of our studies, it "feels right". The contrarieties we encounter in our studies also make sense, as writers such as Kuhn (1970) and Phillips (1985) explain diversity through recourse to historical argument. Our adoption of the philosophers' perspective provides us with an understanding of the modes of knowing. We are persuaded of their potential practical utility, and are inclined to "take for granted", without reason or argument, the presence of practical implications for teaching and learning.

But when we work in school, our assumptions of practical utility dissipate. To begin with, few people in schools use the language of modes of knowing, and if we researchers use it, the kindest response is likely to be, "That's interesting". When we identify an act as fitting a specific mode, the identification slips away amidst all the other modes at work. For instance, a child drawing in an art class turns out, among other things, to be acting "interpersonally" (pleasing the teacher), "intuitively" (grasping the whole), and "formally" (arranging line, space and colour). We can, of course, classify a child's drawing as aesthetic, his mathematic problem-solving as formal, and his science experiment as scientific. Classification of this kind has little appeal for us, however, since our interest is the "knowing" in the child's act, a knowing that is much more, and perhaps of a different order, than that implied in the name of a category. What we call "aesthetic" in the child's drawing may be a blend of all of the modes mentioned, and in any case, to say that the mode of knowing is aesthetic is to call it by someone else's name. Just as social anthropologists talk the language of the culture they study, we should "talk school".

When we shift attention from the child learning to the teacher teaching, the sense of inappropriateness is heightened. A teacher teaching mathematics, even in a deliberate attempt to teach a formal mode of knowing, cannot be well understood in "formal" terms. The teacher plans, explains, demonstrates, praises, evaluates and reflects with voice and body. She does not know her teaching act "formally", nor can we characterize our knowing of it as "formal". Although there are, of course, formal elements to both her teaching and our knowing, the term "formal mode of knowing" is not a satisfactory characterization for either one, or for the students' learning of mathematics. What does feel appropriate is the rhythm of teaching and learning and the
detailed kaleidoscope of knowing that is occurring. The thought of applying the notion of modes of knowing disrupts this sense of appropriateness.

Just as applying the modes of knowing feels discordant when we are in school, our school thoughts seem out of place when we are in the philosophers' world. The language of image, narrative unity, ritual, cycle, and rhythm which helps to characterize ways of knowing in school, seems, in the realm of theory, ill-defined and ultimately indefinable with any degree of precision. The school events in which we participate appear, from the security of the philosophers' study, unendingly variable, and thoughtless.

We are, accordingly, on both sides of the fence. Both sides are informative and pleasing in their own terms. But when we move from one side to the other, especially when we consider implications of theory for practice, the effect is disharmonious. Why should this perspective make the difference it does to our sense of what is appropriate? The question has two partial answers, both of which are found in the difference between inquiry leading to "school talk" and inquiry leading to "modes of knowing talk".

13.2. KNOWING THE EXPERIENCE OF TEACHING AND LEARNING VS. KNOWING THE MODES OF KNOWING

The first answer stems from Geertz's definition of anthropological inquiry, noted earlier. When we work with practitioners, our constructions are of their constructions of knowing. In the pages of philosophy, the constructions are of knowing more directly; the intervening subject, "their constructions", is missing. In school inquiry we say, "These are the forms I employ to describe the ways teachers and students know teaching and learning", while in philosophic inquiry we say, "This is how I describe the forms of disciplined thought". In both cases, of course, the forms constitute a metalanguage and are not necessarily part of the situation described. But, for each type of inquiry, the correspondence is sufficiently close to the experience described to elicit a degree of practitioner acceptance. Artists tend to feel comfortable with the language of aesthetics, scientists with the philosophy of science, and teachers with the discussion of images, rhythms, cycles and routines. For these and other kinds of practitioners, the subject and purpose of inquiry contained in their perspectives
is close enough to their experience to create a sense of appropriateness. When perspective shifts, however, neither subject nor purpose coincides with experience.

The second answer arises from a consideration of the role of experience in inquiry. In contrast to the philosophical construction of modes of knowing, our constructions of schooling are expressed in terms of narratives of experience. The actions of teachers are not merely performances, but are minded, knowing actions. Knowing is an experience. Action and knowledge are united in the teacher, and our account of knowing is, therefore, of the teacher with her personal narratives, intentions and passions. The practical knowing of teachers (and of students) is complex because it embodies in a history, in the moment and in an act, all modes of knowing, focussed on the particular event that called forth the teaching or learning act. In contrast, philosophical accounts of the modes of knowing offer, on the whole, a conceptual account of disciplined inquiry. In writing of this kind, the reader is offered a formal expression of the knowledge of inquirers' experience. Moreover, this knowledge tends to be of the formalized, adjudicated products of disciplined inquiry and its arguments, of the formal outcome of inquiry rather than of the act of inquiry. The context for "knowing" is therefore strikingly different from the context of a study of the narrative experience of teaching and learning.

The narratives of practitioners are guided by experiential intentions, and those of theoreticians by formal intentions. Teachers are concerned with the child; the best teachers are sensitive to the child as a person, not just as a carrier for the subject matter. Since their concern is with how the child copes with his learning, they take as evidence of teaching achievement the child's social growth, happiness, career goals, and ambitions. Accordingly, inquiry into schooling which takes narrative as its subject comes within the experiential, intentional character of teacher practitioners.

Practitioners of a discipline, on the other hand, tend be governed by formal, experientially free intentions. These include the objectification of concepts and concept structures, and the adherence to methodological rule for the removal of inquirer bias. Mathematicians and biologists alike aim at a stable, formal product with conceptual status. Accordingly, philosophic inquiry
into formal modes of thinking falls within the conceptual, intentional character of practitioners working in academic disciplines.

In brief, the imagined outcomes by practitioners within each perspective correspond in kind to the outcomes of inquiry into their practices. In part, this compatibility accounts for the sense of appropriateness we feel for the modes of knowing when studying philosophy and for the vagaries of practice while working in school. Because the imagined ends of each are different -- experiential versus conceptual -- there is a sense of inappropriateness when the two perspectives are interchanged in a quest for implications of one for the other.

13.3. MODES OF KNOWING WITHIN NARRATIVES OF EXPERIENCE

Theoretical concepts, such as the modes of knowing, may, as Polanyi shows, be thought of as tools (1958, p. 59). They may be felt as extensions of our body, submerged in our awareness for use in the pursuit of our intentions. Just as a pencil may be used for writing, a mode of knowing may be used for understanding. In skilled use, the user "dwells in" the tool and is only subsidiarily aware of it while his attention is focussed on its use. We attend to what is written, not to the pencil, and we attend to what is thought and not to the mode of knowing by which we think.

This account brings us to a point of contact between the perspectives of the theoretician and the practitioner. The theoretician's aim is to call attention to the mode of knowing, to twist and turn it in order to display the shades of meaning reflecting from its many facets. The user's goal is to put the modes of knowing "out of sight". The more effective the tool, the less the user attends to it. A butcher's knife comes to the butcher's attention when dull; likewise, the pencil for the writer and a mode of knowing for the thinker. Furthermore, depending on their generality, tools can have many uses. A pencil, for example, may be a device for writing, drawing, poking holes, or enhancing eye-hand coordination. It would, in fact, be difficult to imagine all the things a pencil may be; and what is said for pencils is multiplied for modes of thought. Hence, while the philosopher may imagine a sophisticated account of the ideal expression of thought, the practitioner, if he thinks about it at all,
will imagine any number of uses, none of which are likely to include formal inquiry.

The submersion of physical and cognitive tools in our awareness, and their multiple uses depending on the purpose of particular situations, highlights a point termed by Bridgeman (1945) as "doing one's damndest with one's mind". Bridgeman, deemphasizing the role of inquiry principles, argued that a problem-solving scientist does everything possible, no holds barred, when confronted with a problem. This suggests that any and all tools are, as Schutz (1973) would say, "on hand" in inquiry. Moreover, when submerged in one's awareness, cognitive tools become something else, something conditioned both by the user's narratives of experience and by the demands of his problem, which is, of course, the focus of his narrative unity.

This notion of narrative unity is developed in a subsequent section. For now, suffice it to say that in our studies of schools, the modes of knowing employed by practitioners in teaching and learning situations are more properly understood, characterized and named in terms of "narrative" than in terms of the "modes of knowing". School practitioners do not know their teaching and learning in terms of the modes of knowing. We are not saying that the modes of knowing have no place. They do, precisely as concepts to be embodied and submerged as tools, thereby becoming part of an existing narrative unity or initiating a new one. Somewhat as sugar sweetens the tea but is lost from sight and recall, the modes of knowing "sweeten" one's personal knowledge while disappearing from sight. And they are not "on call". A user does not call up a mode of knowing in the sense that he tries out different kinds of pens or recalls items for a test. In the pages of philosophy, and in the textbooks and methods of instruction, the modes of knowing have a quality of identifiability which is lost in a user's submersion of it in his mind and body. Something else, which we call "personal practical knowledge," is "on call". Because personal practical knowledge is experiential, constructed out of the narratives of a user's life, it does not have an identifiable conceptual status. Instead, as we know from our own experience, we "do our damndest" as needed in a specific situation. We react one way now, another way later, drawing on experiential images, habits and bits of experience, including those of conceptual origin. This entire armory is "on call"; calling it forth is not a
matter of searching through it for particular elements to use in the situation but is, instead, a re-collection, a process of crystallization, out of the narrative unities of experience.

13.4. PERSONAL NARRATIVE UNITIES AND THE KNOWING OF TEACHING AND LEARNING

From the point of view of schooling, this account has considered the "best case", in which the modes of knowing become submerged as tools and take their place in the learner's narrative. When this happens, the modes are not identifiable in action, and might be said to have passed beyond the stage of easy recall and expression. If concepts are learned as concepts they are not necessarily submerged but remain visible, and identifiable, and may be recalled, for example, on achievement tests. In a teaching situation, high recall scores indicate high understanding of the modes. From the user's perspective, however, precise recall may be a sign of incomplete learning. It may mean that the concepts have been learned as concepts, not as narrative, and are, therefore, not "on call" except in the lesser sense of recall upon demand. Using a distinction developed by Crites (1971), we say that concepts are recalled, narratives are re-collected and on call.

Since our purpose is to understand how teachers and learners know their situations, our inquiry is not a study of modes of knowing but rather a study of knowing-in-practice. It is a study of knowing as expressed in teaching and learning acts. In the study of school practice we observe a unified intellectual and material event, for example, a teaching act. In this act theory and practice are not separated. The act is not an application of theory, although, with due regard to the reduction involved, it might be called theory-in-action. More accurately, it is narrative-in-action. It is the expression of biography and history (in which theoretical learning has a place) in a particular situation. Theory and practice, and the various modes of knowledge, are unified in the teacher through her narrative unity of experience. Knowing and doing are reflections of one another. Knowing a teaching and learning situation is a matter of recollections from one's narratives. These recollections are personal, in that they are derived from a person's narrative, and practical, in that they are aimed at meeting the demands of a particular situation. They are, of
course, also theoretical, both in the sense of containing conceptual content, such as the modes of knowing, and in the sense of typifying the particulars of a situation. They are also cultural, in the sense that individual narratives are embedded in cultural and historical ones.

13.5. A NARRATIVE FRAGMENT: THE GINGERBREAD BOYS EPISODE

For several years now we have been conducting an anthropological-style study of how teachers know their teaching situations. Part of the methodology consists in writing field notes and preparing interpretive accounts of the notes and other aspects of the research. These accounts, the first formal step in the interpretive process, are used as letters to our participants to initiate discussion on the substance and direction of our constructions.

The following paragraphs present an excerpt from an interpretive account written to Stephanie, the grade 1 teacher described in Chapter 8. The teaching episode to which it refers will be used to illustrate our current understanding of teachers' modes of knowing. We shall show how an interpretation of the episode in terms of Stephanie's narrative history yields a set of experiential terms by which we understand Stephanie's knowing. The example also illustrates how narrative unity contributes to a unity of knowing in any teaching and learning act. The episode takes place as Christmas nears. The account reads:

At Christmas time, you asked me to make gingerbread boys with the students. I was becoming quite accustomed to baking with the students so I said I would try. We had initially discussed the gingerbread early in December. I had assumed we would make it on the last day of school so the children could eat it as a party treat. The following field note segments record some of our discussions around the gingerbread.

At lunchtime on Friday, Stephanie and I had a discussion about the gingerbread. Stephanie wanted to start the gingerbread on Monday. I was surprised as I thought she would want to put it off for several days in order to have the fresh gingerbread for a party treat. The party was almost two weeks away! (Notes to file, December 9, 1981)

The day we made the gingerbread you told me you wanted to poke holes in the unbaked dough so they could be used as tree ornaments.

She sat down and started to poke holes in their heads so that the
children could hang them on their trees if they wanted. Earlier, I had remembered to do that with two of the batches. The children said they had no intention of hanging them on trees. They all meant to eat them. (Notes to file, December 16, 1981)

I was not in school on December 17, 1981 and when I arrived on the morning of December 18, 1981, the gingerbread boys had been turned into a beautiful display.

The gingerbread men were all decorated. Each was on a separate paper plate and they were arranged on the back table. Stephanie had arranged the plates on a strip of red velvet material. She pointed several of them out to me, and said they were all very nicely decorated. She told me that Mrs. Jones had been there to help the children decorate them. By this time, the children had started to arrive. The children came in and Stephanie greeted them. A number of children came back to look at the gingerbread men and to show me which ones were theirs. I was standing at the table with the children and they were pointing out their gingerbread men. (Notes to file, December 18, 1981).

Later that morning you made it clear that the gingerbread boys were first for display and then for eating.

She asked two students if they had taken the gingerbread boy to Tereena. Tereena had been absent from school. They said they had and said she had eaten it right away. Stephanie said we were going to be good, and "not eat ours yet". (Notes to files, December 18, 1981)

13.6. UNITIES IN THE NARRATIVE

In this account of Stephanie's practice, we see Stephanie planning her program, organizing a learning activity, arranging a learning environment, evaluating student actions, interacting with students and encouraging student interaction. Her actions include many of the practical everyday matters we commonly think of as characterizing teaching practice.

Although the episode is only a narrative fragment covering nine days, it reveals a shifting interplay of these practical matters. A unity of practices, often theoretically thought of and treated as discrete, is in evidence. When she first talked of making the gingerbread in early December, Stephanie "knew" how and when she would teach and evaluate her planning. Stephanie's plan to make gingerbread boys leads to her teaching, already imagined in the planning, and her teaching leads to evaluation, already imagined in the
planning and teaching. There was thus a unity in the kinds of activities we commonly name as comprising teacher practice. We say that Stephanie knows the various practices as a unity given by the temporal movement (the period of nine days) defining the narrative fragment.

Of more interest to this chapter is the evident unity of modes of knowing, the aesthetic being perhaps most in evidence. All the children participated in making the cookies, and the making was done with artistic ends. Stephanie intended that students display the cookies as Christmas tree decorations both in the classroom and in the homes of those who celebrated Christmas. She heightened the aesthetic effect by her "art show" display of the cookies on the red velvet table cover. In terms of the modes of knowing, we might well name the gingerbread boys episode as one of instruction in aesthetics, and describe Stephanie as a teacher of aesthetics to Grade 1 students.

Closer inspection of the episode reveals the inadequacy of such a characterization. For if we see Stephanie's practice of making gingerbread boys as instruction in aesthetics, how do we account for the moral overtones surrounding their use and design? The researcher's "knowing" of this classroom practice differed from Stephanie's, and was "corrected" by Stephanie when she turned the cookies into ornaments by punching holes in the dough and when she later told the children to be "good" and not eat the cookies until they had been hung on the tree. This moral dimension is a sign that there is something more at work in this practice, and that at the very least we need to describe the episode partially in moral terms.

When this episode is seen in its larger narrative context, the moral overtones take on additional meaning. The knowing expressed in the gingerbread boys episode is an expression of Stephanie's personal practical knowledge of classrooms, in particular of her image of the "classroom as home" and of her rhythm of teaching. The aesthetic and moral dimensions of the episode are rooted in these narratively grounded ways by which Stephanie knows her classroom. The plausibility of these constructions, the image of home and the rhythm of teaching, depends upon a detailed recording and interpretation of Stephanie's narratives of experience. Such detail is provided in Chapter 8 of this report and elsewhere (Clandinin, 1983; Clandinin and
Connelly, 1984). We must rely on the good humour of our readers and take refuge in Geertz's (1983) remark that "If, as I have, you construct accounts of how somebody or other...glosses experience...you feel at each stage fairly well away from the standard styles of demonstration" (p. 6).

13.6.1. The Image of the Classroom as Home

In brief, Stephanie's image of the classroom as home emerges from the narrative unity of her experience in her schooling, home, professional training and teaching. The image is of a place where people can interact and cooperate but where each person has her "own space" and is "free to march to her own drummer". It is an image of a space full of treasured things, an area in which to "live", and an environment in which she and her students can feel comfortable and cared for. The moral and emotional dimensions of the image are evident. The classroom should be a place where she and the students can treat each other as individuals, a place full of treasured things such as plants, artwork and personal items. The image has an emotional colouring drawn from Stephanie's own home and school experiences, which, as Chapter 9 indicates, lacked the closeness that she now seeks in the classroom. Stephanie felt strongly that the homelike environment of the classroom was enhanced both by making the cookies and by displaying them.

Stephanie's private and professional experiences create the narrative unity out of which her image is formed when evoked by particular situations. This unity lends meaning to the aesthetic, moral and emotional dimensions of the narrative fragment; what appeared as an aesthetic experience with moral overtones turns out to be an attempt to create a proper home life with all that it entails, morally and emotionally.

13.6.2. The Rhythm of Teaching

Stephanie's image of the classroom as home is given cultural meaning by the rhythms of her teaching. Just as there are rhythms in our North American life associated with the seasons, the work week, and cultural holidays such as Christmas, Thanksgiving, and Easter, so there are similar rhythms in Stephanie's classroom life.
Rhythms serve to modulate an individual teacher's imagery and the narrative unities of which the imagery is a part. Chapter 12 described the power of cultural rhythms to moderate, smooth out, and make harmonious personal and social action. Stephanie is Jewish and celebrates the Jewish holidays, but teaches in Bay Street School, which has an essentially Christian cycle. The rhythm she knows is therefore not strictly Jewish or Christian. By expressing the rhythms of her culture while accommodating the cultural holidays of others, however, she lives out the school year in such a way that her own personal and cultural rhythms and those of her students find harmonious expression in her classroom.

We use the term rhythm in the commonplace sense of something that occurs repetitively, perhaps cyclically, and has an aesthetic quality as performed. Baseball players, musicians, writers and teachers can name the times and places when they felt "in the groove". For Stephanie, being in the groove is partly a matter of conducting her curriculum according to the cycle of cultural holidays. September begins a sequence of activities leading up to a Thanksgiving party, and the sequence is repeated from then to Christmas. Arithmetic is done by counting out the days to the next celebration, shape and colour may be studied with "Thanksgiving" leaves, and language arts activities are always "in season". Physically, the classroom wilts, then flourishes again, for example, with Christmas decorations. Every sequence of activities climaxes with a classroom party.

The rhythm is the personal practical knowledge, the "mindedness", behind Stephanie's habit of celebrating not only the main school holidays but those of pupils of diverse cultural origins. Her practice of making gingerbread boys is an expression of her rhythm of the school year, part of the Christmas celebration. Because of the cultural context for knowing the classroom, the gingerbread boy episode has spiritual significance for Christian children in Stephanie's class. Even for non-Christian children, participation in the rhythm conveys a sense of the spiritual, particularly since Stephanie conducts "minor" celebrations for children of other cultures. Accordingly, this rhythmic knowing of the school year is an important narrative context for the gingerbread boy episode.
13.6.3. Personal Practical Knowledge and Narrative Unity

The gingerbread boys episode is aesthetic in the sense of expressing a pleasant home life and celebrating a cultural holiday. But it is more. The episode is an expression of Stephanie's personal practical knowledge, an embodiment of the way she knows her teaching and learning situation. The gingerbread boys are not merely a Christmas party treat, as we originally thought. Witness Clandinin's surprise at their early preparation (Field notes, December 9, 1981). Nor are they merely part of a lesson in aesthetics. The moral and emotional aspects of the episode, along with interpersonal and spiritual dimensions, are given meaning in the context of Stephanie's image of home and as part of her rhythm of the school year. The making of gingerbread boys is a way for Stephanie to make the children feel "at home" and to permit them to participate in her culturally influenced classroom rhythms. The episode, then, takes its place within Stephanie's narrative unity.

To review, we see in her practice of making gingerbread boys a unity in the act and in Stephanie, the actor. In neither act nor actor is there any separation of the modes of knowing. We do not see the act as a reflection of any one mode of knowing. Rather, any teaching or learning act is at once a reflection of all of the modes of knowing: aesthetic, scientific, formal, interpersonal, intellectual, intuitive, and spiritual. In the gingerbread boys episode, we do not see Stephanie knowing aesthetically and then knowing interpersonally and then knowing formally. Instead, we see a teacher knowing her practice. This knowing of practice, this acting knowingly, has aesthetic, interpersonal, moral, emotional, and spiritual dimensions. Home and culture are combined in the episode.

13.7. EDUCATION AS THE CREATION AND REVISION OF NARRATIVE UNITIES

Our focus has been on a conception of knowing teaching and learning situations from the perspective of teachers. We now shift our attention to the educational possibilities of this conception. The gingerbread boys episode illustrated how Stephanie's practice is part of her narrative unity and an expression of her personal practical knowledge. Through the interpretation of Stephanie's practice, we can see the sense in which teachers are constantly
constructing and reporting their own narrative unities in their classroom practices, or as Mark Johnson expresses it, practitioners are, through their practice, both reading their experiences as a text and continuing to tell their own story.

Stephanie's practice of making gingerbread boys is part of her narrative unity, reported and revised through its expression in the classroom with the researcher and with her students.

Let us pursue this observation further and think of it not only as an interpretation of the teacher's experience but also as a way of thinking about the education of students. If in our lives we are constantly constructing, reporting and revising various narrative unities, then education should somehow draw on, develop, remake and introduce such narratives. From this perspective, education cannot occur unless it calls up and makes use of some aspect of each student's narrative unity. What makes sense to an individual depends in large part on which narrative structures are blended in his or her life and just how the blending occurs. We can see this in the sense of learning through the experience of schooling and in the sense of learning formally through discussion of the experience in terms of the modes of knowing. Let us return to the gingerbread boys episode to understand how we see the practice of teaching and learning in these terms.

It will be recalled that the aesthetic quality of the episode was not only descriptive of how it was experienced by Stephanie but also of how she felt it should be experienced by her students. The children were required to act as "little artists" by making their own cookies and then were told to be "good" and not eat them but instead to use them for decoration. Even the researcher was educated in this respect as Stephanie showed her what to do with the children and then drew her attention to several of the more pleasing cookies.

This heightening of the aesthetic dimension of experience is done in a more formal way in creative art courses when children's attention is specifically drawn to it. Some professors teach aesthetics to teachers and philosophy students in a similar fashion. Maxine Greene and Elliot Eisner, for example, teach aesthetics to teachers by having them reflect on the aesthetics of their everyday experience, and Mark Johnson teaches aesthetics to
philosophy students in a similar way. Like Stephanie, these instructors are not asking their students to know aesthetics conceptually but experientially. By reflecting on the aesthetics of their personal experience the students are able to heighten the experience of knowing aesthetically.

For us, this going back over an experience and heightening a dimension is a "giving back" of the experience, aimed at seeing it in new lights. It is, in our terms, a revising and remaking of each learner's narrative unities. Accordingly, we can view the gingerbread boys episode as one of revision and re-creation of the narrative unities of Stephanie's students. When the teacher "gives it back" experientially rather than teaching it conceptually, pupils encounter the aesthetic experience morally, emotionally, interpersonally, and spiritually. Indeed, to call the episode a lesson in aesthetic knowing runs the risk of diminishing this more complete sense of how this teacher and her students know the teaching and learning situation. It is, for them, a unity of knowing.

Giving it back, of course, means different things for different children, depending on their narratives. Some children will come from homes where gingerbread boys are made at Christmas, some from homes where the cookies are made but not for any special occasion, some from homes where the cookies are not made at all but where baking is part of a tradition of celebration, and some others, perhaps, from homes where neither baking nor celebration are part of home life. In the last case, the episode might be best considered an initiation of new narratives, separate from the narrative unity of the children. Even here, a close study of the children's narratives would reveal related experiences in friends' homes, in the shops, through the media, on the playground and in past school activities. To some degree, all students have some narrative context for the making of gingerbread boys.

A sense of giving back the children's experience for reflection is, then, inevitable for almost all Stephanie's pupils, in ways that make the gingerbread boys touchstones to home experience and cultural cycles. She is calling forth the students' experience and giving it back in the new setting of the classroom with its multicultural make-up. A Christian child, for example, now sees his personal narrative, and the celebration of Christmas, through the eyes of his
teacher and classmates. Both Stephanie and the other children have their own experiences and these, in turn, are embedded in different cultural and historical narrative unities.

This "seeing through the other's eyes" occurs because other children's narrative unities have been celebrated in the class. The experience of Christmas for the Christian child is therefore enriched because the child's experience is broadened to respect and understand the cultures of others.

Although the classroom experience of making gingerbread boys may resemble a similar home experience, its educational value goes beyond mere replay. For the child who shares in the cultural and historical narrative unity of which the Christmas baking of gingerbread boys is a part, seeing the experience as it is seen by others with different narrative unities is a revision and re-creation of narrative unity. Life is seen to be more than a cycle of Christian holidays. In a similar way, a new narrative, and with it insight into the personal and cultural narratives of others, is begun for students whose narratives are embedded in different cultural and historical narrative unities. They now see life as more than their own cultural narrative unities.

We do not wish to make more of the gingerbread boys episode than is warranted. By seeing it as embodying aesthetic, moral, emotional, interpersonal, and spiritual modes of knowing, as a touchstone to home and culture, and as a way of enhancing children's personal and cultural narratives, it may seem that we are making much ado about a little. We would be doing so if the episode were an isolated act. But because the episode occurs as an expression of Stephanie's modes of knowing the classroom as home, rhythmically lived out in terms of cultural holidays and home life, the gingerbread boys are part of the continuing educative experience of giving back for reflection the children's narratives of experience. The episode has a narrative unity which is given, and seen, in terms of Stephanie's personal practical knowledge of her classroom.

Two points, then, emerge from our interpretation of Stephanie's practice. The first is that in Stephanie's classroom we see her "giving back" each child's experience in her Christmas practice of making gingerbread boys. In that "giving back, she calls up and makes use of some aspect of each student's
narrative unities. For some students, the experience of making gingerbread boys in class is a revision of a continuing narrative unity; for others, it is the creation of a new but connected narrative unity.

Second, the "giving back" of student experiences is a desirable classroom practice. In the reporting, revision and creation of narrative unities, the richness of each person's experience is evoked. Teaching and learning situations should, we believe, continually "give back" a learner's narrative unity so that it may be revised and, perhaps, a new, connected narrative unity begun.

13.8. EDUCATIONAL IMPLICATIONS OF EXPERIENTIAL MODES OF KNOWING

The primary implication of the school perspective on knowing is a focus on the experiential rather than the conceptual. It is a focus on the making and remaking of meaning in teaching and learning situations. In knowing school situations, teachers bring to bear their personal practical knowledge, composed of such experiential matters as images, rituals, habits, cycles, routines and rhythms. This mode of knowing the teaching and learning situation (or, if one prefers, "these modes of knowing") is re-collected from the narrative unities which make up the person's life experience and which contain experiential elements that are "on call" for this purpose. Modes of knowing that are described as conceptual modes of knowing when formally learned (sense one) are submerged, and take their place in the narrative unities of the teaching and learning knower (sense two). Depending on the demands of the situation, these modes of knowing may be recalled as concepts for instance, on a test (sense one), or re-collected as experiential dimensions of the modes of knowing teaching and learning situations (sense two) for example, in Stephanie's Christmas classroom practices.

A second implication of the school perspective on knowing, essentially a corollary of the first, is that teaching and learning acts are no mere sequences of behaviour, nor are they only expressions of a conceptual, cognitive structure, such as modes of knowing (sense one). They are unities of mind and body, which we term "minded practice". To see a teaching and learning act is to see
an experiential mode of knowing (sense two) at work. Likewise, to refer to an experiential mode of knowing, such as rhythmic knowing, is to imagine certain bodily movements. The two are intertwined. Accordingly, when it is said that Stephanie knows her teaching rhythmically, we imagine such bodily acts as the making of gingerbread boys at Christmas, and the in-class celebration of each child's cultural holidays.

This understanding of Stephanie's experiential mode of knowing teaching and learning situations entails two further points of interest. The unity of Stephanie's modes of knowing her teaching and learning situations implies a unity, derived from her narrative experience, of the kind of activities teachers carry out, such as planning, teaching, and evaluating, and also a unity in the personal practical knowledge brought to bear on the situation. Thus, knowing the classroom rhythmically entails a unity of considerations of planning, teaching, and evaluating. At any point, of course, one of these activities will predominate. The making of gingerbread boys is an example, timed according to its place in the rhythm of teaching. But in the transition, in the movement entailed in the rhythm, a planning act leads to teaching that is imagined in the planning; and the teaching leads to evaluation, and contains it reflectively both in the act of teaching and, sometimes, summatively at its end. All of these matters are in the teacher's knowing at all times. Each of these three instructional acts reflects the others. Similarly, a student knows his learning situation as one of evaluation as well as learning. His narratives of classroom experience have taught him that learning and evaluation, in formal school situations, are always simultaneously at work.

The personal practical knowledge brought to bear on a situation also exhibits unity, evidenced in the gingerbread boys episode where the aesthetic is highlighted. Because we understand that Stephanie's experiential mode of knowing her classroom is in terms of an image of home, and because she knows the year rhythmically, we understand that the aesthetic emphasis is played out as a recollection of her personal narrative unities. As such, the aesthetic experience is merely our name for what is, for her, a unity in her narrative. We re-examine the episode and find moral, emotional, interpersonal, cultural, and spiritual dimensions. But Stephanie aims at none of these. She wants students to appreciate the gingerbread men, and thereby, to heighten their aesthetic
sense. But she does so because she wants the students to feel "at home" and to experience the cultural rhythms of her classroom. They are, after all, her modes of knowing the classroom. In short, the unity of mind and body in teaching acts further entails a unity in the activities attributed to teaching and to the modes of knowing (sense one) at work.

Teachers, teacher educators, and others concerned with curriculum planning should not treat the modes of knowing (sense one) as garments to be put on according to particular situations, e.g., the aesthetic for an art class, the scientific for a science class. While it is good to recognize a diversity of modes of knowing (sense one), rather than treat teaching and learning as if it were an expression of only one or two, one risks treating the modes as concepts to be applied in various teaching and learning situations according to their character. In our view, there is little to choose between diversity and singularity with such a notion. Instead, educators need to focus on experience, unity and, in particular, teacher and student narratives. In drawing upon, developing, remaking, and introducing narratives, teachers can bring out the richness of experience, giving credit to both their own and their students' personal knowledge of their teaching and learning situations. These situations need to continually "give back" a learner's narrative experience so that it may be reflected upon, valued and enriched. We want knowing to come alive in classrooms as the multi-faceted, embodied, biographical and historical experience that it is.
REFERENCES


Clandinin, D.J. and Connelly, F.M. Teachers' personal practical knowledge: Calendars, cycles, habits, and rhythms. Paper read at the curriculum planning conference, Haifa University, April, 1984.


Phillips, Dennis C. "On What Scientists Know, and How They Know It." Chapter in Learning the Ways of Knowing, the 1985 Yearbook of the National Society for the Study of Education (in press).
