

Enabling Access: Toward Multicultural Developmental Curricula

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ABSTRACT: This article seeks to initiate discussion of the contours of a multicultural developmental curricula. It first discusses the need for multiculturalism in developmental education and offers an understanding of access to higher education that integrates key strengths of several, currently popular, conceptions of multiculturalism. Then, it presents a model curriculum and discusses specific classroom practices to implement a multicultural developmental approach.

The broad field of multicultural education is increasingly informing work within developmental education (Bruch & Higbee, 2002; Higbee, Bruch, Jehangir, Lundell, & Miksch, 2003). But as theorists such as Giroux (1997), Banks (1997), and others (Macedo & Bartolomé, 1999; Sleeter, 1996) have argued, “multiculturalism” is a term without a fixed set of meanings. In fact, advocates of a multicultural approach in higher education offer at times conflicting perspectives on the ways that schools can more fully serve our increasingly diverse society. Rather than becoming embroiled in debates over which definition of multiculturalism is correct, developmental educators and the students we teach will be best served by drawing together key strengths of each of the dominant approaches (Bruch, 2002). The purpose of this article is to explain the present need for a multicultural approach to developmental education, to present a vision of multicultural developmental education that integrates the strengths of three dominant approaches to multiculturalism, and to share with readers a curricular framework and specific examples of multicultural developmental curriculum.

The Need for a Multicultural Approach to Developmental Education

Multicultural education can help developmental educators respond constructively to the demographic shift known as “the browning of America.” The browning of America has transformed the constituency for higher education. In the year 2001-2002, 39% of public school students in the United States were persons of color (*Facts in Brief*, 2002). In addition, women’s enrollment in higher education continues to climb such that between 1970 and 1996 women undergraduates increased from 42% to 56%. 1996 data specifies

that increasing matriculation of women of color has contributed to the rise in overall degree attainment by women (*Facts in Brief*, 2000). Gender and race are not the only demographics that distinguish today’s typical college students from those of previous generations. A report by the National Center for Educational Statistics defined the traditional college student as one who “earns a high school diploma, enrolls fulltime immediately after finishing high school, depends on parents for financial support and either does not work during the school year or works part time” (Choy, 2002, p. 25). In 1999-2000 only 27% of undergraduates met this criteria, and the remaining 73% were nontraditional college students as defined by the following criteria (Choy, 2002, p. 26).

- delays enrollment—does not enter postsecondary education in the same calendar year that he or she completed high school
- attends part time for at least part of the academic year
- is considered financially independent for the purposes of determining eligibility for financial aid
- has dependents other than a spouse (usually children but sometimes others)
- is a single parent (either not married or separated and has dependents)
- does not have a high school diploma (completed high school with a GED or other high school completion certificate)

New demographics of race, social class, ethnicity, family culture, gender, and disability have reached a critical mass throughout higher education. This is especially true in developmental classrooms where students who are in some ways marked as different are over-represented. But, although the constituencies developmental educators serve and the sociopolitical context of our work have changed dramatically, the dominant understanding of access has stagnated. As Martinez Alemán (2001) has recently argued, responding to the browning of America, “colleges and universities have engaged not in a revision of the ideal community [that their curriculum implicitly values], but in an enumerative and assimilationist approach to difference” (p. 486). For Martinez Alemán and others, an exclusively assimilationist approach to new diversity actually exacerbates the challenges that nontraditional students face.

The exclusive emphasis on assimilation that

Martinez Alemán challenges is the primary alternative to an approach that embraces multiculturalism. Despite having proven to be an "unqualifiable failure" (Fox, 1993, p. 42) over the past three decades, forced assimilation continues to operate as a default expectation. It is founded on the enduring cultural myth that we have achieved our goal of creating institutions in which individual success is determined by neutral criteria. In education, valued attributes such as intelligence, hard work, and perseverance are often thought of as individual possessions rather than as the outcomes of how well particular individuals fit within the culturally specific expectations of the academic community. In their article in *Journal of Developmental Education*, Paul Fidler and Margi Godwin (1994) identify these expectations as "based on a white [sic] middle class norm" (p. 35). Ignoring the cultural partiality of education, many see it as a meritocracy in which high test scores and high grade point averages correlate strictly with an individual's aptitude and effort. From this perspective, the disproportionate success of middle class, white students is not seen as evidence that higher education privileges those students, creating learning contexts in which they thrive. Instead, it is seen as evidence of the failure of other students to rise to the challenge of competition.

The traditional perspective described in the previous paragraph responds to diversity by providing a more diverse group of students access to the traditional institutional culture. Access is narrowly defined as an opportunity to assimilate. Such a view is inadequate for developmental education because it offers an impoverished understanding of students who encounter the traditional institution as a system of cultural obstacles. It can understand students marked as developmental only as incapable or unwilling to perform at the level expected for college admittance.

Educators who work with developmental students know that education is a meritocracy but not a neutral one. It rewards students for their abilities based upon a very narrow range of skills as assessed using a limited number of methods. Therefore, the meritocracy is flawed because it advantages some students who have a selected range of skills, learning styles, and cultural backgrounds while disadvantaging those who have other skills, learning styles, and cultural backgrounds. Developmental educators can draw from the insights of multicultural education as we work to change the practices of higher education to reflect the recognition that developmental students are not deficient; they simply have a skill set and cultural competence that have been undervalued by the traditional education system. Multicultural education can help instructors legitimately use a variety of teaching methods and an expanded array of assessment methods so that students can learn more effectively and their comprehension

of content can be evaluated more accurately. By defining meaningful access as dependent upon the institutional practices that enable students to work hard, participate fully, and demonstrate intelligence, multicultural education has much to offer developmental educators.

Bringing Together the Strengths of Different Approaches to Multicultural Education

To say that multicultural education offers perspectives on meaningful access is to take only the smallest of first steps toward an adequate vision of multicultural developmental education. The next step is to clarify what strands of the large conversation on multiculturalism are worth incorporating into an expanded understanding of education. Among advocates of multicultural education, several major perspectives or approaches have evolved over recent decades (Newfield & Gordon, 1996). They can be called "celebratory," "critical," and "transformative." Although these categories

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often overlap in some respects, it is useful to conceptually distinguish them for purposes of highlighting the important contribution each can make to a vision of meaningful access through multicultural developmental education.

Celebratory Approach

The celebratory approach focuses on highlighting the positive accomplishments and aspects of many different cultures and social groups (Trantacosta & Kennedy, 1997). In contrast to a view of educational access that views cultural differences as deficiencies, this approach positions cultural diversity as positive and healthy variety to be respected and celebrated. The key contribution that this approach offers is its emphasis on, recognition of, and respect for plurality as essential to meaningful educational access. Prioritizing plurality and recognition, the celebratory multicultural approach offers an important alternative to traditional approaches that compel assimilation and "marginalize whoever cannot or will not be homogenized" (Silvers, 1995, pp. 30-31).

On its own, however, a celebratory approach is inadequate as a remedy for the obstacles to access created by the default expectation of homogenization. As advocates of a critical multicultural approach point out, merely celebrating differences

tends to falsely represent cultural differences as socially parallel to each other and to downplay or ignore relationships of social group power that impact differences and relationships among persons marked differently. Further, celebrating the uniqueness of different cultures tends to reify or essentialize those cultures and undermines appreciation of the relational nature of cultures and groups.

Critical Approaches

Sensitive to these dangers of simply inverting the traditional view of difference as deficiency, critical approaches to multiculturalism argue that celebratory approaches ultimately promote the very access through assimilation approach that protects the privileges of dominant groups because they ignore group relations of power. For critical multiculturalists, the so-called standards that students must meet tend to privilege certain ways of being and seeing at the expense of others while claiming cultural neutrality. Advocates of a critical approach to multiculturalism challenge how and why valued knowledge can privilege group identities, histories, language, desires, and values of dominant groups: for example, white, male, straight, middle class, able bodied. At the same time, critical multiculturalism questions the celebratory approach which tends to ignore whiteness and reinforce existing differences as entities in themselves rather than as relationships that are continuously renegotiated.

What is most valuable about critical multiculturalism is its emphasis on relations of power and privilege and the ways that these inform both traditional approaches and celebratory multicultural approaches. The danger of this view is becoming overly deterministic: Overemphasizing domination can prove debilitating and demoralizing to all students and can oversimplify the complexity of social experience.

Transformative Approaches

Transformative approaches to multiculturalism attempt to respond to the dangers of an overly critical approach. The goal of education is not primarily to appreciate domination but to learn to participate in higher education and public life in ways that transform domination for the good of all. The key strength within this approach is its recognition that people are both free individuals and members of social groups integrated, whether they like it or not, into systems of power that shape them. If education is really more than cynical machinery for social reproduction, then an essential function of education must be transformation and improvement of the world as it exists. The difficulty with transformative approaches to multiculturalism is that, to date, they have tended to conceptualize transformation as fully one directional: Either students completely transform institutions or institutions completely

transform students but not both. In addition, transformative approaches have offered a visionary alternative to what is but have tended to offer alternative views so far distant from existing practices and approaches that they are easily dismissed as impractical and outlandish. Demonstrating this tendency to dismiss transformative views, Jacobs' (2003) discussion of transformative multicultural education is introduced by the editors of *Annual Editions: Multicultural Education 03-04* as "an off the charts postmodernistic view of the educational process" (vii).

Integrating Multicultural Approaches

Although advocates of celebratory, critical, and transformative approaches to multiculturalism may disagree on specifics, they share a commitment to educational access for those excluded or underserved by education. As such, they are natural allies of developmental educators. In addition, all the described multicultural approaches can together remedy the historic overemphasis within developmental education on inclusiveness through homogenization and the concomitant lack of attention to issues of cultural power. Expanding theory and practice to incorporate insights of multiculturalism can broaden and deepen educators' responsiveness to the often unintentional ways that universities and other institutions obstruct meaningful access.

Reciprocally, developmental education stands poised to extend the strengths of the various approaches to multiculturalism. As Geneva Gay (2000) and others (Clark & O'Donnell, 1999) have recently noted, a major challenge for multicultural education as a field is the gap between theory and practice. In part this gap has resulted from the challenging nature of the insights provided by multicultural education. Additionally, multicultural education research has rested, often implicitly, on a critique of the reproductive function of education that has diminished its impact on practice. In this view "schools are reproductive in that they provide different classes and social groups with forms of knowledge, skills, and culture that not only legitimate the dominant culture but also track students into a labor force differentiated by gender, racial, and class considerations" (Giroux, 1997, p. 119). The strong practitioner orientation within developmental education does not share this skepticism of schooling and, accordingly, can help remedy the gap between theory and practice in multicultural education.

For too long, the multicultural agenda of recognizing difference and the agenda of socializing students through developmental education have been conceptually opposed rather than integrated. The socialization and assimilation that takes place in schools need not be uncritically accepted, as has often been the case in developmental education (Fox, 1999; Trentacosta & Kenney, 1997), or viewed in principally negative terms, as has tended

to be the case in multicultural education. Instead, recognition, critical attention to power, and a socially transformative understanding of education can combine with the socialization agenda of developmental education to mutually redefine each other and produce a new definition of meaningful access. Drawing multiculturalism into developmental education, meaningful access is a participatory project in which students learn to value differences and to see them as, in part, relationships of power that can be transformed. Contrary to a view of educational access that begins and ends with admission or a view of transformation that is one directional (in which either the students change or the institution changes, but not both), in developmental multicultural access each pole of the socialization/recognition opposition will lose its fixity. The meaning of recognition must shift from recognizing fixed differences to recognizing that groups and power are relational, dynamic, and renegotiable. On the other hand, the meaning of socialization must change from becoming a part of a fixed set of unquestioned norms

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and knowledges to learning to participate in continuously redefining norms and knowledges in light of new perspectives on our old practices. The discussion now turns to the implementation of these ideas as a framework for understanding developmental curricula.

Transforming the Curricula

A developmental curricula transformed by the insights of multiculturalism tries to enable developmental students to be full participants in academic institutions. The authors were part of a team that recently produced new curriculum guidelines for the developmental unit in which we work. These guidelines provide a framework for classroom practices that can operationalize multiculturalism to enable meaningful access. First, we will briefly describe the setting in which we are working to implement multicultural developmental curricula. The authors teach in an interdisciplinary developmental unit in a large, selective, public research university. Each fall the unit admits approximately 15% of the university's first year students; these students do not meet the regular admission criteria of the university. The most recent incoming class of approximately 875 students included many first-generation college students, and approximately 46% were students of color. The credit-bearing curriculum includes a

multidisciplinary range of courses integrating both skills and academic content, providing students with a set of perspectives and academic training for continuing work directly in their majors. Students can take courses in writing, math, sciences, social sciences, and humanities, all of which fulfill university graduation requirements. Students typically transfer to degree-granting colleges of the university at the midpoint or end of their second year.

The new curricular guidelines for working with these students move away from traditional assimilation-based developmental education models to those informed by multicultural theories (Collins & Bruch, 2000; Lundell & Higbee, 2001). Specifically, the guidelines establish a pluralistic and discursive framework instead of one that focuses on assessment of standardized "deficits" and remediation (Lundell & Collins, 1999). In our unit's multicultural framework, the literacies, practices, and aspirations of students are the point of departure for helping students use academic tools to become critical participants in their academic and nonacademic contexts. This framework pursues the National Association for Developmental Education's (NADE) 1995 "Definition and Goals Statement" goal of "develop[ing] in each learner the skills and attitudes necessary for the attainment of academic, career, and life goals."

In order to meet this NADE goal in a multicultural framework, the curriculum applies the principles of Universal Instructional Design (Higbee, 2003): one size does NOT fit all; instead, the goal is to make room for flexible, customizable content, assignments, and activities that are accessible and applicable to students with a variety of backgrounds, learning styles, abilities, and disabilities. An awareness of what students bring to academic spaces and an active engagement grounded in the multicultural not only facilitates students' successful negotiation of academic careers; it enhances their ability to succeed in nonacademic endeavors (Banks, 2003; Purpel & Shapiro, 1995). Therefore, the overall goals of the curriculum are to enable students to:

- develop academic skills and successfully apply them to college-level coursework;
- build and use a framework of general knowledge to identify, analyze, and solve issues/problems;
- develop attitudes and practices that are associated with success in college;
- perceive their own learning interests, skills, and weaknesses, which enables them to set attainable academic and career goals;
- understand themselves as social knowers who influence and are influenced by larger communities;
- engage the histories and perspectives of a wide range of social groups;
- enrich the rules and rhythms of academic

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discourses with their own dialogues and voices; and

- learn to identify, negotiate, and transform the ubiquitous practices that promote inequality and privilege. (This process is never-ending, and produces no absolute right/wrong, good/bad.)

In addition to these goals, the new curricular guidelines outline specific skills that will assist meeting diverse teaching and learning needs. The intent of the curricular model is not to create a hard-and-fast set of prescriptions and proscriptions that would limit academic debate, creative potential, experimental spirit, and ongoing investigation. Instead, the model establishes various means through which instructors, staff, and students can continue to critically examine and reimagine the curriculum to better meet the diverse teaching and learning needs and interests of the community. Students don't just learn one set of assumptions, they learn to negotiate multiple—and often conflicting—sets of experiences and behaviors, evaluating which set is the most fruitful in a given context. Students develop specific skills that help them construct and demonstrate learning processes such as making strategic plans, seeking and evaluating reasons, creating intellectual curiosity and wonder, and being metacognitive. Students use learning processes such as these to continually refine the following skills.

- *Reading.* Students should develop the vocabularies of a number of disciplines and create reading processes that will promote critical literacy of various subject areas.
- *Writing.* Students should develop the ability to write to explain ideas to others, summarize knowledge, provide analysis, argue convincingly, and provide documentation of facts and the ideas of others.
- *Oral communications.* Students should be able to listen critically with comprehension, raise questions and phrase them with precision, analyze information and evaluate its content and structure, discuss concepts and issues with individuals and in small groups, construct arguments and develop evidence for their support, and create oral discourse that is appropriate to varied audiences and situations.
- *Mathematics.* Students should develop conceptual mathematical models and conceptual frameworks that support mathematical processing and problem solving in a variety of disciplines and contexts.
- *Information technology use.* Students should be familiar with common tools that create and/or manipulate electronic information. They should be able to assess and use the most appropriate tools (such as notebook computers and the Internet) to complete courses in a variety of disciplines.

Overall, the curriculum establishes an orientation that sees education as a never-ending process of critically inhabiting discourses that privilege some ideas and groups at the expense of others. As such, the curriculum is necessarily experimental as faculty and staff develop and assess practices that enable students to become powerful learners. Multicultural developmental education seeks not only to enable students, faculty, and staff to succeed within current institutions but also to provide individuals and groups resources to understand, challenge, and transform institutional structures and spaces to make them more open, democratic, and just (Giroux, 2001; Herideen, 1998). This articulation of developmental education is not simply about what instructors teach; it is not all about content. That is, it does not advocate that every course must take up issues of social justice. Rather, it is a vision that informs the how and *WHY* (not just what) of teaching and learning. Indeed, disciplinary realities often dictate that social considerations be placed in the distant background. However, each course should provide stu-

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dents with tools to investigate how and why some understandings are suppressed while others are advocated.

The Transformed Curricula in Practice

As the nation's demographics change and grow, integrating multiculturalism in developmental curricula is essential. There are multiple teaching models that invite multicultural integration into classroom practice, and this section will provide some expressions and direct applications of these practices. The examples provided are by no means exhaustive but demonstrate the breadth of pedagogy available regardless of disciplinary focus. A developmental curriculum informed by multiculturalism can provide students with an opportunity to bring skills, knowledges, and experiences to the classroom that will not only facilitate the acquisition of academic competencies but will also help them learn to transform the practices of the institutions they inhabit.

1. Social Science Simulations

Short classroom simulations provide active learning activities that place students in the role of decision-makers assessing the various options available in a particular situation (i.e., students in groups represent the U.S. Senate negotiating political compromises such as Indian removal and expansion of slavery prior to the Civil War.). Students are provided with sufficient background in-

formation to perform their individual roles, to discuss the merits of options, and to render a decision. Simulations can have a role-playing format to prompt individual creativity; a game format to promote student cooperation and competition; or a map format to address issues related to population, economic resources, or territorial boundaries. Simulations could also serve as the stimulus for a number of individual student or group research projects such as investigating the historical background of the situation, identifying the factors that promote or inhibit a resolution, contrasting the simulation with actual decisions, or assessing the influence of particular individuals or groups in the final outcome (Ghere, 2001; Glenn, Gregg, & Tipple, 1982).

Simulations provide developmental educators with additional means for disseminating content material and assessing student capabilities. Simulations are effective in stimulating lively class discussion, promoting critical thinking, and supporting a variety of educational activities based on cooperative or constructivist learning theory (Ghere, 2001; Randel, Morris, Welzel, & Whitehall, 1992). Some students, who are unmotivated and unproductive in a typical class situation, become active and involved during the simulations. The typical assessments of student abilities can be augmented with evaluations of student involvement, achievement, and reflection concerning the simulation (Ghere, 2001). Research has shown that simulations enhance student retention of knowledge, foster student interest in the subject matter, and develop student communication skills and self-awareness (Druckman, 1995).

Multicultural perspectives can be written into simulation materials, presented by students as they play their roles, or examined in the postsimulation critique. Analysis could address the relative influence of different social or political groups on the decision makers and the effects of their decisions on those groups. The attitudes, goals, and rewards of decision makers can be called into question as well as their underlying ideology or basic assumptions. Some roles or attitudes could be “uncomfortable” to students (such as advocating slavery or Indian removal), and class discussion could focus on how people justified those attitudes at the time or to what extent modern attitudes are similar to those historical ones. The simulation experience may prompt students to reconsider their own assumptions, recognize the validity of other perspectives, and embrace a more multicultural understanding of society (Ghere, 2001; Glenn, Gregg, & Tipple, 1982).

2. Interdisciplinary Learning Communities

Imbedded in the discussion of centrality of multiculturalism in developmental education is the role and need of a sense of community for all students (Boyer, 1990). Since community is amorphous

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and intangible, building a “sense of community” that enables meaningful access often evades instructors, even those who seek to welcome new groups of students entering largely white institutions. This raises the question of redefining community by beginning to pursue truly multicultural community in developmental classrooms. The very students who have existed on the fringe of the academy are the ones “who can prod us and spur our development and that of our institutions” (Miller, 2003, p. 4). Learning communities are one model that allows the flexibility and challenge to be interdisciplinary in content and pedagogy within the classroom while simultaneously challenging students’ and teachers’ perceptions of a multicultural community.

There are several different learning community models ranging from linked courses to team-taught learning cohorts (Goodsell-Love, 1999; Smith, 1991). But regardless of model, learning communities lend themselves to modes of inquiry that bridge developmental learning, multicultural education, and cognitive and affective learning of all participants in the following ways (Gablenick, MacGregor, Matthews, & Smith, 1990; Levine, Smith, Tinto, & Gardner, 1999).

- *Face time:* Learning communities create extended periods of time for students to have increased interaction with both faculty and peers. More time together heightens trust, which translates into greater risk taking and improved intellectual interaction for developing skills as well as an understanding of diverse perspectives.
- *Multimodal learning:* Learning community formats provide faculty with options for using experiential, collaborative, and cooperative learning while also being conscious of students’ individual cultural learning styles. Using multiple modes of instruction enhances students’ capacity to self-evaluate, engage in problem-centered thinking, and examine issues from multiple lenses.
- *Interdisciplinary learning:* Learning communities can be configured with a range of courses and disciplinary foci. This can enhance the curricular coherence of a college and provide opportunities for faculty collaboration across disciplines. Interdisciplinary study allows students and faculty to integrate and reinforce ideas and understand issues across subject matter.
- *Building a sense of place:* Learning communities can provide historically marginalized students with a sense of belonging and space such that they can be truly engaged and active contributors in the learning.

Finally, the capacity to create community both in and out of classrooms will be deeply affected by the extent to which teachers are visibly

engaged in students’ learning. The impact of efforts to transform communities will hinge on leaders’ capacity to leave their comfort zones. In addition, leaders from various communities must begin to model new ways of relating that model the civic life they wish to engender (Gamson, 2000).

3. Critical Mathematics Education

Broad application of curricular and classroom innovations like social science simulations and interdisciplinary learning communities within developmental education is complicated by the fact that many developmental programs concentrate on foundational skills such as mathematics and grammar that seem to be stable, objective, and best taught separately from social, political, and cultural dynamics of meaningful access. Tightly defined outcomes objectives of courses in math and hard sciences, especially, have made it seem impossible to conceptualize the entire developmental curriculum as enabling students to significantly contribute to culturally sensitive learning objectives and approaches. But multiculturalism must inform

Multiculturalism must inform and transform the entire curriculum.

and transform the entire curriculum. If meaningful access is limited to certain parts of the curriculum and forced assimilation remains the order of the day in other classes, then institutions of higher education will be continuing the unfortunate tradition of justifying rather than transforming practices that “marginalize whoever cannot or will not be homogenized” (Silvers, 1995, p. 30-31).

Fortunately, important work is being done to apply multicultural insights to mathematics classrooms. Noddings (1993) has proposed that bringing multiculturalism into the mathematics classroom involves “promoting dialogue both within mathematics lessons and about mathematics as a possible avenue of self-affirmation” (p. 156). In the first case, Noddings discusses familiar activities such as collaborative groups and asking the students to contribute various approaches to interpret and “solve” mathematical problems. In the latter, Noddings suggests that teachers of mathematics become aware themselves and share with students research such as that of Chipman and Thomas (1985) and Donlon, Ekstrom, and Lockheed (1976), among others (*cf.*, Mellin-Olsen, 1987) that investigates issues of gender and social class privilege as aspects of mathematics education.

Appelbaum (1998) extends this perspective in his discussion of five-week (or five-day) units in which students are presented with a theme that connects important mathematics concepts with contemporary civic or campus life such as “uni-

versal health care” or “resolving the state budget deficit.” Students spend the first week (or day) learning about the relationships between mathematical and sociocultural dimensions of the issue. Who are involved constituencies? Who are decision makers? How are perspectives forwarded and defended using mathematics? In the second, third, and fourth segments, students discuss, define, and perform individual or group projects that they want to undertake within the theme. The teacher’s role is to provide support including mathematics “clinics” to enable students to complete their projects. In the fifth portion, students celebrate knowledge gained through projects by making presentations to the class or broader communities. This type of mathematics education engages the cultural politics of mathematics. Students are learning math as a tool for participating in society and learning to intervene constructively in uses of mathematics that mystify relationships of power and profit and group dynamics of power.

Conclusion: Multicultural Developmental Education

When only members of a relatively homogenous social group were being served by higher education, the shortcomings of a system that was Eurocentric, partial to men, and built on the unquestioned assumptions of middle class ideology were less apparent. Today, society is multicultural and thus any accurate study of society must be based on a variety of multicultural perspectives. If an historian is not teaching multicultural history, he or she is teaching propaganda based on some narrow perspective and a distorted collection of facts. If a political scientist ignores multicultural perspectives, the resulting analysis is limited and distorted. Furthermore, each academic discipline has developed within historical and cultural contexts and is based upon assumptions inherent in those contexts. If these assumptions remain unquestioned, students who bring different, equally valid, assumptions to their studies and to their participation as citizens cannot be adequately served.

Serving students will entail transforming the curricula so that it can reflect the diverse knowledge bases of the community and provide a forum for pluralistic learning. Today, too many students have “felt like strangers to the classroom because the curriculum had nothing to do with their lives” (Rendon, 1996, p. 19). Transforming the curriculum so that it resonates more broadly will benefit all students and the society at large (Orfield & Kurlaender, 2001). Research assessing the consequences of including the diverse resources engaged by multicultural education has demonstrated that students from all, including dominant or “mainstream” backgrounds, “may be experiencing a richer and more intellectually challenging college experience” in well-constructed multicultural educational settings (Pascarella, Palmer, Moye, & Pierson, 2001, p. 270). Specifici-

cally, multicultural education enriches education by helping all participants recognize the partialities of their own and others' perspectives and ways of making knowledge and thus the dynamic—collective, conflictual, and profoundly consequential—nature of all knowledge. Through its vision of access as institutional enablement, multicultural education can enable developmental students to fulfill their potentials as knowledge makers as it enables higher education to fulfill its potential of continuous rejuvenation of the United States' democratic experiment.

References

- Appelbaum, P. M. (1998). Teaching/learning mathematics in school. In J. L. Kincheloe & S. R. Steinberg (Eds.), *Unauthorized methods: Strategies for critical teaching* (pp. 199-229). New York: Routledge.
- Banks, J. A. (Ed.). (2003). *Diversity and citizenship education: Global perspectives*. San Francisco: Jossey-Bass.
- Banks, J. A. (1997). *Educating citizens in a multicultural society*. New York: Teachers College Press.
- Boyer, E. (1990). *Campus life: In search of community*. Princeton, NJ: The Carnegie Foundation for Advancement of Teaching.
- Bruch, P. L. (2002). Toward a new conversation: Multiculturalism for developmental educators. In J. L. Higbee, D. B. Lundell, & I. M. Duranczyk (Eds.), *Developmental education: Policy and practice* (pp. 35-44). Warrensburg, MO: National Association for Developmental Education.
- Bruch, P.L., & Higbee, J.L. (2002). Reflections on multiculturalism in developmental education. *Journal of College Reading and Learning*, 33(1), 77-90.
- Chipman, S. F., & Thomas, V. G. (1985). Women's participation in mathematics: Outlining the problem. In S. F. Chipman, L. R. Brush, & D. M. Wilson (Eds.), *Women and mathematics: Balancing the equation* (pp. 1-24). Hillsdale, NJ: Lawrence Erlbaum.
- Choy, S. (2002). *Nontraditional undergraduates*. Washington, DC: National Center for Educational Statistics.
- Clark, C., & O'Donnell, J. (1999). Rearticulating a racial identity: Creating oppositional spaces to fight for equality and social justice. In C. Clark & J. O'Donnell (Eds.), *Becoming and unbecoming white: Owning and disowning a racial identity* (pp. 1-9). Westport, CT: Bergin and Garvey.
- Collins, T., & Bruch, P. (2000). Theoretical frameworks that span the disciplines. In D. B. Lundell & J. L. Higbee (Eds.), *Proceedings of the first intentional meeting on future directions in developmental education* (pp. 19-22). Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy.
- Donlon, T.F., Ekstrom, R.B., & Lockheed, M. (1976, August). *Comparing the sexes on achievement items of varying content*. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.
- Druckman, D. (1995). The educational effectiveness of interactive games. In D. Crookall & K. Arai (Eds.), *Simulation and gaming across disciplines and cultures* (pp. 178-187). London: Sage.
- Facts in brief. Nearly 40 percent of public elementary and secondary students are persons of color.* (2002). Washington, DC: American Council on Education. Retrieved December 12, 2003, from <http://www.acenet.edu/resources/higheredfacts/access.cfm>
- Facts in brief. Women more likely than men to attend and complete college, NCES study shows.* (2000). Washington, DC: American Council on Education. Retrieved December 13, 2003, from http://www.acenet.edu/hena/facts_in_brief/
- Fidler, P. P., & Godwin, M. (1994). Retaining African-American students through the freshman seminar. *Journal of Developmental Education*, 17(3), 34-40.
- Fox, T. (1993). Standards and access. *Journal of Basic Writing*, 12(1), 37-44.
- Fox, T. (1999). *Defending access: A critique of standards in higher education*. Portsmouth, NH: Boynton/Cook.
- Gablenick, F., MacGregor, J., Matthews, R.S., & Smith, B.L. (1990). (Eds.). *New Directions for Teaching and Learning: 41. Learning communities: Creating connections among students, faculty and disciplines*. San Francisco: Jossey-Bass.
- Gamson, Z. (2000). Afterword. In T. Ehrlich (Ed.), *Civic responsibility and higher education*, Phoenix, AZ: American Council on Education and Orynx Press.
- Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.
- Ghere, D. L. (2001). Constructivist perspective and classroom simulations in developmental education. In D. B. Lundell & J. L. Higbee (Eds.), *Theoretical perspectives in developmental education* (pp. 101-108). Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy.
- Giroux, H. A. (1997). *Pedagogy and the politics of hope: Theory, culture, and schooling*. Boulder, CO: Westview Press.
- Giroux, H. A. (2001). *Public spaces, private lives: Beyond the culture of cynicism*. Lanham, MA: Rowman & Littlefield.
- Glenn, A. D., Gregg, D., & Tipple, B. (1982). Using role-playing activities to teach problem solving: Three

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- teaching strategies. *Simulation & Gaming: An International Journal*, 13, 199-209.
- Goodsell Love, A. (1999). What are learning communities? In J. Levine (Ed.), *Learning Communities: New Structures, New Partnerships for Learning*. The First Year Experience Monograph Series, 26.
- Herideen, P. E. (1998). *Policy, pedagogy, and social inequality: Community college student realities in post-industrial America*. Westport, CT: Bergin and Garvey.
- Higbee, J.L. (Ed.). (2003). *Curriculum transformation and disability: Implementing Universal Design in higher education*. Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy, General College, University of Minnesota.
- Higbee, J.L., Bruch, P.L., Jehangir, R.R., Lundell, D.B., & Miksch, K.L. (2003). The multicultural mission of developmental education: A starting point. *Research and Teaching in Developmental Education*, 19(2), 47-51.
- Jacobs, W. R. (2003). Learning and living difference that makes a difference: Postmodern theory and multicultural education. In F. Schultz (Ed.), *Annual editions: Multicultural education 03/04* (pp. 85-96). Guilford, CT: McGraw-Hill/Dushkin.
- Levine, J., Smith, B.L., Tinto, V., & Gardner, J. (1999, April). *Learning about learning communities: Taking student learning seriously*. Teleconference resource packet. National Resource Center for the First-Year experience and Students in Transition. University of South Carolina, Columbia, SC.
- Lundell, D. B., & Collins, T. (1999). Toward a theory of developmental education: The centrality of "discourse." In J. L. Higbee & P. L. Dwinell (Eds.), *The expanding role of developmental education* (pp. 3-20). Morrow, GA: National Association for Developmental Education.
- Lundell, D. B., & Higbee, J. L. (Eds.). (2001). *Theoretical perspectives in developmental education*. Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy.
- Macedo D., & Bartolomé, L. I. (1999). *Dancing with bigotry: Beyond the politics of tolerance*. New York: St. Martin's Press.
- Martinez Alemán, A.M. (2001). Community, higher education, and the challenge of multiculturalism. *Teachers College Record*, 103(3), 485-503.
- Mellin-Olsen, S. (1987). *The politics of mathematics education*. Norwell, MA: Kluwer Academic Publishers.
- Miller, M.A. (2003). Our students, ourselves. *Change*, 35(2), p. 4.
- National Association for Developmental Education. (1995). Definition and goals statement. In D. B. Lundell & J. L. Higbee (Eds.), *Theoretical perspectives in developmental education* (p. 7). Minneapolis, MN: Center for Research on Developmental Education and Urban Literacy.
- Newfield, C., & Gordon, A. F. (1996). Multiculturalism's unfinished business. In A. F. Gordon & C. Newfield (Eds.), *Mapping multiculturalism* (pp. 76-115). Minneapolis, MN: University of Minnesota Press.
- Noddings, N. (1993). Politicizing the mathematics classroom. In S. Restivo, J. P. Van Bendegem, & R. Fischer (Eds.), *Math worlds: Philosophical and social studies of mathematics and mathematics education* (pp. 150-161). New York: State University of New York Press.
- Orfield G., & Kurlaender, M. (Eds.). (2001). *Diversity challenged: Evidence on the impact of affirmative action*. Cambridge, MA: The Civil Rights Project, Harvard University, Harvard Education Publishing Group.
- Pascarella, E. T., Palmer, B., Moye, M., & Pierson, C. T. (2001). Do diversity experiences influence the development of critical thinking? *Journal of College Student Development*, 42, 257-271.
- Purpel, D., & Shapiro, S. (1995). *Beyond liberation and excellence: Reconstructing the public discourse on education*. Westport, CT: Bergin and Garvey.
- Randel, J. M., Morris, B. A., Welzel, C. D., & Whitehall, B. V. (1992). The effectiveness of games for educational purposes: A review of recent research. *Simulation & Gaming: An International Journal*, 23, 261-276.
- Rendon, R. (1996). Life on the border. *About Campus*, 1(5), 14-20.
- Silvers, A. (1995). Reconciling equality to difference: Carving (f)or justice for people with disabilities. *Hypatia*, 10(1), 30-55.
- Sleeter, C. E. (1996). *Multicultural education as social activism*. Albany: State University of New York Press.
- Smith, B.L. (1991). Taking structure seriously: The learning community model. *Liberal Education*, 77(2), 43-48.
- Trentacosta, M. J., & Kenney, M. J. (Eds.). (1997). *Multicultural and gender equity in the mathematics classroom: The gift of diversity*. Reston, VA: National Council of Teachers of Mathematics. 