

## ABSTRACT

As an instructor in a program that helps disadvantaged women identify and take steps toward personal and professional goals, Wendy Quiñones had met with some success using the popular education approach where the overarching goal is social action. For her project, she wonders whether MI theory might enhance her teaching, asking “Will use of a multiple intelligences framework support the goals and practice of popular education in an ABE classroom?”

Wendy considers the key aspects of popular education, such as developing self-respect and respect toward others, facilitating student empowerment, creating an environment based on democratic principles, and using non-traditional and “problem-posing” pedagogical approaches. Towards those ends, Wendy facilitates students’ self-assessment and recognition of their own and their peers’ intellectual strengths. She creates opportunities for student choice and decision-making in the classroom, and integrates more hands-on and real-world activities in her teaching.

Perhaps the highlight of her MI-informed activities is giving students opportunities to demonstrate their understanding of key concepts through MI-informed projects of their choosing. For example, students write and perform a skit about patriarchal mental health models, create three-dimensional artwork demonstrating images of women, use timelines, graphs, and other graphic organizers to present historical information about women’s lives.

Wendy’s hunch of a “natural fit” between MI-informed approaches and popular education is validated in her study. She finds MI theory supports her efforts in ways that enhance her teaching methods and the classes’ popular education-based goals and strategies. She identifies four related findings: 1) using a multiple intelligences-informed approach helps her align her teaching more closely to popular education principles; 2) using an MI-informed approach creates empowering opportunities for students; 3) an MI framework promotes a more democratic classroom environment; and 4) MI-informed practices serve to increase students’ positive sense of self and appreciation of others, promoting respect and interdependence, key elements of popular education.

Through her efforts on the AMI Study, Wendy discovers that it is not only her students who have been powerfully effected: “I feel that both my understanding and my practice have been transformed, and that as a result I am much closer to the kind of teacher I want to be than I was just 18 months ago.”

## RESEARCH QUESTION

At the time of this research, I was associate program coordinator and a teacher at the Veronese Community Education Resource Center at Wellspring House, Inc. in Gloucester, Massachusetts. Both as an individual and in my professional role, I am committed to the philosophy and practice of popular education. Popular education to me is education that empowers and joins together oppressed and otherwise powerless people so they may collectively improve both their own condition and that of the world around them.

My research question involved the combination of the multiple intelligences and popular education frameworks: “Will use of a multiple intelligences framework support the goals and practice of popular education in an ABE classroom?” The multiple intelligences theory – from what little I knew of it when I began this project – seemed like a natural fit with popular education pedagogy. Popular education assumes that adults seeking education already know a great deal through their life experience, and that the primary role of education is to help them learn to think critically about that experience and about the world around them.

Because the goal of popular education is social change, I was at first interested in whether using the multiple intelligences framework would enhance students’ active participation in their community. In my previous six years of teaching with popular education methods, I had had good success in encouraging personal change among the women in my courses. I had, however, hoped for more socially-directed change and had been disappointed in the results. As I began this project, I asked whether the use of an MI framework would enable learners not only to make changes within themselves, but also to change the world around them. It soon became apparent, however, that virtually every aspect of my teaching – not merely the use of MI – was now directed toward that goal in a way markedly different from my previous work. I abandoned this question when it became obvious that it would be difficult if not impossible to determine whether any observed actions would be attributable to MI or to other changes in my teaching.

At the same time, I observed a much more powerful synergy between the two frameworks than I had expected. I chose to redefine my research question to examine this relationship, and to study the ways in which MI can support popular education.

*Will the use of a multiple  
intelligences framework  
support the goals and  
practices of popular  
education in an  
ABE classroom*



## RESEARCH CONTEXT

My program, called Foundations, was offered free of charge to women of limited income or who were otherwise in transition. Lasting for 26 weeks, 20 hours a week, the program was situated in the Veronese Community Education Resource Center, the education arm of Wellspring House, Inc., a private non-profit organization. Gloucester is a coastal city of about 28,000 roughly 40 miles north of Boston. For many years an important fishing port, Gloucester's economy has declined significantly with the downturn in the fishing industry. Its unemployment rate is historically about double the state average, and it has a relatively high rate of drug and alcohol abuse.

Foundations was intended to be a transitional year in women's lives, with the objective of helping them to identify and take steps toward their own future goals. It combined and integrated segments of academic skill-building (reading, writing, math), with personal growth, teamwork, critical thinking, career exploration, and a large component of computer skills. Like Wellspring House as a whole, Foundations had a strongly feminist and grassroots democratic philosophical base. For example, I did my MI research primarily in a semester-long course on women's history called "Women at the Center." Unlike a course which concentrated on historical events and specific people, this course was conceived of more as a reflection on women's lives through history, with emphasis on women's resistance to the forces which have historically oppressed them. The purpose of structuring the course in this manner was to give women a stronger sense of their own place in the world and their own ability to take action to change it.

Our students were women in the community, a few of whom had been guests in Wellspring's small emergency family shelter, some of whom had participated in other Wellspring programs, and some of whom were recruited through newspaper articles, flyers, or other means of publicity. Both years, about half of the students were receiving public assistance, and with welfare reform faced severe time constraints on their source of income. Perhaps a quarter of our students were in recovery from drug or alcohol habits. It also became apparent during the program, although we never asked directly, both that some students had been victims of domestic violence and/or sexual abuse and that more than a few suffered from different intensities of depression (one student was hospitalized for a time; perhaps half-a-dozen spoke of taking anti-depressant medication; probably as many as a quarter to a third demonstrated some symptoms of depression). The overwhelming majority were single mothers, although each year there were one or two without children and one or two with partners. All but four of our graduates entered the program with high school diplomas or GEDs (although this did not necessarily mean they had good academic skills), perhaps 10% had some college, and all but two or three had significant work experience. They were, nevertheless, looking for a direction for their lives and the education to earn a living wage for their families.

There was a sharp difference between the two classes I studied. The class of 1996-97 began with 16 women, most of them near or over 30 (three were in their early 20s and one was in her 50s). In the second year's class of 1997-98, more of the 21 women we recruited into this class were in their 20s, and many were Gloucester natives with limited experience of life "over the bridge," as residents of this island community refer to the world outside. The teachers often speculated that the difference between the two classes may have been due to the effects of welfare reform. Caseloads in Massachusetts have dropped precipitously since time limits and other new regulations went into effect in 1995, with those who could opt to leave a system which was becoming ever more restrictive and punitive. As a result, those women still on welfare tend to be younger, less skilled, and with less life experience than previously was the case.

## EVOLUTION OF MY WORK AND THINKING

I began the project with only the sketchiest knowledge of MI theory. My program has always explicitly identified and encouraged different learning styles and personality types, so the notion that people learn and function in many different ways was a comfortable one for both me and my students. Also, the theory had additional credibility for me because several elementary schools in Gloucester have adopted MI into their curricula, and my own children's elementary school operates within a similar framework. I felt, however, that my teaching practice to this point had been constrained by my own overwhelming preference for linguistic methods and so had not taken as much advantage as I would have liked of the non-traditional teaching methods available through popular education.

At first I relied for my knowledge of MI primarily on what the teacher-researchers learned during our first AMI Institute. I was far less interested in details of the theory than in how I could apply it in the classroom. I did have to understand enough theory to explain it to my students; both our popular education pedagogy and our program's explicit goal of teaching our students how to learn called for me to explain both what I was doing and why I was doing it that way.

I found Bruce Campbell's *Multiple Intelligences Handbook* an extremely useful entry into the theory through an examination of its application in his elementary classroom. He sets out in his lesson plans ideas for projects in each of the intelligences, and I found these helpful, both for ideas about the wording of problems and questions posed to students and for raising issues that I with my strong linguistic orientation would never have come up with. This was particularly helpful when I was doubtful about being able to teach through my own weaker intelligences. Discovering that students with different intelligences could learn through certain types of assignments even though I myself might not be able to do them (at least not well) broadened enormously for me both the range and educational value of possible classroom activities.

Like the other teacher-researchers, I was at first very concerned with the idea of assessing students' individual intelligences profiles. This seems, at least for me, to have been a stage in beginning to understand MI and how it functioned in my classroom. I asked what intelligences were represented among my students. How could I use those that were already strong and help people explore others that were relatively weak? How would a knowledge of my students' intelligences inform my teaching? Although I struggled with this for some time, in the end it seemed to me that individual assessments held little promise for my teaching setting; I simply had too many students and too little time to develop individual education plans for each of them. I was left wondering about the purpose of intelligences profiles. Did the students or I need them at all? This question was answered for me in a comment made by Thomas Armstrong (author of *Seven Kinds of Smart*) and reported by one of the other teacher-researchers: "The single most important aspect of MI is passing the awareness of individual profiles on to your students," Armstrong said. "This way they can use it, apply it, and gain greater control of their lives and learning through their strengths." (EMAIL FROM DIANE, 4/10/97) With this in mind, I chose to use an intelligences self-assessment tool developed by one of the other AMI teacher-researchers (Costanzo 1997). For this informal assessment, students listen to descriptions of typical behaviors, abilities, and interests associated with each intelligence and rate themselves on each. My students then transposed those ratings to individual charts which were posted in the classroom for several months.

Used in this way, individual profiles conformed to what I believe the classroom use of MI is about: the validation and strengthening of different ways for students to learn and demonstrate their learning. Both the popular education philosophy and my classroom experiences guided how I interpreted and used MI in my setting. My work on this AMI project gave me a greatly enhanced ability to live up to the philosophy of popular education I espouse, through the use of an MI-based classroom pedagogy.

## METHODS

I used a variety of data collection methods, some of my own design and some more standard methods:

- **Teacher journal** (referred to hereafter as TJ): These journals were written periodically, sometimes immediately after the class or event in question, and sometimes later. They recorded events, reflections, questions.
- **Learning logs** (LL): Students wrote in these logs (sample attached) during language arts classes during the first semester of the 1997-98 program year. They were designed to record each student's activities, her reflections on her learning, and with whom she worked.
- **Class notes** (CN): My contemporaneous notes written during class.
- **Program evaluation** (PE): At the end of the 1996-97 program year, students wrote evaluations of the total Foundations Program, including both segments that had been influenced by MI and those that had not.
- **Dialogue journal** (DJ): During the second semesters of both years, students kept dialogue journals, writing in them once a week during the language arts segment of the program. Either I or my regular volunteer responded to what they wrote.
- **Final Evaluation** (FE): In both class years, students answered qualitative questions in a final evaluation of the women's history segment, the primary setting for my multiple intelligences work.
- **Observation log**: At the beginning of the project, I was particularly concerned to develop individual student intelligences profiles, thinking that they would be useful to me in individualizing my teaching. I devised this log as an assessment tool for keeping track of intelligences that students displayed during class or in their assignments. I used these logs for some months, but time constraints made this impractical. I discontinued this assessment tool the second year for these reasons and because it became apparent that deducing specific intelligences from activities was highly subjective.

## FINDINGS

From my research, I can say without any reservations that the multiple intelligences framework is a powerful and effective support for the goals and practice of popular education.

### **Finding 1: Use of an MI framework helped me to extend my teaching to conform more closely to what I consider good popular education practices.**

Popular education is education directed toward social change. My thinking about this has been profoundly influenced by the work of Paulo Freire, the late Brazilian educator who formulated popular education's principles and practice in 1970 with his book *Pedagogy of the Oppressed*. Popular education seeks "to build the capacity for democratic social change through education," to promote in its participants a "social transformation toward full human participation in society." (Hurst, 1995) Its methods as well as its philosophy are democratic: "Popular education is, at root, the empowerment of adults through democratically structured cooperative study and action, directed toward achieving more just and peaceful societies within a life sustaining global environment" (Hurst). Additional important resources for my understanding of popular education included *Teaching to Transgress* by bell hooks, *Unearthing Seeds of Fire* by Frank Adams with Myles Horton, *Training for Transformation* by Anne Hope and Sally Timmel, and Freire's recent *Pedagogy of Hope*.

The popular education learning environment itself is a nurturing and democratic one in which learners experience –sometimes for the first time – being valued as human beings with important knowledge, experience, and opinions. They are taught not only the tools of learning but also of participation in the wider society (democratic decision-making, social analysis, reflection, and action, both collective and individual); participants are involved from the beginning in making decisions about the program's content and structure. Non-traditional teaching methods that promote both collective experience and different ways of individual learning – for example, drama, music, movement, action and research outside the classroom, individual and group reflection – are an integral part of popular education pedagogy. Learners' own experience both in their lives and in the learning itself constitutes much of the content of a popular education program, and their experience is explicitly linked to the historical development of the society they inhabit. (Reed, 1983)

### **My data demonstrate that the use of a multiple intelligences framework in a popular education classroom:**

- helped me to extend my teaching to conform more closely to what I consider good popular education practices.
- encouraged practices that created opportunities for increased student empowerment and collective action, a key popular education principle.
- promoted a more democratic environment through increased power sharing among students and teacher.
- provided students with tangible evidence both that others have strengths which they lack, and that they themselves have strengths - perhaps never before acknowledged or valued - which others lack. This in turn allowed for an increased sense of both self and others, promoting the kind of respect and interdependence prerequisite to the social action that popular education aims to produce.

Popular education begins with the premise that people always have knowledge, even though it may be based on thinking that is “superstitious and naïve” (Freire 1993, p.89) rather than critical and analytical. It rejects the idea of the student as an empty vessel into which the teacher pours knowledge. Rather, popular education assumes that student and teacher together create new knowledge through dialogue. It begins with a position of respect for the student’s knowledge and world view, and assumes that both student and teacher have much to learn through their dialogue. In other words, the popular education practitioner begins from the expectation that education is a mutual exchange, and that students have valuable knowledge and insight to bring to it. In my experience, this expectation in itself is likely to encourage students to accept this view of themselves, thereby empowering them.

I find the multiple intelligences framework also to be inherently empowering. Although it is at root a psychological theory rather than an educational one, MI like popular education assumes that learning is both an active and an interactive process. In a specifically educational setting, then, it would, like popular education, call for rejection of the model of passive student receiving knowledge from active teacher. MI suggests that students have their own strengths to bring to the educational interaction. Identifying, validating, and encouraging the use of those strengths – which in many cases have been ignored or discouraged by previous educational experiences – again demonstrate the expectation that strengths exist, and so calls them forth. In both years of the study, my students came to have new confidence in their abilities almost as soon as MI was formally introduced. Roberta, for example, had steadfastly refused to acknowledge that her strong spatial intelligence was significant. She began to think differently about herself when she saw in the graphs of intelligence profiles that hers was visibly different from others. “I knew I was spatial,” she said. “I just thought everybody else was, too.” (TJ10/29/97)

Placing MI theory into an educational setting demands diverse methods of learning and teaching. Popular education, at least in part because of its roots teaching basic literacy to peasants in developing countries, similarly emphasizes the use of non-traditional teaching methods and materials as a way of treating subjects and concepts more complex than the learners’ written language skills could accommodate. Although I had always used some non-traditional teaching methods, my own overwhelming linguistic preference tended to limit how often and how far I went beyond reading and talk. Accepting MI as a fundamental part of my pedagogy necessitated venturing beyond the paths I had previously trod.

The effects of doing so were quickly apparent. Preparing for a women’s history class in the first year, for example, I became aware that my unit on the history of housework involved me standing up and talking about it. Thinking, “Oh, I better put some MI stuff in here,” I made overheads of some of the photographs I’d found in my reading. Then applying popular education’s problem-posing methodology, I decided to ask students questions about what they were seeing rather than telling them what I wanted them to see. No prior knowledge was assumed (where it was required, I supplied it); everyone had an equal chance to see and discuss the material in the overheads. Looking at a drawing of a family at a Colonial cooking fire, for example, I asked:

Who is doing the cooking? Who is bringing the firewood? Who cuts and stacks the firewood? Who keeps the fire going? With the equipment you can see, how many different dishes would be involved in a meal? How much

preparation will be involved in making it? Where do the foodstuffs come from? Who grows/makes/ grinds/ transports each of them? Which jobs are essential to the family's survival? Which jobs produce income? And so on.

This combination of MI and popular education – to my surprise – turned what could have been a simple lecture into a true experience. It wasn't "being there," of course – but it did give students the experience of searching the scene for themselves, discovering, sharing, testing the meanings they found in the picture, potentially calling on a variety of intelligences. That experience in turn served as a source of knowledge a few minutes later as they considered similar questions about a photograph of an aproned housewife standing alone beside her huge iron cookstove. I didn't have to tell them about the contrast; they experienced it for themselves.

I reflected afterwards on my surprise at the power of the overheads, which I had seldom used previously. Even I could feel the difference between merely talking about this subject and experiencing it visually. For the more spatially oriented, this must have been quite powerful – and indeed, our most spatial student, Gwen, mentioned these overheads specifically in her evaluation of the course: "I really enjoyed the slides that related to housework – the early fireplaces, as opposed to the complicated stoves ...to put knowledge into a spatial context I can "see" and "feel" what I am learning ... is much more effective for me" (FE97).

This is, I think, one of the clearest lessons to me of the way in which using an MI framework can support and inform popular education. In Freire's way of thinking, the role of the teacher in popular education is less to teach than to provide structured opportunities for students to learn. In his own ponderous vocabulary, students must become "cognizing subjects," rather than "objects upon which the discourse of the educator impinges." (Freire, 1994, p. 46) In other words, I could tell them that in Colonial times every member of the family was involved in what we would now call "housework" – or I could show them a picture and ask them to figure that out for themselves – which incidentally leaves room for them to have insights that I haven't had (and the more spatial of them certainly did!).

Providing learning experiences which students could process through their preferred intelligences had another benefit of particular relevance to popular education: Use of the MI framework permitted me to use diverse means of teaching about social change – the primary objective of popular education – which proved to be extraordinarily effective. The study of women's history in a program dedicated to empowering women is essential, according to Freire's theory: "No pedagogy which is truly liberating can remain distant from the oppressed by treating them as unfortunates and by presenting for their emulation models from among the oppressors. The oppressed must be their own example in the struggle for their redemption" (1993, p. 36). In their final evaluation students testified to the value of this strategy:

*Edna: "I learned of many women in history trying, struggling to achieve change through a different lens. I learned we can take charge of our lives now and tomorrow."*

*Pat: "I have learned about many great women through this course. This has made me stronger as a person. Before this class I had no women role models."*



**Gwen:** *“The course familiarized me with alternatives. The women that we learned about all dared to be different, and dared to be themselves.”*

It is also critical, says Freire, for learners to become aware that their prior understandings had been incomplete or distorted (1993, p. 95-6). The personal and powerful links to their own history which they established through MI-informed activities permitted them to come to this knowledge themselves. By imaginatively experiencing the history of women through their multiple intelligences, rather than merely studying it through books and lectures, my students were able to become conscious of themselves in the world “as persons or as members of an oppressed class” (Freire 1993, p. 28) and to establish powerful and emotional links with that class and its history. They could identify what knowledge was the result of an external ideology and what knowledge was the result of their authentic experience. One student comment in particular attests to the value of this discovery. In her final evaluation, Edna wrote, “Now I know why how we feel and see ourselves is sometimes so foreign feeling, is because it’s not us, it’s patriarchal assumptions.” There could hardly be a better illustration of Freire’s dictum that people begin to truly contribute to their own empowering education “only as they discover themselves to be ‘hosts’ of the oppressor” (Freire 1993, p. 30).

In this finding, I cannot report divergent cases. Certainly the level of understanding and connection differed among students – for some it was profound and life-changing, while for others it seemed more superficial and casual. But for all students, the connection was made, the study of their own history came to life and made sense in their lives. In their final evaluations, students in both years testified to their new understanding:

**Janie:** *“I was amazed how little I knew. How our culture is patriarchal. How much I internalized that my position as a woman was my fault.”*

**Pat:** *“I had no idea why women were so oppressed and subordinate, before this course.”*

**Sula:** *“[Women’s history] lifted the veil! Showed how we are marginalized and ‘marked’.”*

**Winnie:** *“I knew it was a man’s world but not to the extent that it actually is. I learned a great deal about how men are really afraid of women and because of this have to stay in control.”*

**Sharon:** *“We learned how men have treated women throughout history and how far we have come and how far we still need to go.”*

This last student, Sharon, gave perhaps the best evidence for the power of teaching and learning social change materials through both MI and popular education. Asked in a language arts class near the end of the year for an essay on cause and effect, she produced the following, which she also read (shakily) at the graduation ceremony:

*When I began Foundations I was very unsure of myself. I had no direction and no goals to speak of. Since I started this program, I have gained a lot of knowledge of women's history, poetry, and world events.*

*I have learned different ways that I am smart. My creativity has grown and I have a lot more confidence in myself. As time goes by I'm realizing more and more than I am somebody, not just a dummy who dropped out of high school, got pregnant, and ended up on welfare.*

*For the first time ever I feel that I have actually learned something. I am very proud to be a member and upcoming graduate of Foundations. It's been a long hard road since I started in September, but it has all been worth it. I actually like myself and I know now that my life isn't a dead end.*

**Finding 2: Use of an MI framework encouraged practices that created opportunities for increased student empowerment and collective action, a key popular education principle.**

In using the popular education methodology for six years before I began the AMI project, I saw many examples of individual student empowerment – people who declared that their participation in our programs increased their self-esteem and their ability to take active roles in their lives rather than merely being at the mercy of other people and events. Adding the multiple intelligences framework expanded this expectation of competency beyond self-esteem to students' sense of themselves as learners, possessing both intelligence and the ability to create important knowledge. Using MI, seeing their own strengths at work and having them acknowledged, gave students substantive evidence of their own efficacy, contributing to improved self-esteem. In an environment which combines these two frameworks, the expectation of competency therefore can increase exponentially – as can many students' ability to fulfill that expectation. A second-year student's comment made this point especially strongly:

*Sula: "[MI] allowed me to be free to do the things I always wished to do, but never was allowed, by myself or others. Unbelievable!" (FE98)*

I had always had difficulty, however, expanding this individual empowerment into a sense of collective power and the possibility of collective action. MI's enlargement of my teaching practices permitted this directly with the second-year class: they had the opportunity of taking collective action and seeing it indeed at least partly transform the world. One of the students was involved in a trial over a sexual assault of which she had been the victim. Many students identified strongly with her situation, so we went to the trial as a class to support her. Her testimony was postponed to a later date; the class returned to court on that day. On this second visit, the students noticed the impact their presence had on the proceedings. Several, for instance, commented that our student looked far less nervous than she had the previous week, while the defendant looked far less sure of himself. "What a difference [our being here] made in her whole attitude. What a difference it made in HIS attitude!" said Sula. The students also felt and obviously enjoyed their strength in numbers:

*Doris:* “We’re going to fill the whole courtroom.”

*Sula:* *And there’s nothing wrong with that, nothing wrong with that.”*

*Doris:* (singing) “We are women, hear us roar!”

*Sally:* (singing) “We are the women of Foundations!”

At one point the court clerk indicated that he didn’t know who the crowd was in the normally empty courtroom. Recalling this later, Barbara waved a clenched fist and declared, “We’re Foundations!” Students’ sense of the strength of women’s presence was enhanced by the fact that both the judge and the district attorney were women, the DA in an advanced state of pregnancy.

Although, sadly, the case was not resolved in our student’s favor, this experience was nonetheless a powerful demonstration of the interconnection between Gardner’s intra- and interpersonal intelligences, of Freire’s “I” and “not-I.” Seeing themselves influence events as a group enabled each of them to see herself as an individual with the power to influence events. As Sula commented, referring to a classroom segment of the program, “This is what ‘When Women Count’ is all about – women’s solidarity. This is the knitting of the blanket, the nice warm blanket for women.” (TJ 12/11/97)

After our first visit, we integrated the experience into a language class, using students’ perceptions of what happened as the basis for writing paragraphs. Asked for her reflections about the event, Sula wrote in her learning log “that courts suck, and it is nice to have friends around when the chips are down.” (LL 12/5/97)

Even without the MI framework to support it, I’m certain that this empowering experience would have been a profound one for my students. What I’m not so certain of is that it would have taken place. MI’s validation of different intelligences so enlarged my conception of what constitutes learning that I could regard this court visit as an activity that met the educational goals of my program, thereby permitting the very collective empowerment I had been struggling for so long to produce.

### **Finding 3: Use of the MI framework promoted a more democratic environment through increased power sharing among students and teacher.**

This theme emerged early in my introduction of MI to my students. As a way of introducing multiple intelligences, the class was to watch a video of the feature movie *Educating Rita*, starring Michael Caine and Julie Waters. Before we watched it, I gave students a list of questions designed to address different intelligences (see Fig. 1). I asked them to pick two to keep in mind as they watched the film – questions that struck them as interesting, as easy, as something they would enjoy paying attention to. One of the questions I developed this way clarified for me the distinction between linguistic and non-linguistic approaches to problems: I asked for the floor plan of Rita’s house. Now to ultralinguistic me, this seems almost silly – I don’t care what the floor plan is, nor would I normally think to ask about it. For someone strongly spatial, however, this might be an extremely interesting project – and the point is that the floor plan would have to be deduced from the events in the movie. For the spatial person, this activity would involve her quite literally in putting these events into a perspective that makes deep sense to her. Understanding this enabled me to imagine how different intelligences might operate on the same information – or, if I couldn’t quite

imagine how they might operate, at least I could understand *that* they might operate differently. Further, I could appreciate that use of such intelligences would produce different but equally valid kinds of knowledge and insight than might be available through my primarily linguistic approach.

Imagining a student responding to the “floor plan” question led me to what in my popular education setting was perhaps an even more important insight: The student manipulating the movie’s events using her spatial intelligence would be learning – but I would not be teaching her. In other words, teaching and learning are separable. An attractive problem could, by itself, provide an engaging learning opportunity; my intervention as a teacher imparting information might not be required. In fact, in my setting, the more I designed problems to reduce the need for my intervention, the more successful I would be as a teacher, because in this way I would transfer from teacher to student the power of selecting learning activities. This insight had a powerful effect on how I taught and organized my classroom from then on. I rejected the idea of using MI myself to make individualized lessons for the students and turned instead to having the students do it for themselves: I provided choices of classroom assignments and homework from among projects and problems which appealed to different intelligences.

I was, in other words, creating opportunities not for teaching but for learning. What was important wasn’t my ability to teach through those intelligences, but rather my students’ opportunity to learn through them. It no longer mattered whether I was strong in them or not; what mattered were the students’ strengths. I continued to use the method of providing MI-based questions in advance of certain experiences such as a video of Stephen Sondheim’s musical, *Into the Woods*, and a field trip to the Lowell National Historical Park. This encouraged students, I think, to experience some events differently than they might have otherwise, and to look at and for aspects that might not otherwise have come to the surface. For example, during a unit of studying textile workers at the beginnings of American industrialization, we took a field trip to the restored mill complex in Lowell, Massachusetts. The questions I developed encouraged students to imagine their own feelings had they been mill girls (see Fig. 2). And although there had been no such question, one student led a group of her classmates in a run down four flights of the mill’s spiral staircase because she wanted to know what that felt like.

These lists of questions directed toward specific intelligences correspond at least in part, I believe, to Freire’s “problem-posing” educational methodology, as opposed to the more traditional teacher-directed educational methods he called “banking education.” These questions are thus a step toward what Freire terms “education for liberation.” “Liberating education consists in acts of cognition, not transfers of information,” Freire says (1993, p. 60). He adds that such problem-posing education is in itself a force for democratization in the classroom:

*Indeed, problem-posing education... breaks with the vertical patterns characteristic of banking education...Through dialogue, the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with students-teachers. The teacher is no longer merely the-one-who-teaches, but one who is himself taught in dialogue with the students, who in turn while being taught also teach. They become jointly responsible for a process in which all grow. In this process, arguments based on “authority” are no longer valid; in order to function, authority must be on the side of freedom, not against it. (p.61)*

In the first year, this change in the normal student-teacher dynamic became especially noticeable once I extended the strategy of choices among intelligence-based questions to be the standard homework model in my women's history course. Again, I was aiming to pose problems that would give my students opportunity to learn through the different intelligences, utterly without reference to the teacher's strengths, weaknesses, or preferences. With this in mind – and again with help from Campbell – I drew up a list of potential projects, sorted by intelligence, through which students could demonstrate their learning in my women's history class. (Campbell, 1994) Rather than give specific homework assignments, I asked students to “respond” to the week's topic with a project they felt was appropriate. In addition, student classroom activities often revolved around specific intelligences that I wanted people to use more than they did (pantomimes, for example, because few voluntarily used bodily-kinesthetic intelligences in their projects) or that I felt would lend interest to topics that might otherwise be boring (for instance, interpersonal activities for making timelines and learning specific dates). Rather than give any kind of final exam, I asked students to produce final projects using as many intelligences as they could.

A change in the teacher-student relationship in the classroom rapidly became apparent. The combination of assignments based on multiple intelligences with the strategy of allowing students to choose their own assignments was the best I have yet found for sharing power while giving students a firm structure within which to work (See Teacher Journal, 3/11/97). Acknowledging weaknesses in my own intelligences profile meant also acknowledging that I could probably not adequately teach in those areas. Rather than depending on potential (but questionable) improvement in my skills in those areas, I chose to depend on the students' own abilities and strengths, freeing them to use and explore these strengths as they chose. This felt to me to be a profound alteration in the student-teacher relationship, with me ceding a great deal of power over their learning to the students themselves, their own motivations, modalities, and interests. For students, this framework meant that the program was not only saying, but was also demonstrating that students themselves, rather than the teacher, are the authorities on how they learn best. It both permitted and underscored the validity of their own personal educational discoveries. Toward the end of the first year, I commented, “One of the things I so love about this (way of teaching) is that it lets me let go. It leaves much more of the learning up to the students, and I love that.” (site visit interview, 5/20/97)

Student comments also emphasized the power they drew from their ability to choose their own assignments:

**Gwen:** “...the homework to this course was thoroughly enlightening and enjoyable. (I never thought that I'd say I enjoyed doing my homework, or that it enlivened me, rather than draining me...)” (FE97)

**Helen:** “I loved this aspect [choice] of the method. It made it fun to do homework projects because it left so much freedom to be creative!” (FE97)

**Barbara:** “The use of the multiple intelligences made everything much more interesting and fun. It was easier to learn when we got to choose what method was most comfortable to us.” (FE98)

In the second year, I expanded this approach to my language arts curriculum. Each 2 ½-hour weekly language arts unit included a 45-minute segment for “choice activities,” during which students were free to choose activities that addressed both the areas they wished to learn and the intelligences they wanted to use. I organized potential activities in individual plastic file boxes, called “stations.” Each contained activities and exercises in a specific language area: “mechanics” (grammar, punctuation, parts of speech, spelling, and so forth), “sentences,” “paragraphs,” “essays,” and “critical reading.” Each station contained folders labeled by intelligence/domain: Outdoors & Nature (naturalist); Conversations & Games (interpersonal); Drawing, Building, & Sculpting (spatial); Reading (linguistic); Charts, Graphs, Timelines (math-logic) ; Looking (spatial and intrapersonal); Acting & Dancing (bodily-kinesthetic); Music (musical); and Thinking (intrapersonal). Each folder contained as many activities as my volunteers and I could come up with, and students were free to choose activities to do alone or with others during this time. A student with spatial strength who needed work on sentence structure, for example, could choose to study a photograph or work of art, or walk outside and study the center’s external environment, or have a conversation with another student on a topic of mutual interest, and then write a specified number of sentences about the experience. Although I suggested questions she might consider writing about, what she ultimately chose to write was up to her. In this example, I would be concerned only with whether she wrote complete and grammatically correct sentences.

My previous teaching method for teaching sentence structure would have been to decide when it was an appropriate topic and to address it with instruction from the front of the room. There would have been considerable discussion with the students, and I would have posed problems for them to solve, but these would have been problems about sentence structure with right and wrong answers. The choice and pace of the activity, as well as the precise content of the knowledge to be gained, would have been up to me as the teacher. Students who already had these sentence skills, as well as those who didn’t already understand enough about parts of speech or grammatical structures to follow the discussion, would thus be forced into an activity that didn’t fulfill their needs. Boredom and disruption are predictable in this situation.

After introducing choice activities, I still included this kind of teaching weekly as a brief “lesson of the day” on a specific language issue. But equivalent time, if not more, was devoted to the choice activities. While I provided the activities to choose among, students had leeway to pick the knowledge area to work on. I was no longer in control of choice or pace; students themselves had the power to make these decisions, all of which were explicitly identified in advance as valid.

Students also had much control over the kinds of knowledge they could gain from their work. Because this was a language arts class, there were of course specific areas of content that I wanted students to learn. But the activities themselves were structured so that students could gain many other types of knowledge from them. There were no preordained, right or wrong answers. For example, Roberta, the strongly spatial student noted above, once chose to examine a photograph and write a paragraph about what she saw. Obviously the content area being addressed was the skill of writing paragraphs. For the activity, Roberta wrote a competent and moving paragraph about the emotions the photograph had aroused in her. But later in her learning log, she also reflected: “I did a writing on a photograph that was very enlightening to me. I never [before] noticed too much detail in something, that someone else would just see as a picture.” (LL11/21/97) Clearly, part of the knowledge she gained from this activity related to a dawning appreciation of and pleasure in her own strengths. Likewise, Gwen gained much from one of the women’s history homework assignments

she chose: “I loved reading about the forms of the old goddesses and then taking this information and creating a ‘goddess’ of my own, using red clay like the ancients, to symbolize the Life Blood. This was the most satisfying assignment for me” (FE97).

Students responded very positively to the introduction of choice activities, both because they enjoyed the activities themselves but also because they greatly appreciated the power to make their own choices. They demonstrated their enjoyment through positive verbal comments as well as through their intense engagement in the tasks they chose. While they were in use during the second year’s language arts segment, even the least skilled and most disruptive students were able to achieve unusually long periods of intense concentration working on their chosen activities. In addition, they wrote of their delight in their learning logs:

**Sally:** *“I like to choose what to do...I think we should do these activities at least twice a week.” (11/12/97)*

**Barbara:** *“I loved doing the choice activities. I like that we can do it in groups.” (11/12/97)*

**Sula:** *“I like the creativity of this class....I like to play with clay, and I love to play with words.” (12/12/97)*

**Rose:** *“I enjoyed [my choice activity] very much because it was on nature, something that interests me a lot and I would like to get a job in.” (11/12/97)*

Once empowered, students were in fact quite vocal in claiming understanding of how they learned best and requesting that their needs be honored. During one language arts class, students expressed disappointment that they wouldn’t be able to use play dough when I outlined the activity I had planned for the next time period. We went on to play dough instead. (TJ 11/26/97) In addition, when given the opportunity students freely expressed their own preferences for learning strategies:

**Judy:** *“[I want] more hands on activities....I really feel I learn a lot faster if I can visualize or actually do what we’re talking about.” (PE 10/31/97)*

**Rose:** *“[I want] more things you can do by yourself. I don’t like working in groups, and it’s easier for me to think [alone].” (PE 10/31/97)*

**Sally:** *“[I want to] work in groups more because when we do we get more accomplished because there is more information and we can agree on it.” (PE 10/31/97)*

**Winnie:** *“I like working by myself a lot better than with other people. I can make my own decisions and do what I want. If I work in a group I feel like I am on the outside and don’t really have much input. Usually I end up unsatisfied with the finished product.” (LL12/12/97)*

In summary, the combination of MI-based activities and students choosing among them provided the opportunity for students to identify their learning preferences and mold their classroom reality according to those preferences, to learn through individually or collectively selected methods, and to create knowledge without predetermined boundaries. The classroom environment thus contrasted strongly to a classroom in which “knowledge and way of knowing are defined [and] the rules of knowing are assumed” (Everhart p. 86). Instead, the organization of MI activities into a system of choices meant for my students that their classroom reality was, to varying extents, “not ‘known’ or preordained...but rather...socially constructed and reconstructed as definitions, meanings and values [were] arrived at through collective communication” (Everhart p. 125). They were sharing with me the power of creating an area of their lives in which they could learn, and in developing learning methodologies for use both within and without the classroom. This was a much closer approximation of a democratically organized learning space than I had ever been able to achieve previously. This is not to say that either MI or popular education, together or separately, are infallible. Each year there were what I would observe to be divergent cases: students who continued to insist on teacher direction, who refused to break out of the old model of education, who refused to take individual power or responsibility outside of narrow classroom boundaries. Many of these students left very early in the program, apparently feeling uncomfortable with our pedagogy (we heard this only second-hand through those who did continue; the women who left were themselves almost always unwilling to talk with us about their reasons). At that early stage a complete MI framework hadn’t even been introduced; we were simply using popular education methods, although in the second year these methods were certainly informed by my increased knowledge of MI. Perhaps if I had given an early explicit introduction of MI theory, those who were skeptical of our unorthodox approach might have been reassured of its value and therefore remained in the program. Perhaps not.

But even among those who stayed longer or even completed the program, there seemed to be at least one each year in whom I could observe little if any response to this changed environment. It is important to note, however, that my observations did not always match their own self-reports. In my observation of one first-year student, from beginning to end she very seldom contributed in class, her academic skills were lower than other students’ and did not seem to improve significantly, and her homework was often quite immature and did not seem to change over the course of the program. Nevertheless, her primary goal had been simply to complete the program, and she herself took tremendous pride in the fact that she had succeeded in doing this. A second-year student who leaped at the opportunity for choice in classroom assignments, and who repeatedly spoke of how much easier it was for her to learn when she did it of her own choice, seemed unable to apply this lesson of power and responsibility beyond specific classroom assignments. Still, my observations do not coincide with her own report: “This course did enable me to take a more active role in my life,” she wrote in her final evaluation.

**Finding 4. Use of the MI framework provided students with tangible evidence both that others have strengths which they lack, and that they themselves have strengths – perhaps never before acknowledged or valued – which others lack. This in turn allowed for an increased sense of both self and others, promoting the kind of respect and interdependence prerequisite to the social action that popular education aims to produce.**

One goal of popular education is to increase both interdependence among people and individual reflective skills so they may take informed collective action toward social change. Our program



explicitly teaches these skills: by using specially designed exercises and activities; by alternating individual, small-group, and large-group work; and by inviting reflection on personal preference and efficacy, on what is accomplished in each setting and on how each person contributes to (or detracts from) the activity. Adding the MI framework, which validates many ways of learning, knowing, and demonstrating knowledge, makes it impossible to ignore the evidence that others have strengths which we ourselves lack, and makes the conclusion almost inescapable that working with others is at least sometimes advantageous. In addition, the MI framework's explicit attention to the personal intelligences validates popular education's emphasis on reflection and collective action.

Gardner discusses the role of the personal intelligences – **intrapersonal** and **interpersonal** – extensively in *Frames of Mind* (1993). Intrapersonal intelligence, he says, represents “access to one's own feeling life,” while interpersonal intelligence refers to “the ability to notice and make distinctions among other individuals” (p. 239). The two are bound tightly together, he adds: “Under ordinary circumstances, neither form of intelligence can develop without the other” (p. 241). The relationship between these two intelligences is intricate and complex. Although Gardner is referring to the development of children, I find his remarks applicable to my students: an individual, he says, may have “his [sic] own affective experiences, but it is the community that provides an essential point of reference and the necessary interpretive schemes for these affects. Accordingly, knowledge of one's place among others can come only from the external community: [one] is inextricably compelled to focus on others, as a clue to himself [sic]” (p. 248).

Similarly, Freire (1993) notes the importance of learners' perception of both an “I” and a “not-I”; in dialogue, each “I” recognizes “that it is precisely the *thou* (‘not-I’) which has called forth his or her own existence” (p. 148). In Freire's popular education theory, the purpose of this complex interrelationship is social action, the joining together of “human hands which work and, working, transform the world” (p.27).

In my previous use of popular education methodology, I had become accustomed to participants in my programs almost always speaking of increases in self-esteem as one of the chief benefits of their participation. This individual benefit was a strong feature for Foundations participants as well.

*Caitlyn: “Foundations gave me the confidence in feeling good about myself and supporting me in such a way that allowed me to start thinking and observing life differently.” (FE97)*

*Helen: “This has been wonderful – I have come to ‘own’ who I am and won't let go ever again.” (FE97)*

*Carolyn: “I lost myself in a sense of who I was and the way I was. I now have found some of the old me and keep finding more.” (DJ 4/11/97)*

But the addition of the MI framework allowed students the powerful experience of identifying and appreciating strengths in others as well. Again, the viewing and discussion of *Educating Rita* was a turning point. Our discussion of the movie was incredibly rich, in part because the film itself engaged people in a very direct way. As one of them said, this is their story; they could relate profoundly to Rita and the events in her life. But allowing them at the outset to choose their own

approach through MI-informed questions invited some students to participate in the discussion in ways they otherwise seldom had. They offered wonderful insights, and saw that others did not necessarily have the same ones – that everyone made genuine contributions to the discussion. For example, one normally quiet woman demonstrated a stunning spatial intelligence by citing detail after detail of color, clothing, jewelry – each one a significant commentary on the movie and on Rita’s character. Among many other observations, she noted that Rita at times had red in her hair and clothes “so we could really see fire in her.” She pointed out that Rita’s shirts literally had blue or white collars, depending on whether she was doing manual or intellectual work, and that for the last half of the movie, Rita wore a dragonfly pin so that we would get the message that she was “really starting to fly.”

In one of those rare but glorious moments, a different student picked up the conversation. “That’s just a whole different way of thinking,” she said. “I would never see all that. I wish I could do that.” But a third student couldn’t let things rest there. Turning to the second student, who is extremely musical, she said, “Yes, but you thought of all the music, how the beginning music added to the scene. And then you said there was that little ‘ding’ whenever Rita got a good idea.” (I had thrown in a question about music as a sop to this and another very musical student; I myself hadn’t remembered any!) All of us, then, saw that we did indeed notice and remember different things about the film, that all of these things were valid, that each of us would have missed wonderful, important things without the contributions of the others, and that each shared insight deepened all of our understanding of the film’s themes. This exchange gave all of us, teachers included, a deep respect for each other’s abilities. For this group, there couldn’t have been a more graphic demonstration of both the validity and the value of multiple intelligences.

But it wasn’t until the second class year that I began to understand how the explicit identification and encouragement of both personal intelligences contributed to the popular education goal of collective action. Before I introduced MI directly, students’ comments were similar to those I had heard before, expressing increases in individual self-esteem. During a discussion at the end of the first week of the program, for example, students remarked on their growing sense of themselves: “This is the first time since my kids were born that I’ve felt like something more than a mother and a wife.” “A lot of my questions were answered and validated. I feel comfortable.” “It’s making us look inside, deep within, and we all probably needed that.” “This is the only [education] place that I’ve ever been that I’m not waiting to leave and depressed. I feel comfortable.” One added a comment about her growing comfort within the group: “We got to know each other. That makes us feel more at ease.” (CN 10/3/97, speakers unidentified)

Later in the year, however, after the explicit introduction of MI, students referred far more to their group experience in reflecting on the difference between Foundations and other educational experiences. One student, for instance, remarked how important it was for her to hear others’ viewpoints, that hearing other people say things a few times helped her develop her own viewpoints. (PJ 11/14/97, speaker unidentified) Another student, addressing me during the same conversation, declared, “You care what we think...our ideas matter.” Students also frequently commented on their enjoyment of working in groups on tasks they had chosen themselves:

*Barbara: “Today we worked on a Lyddie poster [Lyddie, a novel by Katherine Paterson, Lodestar Books, 1991]. I had a lot of fun. I like working with other people on projects. I learned a lot by doing the Lyddie story in a poster.” (LL 12/10/97)*

*Sally: "I liked getting into groups and arranging the pictures of our group working on the line at the cotton mill. I thought it was fun and it refreshed my mind about the mill girls." (LL 10/31/97)*

*Sally: "Today was a fun and exciting morning. I enjoyed working together on our project." (LL12/10/97)*

Students were directly experiencing the value and benefits of working collectively. They had seen these already in the court experience described earlier (see Finding 2) but I believe that experiencing them as well in an educational setting, which traditionally values independent work and competition, was particularly powerful for them.

## **DISCUSSION**

It's difficult for me to overemphasize the impact this research and its findings have had on me as a teacher. I feel that both my understanding and my practice have been transformed, and that as a result I am much closer to the kind of teacher I want to be than I was just 18 months ago.

Most importantly for my research question, it became apparent that each framework validated the other. For example, I was intuitively certain that "non-traditional" or "multisensory" or "multimodal" methods of teaching were superior to a strict lecture-and-listen environment. Thus I had always been comfortable with popular education pedagogy, which uses many nontraditional methods of teaching and learning – drama, music, dance, art, and so on – because it was developed with and for an illiterate population. MI provides a clear theoretical rationale for using these nontraditional methods even with a literate population. I can no longer think of them even subconsciously as "fun extras" – they are central to the teaching and learning.

Likewise, popular education's requirement of more democratic power relationships in the classroom validated MI's identification and encouragement of different ways of knowing. Convinced of the value of diversity, I had always been comfortable with a vague notion of different learning styles and temperaments. Popular education provides a clear theoretical rationale for identifying, elevating, and acknowledging the equivalent value of these different ways of knowing. I can no longer think of democratic classroom organization as a "bonus" – it, too, is central to the teaching and learning.

It is their fundamental philosophical agreement, their position of respect for learners as active participants in education, that I think accounts for the deep compatibility of the frameworks of popular education and multiple intelligences. And it is the fact that both operate from a model of student competence rather than student deficit that I believe accounts for the powerful effect of their simultaneous use.

Perhaps the most important change to my teaching practice will be the huge enlargement of my own conception of what constitutes knowledge. As an overwhelmingly linguistic person, I had, for example, previously considered linguistic skill as a prerequisite at least for demonstrating, if not acquiring, knowledge. I had always tended to dismiss those who didn't write or speak well as

simply not too smart, or too lazy to learn the rules, or something of the sort. Now, however, I understand that intelligences fall in different but equally valid areas, and that a lack in one does not imply a lack in another. With the evidence I have seen in my last two classes, I feel myself genuinely more respectful of non-linguistic intelligences, and more authentically motivated to provide opportunities for acquiring and demonstrating knowledge through them. In addition, I have learned to leave the boundaries of knowledge open. I may intend students to learn a certain body of knowledge – sentence structure, for example, or the fact that women’s roles in history have been overlooked rather than nonexistent. By allowing them to approach these areas of knowledge in different ways, I must also acknowledge that students may learn (and so teach me) many other important and valuable things as well, whether they are connected to the ostensible subject at hand or to other insights.

In terms of applying MI in my classroom, I feel that using the structure of student choice is one of the most important aspects of its success. Allowing students some control over their learning reduces the almost inevitable human reaction against the imposition of authority, and encourages students to accept the validity of the activities they participate in. However, extending that control to a choice among mutually acceptable activities and settings allows far more individual control than is possible even in settings of consensual decision-making. Students who are ahead of or behind others in given subject areas are able to individualize their learning with a minimum of intervention (read: control) by the teacher. Students can be willing to undertake even the most boring of drills if they have chosen them for their own reasons; likewise, they can be wildly experimental and take otherwise unlikely risks if, for their own reasons, they feel themselves capable of this at a particular time.

## **NEW QUESTIONS/NEXT STEPS**

I feel I have satisfactorily answered my primary research question in the affirmative. But many others remain about the combination of MI and popular education.

One of the most interesting to me involves the question of reducing student resistance to learning. Although I have discussed this question directly elsewhere (See Chapter 11 in Vol. I), neither my work nor that of others in this study sufficiently examines whether MI, by itself or in conjunction with popular education, is a possible means for bypassing many of the triggers for resistance. My own sense is that a popular education methodology eliminates much of the almost instinctive student reaction against authority through power-sharing, and that MI permits students and teachers to bypass damaged or blocked cognitive pathways (as the result of trauma, for example) as well as those which are the result of unacknowledged conflicts among goals (maintaining the subservient position required in an existing relationship, for instance, rather than expressing the independence gained through education). This leads to the question of knowledge transfer. A student’s conflicts, for example, may prevent her from learning through pencil-and-paper tasks, but permit her to assimilate the same information if she makes a poster or a clay model. Will that knowledge transfer to unavoidable pencil-and-paper tasks?

Another question that I had hoped to investigate this year was the effect of asking students to work in groups based on either their strengths or their weaknesses. In an activity which contained both and allowed both students and teachers to reflect upon the differences between them, it appeared that working together in an area of collective weakness fostered greater group solidarity. Would task groups based on members' weaknesses promote solidarity if used with other activities? On the other hand, working in groups based on strengths appeared to enhance the retention of content. Would task groups based on members' strengths promote content retention if used with other activities? Both because of my own time constraints and the extremely uneven attendance patterns which characterized my class, I was unable to pursue this question, but it continues to hold considerable interest for me.

Finally, as my own activities broaden beyond classroom teaching, I wonder about the use of MI in other settings. Much of popular education is concerned with fairly explicit political organizing. In this country, organizing is most often accomplished with talk. Will people who are coming together to identify political goals and strategies accept MI-informed ways of working? In settings where I don't have the automatic authority of a "teacher" (however democratic) are there appropriate ways of bringing in these methods? This is a question I look forward to exploring.

## **FIGURE 1. SAMPLE QUESTIONS FOR EDUCATING RITA**

1. What are Rita's feelings when Frank refuses to teach her?
2. What are some ways in which Frank's and Rita's relationship changes from the beginning to the end of the film?
3. What are some ways that Rita's appearance changes through the film? What does this say about her?
4. What are some ways in which this film affected your feelings about education and getting an education?
5. What are some lines in the film that struck you as memorable?
6. What is the floor plan of Rita's house? Of Frank's?

## **FIGURE 2. SAMPLE QUESTIONS FOR MILL VISIT**

1. What repeated activities – for example, hearing bells, climbing stairs, operating machinery — did you notice in mill girls' lives? How many times would they repeat them during the course of a day, a week, a month, a year?
2. What sounds did you notice most in the mill?
3. What emotions did your experiences on the visit produce in you?
4. What parts of your body would feel the worst after a day in the mill? What could you do to make them feel better?
5. How would working in the mills affect a girl's relationships with her family at home?