Designing for Culturally and Linguistically Diverse Communities: A Case Study of the Role of Local Context in Shaping Curricular Adaptation

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Abstract: Understanding how curricular innovations get adapted when implemented in culturally and linguistically diverse schooling contexts is critical to making inroads toward the goals of dissemination and scale-up of school reform. This paper examines the role of local context in shaping curricular adaptation through a case study of teachers' implementation of a curricular design which aims to align school and out-of-school communities in mutual benefit partnerships. Our analysis characterizes how this innovation is adapted to meet local goals and suggests the need to make visible in the design how specific structures and strategies can be used in support of local goals.

Keywords: teacher beliefs and practices, diversity, home-school connections, educational reform

Introduction

A pervasive theme within current educational reform in the United States is the call to align school, home, and workplace environments to mutually support children's intellectual and social development. This discourse assumes that learning and development occur in an ecology of interrelated contexts (Bronfenbrenner, 1979), and suggests that child development is supported when families and schools have overlapping or shared missions and goals concerning children (e.g. Epstein, 1992; Epstein, 1987a). This call for alignment is further fueled by studies which suggest there are untapped resources within families and out-of-school communities that can be leveraged in support of schools' curricular objectives (e.g. Coleman, 1988; D'Andrade, 1992; Delpit, 1995; Fuson & Cicero, 1999; Lee, 1995; Moll & Greenberg, 1990).

Radinsky et. al. (in press) characterize initiatives responding to this call for alignment by two approaches: 'simulation' and 'participation'. The simulation approach, as in many problem-based learning curricula (e.g. Hmelo, Gotterer, & Bransford, 1997), aims to represent targeted out-of-school practice within the context of the classroom, designing materials, tools, assignments, and interactions to map to the activity of some outside community. By simulating out-of-school practices, these designs attempt to expose students to the aspects of the target community's practice which are most fruitful for learning, while sheltering them from irrelevant or possibly harmful or distracting elements. A second approach to cross-community alignment is the creation of opportunities for students to participate in the actual work of an out-of-school community, as in programs such as workplace apprenticeships (e.g. Rosenbaum, 1992) and community service (e.g. Youniss & Yates, 1997). Lave and Wenger (1991) suggest that, rather than being taught a practice in a separate learning environment, learners need opportunities to engage directly and productively in the target communities themselves: This participation-based approach maximizes opportunities for incidental learning in the target domain, a kind of learning which cannot be captured in the domain analyses used for simulation.

This paper describes a curricular approach which aims to combine the advantages of both simulation and participation, resulting in a new design which we call 'mutual benefit partnerships' (MBPs) (Bouillion, Radinsky, & Gomez, unpublished; Radinsky, Bouillion, Hanson, Gomez, Vermeer & Fishman, 1998; Radinsky, Bouillion, Lento, & Gomez, in press). MBPs attempt to balance the learning resources available uniquely in the classroom setting with those available uniquely in an external, professional setting through cross-community investigations of real world problems that are of shared interest and result in mutual benefits. The MBP design is in its fourth year of development and implementation by nine collaborating school districts across Illinois, Northwestern University,

Western Illinois University, Argonne National Laboratories, and the Illinois State Board of Education as a part of a five-year grant called Reality Based Learning.

In all existing cases of MBP project implementation we can identify the same essential design features: (1) a 'real world' problem, (2) a school-community or school-business partnership, and (3) student-developed products considered to be of mutual benefit to project participants. As we probe more deeply, however, we begin to see variations in the perceived benefits, the associated challenges, and the implementation strategies used to enact this design within different school-community contexts. The questions we ask in this study are: 1) How can a curricular design be adapted in support of different goals?, and 2) What role does local context – including the cultural values, norms, histories, and experiences of a community – play in shaping the nature of teachers' curricular adaptations? This paper explores these questions through a case study of an MBP implementation at Wheaton Elementary¹. This case was chosen because of the perception by the other participating schools that the Wheaton approach was somehow different than their own, and sparked a debate within the community as to what constitutes a mutual benefit partnership. Our analysis presents the unique features of the Wheaton MBP implementation, explores the role of the local context in shaping those features, and considers the implications for supporting future implementations in diverse settings.

Context of the Study, Methods and Data Collection

The context for this paper is a case study of the implementation of a MBP project at Wheaton Elementary, a K-6 school in a predominately Mexican-American neighborhood in Chicago, Illinois. This case study is based on a larger qualitative study of MBP implementation at ten schools during the 1996-97, 1997-98, 1998-99, and 1999-00 school years. This study took place during the 1996-97 academic year, and involved a project which was co-planned and facilitated by two fifth-grade, self-contained classroom teachers, the school's science teacher, an ESL instructor who split her time between the two participating classrooms, the school's technology coordinator, and the first author who played the joint roles of co-participant and researcher. As with most of the schools, the Wheaton teachers were selected by their administrator to participate in this project, and once teachers had been appointed, the administrator played only a peripheral role in day-to-day planning and implementation. The Wheaton teachers reported prior use of inquiry and problem-based teaching and learning in their classrooms. This was true in only four of the other nine schools. All MBPs involve the collaboration of at least two teachers, across both self-contained and subject specific classrooms, although the arrangements of collaboration vary. No official curricular materials were available at the start of this first year (1996-97). The expectation was that these 'pilot' projects would be used to inform the design of curricular supports for future MBP implementations. These schools are diverse in that they represent rural, urban, and suburban contexts, different grade levels spanning K-12, and school-communities which are predominately Mexican-American, predominately African-American, predominately European-American, and combinations of the above. All of the schools selected serve a majority of students whose families meet federal income guidelines for receiving free lunch. Wheaton is the only school in an urban school district and the only school with a majority of bi-lingual and Mexican-American students.

Various frames have been used in research focused on instructional practice. Research using a cognitive frame to understand teacher practice focuses on teachers' thinking about their work. These studies provide a view from the *teacher's perspective* and provide analysis for how they see their world. One of the implications of this research is that teachers' perceptions of their purpose and the goals they are committed have important influence on their instructional practice (Lortie, 1975). While individual teacher cognition is a helpful lens for indicating the motivations, intents and beliefs behind practice, these insights cannot adequately predict practice in action. Schools have long been viewed as 'contested terrains' (Lipman, 1997) in which efforts for school change are mediated by economic, political, ideological, and cultural influences (e.g. Apple, 1979; Ball, 1987; Giroux, 1983). We use this frame of situated activity to explore the role of the Wheaton context in influencing these teachers' unique adaptation of the MBP design. A variety of data was collected as a part of this case study. The first author attended all regularly scheduled teacher planning meetings which were audio taped and later transcribed, as well as, conducted classroom observations 2-3 times per week over the course of the MBP project, during which field notes were taken and also transcribed. Pre and post interviews were conducted with teachers and students, and a variety of artifacts were collected including e-mail correspondence, teacher-designed instructional tools, and examples of students' work. Iterative

coding and triangulation were used in our analysis to identify themes which characterize the role of local context in influencing teachers' adaptation of the MBP design.

Our Findings

A major premise of the mutual benefit partnership (MBP) design, as stated in the originally funded proposal, is that students are capable of contributing products of value to non-school communities and that the experiences associated with the development of those products provide valuable learning opportunities for students. The language used in that proposal, and in the first year of project implementation, assumed a model in which students would participate in the "reality of work beyond the classroom" as consultants to out-of-school organizations.

Much too often, classroom learning is *disconnected from the problems faced by professionals in the world beyond school.* Students feel the disconnection. They often ask questions like "Why are we learning this?" We envision classrooms where the tasks and projects that teachers and students are engaged in *are tightly coupled to the reality of work beyond the classroom.* This project (...) envisions a network of schools in which students use their knowledge and technology skills to address real world problems, generated through an active collaboration of business, government, community, higher education, elementary and secondary schools and parents. (1996, Technology Challenge Grant Proposal)²

The definition of "real world" problem in this vision is implied as those which are "faced by professionals in the world beyond school." In this scenario, it was assumed that the "client" organizations would bring their real world problem to students for consulting services. Early in the first year (1996-97), Northwestern received an e-mail from the Wheaton teachers which questioned the rationale behind this model of mutual benefit partnerships (MBPs). Their questions included:

Who creates/co-creates the problem-based curriculum? What role will children have in the creations of the PBL? Children ownership? Will the professionals talk down to or work at the level of the children? What will the children get out it? (E-mail, 1-16-97)

The Wheaton teachers were especially concerned that their students might be exploited by the outside business organization. In subsequent planning meetings the teachers continued to convey their goal that the project be meaningful for their students. In support of this goal, they decided that the real world problem should come from the students rather than an outside organization, thus broadening the realm of "real world" problems to include those not only faced by professionals in the worlds of work, but also those of students and their families in the world of their immediate community. From that point on, the Wheaton project took on a distinctly different flavor than that of any of the other schools' MBP projects. The problem identified by the Wheaton students was the pollution of and illegal trash dumping on a portion of the Chicago River riverbank located near their school. Outside organizations (described as partners rather than clients), such as the Friends of Chicago River, were brought in to teach students about the river and about the environment. The students then engaged in a number of activities, which evolved from classroom discussions and brainstorming sessions. Students wrote letters to the landowner asking for removal of the debris, they created and performed a play for the community to educate them about the environment, and they collected data on the river's water quality to present at a local hearing on restoration of the river. These, as well as a number of other activities, eventually led to the landowner bringing in bulldozers to remove the trash from that portion of the riverbank, and agreeing to lease the property for development as a neighborhood 'green space.' The teachers describe the audience for this project as the students and the neighborhood community at large, rather than a particular business or community organization. The teachers emphasized that this process was "student driven," that it emerged from the students' discoveries and discussions in a way that might have been constrained if forced to fit under the needs of a particular "client" organization.

...this *organic process* of students brainstorming solutions, identifying the problem and searching for a client comes from the students. This is [a] *student driven [project]* with plenty of room to negotiate with our students...The river project has extended its [project] boundaries (in a number of directions). Though I know these things cannot all be directly connected back to "the client" I truly believe the theme, river, along with the problem provides so many teachable opportunities. *Trying to make it all fit under the needs of the client seems confining*...this is a multipurpose activity which the client may or may not of had us explore. (E-Mail, 3-24-97)

Variation in Adaptation Understood Through a Lens of Local Context: Culturally-Relevant Goals and Practices

The differences in the Wheaton adaptation of the MBP design sparked a larger debate within the community of participating schools about what counted as mutual benefit partnerships. What makes a problem "real world"? Who decides on the problem? What is the role of the partner organization? Who is the audience? Who benefits and in what ways? To better understand the implications of the Wheaton adaptation, we asked the question, How do the goals, norms and values connected to the Mexican-American and urban experiences of the Wheaton teachers and their students relate to their adaptation of the curricular design? There was a clear sense from Wheaton teachers that they were working in a context in which the children they teach face challenges that are intimately connected with the experience of growing up in an urban setting, being poor, and speaking English as a second language.

When we thought of RBL, our concern was that some company was going to come in and exploit our children and then we were going to have to do this project that was very top-down. And that doesn't work within our classrooms because we have to include much of what they're interested in. *We work with a community that's oppressed...*our kids deal with gangs and violence, I don't want to say daily but it's on fairly regular basis. (Interview, RBL Videotape 1997)

Our audience is our community, an *inner city neighborhood facing the hurdles of poverty, gangs, second language acquisition and racism.* (Wheaton School Website³)

In light of this context, how do Wheaton teachers define educational success? What are their goals for students, and how did they adapt in the mutual benefit partnership design in support of those goals? Three themes emerge from an analysis of the Wheaton case study: 1) Community Activism: Building on Community Issues, 2) Student Empowerment: Finding a "Power Place" in Society, and 3) Cultural Capitol: Building on Students' Prior Knowledge.

The first theme that emerges in the Wheaton adaptation of the MBP design is the theme of *community activism* and building on issues of community concern. The Wheaton neighborhood is located near the Chicago downtown area and runs parallel to a large industrial area. There are few 'green spaces' to be seen, but the ones that exist are highly prized within the community. The teachers recognized this as both a resource and an issue of concern with the community around which they might anchor their curricular efforts.

The Bubbly Creek site is a very small piece of nature, and it's very interesting but the whole community refers to Bubbly Creek as the Amazon of [this] neighborhood. And when you go there it's terrible that this is all that they have, but *it's their little jewel here in the neighborhood*. (Interview, RBL Videotape, 1997)

By anchoring their students' curricular experience in issues that were of importance to them and their community, the Wheaton teachers hoped to help develop students' sense of social action and to play a role in doing something that contributes to their community.

By learning the historical importance of the Chicago River and reclaiming the river banks as once again a place to visit and enjoy, *children will develop a sense of social action and civic responsibility*. (Wheaton School Website)

[It's] for them to go out *and feel like they're going to do something important for the world*, you know, our audience is the community. Not a corporation, not an establishment [but] the community. (...) It's about doing something for their community, *doing something that makes their community better*. (Interview, RBL Videotape, 1997)

This approach is similar to that used by the Algebra project (Moses, Kamii, Swap, & Howard, 1989) in which math education was linked to the future prospects of inner-city children, thus transforming what had previously been a purely curricular issue into a broader political question. Moses et. al. describe this strategy for connecting with and successfully teaching disenfranchised students as similar to the strategies used by the community organizer in the tradition of Ella Baker.

In contrast to the university-based researcher, the organizer working in the tradition of Ella gradually becomes *recognized by community members as having a commitment to their overall well-being*. The organizer immerses him- or herself in the life of the community, *learning its strengths, resources, concepts, and ways of conducting business*. The organizer does not have a comprehensive, detailed plan for remedying a perceived problem, but *takes an "evolutionary" view of his or her own role in the construction of the solution*. (...) The organizer seeks out views of community members who have strong interests in the issue, and informally educates community members who are uninvolved but whose interest are at stake. It is the organizer's task to *help community members air their opinions, question one another, and then build consensus*, a process that usually takes a good deal of time to complete. (1989, p. 439)

The community organizer role resonates with the approach described by the Wheaton teachers. Much like the "evolutionary" process described here, the Wheaton teachers talk about an "organic process" in which there is an on-going negotiation and exploration with their students around the problem of the polluted riverbank. And for Wheaton, the mutual benefit partnership design was a way to build stronger bridges to the community in support of other school initiatives such as their Parent Project. Teachers reported that parent involvement was strengthened when parents and community members were invited to attend a musical performance written by and based on students' experiences with the river. The performance was so convincing that sixteen parents joined the Parent Project, so they too could explore the river and share in similar nature experiences as the students. The teacher as organizer, seeking out views of community participants, was also evident in the formation of a Community River Committee which brought together student, teacher, family, community and local business representatives to serve as stewards of the Chicago riverbanks in the neighborhood.

The second theme that emerges in the Wheaton adaptation of the mutual benefit partnership design is the theme of student empowerment. As described earlier, the Wheaton teachers view their students as growing up in a context of oppression. These students see many of the adults around them isolated from participation in issues of concern to them as a product of racism, language barriers, poverty and a lack of education. In the spirit of Paul Freire and other social theorists, these teachers see education as having an important role in the struggle for liberation from oppression. Their goal is to "uplift" their students, to help them to become "agents of change," and to help them find a "power place within this society."

Our partners are the agencies, educational establishments and businesses that will *uplift and empower our students* so that they, the children are able to work as *agents of change* within the community. (Wheaton School Website)

Our goals [were]...to have them do something that would create a sense of community and a sense of empowerment...*to show them that small voices can be heard*. (Post-Interview, 6-17-97)

It's about empowerment. It's about providing our kids with skills that will not only help them academically (...) [but it also] motivates our kids and gives them a reason to learn. (Interview, RBL Videotape, 1997)

Students will establish a *positive sense of themselves, a power place within this society*, and sense of citizenship by providing community service. (Wheaton School Website)

The third theme that emerges in the Wheaton adaptation of the mutual benefit partnership design is the theme of *cultural capitol*. The Wheaton teachers had a strong sense that one of the keys to student empowerment is building on the experiences and prior knowledge that students bring to school from their families and community. While these teachers acknowledge the tremendous barriers facing their students, this did not translate into a "deficit" view of what students know and are able to do. These teachers pointed out that many of their students come from families in which the parents from Mexico "have extensive knowledge of the earth." And although there are few 'green spaces' in this urban neighborhood where students might themselves have personal knowledge of the earth, most families have a variety of plants in their homes that are used for cooking or medicinal purposes. This is just one of the many kinds of knowledge and experience that the Wheaton teachers aimed to leverage in their curricular efforts.

We see little of nature in this cemented neighborhood, yet *our immigrant parents from Mexico have extensive knowledge of the earth*. Many of our children travel back to their homeland to visit family bringing to us, stories of life in rural Mexico. In order for our children to succeed, it is paramount that we as educators, assist our students in *maintaining a sense of where they came from* so they can successfully construct knowledge. (Wheaton School Website)

In their efforts to restore the Chicago riverbanks in their neighborhood, Wheaton students collaborated with several environmental scientists and lobbyists, primarily from an organization called Friends of the Chicago River. In all of the mutual benefit partnership designs, there is the question of what students are able to uniquely contribute that is of value to the partner organization. In this case, the students developed expertise around the river which drew on both the knowledge of the earth represented in their families, and skills they were taught by their teachers and the collaborating scientists. There is considerable evidence to suggest students and their community benefited from this project. The question is left, however, as to if or how the partner organization, Friends of Chicago River, benefited. This is an important question to ask as an underlying assumption to the mutual benefit partnership design is that distributed expertise is most effectively leveraged in a context in which all parties feel a significant investment in the process, and further, that this investment is in part influenced by the sense that they will get something of value out of that process. In this case, one might wonder whether the Friends of the Chicago River might not have been just as successful in cleaning up this portion of the riverbank themselves, without the help of Wheaton students.

According to the scientists at Friends of the Chicago River, one of the key things that the students brought to the process was a knowledge of and connection to the community members. Restoration activities are in large part about building awareness, creating consensus, and motivating action. In the community surrounding the targeted riverbank, the scientists from this organization were likely to face tremendous barriers in their restoration efforts as a product of both language barriers and a lack of legitimacy or trust within the community. Students in this context, used their Spanish and English language skills to bring together and create a bridge between the partner organization and the community. In this liaison role, students were important collaborators with the scientists in building awareness and mobilizing action within the community. In the classroom, Wheaton teachers encouraged students to do all assignments in both Spanish and English. Some students were more recent immigrants to the community than others, and did not speak or write much English. These students were referred to as the "Spanish experts" and called upon to help their peers, who may have developed more fluency in English, but not have had as much fluency in Spanish.

Summary and Implications for Scaled-up Implementation of the MBP Design

The analysis of local context in how this school adapted the mutual benefit partnership design has many implications for how that design might be revised to support its dissemination to and culturally relevant use in diverse contexts. In this first year of MBP implementation, the design specifications loosely defined the essential elements of a mutual benefit partnership - a 'real world' problem, a school-community or school-business partnership, and student-developed products considered to be of mutual benefit. The teachers were told that they would be piloting this design, helping to 'flush out' the specifics of these elements, and identifying the structures necessary to support their implementation. Perhaps not surprising to some, we learned that this adaptation process takes a tremendous amount of energy, investment, and ingenuity on the part of the teachers. This is hard work. Our original goal had been to use the insights of these cases of adaptation to inform the design of curricular materials to support future implementations, and to alleviate the burden of this time and energy intensive activity. This case suggests, however, that the activities of negotiation, re-invention, and adaptation are essential components of the MBP design. This has important implications for the goal of scalability, and suggests the need for a different kind of curricular artifact than originally conceived.

The second major insight of this analysis relates to the influence of different and potentially conflicting views on the purpose of schooling. Labaree (1997) suggests the root of educational conflicts over the years can be traced to the existence of three competing goals for American education - democratic equality, social efficiency, and social mobility. Through our experience with and analysis of teachers' adaptation of the MBP design, we became aware of how our original design assumptions leaned more toward the goal described by Labaree as social efficiency, that is, the preparation of future workers. This goal is exemplified in the 'client-consultant' language used in the original proposal, and relates to an emphasis on developing structures to provide students' access to knowledge and practices associated with the out-of-school business community. In contrast, the Wheaton teachers' vision to empower and 'give voice' to students so that they can overcome oppression and participate in society suggests the need for different participant structures and instructional strategies. At Wheaton, this translated into the development of structures that would identify and make use of students' and their families' prior knowledge in relation to the 'real world' problem. The implication is that, particularly in the case of innovations which aim to align school and outof-school communities, curricular structures may inadvertently conflict with or even undermine local values, beliefs, and practices (Valdés, 1996). The Wheaton case suggests the need for more in-depth case studies to identify both the range of goals that seem to be afforded by this design, as well as the specific structures and strategies developed in support of those different goals. It is through the process of making visible how local context helps to shape these design specifications that we will be able to more successfully disseminate and sustain curricular innovations in a diverse range of contexts.

Endnotes

- (1) Wheaton is a pseudonym.
- (2) Italics indicate emphasis added.
- (3) This website was written by the Wheaton teachers to share their experience with the MBP River Project.

References

Apple, M. W. (1979). Ideology and curriculum. Boston: Routledge & Kegan Paul.

Ball, J. (1987). The micropolitics of the school. London: Methuen.

Bouillion, L., Radinsky, J., & Gomez, L. (1999, unpublished). A 'third party' in the classroom: The challenges of curricular adaptation in mutual benefit partnerships.

Bronfenbrenner, U. (1979). The Ecology of Human Development.

- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94(Supplement), S95-S120.
- D'Andrade, R. G. (1992). Schemas and motivation. In R. G. D'Andrade & C. Strauss (Eds.), *Human motives and cultural models* (pp. 23-44). Cambridge, England: Cambridge University Press.

Delpit, L. (1995). Other people's children: Cultural conflict in the classroom. New York, NY: The New Press.

Epstein, J. (1992). School and family partnerships. In M. Alkin (Ed.), *Encyclopedia of educational research* (6th ed.,). New York: MacMillan.

Epstein, J. L. (1987a). Toward a theory of family-school connections: Teacher practices and parent involvement. In

K. Hurrelmann, F. Kaufmann, & F. Losel (Eds.), *Social intervention: Potential and constraints* (pp. 121-136). New York: DeGruyter.

- Fuson, K., & Cicero, A. (1999). Using referenced concepts to teach mathematics for understanding: An extension of Vygotsky's spontaneous and scientific concepts. *Manuscript under review*.
- Giroux, H. A. (1983). *Theories of reproduction and resistance in the new sociology of education: a critical analysis.* South Hadley, MA: Bergin & Garvey.
- Hmelo, C. E., Gotterer, G. S., & Bransford, J. D. (1997). A theory-driven approach to assessing the cognitive effects of PBL. *Instructional Science*, 25(6), 387-408.
- Labaree, D. (1997). Public goods, private goods: The American struggle over educational goals. *American Educational Research Journal*, 34(1), 39-81.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation*. New York NY: Cambridge University Press.
- Lee, C. (1995). Signifying as a scaffold for literary interpretation. Journal of Black Psychology, 21(4), 357-381.
- Lipman, P. (1997). Restructuring in context: A case study of teacher participation and the dynamics of ideology, race and power. *American Educational Research Journal*, 34(1), 3-37.
- Lortie, D. (1975). Schoolteacher: A Sociological Study.
- Moll, L., & Greenberg, J. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L. Moll (Ed.), Vygotsky and education: Instructional implications and applications of sociohistorical psychology (pp. 319-348). Cambridge, MA: Cambridge University Press.
- Moses, R. P., Kamii, M., Swap, S. M., & Howard, J. (1989). The Algebra Project: Organizing in the spirit of Ella. *Harvard Educational Review*, 59(4), 423-443.
- Radinsky, J., Bouillion, L., Hanson, K., Gomez, L., Vermeer, D., & Fishman, B. (1998). A Framework for authenticity: Mutual benefit partnerships. Paper presented at the American Educational Research Association, San Diego.
- Radinsky, J., Bouillion, L., Lento, E., & Gomez, L. (1999, in press). Mutual benefit partnership: A curricular design for authenticity. *Journal of Curriculum Studies*.
- Rosenbaum, J. E. (Ed.). (1992). *Youth Apprenticeship in American*. Washington, D.C.: American Youth Policy Forum.
- Valdés, G. (1996). *Con respeto: Bridging the distances between culturally diverse families and schools.* New York, London: Teachers College, Columbia University.
- Youniss, J., & Yates, M. (1997). Community service and social responsibility in youth. Chicago: University of Chicago Press.

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