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ABSTRACT

This study focuses on a beginning secondary science teacher and his efforts to establish a learning community in a large metropolitan school district. During the study, the teacher was enrolled in an alternative teacher-certification program for returned Peace Corps volunteers. After teaching full-time during the day, participants attend university classes at night to earn certification and a masters degree in education. Data collected included 20 interviews, 5 focus group sessions, over 60 classroom observations, portfolios, and journal entries over the course of five and a half semesters. Findings are presented in the form of narrative vignettes and dialogues, and suggest that the authoritarian teaching methods taught and practiced overseas through the Peace Corps hindered the teacher until he developed his own, more collaborative teaching style. Other barriers to the teacher's efforts to establish a participatory instructional community are discussed, including bureaucratic demands, loss of instructional time for numerous reasons, and student absenteeism. (Contains 17 references.) (PB)

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PEACE CORPS FELLOWS IN THEIR URBAN CLASSROOMS:
THE STRUGGLE TO BUILD A LEARNING COMMUNITY

by

Ruth Bombaugh

Presented at the Annual Meeting of the American
Educational Research Association
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Peace Corps Fellows in their Urban Classrooms: The Struggle to Build a Learning Community

Prepared for the national conference of the American Educational Research Association, NYC, April 8-12, 1996.

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Purpose

This descriptive study focuses on a beginning secondary science teacher, "David," and his efforts to establish a learning community in a large metropolitan school district. Classroom learning communities with their emphasis on collaborative and student-based teaching have been strongly advocated as efficacious environments for valid learning experiences (Ayers, 1993; Marshall, 1990; Palincsar, Anderson & David, 1993; Roth, Peasley, & Hazelwood, 1992). Careful documentation of individual teachers working in their classrooms may yield valuable insights (Kilbourn, 1980, 1988; Russell, 1994). This study probes the details of David's individual classroom experience for suggestions into what can contribute or hinder the formation of learning communities. These suggestions, in turn, hold implications for policy makers and for further research.

Context and Data Collection

During the study, David was enrolled in a Peace Corps Fellows/USA Program, an alternative teacher-certification program custom-designed for returned Peace Corps volunteers (Bombaugh, 1994). The Peace Corps Fellows/USA Program places "Fellows" (i.e., returned Peace Corps volunteers) into inner-city classrooms as "permanent substitutes" after just two weeks of orientation. In their assignments as permanent substitutes, the Fellows are given the entire responsibility for their own classroom of students in the same manner as regularly certified teachers. After teaching full-time during the day, the Fellows attend university classes during the evening in order to earn both teaching certification and a masters degree in education. David completed the program after five and a half semesters. I was his university supervisor for his first eighteen months, August 1993 through January 1995. Data that I collected while I worked with David included 20 interviews, 5 focus-group sessions, over 60 classroom observations, portfolios, and journal entries.

Theoretical Framework

For this work, I have taken the phenomenological stance of Ton Beekman and his colleagues at the Institut Pedagogische and Pedagogische Wetenschappen, Utrecht Universiteit that the researcher is a central figure in her research and that everyday experience is worthy of study (Barritt, Bleeker, Beekman, & Mulderij, 1985). I share the belief with Loren S. Barritt that the language and action of participants in their normal everyday life when examined carefully reveals fundamental beliefs about learning and teaching as well as important insights in how their working environments interact with those beliefs (Barritt 1994, 1996).

In keeping with this study's phenomenological stance, I have presented my results in the form of a critical vignette. Events are described with attention to details as a way of conveying the situation as accurately as possible. I deem such attention to details as absolutely essential for capturing the nuances of the atmosphere, the feeling of the reality of the present and the mood, i.e. Martin Heidegger's *Befindlichkeit*. I concur with Brent Kilbourn's emphasis on "holistic interpretations" as a key element in ethnographic and phenomenological research which separates this qualitative research from the more traditional, carefully controlled research based on a physical science model (Kilbourn 1980, p.173). Classrooms are "yeasty

places" (Ayers 1993, p.16) and studying them is more like doing research in ecology than in the physical sciences (Hurd, 1991).

Results: A Critical Vignette

Part I: My Entry into the Study and David's Start as a Middle School Teacher

I can feel the tension in my neck building as I drive further and further east into totally unfamiliar terrain. A city map is spread out on the car seat beside me. On top of it is a large index card with a step-by-step list of the inner-city streets which make up my route to Langston Middle School.

But even before I can use the card, I have to find the interstate. Why hasn't it appeared yet? Have I missed it somehow behind me?

At last the interstate appears and I merge onto it watching as more and more trucks crowd the lanes and farmlands become industrial areas. Finally, I turn off the interstate onto the smaller streets which are listed on my index card.

So," I think silently to myself. "*This* is the inner city."

The city is the way it's "supposed" to be; everybody is African-American. In the trucks, in the cars, walking on the streets, everybody is African-American. Everybody, of course, but me. I notice that the street-lights don't have left turn signals. They seem to say "take your own chances." There's something else missing too; the elementary schools that I pass don't have special cross-walks for the children. "Aren't these children cherished and precious too?" I wonder.

I'm relying heavily on my index card with the listed turning points now. I spent considerable time last night writing it out. For sure, the inner-city *isn't* one of the places I want to get lost in.

Actually, I smile ruefully to myself, it's pretty ironic that I would take on a job that necessitates commuting at all. I *hate* driving. Not only do I *hate* driving, I also am not particularly *good* at it. In fact, I've managed to "total" two cars quite nicely. The last car I totaled was just last spring. That accident almost excused me from driving altogether since it was difficult afterwards to find an insurance company willing to insure me.

But anyway, of all the university work which I could have found to do as a graduate student, I chose this one of supervising with the Peace Corps Fellows/USA Program. In spite of the driving and in spite of whatever trepidation I have about being in the "big" city, here I am groping my way along the congested urban streets on my way to my first school site.

Finally, I arrive at the last street listed on my index card and turn down it. Some of the houses are boarded up and a few are entirely blackened without roofs. Most just look run-down. But here in the inner city it is *green*. Much greener with trees and grass than I ever could have hoped for the children who must live here. Inwardly, I give a little alleluia.

I drive through a few more intersections and suddenly Langston Middle School appears. "My God!" I whisper softly. Fifteen-foot fences with barb-wire on top surround most of the grounds. No grass, no trees. Everything is black-top. There are two buildings on the site and they are *huge*. I'm not sure if it looks more like a factory or a prison.

I drive on looking for a secure place to park. There's a fenced parking lot with a broken gate but it's full. So, I'll have to take a chance and leave my truck on the street. "Well", I mutter trying to comfort myself, "at least my truck is old and fairly unattractive, not a spiffy sports model or anything." But, of course, my predecessor's car that got stolen last year wasn't fancy either! I hope *he* had full insurance; I can only afford liability.

It's not obvious how to get inside. The only students who are outside are all males. I find one who is standing alone and ask him which entrance I should use to find the office. He gives me clear directions in a very polite manner and I thank him.

I walk past the police-car parked on the sidewalk and find that only one of the doors is unchained. "God forbid that the people inside, including myself, ever have to exit quickly from a fire" I think out loud as I pull the single, unchained door open. On the other side are three guards standing beside a metal-detector just like the ones I've seen at the high-security Frankfurt airport.

Part II: Inside David's Middle School

One of the guards frisks my back-pack while a second one checks my ID cards and has me sign an entry sheet. The third one points the way to the office and asks me to report there for an official visitor's badge.

Just as I begin walking, the bells that announce the change of classes begin to ring at ear-splitting levels. Classroom doors swing open and preadolescents spill out of them and fill up the corridor within seconds.

The decibel level in the hall-way nearly matches a Boeing 747. Throngs of students in closely packed tides of movement jostle their way up and down the stairwells. They slam lockers and shout to each other as they push and shove their way down the corridors. A teacher standing in the hallway shields himself with his classroom door. He braces his foot for a doorstop and wields his shield using the doorknob as a handle. His mouth is moving and his free hand is gesticulating but none of his words can be heard; he makes a surreal vignette against the reality of students bumping and buffeting their way around me.

The end of the three minute break between classes is heralded by hall-way bells starting to ring again in their ear-splitting level; one particularly obnoxious bell is right above me. Students begin jamming themselves frantically through classroom doors elbowing each other for space. Within thirty seconds, the hallways are clear. I am alone again and follow the signs to the office.

I enter the large double-doors to the office and approach the long, wide desk counter. While I am introducing myself and asking for David's room number, an African-American woman who is roughly my height and well-dressed in an orange-yellow suit enters from the hall-way behind me.

"Dr. Bennett, what time will your assembly be tomorrow morning with the eighth graders?" one of the female office workers asks her from behind the high counter space.

"Immediately after their lunch hour and I want a separate assembly for the seventh graders and sixth graders as well" Dr. Bennett replies.

She turns around to me and offers her hand. "I'm Vivian Bennett, the principal."

"Oh, thank-you, Dr. Bennett, I'm glad to meet you" I reply shaking her hand and noticing what a surprisingly firm hand-shake she is giving me back. "I'm Ruth Bombaugh and I work with the Peace Corps Fellows/USA Program at the University Center. I'm here to observe one of our Fellows who is a new science teacher in your building."

"Well, that's good to hear. You're very welcome" says Dr. Bennett graciously. "What program did you say you're with at the university?"

I quickly explain how the Fellows program was set up as an alternative certification and masters program and Dr. Bennett zeros in on me with her attention. Then she welcomes me again and tells me a little bit about herself and the school. I'm surprised to learn that the school had just reopened in the fall.

"You mean all the students and teachers and everybody has just come to this school this fall?" I ask. "Where did they all go to school before?"

"Well, the board kept the high school next door open but they shut down this junior-high school about seven years ago. All the middle-school students and teachers had to switch to other schools in the district. But for the last two years, the board wanted to reopen this building and the area supervisor had asked me three different times to come over here and be its principal. So, I finally decided he was very serious and I should do as he asked" she says laughing.

"Wow, that means that *everyone* is new and starting over" I say out loud while trying to mentally evaluate all the pros and cons for what it would be like for a one of our Fellows to come into a newly reopened school.

"Yes, that does mean a new start for everyone. And some of our students still aren't sure what the right way to get started is" Dr. Bennett says getting serious. "So I'm going to have these assemblies to let them know what the expectations are."

"Excuse me, Dr. Bennett, Dr. Pederson is returning your call," an office personal interjects before Dr. Bennett can elaborate further. "Oh, that's fine; I'll be right there." Dr. Bennett replies. We shake hands again and I return to the hallway.

I keep following the numbers down, down, down the hall until finally at the very end of the corridor on the corner. I see David's room number. It's quiet, so I open the door carefully.

Part III: David's Sixth Grade Class

Only David is inside. It is his lunch hour, albeit 10:30 in the morning. He is very intently writing on the black-board but looks up after I have entered the room.

"Hi! Come on in. I need to get some stuff on the board so I won't be able to talk for a few minutes."

"No problem. I *always* carry lots of work with me just in case I have an unexpected windfall of leisure time" I reply laughing as I sit down in a student's desk at the back of the class.

I appreciate the moment's respite and I use it to quietly look around. "Nothing." I think silently to myself. "in this space around me is different than my own 1920's building where I taught middle school for eighteen years." The thirty-five wooden student desks with their attached seats are in rows so tightly spaced that a person has to walk sideways to get up and down the isles. The black-board spanning the whole front of the room is the old-fashioned slate, real slate. The floor are bare but boast solid maple. The ceilings are high, and the windows full-sized. "This setting could be wonderfully bright and cheerful if only these walls weren't so bleak with their grayish, chipping paint" I muse silently. Last but not least, dead center and squarely-placed in front stands that bastion of authority, the traditional, solid oak, teacher's desk.

Just as I finish my perusal, David suddenly notices a student smirking and looking into the room through the glass window on his door. He flies out into the hall chalk still in hand.

"What do you think you're doing?" he challenges the tall, pre-adolescent female.

"I was just looking" the student replies sticking out her chin.

"Well, what gives you the right to look into my classroom? If classes were going on, you would be disturbing them."

"Classes aren't going on!"

"Don't be looking in my room. Go about your own business. You have no right to hang around my door, no right at all!" David says in such an adamant tone of voice that the girl hangs her head. She says "Okay, I won't do it anymore."

"Thank-you," David replies in a strident voice and marches back inside his room to his blackboard. He finishes writing, grabs his paper lunch bag from one of the desk drawers and sits down with me.

"What are you doing today in class?"

"Ah, we're converting metric units of length for the first five minutes."

"Oh, for your "bell" work?"

"Yup. And then I'm doing a demonstration to illustrate chemical change versus physical change afterwards" David replies between mouthfuls.

"That sounds good. You're using bell work to follow up on the metric unit you told me about last week and then you're providing variety within the same class period by adding new material."

"Right," David concurred. "The students had a lot of problems using rulers and making conversions but I followed your suggestion on measuring students and their height charts are up there." He points with the sandwich and I notice homemade charts with each student's name and height in centimeters posted on the wall beside the chalk board.

"Great! That's really good that you made your first measurements right away so that you can follow-up throughout the year with monthly up-dates. Later on, you can show the students how to calculate mean, mode, and median averages for their height, compare male versus female growth spurts, make graphs and have all sorts of fun with the large body of data you collect. Neat!"

"Yup. And you were right about the students being interested. They *loved* being measured."

"Sure. Anything involving themselves, their own bodies or each other is intrinsically fascinating to pre-adolescents." I smile. "And by doing the height measurements with a lot of care, being consistent with the measuring device you use, being consistent with how the students have to stand straight and not wear shoes or hair clips, being consistent in how you write down each measurement as it's being taken etc., you show them by example one way to go about collecting data like a model scientist."

I am both surprised and pleased that David has acted so quickly on a suggestion I made only a couple of days ago. For David to have measured all his students and to have made hand-written charts meant that he had invested some real time in the project. I begin to really warm up to the subject and am ready to expand, with David's help, on still more ways to follow through on the monthly measurements. Our conversation, however, is interrupted with the same ear-splitting level of sound that I had suffered in the hall when the bells had rung twice before. Apparently, David's lunch period is over.

Students start spilling into the room, laughing and bumping into the desks. "Well, gotta go" David says apologetically as he squeezes himself out of the student-sized desk and turns his attention to his students.

"Sit down," David bellows over the din as he walks sideways in the narrow aisle back up to the front of the room. "I am collecting your bell work. I am collecting your bell work." he repeats for emphasis.

Students still are bursting through the door, laughing and shouting.

David starts clapping his hands slowly and loudly. "You are so wound up today" he protests to the exuberant students grabbing each other and falling over desks around him.

"But he broke my pencil in math class!" a male student starting to scuffle with another shouts back.

"Settle down!" David shouts as more and more students spill in. Students begin taking their seats until only one or two desks of the thirty-five total are vacant and no students are left to fill them.

"I want you to do problems today on a separate sheet of paper" David says loudly even though the room is quiet now.

"You either do a problem or you got to show me 'cause I forget how to do it," a female student calls back to him.

"Remember how we said the meter is a dollar and the centimeters are the pennies? So you can fill this one in," David encourages her. He walks over to her desk to make sure she can get started and then begins moving around the room squeezing himself between desks.

"Look at this student here. He already has a couple of problems down on his paper," David says standing over one student. A few of the nearby students look over at the model student and then get started themselves.

"I don't have any paper," protests one student on the other side of the room.

"You are responsible for bringing in paper. How many times have I told you that?" David says in an exasperated tone of voice.

"You tell us that every day!" another student pipes up.

David fetches the student a piece of paper and then continues to circulate around the class. The five minute bell work stretches into twenty minutes until finally David calls on a student to show her work on the board. She finishes her task and then gets the privilege of picking the next student. Students are waving their hands frantically. She picks a male student but another female student is very upset.

"You *promised* that Jenny and I could have a turn at the board today" she insists to David.

"That is right. I did make a promise. These two young ladies should go to the board next" David responds. "Sorry" he says to the male student who has been picked but isn't going to get a turn.

While the students finish up their work on the board, David gets ready for his lab demonstration. Students talk in excited tones to their neighbors while they wait.

"Physical change is a change in which *no new* products are formed" David tells the class in a serious voice.

"Chemical change is a change in which something *new* is formed. Now, I'm going to show you some changes. twelve in all, and you tell me if they're physical or chemical changes."

David begins doing a rapid series of demonstrations and the students respond with glee. They shout out answers and wiggle back and forth in their seats to get a better view. The most exciting parts of the demonstrations are the ones that use fire. Even lighting a candle and then holding it sideways so that the wax drips off causes the students to sit with their legs tucked underneath themselves for a better view.

"Is this a chemical or a physical change going on here?" David calls out to no-one in particular as the candle wax drips and a bit of smoke rises.

"Physical?" came back an answer.

"No, chemical" David replies. Any further discussion or explanation is interrupted by the bell.

"Turn in your papers before you leave" David shouts over the eruption of movement and talking. Students jostle one another to put their papers on the teacher's desk and then fight their way out of the room.

"Good-bye. See ya tomorrow" a number of them call back to their teacher on their way out.

"Yup. We'll go over this again tomorrow" David calls back to them as he cleans up his demonstration materials.

"Good quick pace there at the end" I tell David in the brief lull between classes. "You really kept their attention riveted."

"Yeah, well, I guess I ran out of time towards the end there."

"You may have spent longer on your bellwork than you intended," I point out. "Those metric problems are something of a challenge for these students. From their comments, I think some may be confused that when you convert from a larger unit like say a meter to a smaller unit like say a millimeter, you suddenly have a bigger number. For example, 97 meters is 97,000 millimeters."

"Right," said David in the characteristic way he drawls the word when making interjections in a conversation.

"And some students couldn't figure out how many places to move the decimal point."

"Right," David says again.

"So, why not tell them just to count the zeros. Like one meter equals 1000 millimeters and the number 1000 has three zeros and the number 1 has none so you move the decimal three places." I suggest.

"Oh yeah? I can see that," David says putting his hands on his hips.

I would have liked to have talked about the lab demonstrations also. I was pretty sure that some students were confusing a change in state with David's definition of a chemical change being "whenever new products are formed." The last class of the day, however, is barreling its way in and David needs to give it his attention. I hand David my written comments, invite him to call me later, and duck out the door when a space appears between incoming students. Our conversation can wait.

As I walk down the corridor, I reflect on my observations of David and his classroom. I feel content with what I have seen. "David has the energy and the ingenuity to match his vibrant sixth graders," I think to myself. "He can work with middle-schoolers. And that is saying a lot! If I have seen some rough edges as far as his expectations of behavior, it's counterbalanced by a sense of fairness and an ability to listen to his students. Beyond his fairness and ability to listen, I trust the middle-schoolers to wear down any rough edges and polish them off!" I conclude.

I chuckle to myself thinking of the ability of middle-schoolers to wear a teacher out while at the same time charming them with their sheer enthusiasm. Any further reflection is put on hold because the crowded halls need my full attention for navigating safely. I cross my arms over my chest to make it easier to protect myself in the tide of students and carefully make my way back to the single, unchained door.

My old, trusty, 130,000+ miles truck is still where I left it. I hop in, lock the door, flip my index card to the back side and carefully back-track my way out of the inner-city.

Part IV: Fourth Friday

"Hey David, Hi! This is Ruth. How are things going?" I query without preamble on the telephone. It was Thursday in late October now.

"Ah, well, about as well as could be expected under the circumstances" David replies simply.

"Under what circumstances?"

"Well, I lost my job."

"You what?"

"You knew that I lost my job?"

"Heck no. What do you mean? You lost your job?"

"Yeah. Fourth Friday."

"What fourth Friday?"

"Last Friday was the Fourth Friday."

"What do you mean, 'Fourth Friday?' I'm clueless. Help me out here. What are you talking about?" I say completely baffled and still hoping against hope that what I am hearing about David being out of his job isn't true.

"You don't know what Fourth Friday is?" David replies.

"No. Never heard of it. What are you talking about?"

"Well, neither did I until this week. You see, there are strict union rules that no teacher can have more than 35 students in a class. But because it takes a while for student registration and everything to get finalized, the schools don't take an official count of their students until the fourth Friday. Well, actually more like the fifth or sixth Friday but they still call it the Fourth Friday. Then they can see how many students there are compared to how many teachers they have. So, if there are too many students in a building, the school will have to hire extra teachers. If the opposite is true, the school will let go of some teachers."

"You're kidding!"

"No, I'm not. I walked into the school on Monday morning this week just like I always do, and before I could get to my mailbox, the vice principal walked up to me, shook my hand and said 'It has been very nice working with you' and I was let go just like that."

"No!"

"Yup."

"Good grief, David, that's terrible. What happens to all your students? You mean, I mean," I stammer, "are they just parceled out into other people's classes?"

"Yeah. I guess so."

"Wow." I envision David's corner room with no-one in it. Shafts of sunlight from the tall windows warm a bare wooden floor and empty desks. A solitary wall chart with height measurements is left hanging like a broken promise on gray walls with chipping paint. The boisterous, energetic community that once filled this room is now in Diaspora.

"What happens from here for you, David? Do you have another job lined up?"

"Well, I guess I'll be a building sub at another junior high school. I'm supposed to report there on Friday."

"Oh, but in the meantime you've lost some income. That's not easy when your wife just had your new baby."

"Well, it isn't just the loss of income for the three days. It's the insurance and lower pay scale."

"What do you mean, 'it's the insurance and lower pay scale?'"

"Being a building sub is different than being a ESRP. I get paid about twenty dollars less per day plus I don't have any insurance benefits."

"You mean there's more than one kind of substitute? I didn't know that! What does ESRP stand for then?"

"That means 'Emergency Substitute in a Regular Position' and those substitutes are the ones who have their own classroom. The building substitutes are just 'ES', 'Emergency Substitute', and they're the ones who go into any classroom that a teacher is absent for that day."

"Oh, wow. I never appreciated that there was a hierarchy. Nor did I realize that the inner-city schools didn't just have a list of people willing to come in and substitute that they could call on when a classroom needed a teacher. You mean each building keeps its own cadre of substitute teachers?"

"Yup."

"And there's a pay differential between ES building subs and ESRP permanent subs?"

"A big difference as far as I'm concerned. It comes out to roughly twenty dollars a day plus an ESRP get benefits and that includes holiday pay."

"Oh man, this really stinks. This would be bad enough for a single person but your infant daughter is only a few weeks old!"

"Right" David drawled in that characteristic way he had of always interjecting and encouraging a speaker to continue.

"Is your wife nursing your daughter?" I thought that was a bit personal to ask but since David had been in the Peace Corps, I knew that his attitude toward such matters would be different than most young, American males.

"Well, she started to nurse her but then when I lost my job, she decided that she had better not because she might have to keep her job so that we have insurance. Her job only gives her a six week leave of absence. Then she either has to quit or go back to work. She really would like to quit and stay home with the baby but we need the insurance. Besides, my job even *before* this happened wasn't paying enough to support all three of us."

"Wow, what a dilemma. I'm *so sorry*, David. Our country is so *extremely* short-sighted about maternity leaves. In Sweden, for example, the mother can stay home with pay for a whole year and then she can choose to stay home a second year without pay but with the guarantee of having her old job back. If the mother would prefer to return to work and the father wants stay home, that's fine too."

"Really?"

"Yup. As for benefits, *everyone* has national health benefits. My Swedish teacher here at the university was really bummed out when she gave birth to her baby last semester. She thought we were really third world!"

"Man, that would be *so* much better."

"I know. But there *surely* are some loans or outright scholarship funds that can help see your family through this trial. I know that Stu as your program advisor will look into this for you. And I hope that you can get another ESRP position really soon."

"Yeah? Well, thanks. So do I. Oh oh, the baby is crying and I'm the one on duty so I gotta go."

"Understood. I can hear her in the background and she's really wailing. Take care, David, I'll talk to you soon."

We hang up and I sit there shaking my head. David had worked the graveyard shift in a plastics factory to support himself and his wife immediately before he joined the program. I am sure that he will do whatever is necessary to take care of his family, even if it means quitting the program. The question uppermost in my mind now is whether or not the program, our university-public-school partnership, will do what is necessary to take care of David.

Part V: Inside David's High School

David's new building substitute job at the second junior high school had lasted less than two weeks. He left that position for another opening at a high school, the age level he really wanted to teach. Personally, I was disappointed that David wasn't going to continue to be with middle schoolers. I felt that David had the combination of energy, patience and ingenuity it took to become an excellent middle-school teacher. I expected him to be a fine teacher at the high-school level too but, in my opinion, it required a lot more of a person to be successful at the middle-school level than it did the high-school level. I thought David might come to a similar conclusion also if only he had had a longer period to work with middle-schoolers. Anyway, it was my *hypothesis* that David would become an excellent middle-school teacher and gradually come to prefer that age level. But, as far as I could see, it was a hypothesis that never would be tested.

David's assignment at the high school was still only a building substitute position rather than an ESRP position. David was hopeful, however, that an ESRP position would appear on the horizon from somewhere soon. In the meantime, the program had secured him a loan to make it through the lean times.

When I arrive at the site of David's new assignment, I find a more modern building than the old four-story high school next to David's original middle school. This high school is only two stories but with the same 2400 student capacity as the older, older high school. Because it has the same capacity but only two stories to house it, the newer high school sprawls over a greater area; it covers a whole city block. Unlike the older school, however, there is space for green grass and a few trees in the front of the building. Extra-wide sidewalks lead up to the entrance providing plenty of space for the three police cars parked there.

There is one large oak tree, hardy and green, next to the school's alley. I park underneath its comforting branches and walk the half block to the central entrance of the school. Across the street in a gas station, a man with no car props himself up between two gas pumps. He is shaking all over and jerking his limbs convulsively. I turn away from his distress wondering at my complicity with some unwritten code of inner-city behavior towards strangers. The usual metal-detector and chained doors that I've come to expect are in place as I enter the building.

I ask the guard standing at the metal detector for directions to the office and he points it out. It's a fairly straight shot down the corridor not too far away.

The office, I find, is a busy place. Some students are trying to get a late pass to class, some alumni have come to order transcripts, and a parent has come to bargain his son back into the school. It takes about twenty minutes before it's my turn.

"Yes?" says one of the staff.

"I'm from the University Center and I'm here to supervise David Jacoby" I explain as distinctly as I can.

"Who? What?" she says looking at me in a puzzled manner.

"David Jacoby is one of your building subs and I'm here to sit in on his class and observe him teach." I explain again.

"Oh" she says turning around. "Doris, have you heard of a David Jacoby?"

"His specialty is science" I say trying to help out. As I stand there waiting, I wonder how many teachers teach at this site. "Probably roughly two hundred in order to cover the 2400 student body," I think silently to myself. "Heck, up in Leelanau County where my son started school, there were 200 *students* K-12 in the whole Leland School District!"

"Oh yeah," says Doris after a considerable pause to the staff person helping me. "He's been doing a lot of substituting in the math department. Why don't you see if Mrs. Johnson knows where he's at today?"

The woman assisting me uses her intercom to call Mrs. Johnson but no-one answers. She keeps the intercom at her side and turns to help some students who have come in. Then she tries again and Mrs. Johnson answers.

"Mrs. Johnson, this is Ms. Arbit in the office down here. Do you have a David Jacoby substituting in math for you today?"

"Who?"

"David Jacoby."

"All of our math people are here today so no-one else is in any of the math classrooms," replies the invisible Mrs. Johnson.

"Oh all right, thank-you Mrs. Johnson," says Ms. Arbit and turns off the intercom. She pulls out a disorganized sheaf of papers and starts running her finger down them. "Oh, here we go" she says. "He's substituting in the English department today." She checks the clock and then the paper. "He's teaching seniors in room 2114 this period" she says.

"Thank-you very much!" I reply, but Ms. Arbit had already turned her attention to a teacher who came in and I'm on my own again.

I start walking in what I hope might be a useful direction. "How can new students ever find their way around here?" I wonder to myself.

I see a door labeled "Faculty Women's Restroom" and think that I am very lucky indeed since a quick stop there would definitely be a relief. The door, however, is locked. I keep walking and see another door labeled "Girls' Restroom". Should I take the chance? I have neither eaten nor drunk all day in order to avoid this hassle but there aren't any students in the hall and I might not have access again until I get all the way back home.

I walk into the restroom and marvel. Someone thought of a way to minimize graffiti on the walls; they're painted black. The lights are so dim it would be difficult to read in there anyway. No problem with tissue being strewn around either; there is none available in any of the stalls. Fortunately, there *are* doors on the stalls. No locks though. I finish quickly and leave just as a bell begins to ring and the corridor fills with students pouring out of their classes. I am reminded of my five-foot stature as I walk among them. "Everything is relative" I murmur to myself as one especially tall female strides quickly past me. After all, if I were among the Otovalian Indians in the Andes, I would be considered tall myself!

Up the corridor standing beside a sliding metal gate is another guard and I get directions to 2114. A few more corridors, up a staircase, around to the right and I am there in front of the door.

Part VI: David's Twelfth Grade English Class

David's students are there as well. We all wait and look up and down the corridor. I see David coming with an adult female; he looks like a white speck in a sea of color. They arrive and we all step aside. As I move over, one of the female students shoots me such a hostile look that I suck in my breath and quickly avert my eyes. "Oh oh," I think silently to myself, "what's going to happen if David crosses *her* path?"

David's companion unlocks the door, gives David strict instructions concerning how to take attendance, introduces him to the class and leaves. I notice that the window which starts at floor level is open. "That's like an accident waiting to happen if ever there were one" I say to myself and automatically take the seat next to it to save David a potential incident.

"Hey, teacher, why's she sitting there when that's my seat?" a male student challenges standing next to me.

"There are no assigned seats in here," replies David in an amiable tone of voice. "take the seat in front of her if you want to be close to the window".

The student continues standing for a moment but since David goes ahead and starts talking to the class, he reluctantly sits down and slaps his notebooks on the desk. He raises his hand but doesn't wait to be called on. "Hey teacher, write me a pass so I can go to my locker and get my yellow enrollment sheet. Mr. Abram our English teacher told me I *had* to turn it in today *this period* or else I wouldn't be able to attend school".

Bingo. Now the student has David in a real pickle. There's no way for David to know if the student has a legitimate need or not. It *could* well be that there *is* such a thing as a yellow enrollment sheet that *does* need to be turned in this period. It could also be, of course, that the student wants a pass so he can roam the halls and not even bother to return.

David hesitates and I can feel the class go silent and get poised for his response. Fortunately for David it's a small class, only about twenty-five students, and the hostile-appearing female has already fallen asleep.

"No way am I going to let you out of the classroom so you can disappear for the entire period." David replies.

"Naw, man, I need that yellow piece of paper!" the student argues forcefully. Then his voice changes to wheedling. "Besides, I'll come right back."

"No, I said no. No way," David says firmly and begins handing out the worksheet that the English teacher had left for the day's lesson.

"Naw, man, you *got* to let me get that paper!" the student starts shouting.

"All right, all right, listen up" says David holding up his hand in a body-language signal that asks the student to calm down. "Listen up," he says more quietly. "I'll tell you what I'll do. I'll cut you a deal, I'll cut you a deal, man. You stay in class for a half-hour and do the work on this work-sheet and *then* I'll give you a pass so you can get the yellow sheet before the period ends."

The student regards David slowly for a moment and then turns to a male classmate in the opposite corner of the room. "Hey Jerry," he calls over to him. "You hear what this *nigger* said? He wants to make a *deal* with me!"

All the students laugh heartily and now the class is *really* interested. Everyone waits expectantly for the new white substitute's response.

David walks over and stands beside the student's desk. "What did you just call me?" he asks.

"I didn't *call* you anything" replies the student staring straight ahead. "I was talking to *Jerry* not you."

"No, but what did you call me?" persists David looking down at him.

"Hey man, I was talking to *Jerry*," insists the student.

"What's your name?" asks David.

"You don't need to know my name. What you wanna know my name for?" says the student still staring straight ahead.

"Is this your identification card?" asks David reaching over and turning the plastic card attached to the student's shirt to look at it. "Your name is Daniel, right?"

No reply.

"Daniel Radford. So I call you Daniel because that's *your* name and you call me Mr. Jacoby because that's *my* name."

David returns to the front of the class and picks up the worksheet which he had just handed out. "This is the work that Mr. Abram left for you to do," he says even though the adult female who unlocked the door had already told the class that information when she introduced him.

He pauses, takes a breath, and looks around the classroom. "We can do the work together as a group so that everyone has the right answers. That way, you can get full credit for the assignment. Do you want to do that?"

Silence.

"Who would like to start? I'll read the first question." He proceeds to read it distinctly and then looks around the classroom again. "Can anyone help us get started on this first question?" he asks hopefully.

More silence.

The worksheet, a grammar exercise on making comparisons, does *not* look intrinsically interesting to me. But then, I'm just a science teacher.

David calls on a student anyway and the student tries to give an answer. David reworks the answer and calls on other students to elaborate. Then he continues down the sheet and shows the students on the black-board how they can organize their answers into a chart form. He even manages to turn the exercise into something close to a game. Except for the hostile-appearing female who's still sound asleep, all the students are now participating. Even Daniel who at first did not offer to answer any of the questions is now raising his hand and vying for a chance to give verbal answers. Unlike the others, however, Daniel writes nothing down.

The class makes it all the way through the exercise and the students turn in their papers. David gives Daniel a pass and Daniel returns with the yellow sheet. It was a legitimate request after all.

The bell rings, students leave, and David gathers the papers together; his next class is in a different room.

"You did really well!" I say with genuine admiration as I walk up to the front of the room. "Daniel put you in a real pickle at the beginning of class. I doubt I could have handled that moment of crisis as well as what you just did. It was important to give Daniel the space he needed. If you had peremptorily sent him to the office for name-calling, you might have alienated the whole class and really have had a problem. Especially since his request turned out to be legitimate."

"Yeah, that's the one thing my uncle, who's a teacher, advised me" replies David. "He said: 'Make sure you let the students save face. Don't back them into a corner where they have to lose face. It's important for you to maintain some face too but make sure you don't take their face away either.'"

"Whoa, great advice, *great* advice," I concur.

I hand David my observation sheet and quickly make some alternative suggestions on just three minor things I had noticed during his presentation. We also start to discuss one of the students whose answers were particularly intriguing but we have to stop. David needs to move on and there's just no time.

"I hope you can find a permanent-substitute assignment so that you'll have your own classroom and be able to teach science soon" I say as encouragement as we walk out of the room. "Meanwhile, you get an idea what the students are like at all levels and what kinds of things they're being taught in various disciplines."

"Oh yeah," says David a bit ruefully, "I believe there's something to be learned from *all* experience."

David heads down the corridor in the opposite direction from where I had come and I start to thread my way back alone through the throng of students fervently hoping I won't take a wrong turn. I think it a small miracle when I manage to find the single unchained door and let myself out of the building.

Part VII: High-school ERSP: David Starts Over Again

It's Friday, October 22nd. "That's a somewhat peculiar day of the week to start a new class," I'm thinking as I walk down the hall to David's newly assigned science room. "But, no time like the present!"

The same "Fourth Friday" policy that had eliminated David's first ESRP position in his sixth grade class had opened this high-school position in science. David had told me about his new job when we were talking on the phone a couple of days ago:

"I'm an ESRP now" David had said with relief. "I interviewed for the job on Monday and they told me Tuesday afternoon that I was being hired."

"Great!"

"Right" David drawled in his characteristic fashion.

"When do you start teaching your classes then? And what science is it?"

"I have to make up the schedules for the students first. Just two or three students are going to be removed by each teacher from each of the classes."

"You mean the *teacher* gets to choose which students she wants to give up from her class?"

"Um hum. Right."

"Um, I see." I kept silent about my own doubts. I wanted to give the situation the benefit of the doubt and not prejudice David. To myself, however, I was thinking: "Oh oh. I know you're the 'new kid on the block' but this is a pretty rough initiation! I can well imagine which students the teachers will have a tendency to choose!" David's new assignment reminded me of my own when I started out. Mine had been made up by a group of teachers also. They took the two classes of the lowest ability-tracked students, combined them into a double size class for the last period of the day and gave them to me to teach. Apparently the "sink or swim" policy for teacher induction was still very much in place in the inner-city just as it had been for me in Ohio.

"Right" said David. By the tone of his voice, I was pretty sure that he was unaware of my thought process. "The department chair is giving me two days to make up a roster of students for my classes after the teachers have given her their lists. She thinks it will help me get familiar with the names. I have to look to see what period each student has science right now, see if I'm teaching that period and if I'm not, rearrange the student's schedule so that she can take something else during her old science period and schedule her for science during one of the periods that I'm teaching."

"Gads, that could really mess up a student's *modus operandi*!" I blurt out unable to hide my dismay any longer. "Say, for example, if she were in a really good English class with a number of her friends and then she got switched into another English class just because her previous science class was a few students too large. Whew! I don't think I would like that if the student were *me!*"

"Right."

"And besides, if you're getting just a few students from each science classroom, that means that you're getting students from Biology, Chemistry, General Science, Anatomy and Physiology and all sorts of classes. How can you make up a schedule to accommodate all of them?"

"Well, I don't. The students are matched up with just the class-period."

"You mean, someone who's been taking biology for nearly a whole quarter might end up in a Physical Science class with you?"

"Yup. That's the way it works."

"You're kidding! What subjects are you teaching?"

"I'm teaching Physical Science, Earth Science and Fundamentals of Science."

"Three preparations a day? Whoosh! But hopefully some of the lab work could definitely overlap. You could do some of the same labs just with a different emphasis."

"Right. That's what I'm thinking, especially in the beginning."

David explained the lab he was thinking of performing for the first class and we made arrangements for me to come visit on Friday.

Our phone conversation had been on Tuesday and now, Friday had come.

When I arrive in David's room, he has just two students. He is shaking their hands and telling them that he is glad they are going to be a part of his class. The science department chairperson arrives with three more students and David invites them to sit wherever they would like and shakes their hands and greets them the same way he had greeted the first two students. He begins to show his demonstration which involves a lit candle changing the water level in a closed container. It is an intriguing show and David has multiple set-ups ready so that the students can try it on their own at the end of the class period. Every five to ten minutes, the chairperson arrives with two or three more students from another teacher's class until there finally are eighteen students, sixteen of whom are males.

"I don't want to be in this stupid class with this stupid teacher!" one of the two female students calls out loudly when the chairperson stops in again to check off people on her list. The student gets up from her desk and walks slowly across the front of the room where the demonstration is taking place. She's a very heavy-set person so she effectively blocks everyone's view. "I was in Anatomy and Physiology and I need that class for my Cosmetology Program. You can switch me back, right?" she asks the chairperson directly while ignoring David.

"You're a junior, right?" the chairperson counters. "You can take your Physiology and Anatomy class next year and still graduate."

"No, I am *not* a junior, I'm a *senior*," replies the student in an angry tone.

"Well, stay in this class for today and we'll straighten this out tomorrow," the department chairperson tells her. "The period is almost over so it's too late today."

The student does not look satisfied. She stares at the department chairperson who has returned to making check marks on the chart. Then, she turns and looks at David and slowly saunters back to her seat.

David invites the students to come up to the front and try the experiment for themselves. Nearly half of the class goes up but the rest, along with the heavy-set female student, stay in their seats.

When the bell is about to ring, David tells the class that they will repeat the experiment on Monday and do a lab write-up. Finally, he shows them what sort of folder he would like them to keep their class notes in and dismisses them as soon as the bell rings.

"A fine start!" I tell David when all the students have left. "Will the class stay this small?"

"No, it will take the chairperson about a week or even longer to pull out the students whose schedule-changes involved other classes besides science. Some students were absent also."

"Ah ha. Well, grade-cards are due next week, true?"

"Right."

"Are you expected to come up with a grade for your new students?"

"No, their old teachers sent a grade with them. I looked them over. Nearly all of them are F's" David said matter-of-factly. "Whether or not the teachers did it knowingly or unknowingly," David starts to laugh, "I have a lot of the F students. That makes me worry because if I don't perform well, I hope it's taken into consideration."

"Hey," I reassure him, "the documentation is there. They failed in all those other classes, right?"

"Yeah."

"But, I hope that you're able to say to these kids either quietly or as a class, you know, 'a lot of you weren't making it in your previous class and what we're about here is making it together now. Like, I didn't give you that grade. That's history. But we still have three grading periods and the way that averages, you can still pass. You haven't flunked for the year.' And that might be important to say because these kids may not know that."

"Right."

"You know, I mean, I don't know what their experience of success is before, other years. You know, in school. And obviously, they've just had a failure experience the first quarter with whomever"

"Right."

"they were with," I say finishing my sentence. "And, I just think it's important that the kid knows that you know that that failure is there and that you believe that he or she can turn that around."

"Right."

"And that you're interested in helping them do that."

"It could be seen as a fresh starting point" says David beginning to understand where I'm coming from.

"Exactly."

"That they could use this as a new beginning. I guess I should emphasize that a little more. Yeah, that's true. Because if they carry that losing attitude with them, they're going to lose."

"Exactly" I concur. "Why should they assume that you're any different than where they just came from?"

"Yeah, I already had one teacher tell me that one of the students is a habitual skipper and never does homework,"

David mused.

We go on to discuss the details of his demonstration and I bring up some negative points about the vocabulary he is using as well as positive points about his presentation overall. I wish I could change the mix of students he's been dealt, but that's beyond my jurisdiction.

Part VIII: Paper Airplanes

"Hello?"

"Hey, how's it going?" I greet David on the phone. It's the very end of first semester now.

"Oh, I should have called you, actually. I was hoping you would come in to observe. We had a paper airplane competition. And it was *fun*. It was Friday of last week when the student numbers were kind of 'iffy' and the kids were squirrely. They broke up into groups and each group had 3 pieces of paper, 10 cm of tape, and one paper clip."

"Whoa. That *does* sound fun!"

"Yeah. The kids came up with the parameters. We spent Thursday deciding the parameters and then Friday we did the competition. The kids came up with the parameters that we're going for: length, and not hang time; how much you can add to your paper airplane; how much you can modify it. We pushed all the desks to the side of the room, and the kids measured off-- the *kids* did-- measured off the meter marks on the floor for fifteen meters."

"Suddenly metric units of length are meaningful. That's great!"

"Yeah, this could be a great introductory lesson in science. I could maybe even work scientific method into it-- get a hypothesis and then test it. Do just one variable at a time."

"Sure could. You could even tie it in with energy if you did it later on, couldn't you?"

"Oh yeah, I'm sure. If I could get the kids to get an average velocity. But anyway, this is one thing I stumbled on just recently, that I was really happy with. You know, it was kind of a last-minute 'What am I going to do today?' I'd been up all night doing my Physics homework. So I said to the kids: 'Let's make paper airplanes! You guys gotta make the rules.' 'Okay!'"

"And the kids really cooperated well, the students?"

"Oh yeah! Really well. I don't have any discipline problems anymore. Even sixth hour is easy now. I remember how it was when I first started out," David said with a pause. "I use to sit in the lunch room all fifth period and just *dread* coming back for my sixth hour class. But now they've kind of given up on trying to give me a hard time. A lot of the rabble rousers are gone too, though. They're gone. Expelled, dropped out. And some of them, I've won over. That's a story in and of itself. But anyway," David hurried on in his excitement, "they all had their group names on the board and they each had 3 trials, so one group came up and threw it, the next group came up, threw it and then they took the average to find out who won. Added them up, divided by three. and found out who was the winner So that was really neat. But it was fun. Because the department chairperson came in there sixth hour-- this is kind of funny-- I was in there and my sixth hour was going zoo with it. They were having so much fun. And they were making really bad airplanes that just kept crashing to the ground. And all of a sudden I'm looking, and I see this paper airplane go zooming across the room, straight as an arrow, it goes [sound effect], soared across the room, and I turned around, and I see the department chairperson smiling. She made this paper airplane that soars across the room! All these kids running over to it, trying to get the airplane, unfolding it, looking at how they're doing it."

"Hey, that's another story in and of itself! That's really great that your department chair can see the value of what you're doing and even enter into it!"

"Right! She's been a really good mentor. Good teacher. She doesn't, you know, just tell me the good things. She lets me know when I'm in the wrong too. And that's good. I don't mind that. I don't have any problem with that. As long as the person is fair in her criticism. And she is."

"Fine, that really is fine. And I know that she doesn't think that noise in a classroom automatically means that learning isn't going on. That's critical in a department chair or principal."

"Right."

"And I know too that she has shared a host of ideas for activities with you. She's a tremendous resource in pedagogical content knowledge."

"Right. And I've been using the books that you gave me too. That one with weather experiments has been really great. But when I think of how I started out at the beginning-- teaching how many neutrons are in a lithium atom or whatnot? Yuck! I had a good talk with the chairperson one time and she just said 'You're being ridiculous! The stuff that you're giving is outrageous! The kids don't know how to use centimeter rulers, and you're trying to teach them the Nils-Bohr method of whatever.' Once I got over all that business and got down to what was really important, it was much easier."

"Super, really super David. So how about my coming in next Friday?"

We talk about next Friday and then start discussing the next semester. David plans to do a unit on simple circuits in electricity. I had given him reading materials with hands-on experiments about a month ago and he now had received special moneys-- the department chair had allocated the same amount, \$200, to each science teacher--that he was spending at Radio Shack to buy wires, bulbs, batteries and other items. Apparently, David's students are in for another treat soon.

Part IX: Springtime and Potential Energy

It's the end of May. Longer days mean driving in morning daylight instead of the dark. Roads are dry and clear rather than being covered with ice. Skies are more apt to be sunny than gray.

Walking down the corridors to David's room is a pleasure. I can nearly always anticipate that *something* fun in the way of a hands-on activity, an original demonstration or just good give-and-take discussions between teacher and students will be going on. It's not that David never does a "read these pages and answer these questions" type of assignment, but he doesn't do it often.

As I walk in the room, David gives me a hand signal of acknowledgment and I take a seat in the back. The bell hasn't rung yet so students are still strolling in, greeting each other and taking their seats.

"Kevin, did you go to the prom?" David calls out to a student.

"Sure did. Would you like to see my pictures?" asks the student pulling out an envelope from his extra-baggy pants.

David starts going through the stack. "Wow, these are nice. Is that your home?"

"Yup, that's my house. And that's my mother and little sister standing next to us."

David finishes the stack and the student takes them back to show others in the class. David starts touching base with a number of the other students. Only his part of the conversations is audible over the noise of the incoming students so it comes out as a disjointed monologue: "Tenika, you're a senior? You going to take the final this week and not next Thursday? Charlie, you still have that major test to make up, what are we going to do about that? Raquel, you got another A on that make-up lab report. Yes, Tammy, you can bring it with you to the final. How was my week-end? I played baseball and had a great time, kind of like a little family get-together with all my cousins, all my nieces and nephews

running around and your math teacher, Simkin, was there. What's his first name? I can't divulge those secrets! That little chart on the left-hand side? It's our Final Review #5. Does it look swollen right there? I don't know. I was working in my garden yesterday, and I rubbed my eye and shortly thereafter it started to swell up. Charlie, would you bring that meter stick over here? Has anyone been copying this stuff on the board down?"

The bell rings and David straightens himself up to his full height. He pauses to look around at the entire classroom and gives students a chance to look at him.

"All right. What we're going to do today, Ladies and Germs, is review the one more part of the Final about potential energy" he says to the class.

"Do we need to copy that stuff on the board?" asks a female student.

"Yeah, that all should be down before you start," David answers pointing to the chart on the blackboard. It has three column headings-- height of ball, mass of ball, and gravity-- as well as five rows for students to fill in during the lab .

Students start copying and David circles the room exhorting them in a loud tone: "Don't forget to give me your units today. If you don't tell me what those numbers mean, I have no idea. And remember to bring this work and your other notes to the final exam. You will need to put your units on the final exam too."

David continues circling the room but stops to lean over the desks of individual students. Finally, he stands again at the side of the room near the lab stations and straightens up in his characteristic fashion.

"All right," David says in his typical manner of using a verbal cue to let his class know something is coming. Students stop working and Kevin pulls out his pictures to show a neighboring student.

"Kevin, please put your pictures away for right now because I need everyone's attention" David says matter-of-factly. "You can show them later." Kevin slips his pictures into his pocket without protest and David hops up on a lab-desk. He is standing about 10 feet high now and holds a racquetball next to a long plank of wood with three meter sticks taped with duct-tape along its length. "Okay. You're going to drop this ball three different times at five different heights: 2.5 meters, 2.0 meters, 1.5 meters, 1.0 meter and 0.5 meters," he begins to explain. "Let's see. There's three planks and there are one, two, three..." David counts each student. "We have nine people? That works out fine. Three to a group. One person drops the ball, one person reads the height and one person records. You with me there? Yes? Okay, so let's all watch these ladies do a trial so you can see how it's going to work."

Three female students begin to do their first trial in front of the other six students but have difficulty with making a correct reading. "Oh, I should have shown you that more carefully" David intercedes and then explains it carefully and loudly enough that the whole class can follow. "Are we in agreeance?" he asks everyone when he had finished his explanation.

"Can you explain that again?" asks one of the students.

"I'd be happy to," David replies and carefully goes through his explanation again. The student seems satisfied and David sends everyone to a lab station.

Students start bouncing their balls and recording. David walks around the room and calls out "anyone need help?" He stops at each lab site whether they have called him or not.

"What are you doing here?" one male student asks me in a whisper while walking over and looking at my notebook. His manner is inquisitive but friendly.

"I'm watching your teacher," I whisper back to him.

"Oh," he replies, "well, I came from another class but *this* teacher in here is a *good* teacher. He knows a lot and makes it fun," he says using his hands for emphasis.

"Great! I'm really glad to hear that," I say with a smile. "I'll make a note of that in my notebook."

The student watches me make the note, gives me a satisfied nod and goes back to his station.

"What'll we do when we have all the heights?" calls out a student from a group across the room from David.

"Okay. After you do that, take the average of your numbers-- add them up and divide by three-- get your averages. Then we can reconvene as a class and I'm going to show you how to figure out the potential energy if you don't remember" David replies.

Students are finishing their averages at different times, however, and David never reconvenes the whole class. He circulates around and shows small clusters of students how to calculate the potential energy. Then he calls out to the whole class as the bell rings for them to leave: "When you come into class tomorrow, everyone should have their potential energies calculated. Can you all hear me? So there's no confusion?"

Some students gather around him for last-minute help and then, finally, hurry off to catch the city bus or other ride that will take them home.

"Good class!" I praise David as I walk up to him with my written notes. "Students obviously enjoyed standing on lab-tables to drop the racquetballs-- they thought learning about potential energy wasn't so bad after all! And I really liked the way you said to your female students at the beginning of class during demonstration, 'I should have explained this better.' That took the burden off of them for not knowing how to read the meter stick correctly. Then the students don't have to feel dumb. They can think: 'Oh, well, he really meant to explain that better. He expects to have to explain it.'"

"Well, yeah, I meant it," David replies as though surprised I should think his attitude praiseworthy. "I really *should* have explained it better. I mean, I wasn't saying that just to try and snow them. It *was* my fault. I should have done that."

"Yes, but when you come at it that way, the student is comfortable, and that's really nice. And then the second thing is, a student *does* have to be comfortable. I mean, I've had students come through high school and not be able to measure linearly. But they don't like to admit that unless it's okay, you know? To say, 'I can't do it,' can require a lot of courage and a real comfort zone. So, if you can establish a comfort zone for your students, a lot of what you're going to see, probably, are things that have been covered up all along"

"Right. That's right," said David putting his hands on his hips.

"Okay. I have just three suggestions for your activity" I say in preamble to my suggestions. "The first two are really small. One is that some students were confused as to where to drop the ball from. If you marked your boards in pencil to show the 3, 2.5, 2, 1.5, 1, and .5 meter marks, it may help them get into the activity faster."

"Right, I think I'll do that before the next time," says David.

"My second suggestion is that you need to emphasize that you're trying to measure the very *top* of the bounce of the ball. Students tended to take a measure just wherever they *caught* the ball whether it still was at the top or not. That's why their range of numbers was so wide. You really have to emphasize how to take care in the gathering of this data if you want results that will reflect more potential energy for higher heights of releasing the ball."

"Okay. I can see what you mean."

"Well, it's always good to have a second pair of eyes in the room. A teacher is too caught up in the swirl of classroom events to step back and have a good leisurely look!"

"Right."

"And my third suggestion is this. Remember my telling you about Marcia Linn who has been perfecting a unit on thermodynamics for over a decade?"

"Marcia Linn? Tell me again."

"Well, I think I mentioned before that one of the things she showed in her research that unequivocally increased the amount of learning students acquired through their lab experiences was making a prediction before they did the lab. Remember? So if you had students write down what they think the potential energy of the ball will turn out to be for these various heights before they actually *did* the experiment, that might help them reflect on it afterwards."

"Right."

"But those suggestions shouldn't overshadow my original and overall comment. It really was a great class!"

"Thanks. The numbers have really gone down though. I know I'm still lucky to have nine students in this last period class and eighteen to twenty-four in my larger classes. I know some teachers that only have four or five students show throughout all their classes."

"Gads, attendance in inner-city schools is such a major problem. When you add the loss of instructional time due to truancy to the loss of instructional time due to half-days, Fourth Fridays and all the other idiosyncrasies of bureaucratic scheduling, it's a wonder that students get any learning done at all!"

"Really. You're right. You're absolutely right. That doesn't mean that I'm not grateful for the time off, however! Well, I've got to pick up my little daughter and I can't be late" David says grabbing his briefcase after looking at the time.

"I know. It was good visiting your class today and thanks for staying after to talk."

"My pleasure."

"I'll still come by next week even though there's hardly any students," I remind David. "You take care!"

"Yup. You aren't going to stay any longer are you?" David inquires. "It's gets pretty deserted in this building."

"No, I'm going to my little ol' truck parked under that oak tree right away. I would *not* want to be the last one out!" I say sincerely but with laughter in my voice.

Part X: Summer Tragedy

It's July and school is out. Public school, that is. The Fellows still have university classes to finish up for the year. Special arrangements have been made, however, so that instead of taking classes spread out over both July and August, their classes are doubled up, six hours a day for four days a week. This concentrated schedule means they will finish their summer courses after the first week in August and still have a few weeks completely free before public school begins its next academic year..

I'm sitting in my office sorting through old papers and mail when I remember that now would be a good time to find David to set up an appointment for an interview. His afternoon class with the other Fellows would be just finishing up. I bounce out of my chair and dash down to the first floor just as the Fellows are walking down the hall.

"Hi Ruth!" one of the Fellows in front of the group greets me.

"Hi yourself! How's it going?"

We chit-chat a bit and then I look around for David. "Where's David?" I ask them. "I can't see him anywhere. Did he leave already?"

"David? No. David hasn't been coming to class. Didn't you hear? His sister died the week-end before last."

"I haven't heard anything. His *sister* died? Was she ill?"

"No, it was an accident I think."

"Has anyone talked to David?"

"Yes, I talked to him" one of the male Fellows intercedes. "He's having a rough time."

"Man, I would think so," I say trying to put things into focus.

"David is in our project group for the urban education class" another male speaks up. "We put his name on everything we turn in so when he's ready to come back to class, we'll help him do whatever necessary to see that he makes it through the course."

"Great. That's really good," I tell him sincerely. "I'm glad to hear it. Thanks for watching out for him. I'm sure he will appreciate it too."

I climb the stairs back up to my office and sit down to gather my thoughts. I pick up the telephone receiver and it feels like a lead weight. I dial David's number but I'm afraid that he might answer. What can I possibly say to him? There is nothing I can say to him. Nothing that can make things right or better, that is.

"Hello?" a female voice answers.

"Kate, is that you?" I ask, relieved to have reached David's wife.

"Yes, this is me."

"Kate, this is Ruth."

"Oh, hi Ruth. David is not here right now. He's at his parents' home."

"Well, I'm really glad to be able to talk to you. I don't know what I would say to David. I just learned about David's loss. I am so sorry."

"Thank-you. Yes, it certainly is a loss. She was 28 and her two children are 5 years and 15 months old."

"Oh, that is so tragic. She had everything to live for."

"Yes, and she was really a fun person who lived life to the fullest. David's family is very, very close so we spend a lot of week-ends together and have really good times. This was a terrible blow."

"I'm sure."

"It was just a freak accident. She was out riding a three-wheeler with one of our nephews and it was dusk. There was a fork in the road and our nephew was driving in front. He took the left fork and didn't even realize that she had gone straight. There was a tree there. Apparently her death was swift so she didn't have to suffer."

"Wow."

We wait silently for a moment.

"I bet your little daughter is a comfort. Just holding her must be a comfort at a time like this. Both to you and David and to her grandmother, David's mother "

"Well, yes. The whole family has been pulling together. David's aunts especially. David's mother is one of three sisters and each sister has lost their first-born through an accident when they were in their twenties."

"No!"

"Yes, that's true."

I don't know what to say. In the face of such family tragedy, I remain mute.

"I've tried to help David out," Kate continues after a long pause. "by talking to people. At least by my telling them what has happened, I spare David from having to repeat it".

"Yes, I understand. I know that can't be easy for you either. How is David?"

"He's angry, very angry. He doesn't understand why people who are drug pushers and really *bad* people are alive while his sister who is really a *good* person and loved by everyone is not."

"I understand."

"But you don't have to worry about his work" Kate reassures me.

"Really? Thank-you for telling me. I couldn't help but be concerned because, you know how it is, when a tragedy like this happens, priorities can change and major decisions reassessed."

"Yes, but his family understands how important it is to David that he becomes a teacher. So they are really supporting and encouraging him to finish the program. He went ahead and took his physics final exam this week."

"That could not have been easy" I say with admiration.

"No, but it's almost better for David to keep busy. He prefers it that way."

"Oh, I understand," I say. "Well, I know his cohort will help him also. The Fellows who are in his project group told me that they put his name on the group assignments and they will help him through the class when he returns."

"Yeah, he has some really good friends in the cohort. I meet them when they come here to work together on group assignments. He talked to one of them this week. Stu came to the visitation too."

"Did he? That was good. I didn't know soon enough. I'm sorry."

"No apology necessary. We understand. Well, thanks for calling. I'll tell David you called."

"Thank-you, Kate. I appreciate your telling me how things are. If there's anything I can do, please don't hesitate to ask."

"Okay. Thanks."

"I'll call back another time to try to talk to David. Bye Kate."

"Bye Ruth."

Part XI: Postscript

In essence the data collection for my study has ended but here I am at David's house anyway participating in yet one more focus group, fascinated with three Fellows' collaborative weaving of stories and seeking out answers to their teaching dilemmas.

"You know what?" says Elaine, one of the Fellows, to the four of us, "I just did a whole chapter on biomolecules and we did lab work every day for two weeks. And at the end of everything, I *still* had kids who said: 'What's a biomolecule?'"

"Right!" says David resonating.

"And I *know* that they knew! But it was that *word*, the word itself."

"Yup" says David. "Isn't that frustrating? But the word wasn't personal to them, it didn't *mean* anything, it was an empty word. I have that same frustration."

"But still," frets Elaine, "they should know what biomolecule means. That's all I wanted, it's sort of like the *hinge* to everything else we had been doing. I don't know. Maybe I'm laying too much importance on a word but it seems like we did all this stuff and I said it every day and they still don't know what it means."

"Well," says Jonathan entering the conversation, "I think if my kids were to define biomolecule they wouldn't come up and say it's a combination of atoms that's necessary for living things or anything like that. They would say something like it's stuff in food."

"Which isn't bad" says Elaine contemplatively.

"Yeah, which isn't bad" agrees Jonathan "in that it shows that things are made up of other things and demonstrates that they conceive of things being made up of other things which we can't 'see'."

The conversation veers off in other directions but leaves me wondering about what has been said. All of our focus groups this year had been centered on the nature of science and constructivist teaching. I knew from my work with each of the Fellows, however, that another related issue which was affecting all of them was the problems they were experiencing with student assessment.

After I arrive home, I read the journal pages David had handed me before I left. A part of what David wrote is the following:

Finals have come and gone. What can I say? I could make the excuse for the students that they have not been brought up placing any great amount of value of trying to perform well during a testing situation. But as much as this may be true, it's as though the students would have to actually make an *effort* to do as poorly as they did. It can all be very depressing because I spent two weeks prior to finals reviewing each section of the final... [and] there does not seem to be much more that I can do when the students do not understand the idea of studying. They do not study for tests. Period. My students for the most part: do not do homework, do not read for pleasure, do not understand what studying actually means, have miserable attendance, and do not take pride in their ability to learn.

"Wow, David is really feeling the strain of his teaching and is disappointed by these test results." I say to myself with a sigh. "He's so upset that he's putting all the responsibility on his students." I feel badly that I haven't helped David explore more options to help his students experience success on their tests. "Better yet," I muse, "all the Fellows who are secondary teachers should take a course in student assessment. David is so dynamic in his classroom. He comes up with all kinds of hands-on activity and he takes the time and energy to reach out in friendship with his students. I feel certain he could experience academic success with his students in testing situations as well. He just needs a little more help."

But I am uncertain from where the help will be forthcoming and I am reminded once more what I have always known as a practitioner-- that teaching is a day-by-day challenge, never something that is completely resolved and running smoothly.

Discussion

Part I: Toward an Understanding of a Science Learning Community

As science educators have moved from views of science as hard, objective facts to views which take into account the more human elements such as its social construction, tentativeness and creativity, they have needed to explore new ways of

teaching it. Annemarie Palincsar and Charles Anderson, for example, found it increasingly necessary to pay attention to the social aspects of doing science and to carefully scaffold the norms of social interactions into their classroom (1993). Kathleen Roth and her colleagues (1992) found agreement with Hermine Marshall (1990) that in a classroom which is a learning place, the emphasis is on active inquiry and question-asking, not just getting the "right" answer. *How* and *why* the work is being done is not disregarded at the expense of getting the work done.

Kathleen Roth and her colleagues, however, elaborated Hermine Marshall's metaphor even further. Rather than being a learning *place*, they chose the phrase learning *community*. And, since they were engaged in the teaching and learning of science, they further described their classrooms as "science learning communities" (1992, p.53).

The change in terminology from learning "place" to learning "community" has important implications. "Community" implies a common sharing, a relatedness and a mutual responsibility. It implies that the teacher and students share more than a space and time, they share a common purpose-- learning. The learning is not something imposed from the top; rather, everybody takes a part of the ownership. The words "learning community" also implies that the teacher and students need to build the types of mutually supportive relationships that foster the social construction of knowledge. These relationships, according to Nicholas Burbules (1993), must contain emotional factors such as concern, trust, respect, appreciation, affection and hope as well as intellectual factors, such as open-mindedness, in order for dialogue to occur. Because their classroom functioned as communities with supportive relationships, concluded Kathleen Roth and her colleagues, students were able to undergo conceptual changes and engage in meaningful learning.

Part II: David's Increasing Awareness of a Need for a Learning Community

The didactic model of teaching which David and his cohort of returned Peace Corps volunteers had brought with them from their overseas experiences leads easily to authoritarian, hierarchical relationships between teacher and students: the antithesis of a learning community. For David and the other Fellows I supervised, the move from more authoritarian ways of handling their students to more human and mutually respectful ways required reflection and growth (Bombaugh, 1994). During his first few weeks of teaching, David rushed out his middle-school classroom door to confront the female student peeking in and challenged her in a strident tone (see "David's Sixth Grade Class" above). Later, however, his *modus operandi* changed radically. As David described it for me in an interview May 31, 1994:

Teaching is easy for me now. It wasn't easy before, when I was trying to be heavy-handed. It seems like if the kids know that you're their friend, they'll respect you. They'll do just about whatever you want, even if they don't want to do it, you know?

The operant words in David's quote above are "heavy-handed" and "friend." Instead of being "heavy-handed," David became a "friend." David's metaphor of teacher as friend framed his whole teaching philosophy and was evident in his classroom. From David's point of view it was simple and clear-cut: "they're honestly my friends and I act like they're my friends. I mean, they *are* my friends" (interview, January 1, 1994). Being friends included greeting students at the door, using all their first names during the period, and taking the time to talk to them in the hallway as a way of asking to make sure they're coming to class and listening to stories of their personal life when the students felt a need to share (interview, January 1, 1994). As shown above in the vignette, "Spring-time and Potential Energy," David approached his students with great respect, much as one friend would approach another. Respect included apologizing for not having explained a procedure carefully enough when the three female students were standing in front of class in a potentially embarrassing position. Respect meant explaining to Kevin *why* he should put his prom pictures away and that he would be able to show them later

rather than ordering Kevin peremptorily to put them away. From a student's point of view, David was a "good" teacher who "knows a lot and makes it fun." Students behaved like David's friends; they shared their prom pictures with him, asked about his weekend and noticed that his eyes were slightly swollen. They worked on their assignment in a relaxed and productive manner.

Part III: Constraints Working Against David in the Large, Bureaucratic School Environment

After David realized that expressing care for his students was an essential part of his teaching, he moved from a heavy-handed, authoritarian stance to a caring, more mutually respectful stance. In essence, he strived to create a classroom that was a science learning community. Even in the midst of his striving, however, strong forces in the large bureaucratic school environment were working against him. One of these forces was the school policy concerning the exchangeability of teacher, students, and subjects. Another strong force working against the establishment of a science learning community was the school's loss of instructional time. The third force was the extreme problem of absenteeism. As I describe in the subsections below, all three are interrelated.

Part IV: The Exchangeability of Teacher, Students, and Subjects

Communities are established by informal social networks. Architects in particular appreciate how the coming together of people in shared spaces leads first to recognition, then to acquaintanceship and ultimately to neighboring and friendships which are the basis of a community (Yancy, 1982). Face-to-face encounters and proximity over time enable understanding and trust to develop, the basis for a community. Continuity, however, is essential and it was the lack of continuity caused by the exchanging of teachers, students and subjects in David's large, bureaucratic high-school that is one of the major obstacles to establishing learning communities in its classrooms.

As shown above in the vignette "Fourth Friday," after the first six weeks of school, teachers can be removed from a teaching position and all one-hundred-fifty students originally scheduled into their five classes can be rescheduled into entirely different classes. On the other hand, a teaching position that did not exist before the "Fourth Friday" count can be newly created and students can be siphoned out of their original classes two by two and three by three into the newly formed classes. What is prioritized in these "Fourth Friday" maneuvers is the ratio of students per teacher. David's sixth graders, for example, were given entirely new schedules and were fitted into whatever science classes had fewer than 35 students during a period that science could be fitted into their schedule. David's newly-formed high-school classes were made up by pulling students out of their original science classes and forming new science classes. In many cases, if a student had to change her schedule because of one class, other classes were affected also. For example, a student taking biology third period before the Fourth Friday might find herself scheduled for English third period after Fourth Friday and instead of taking biology, she would be taking Earth Science first period. That would mean having an entirely different English teacher as well as a new science teacher.

Another major rescheduling occurs at the semester change. Because of the large numbers of students who don't pass their mathematics classes, the entire mathematics department has a new schedule drawn up second semester. This in turn has a domino effect on the students' other classes.

Still another factor in the exchangeability of students is the suspension/expulsion policy. Students with behavior problems can be suspended or expelled from a particular school but not the whole school district. A returned Peace Corps volunteer at another large high-school in the district, for example, described to me "hall-sweeps" where as many as 200 students were rounded up and suspended for two days the first time that they were caught and permanently suspended the

second time they were caught. Most experienced teachers will admit that the addition of even one or two students with behavior problems in a well-functioning class can disturb the equilibrium until the new student(s) and the class can be acclimated to one another. To have suspended students constantly being added throughout the whole school year would make it even more difficult to maintain a caring community in the classroom.

Still another reason that the composition of students in David's classes changed throughout the year was beyond the immediate control of the school. Families withdrew their children from one school and entered them into another or else either moved into or out of the school district entirely. In one class, for example, only 9 of the original 32 members enrolled were still present by February. During that time (September to February), 23 had dropped out and 34 new ones had been added giving a total of 43 students.

Part V: Loss of Instructional Time

When learning is a priority, instructional time is given precedence over all other considerations. In several important ways, however, David's high-school compromised instructional time. This de-emphasis on instructional time seemed to give a message: student learning was less important than administrative convenience.

The first compromise of instructional time was the interruptions that occurred during class time. During my observations of David's classes, for example, I would see them being interrupted by probation officers, department chairs, public-address announcements, and requests to send students to the counselors' offices. On a few occasions, half the class might be missing because a special assembly had been called for the sophomore class or an entire class might be missed because of a pep rally. All of these interruptions diminished instructional time.

Fourth Friday also contributed heavily to the loss of instructional time. Fourth Friday, however, meant more than the disruption of schedules. One of David's fellow teachers was told by his department chair not to make up his attendance book in ink, not to distribute textbooks, and not to teach anything sequential until after the first few weeks of the Fall semester had passed (interview, August 28, 1994). Because there is no commitment from the school that a particular group of students will remain in a class, teachers might not make the same personal commitment that they otherwise would for "their own" students. There would be little incentive for David, for example, to invest the considerable time and energy needed to start a long term data-gathering activity like monthly measurements (see "David's Sixth Grade Class") if he had known beforehand that he might not ever see his sixth graders again after the first six weeks.

Still another loss of instructional time comes because of the way exams are scheduled. As discussed above, many classes are rescheduled at the beginning of second semester. The first semester exams, however, are finished and grades are submitted three to five days before first semester ends. Teachers are reluctant to start second semester's work because they know they will not be teaching the same students. Students are reluctant to come to school because they know that any work they turn in doesn't have any effect on their grade anyway.

The scheduling of final exams causes even more loss of instructional time. "We have three and a half weeks of school left on the calendar but only five instructional days" one teacher from David's high school told me in May (from field-notes, May 31, 1994). He explained that the exams were all half-days and that the eight days left after the exams were essentially non-student days since grades had been turned in and students didn't bother to come to school.

Besides these unofficial non-student days, there were official ones also. Special inservice days, records days, and parent-teacher conference days were all non-student days. Besides these, there were half-days when state standardized tests, the

"MEAP," were going on plus other half days as well. The number of half-days and non-student days varied from school to school. During the 1993-1994 school year, for example, David's high-school had many more half days and non-student days than the middle school a few blocks away. A concrete example of this is David's colleague's comment to me on March 18, 1993 that "this is the first full week of school since Christmas break!" The middle school, in contrast, had had only the Martin Luther King holiday and President's holiday (from my field notes).

If some students had difficulty coming to school for whole days, even more did not come during half-days. This leads into the next major obstacle to establishing communities of learning: absenteeism.

Part VI: Absenteeism in the Inner-city High School

David identified absenteeism as one of his biggest problems. Student attendance varied according to the day of the week, the period of the day, weather, and other factors such as whether it was a half day or whole day of school, how close it was to a holiday break and whether or not it was a non-graded period when exams were over. For example, David's last period class could typically have 18 students on a Wednesday but only 6 on a Friday. Typically, on a first or last period on a Friday or a Monday, for example, 50% attendance would be considered good. On the day before the winter holiday in December, there were a total of 2 students in David's third period. During the last week in June, David had no students show up for class: they did, however, drop by the school to chat and say good-bye to him (from field-notes)!

If a student is enrolled in school, both the school and the family of the student can gain monetarily. The school receives state funding according to how many students are enrolled. Families on public assistance receive pay for dependents who are enrolled students. For some students, it is like a game whose rules they know how to manipulate. There is a card, called the "10-0-7" card which students need to fill out and sign as proof of their presence in school. As long as they do not miss more than 20 days in a row, they can not be dropped from the register. One of the other returned Peace Corps volunteers, for example, had certain students who would regularly appear every 20 days and carefully make sure that Jonathan had filled out their card (from field-notes).

Another indication that student learning was not a high priority at David's high school was what must have been a teaching practice in at least a few of the other classrooms. This teaching practice became visible through the expectations of some of the students. These students had expectations of being able to pass by attending the last week and making up work which they had missed the previous eight. David found himself being challenged by the *parents* of his students when he would not give chronically absent students worksheets for make-up work during the last week so that they could pass. Because such practices were not uncommon in other classrooms, David's refusal was perceived as being unfair:

I do know teachers that say: "If you do this many assignments throughout the course of the year, you're all set." So, kids can essentially show up on the last week of school and find out the make-up work they have to do, and just do it all, and then pass the class. And that's another run in I've had with a lot of my parents. If I don't see a kid the whole semester, then they'll come to me and ask for make-up work for the whole year, or whatnot. But I don't do it. I can't justify it. I can't say, "Here are 15 assignments out of this book. Do these, and I'll pass you" (Interview, May 31, 1994).

Summary and Conclusions

During his first year of urban teaching, David had moved from a more authoritarian, teacher-centered pedagogy to hands-on, collaborative types of activities and expressed a belief in the importance of showing care for his students. The large, bureaucratic school system in which he worked, however, enacted policies that worked against David's efforts to build a community of learners. One of these constraints was the school (and district) policy concerning exchangeability of teachers.

students, and subjects so as to maintain a certain teacher/student ratio. Other constraints for David were the second semester reorganization of math classes and the suspension/expulsion policies. It is difficult to build a community if the members are transient.

Another strong force working against the establishment of science learning communities was the school's loss of instructional time through faulty exam practices such as turning grades in early and having half-days during the weeks of state-wide and semester exams. The numerous half-days and non-student days, in turn, contributed to absenteeism, one of David's biggest problems in structuring his curriculum and trying to have continuity.

Coming face-to-face with the constraints in David's work place gives credence to what Lois Weiner (1993) claimed Larry Cuban and others had shown in research twenty years ago:

teacher education may not be an effective mechanism for educational reform... basic changes in the school's organizational structures are necessary prior steps in any sustained effort to touch what teachers do daily in classrooms (p.8).

In spite of the research on urban education done in the 60's on up and the cries for reform, this descriptive study of a single beginning teacher suggests that certain major, systemic constraints against successful teaching and learning persist. Even the dedication and persistence of individuals such as returned Peace Corps volunteers may not be able to counteract it. Jonathan Kozol (1991) who had taught in an urban classroom in the 60's and returned to interview children and their teachers in the 90's had this to say:

[The U.S.] has turned its back upon the moral implications, if not yet the legal ramifications, of the *Brown* decision... The dual society, at least in public education, seems in general to be unquestioned... Looking around some of these inner-city schools, where filth and disrepair were worse than anything I'd seen in 1964, I often wondered why we would agree to let our children go to school in places where no politician, school board president, or business CEO would dream of working (pp. 4, 5).

Unlike a number of other countries, such as Holland, which have *national* policies of providing extra funding for the education of *all* their minority children and children born in poverty (Barritt, 1996), our inner-city children have no such guarantees of help in attaining a competitive education. I offer this study as a reminder of the problems confronting our teachers and their students in large, bureaucratic school environments in the hope that we as a nation will not continue to ignore them.

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