Silos to Symphonies?

Hopes and Challenges Implementing Multicultural Program Infusion

Laura B. Liu & Natalie B. Milman

Introduction

The need for teacher preparation faculty to infuse multicultural education (ME) across program course and experiences is well documented by research set in the U.S. (e.g., Assaf, Garaz, & Battle, 2010; Jung, 2007), as well as Australia (e.g., Mills & Ballantyne, 2010; Premier & Miller, 2010), Canada (e.g., Guo, Arthur, & Lund, 2009), and Japan (e.g., Suzuki, 2011). Many programs are incorporating changes to cultivate teacher candidate (TC) ‘knowledge, skills, and dispositions’ to support diverse populations more effectively, yet institutions are at very different stages in infusing ME across program components (Hollins & Guzman, 2005; Melnick & Zeichner, 1998). Moreover, conceptions of diversity and why it matters in teacher preparation vary significantly among educators, researchers, and policy makers (Author, 2012; Grant & Gibson, 2011). A plethora of studies exists on multicultural teacher preparation (MTP), including examinations of faculty attitudes on diversity within one course (e.g., Cho & DeCastro-Ambrosetti, 2006) or across a program (e.g., Jennings, 2007), and the impact of curricula and field experiences on TC attitudes toward diversity and reflective practice, as seen in the Australia (e.g., Santoro, 2009), New Zealand (e.g., Hedges & Lee, 2010), and the U.S. (e.g., Dome et al., 2005), among other nations. MTP studies consistently conclude that introductory ME courses are “essential but not sufficient,” (Cho & DeCastro-Ambrosetti, 2006, p. 27), yet most faculty do not

This is the author's manuscript of the work published in final form as:

integrate ME into coursework (Jennings, 2007). Research shows TCs need more program support and time to reflect on the educational needs of diverse learners.

While most programs demonstrate a segregated approach to ME, confining diversity to specialty courses, ME program infusion places diversity, equity, and social justice central across program experiences to prepare TCs to support all students (e.g., Banks et al., 2005; Cochran-Smith, Davis, & Fries, 2004; Gay, 1997; Hollins & Guzman, 2005; Melnick & Zeichner, 1998). The triumphs and challenges faculty face in integrating ME across entire teacher preparation programs deserve more careful analysis (Jennings, 2007), particularly in offering contextualized data that may be used to inform and assess program progress in fulfilling ME objectives, as well as standards set by local institutions and national bodies of program accreditation, such as the National Council for Accreditation of Teacher Education in the U.S. (Vavrus, 2002). The work of developing such meaningful teacher preparation program objectives and measures is too critical to leave to political groups outside the profession of education.

**Conceptual Framework**

While multiple perspectives are integral to the discussion of the findings in this study, initial data analysis primarily was informed by three leading perspectives relevant to research on ME program infusion: Cochran-Smith et al.’s (2004) 12 key components to MTP, Gay’s (1997) descriptors for ME program infusion, and Melnick and Zeichner’s (1998) promising program practices for preparing TCs for diversity. These three lenses complement one another by offering respectively important conceptual orientations, program distinctions, and practical methods for integrating ME into teacher preparation, and served as a guide for establishing the codes for initial data analysis. Throughout the data analysis process, Cochran-Smith et al.’s (2004) eight MTP questions emerged as particularly helpful in framing key concepts found in the data, and
therefore were employed to organize the study’s initial findings, which were later revised to reflect more clearly themes that emerged in allowing the data to ‘speak for itself.’

Tables 1 and 2 present Cochran-Smith et al.’s (2004) eight questions integral to the process of MTP, as well as four external forces impacting how these questions are answered. These questions include how TCs conceptualize diversity, frame the purpose of schooling, understand and view students’ diverse backgrounds, learn to teach diverse student populations and are assessed in this preparation process, as well as how programs recruit diverse populations and make MTP a coherent teacher preparation program experience. Four external factors impacting MTP include institutional resources and envisioned objectives, program relationships with the local community and society more broadly, including governmental and other political bodies (Cochran-Smith et al., 2004).

Adding to this view, Gay (1997) offers empirically-based distinctions found across programs that specialize in ME, infuse ME throughout, or take a traditional approach to teacher preparation. Gay’s work (1997) ultimately shines light on the benefits of taking a dual approach to ME program infusion, which involves focusing on foundational ME concepts in specialized courses while also examining and revising admissions requirements, foundational courses and experiences, subject-specific methods and materials, and field experiences to reflect “cultures, histories, and heritages of the many ethnic, racial, and social groups” (p. 159). Integrating ME into foundational courses might include examining the purposes of education, culturally relevant teaching and classroom management, and sociocultural theories of development, learning styles, and assessment. In methods courses, TCs might learn to incorporate in curricula the voices and contributions of diverse populations, as well as complete microteaching, research, and reflective
assignments integrating diversity into “subject matter topics, themes, and activities” (Gay, 1997, p. 172). In addition, a portion of student teaching should be conducted in diverse settings.

A final perspective grounding this study was Melnick and Zeichner’s (1998) research on institutions showing success in preparing teachers for diverse populations, particularly minority students facing socioeconomic challenges. Promising practices included making diversity central to a program’s TC selection process, curricula and instruction, and institutional environment (Melnick & Zeichner, 1998). Consistent with Cochran-Smith et al. (2004) and Gay (1997), Melnick and Zeichner (1998) emphasize the need for TCs to engage in intercultural case-based analyses and field experiences combined with critical reflection in a learning community led by educators adept in this work, as well as the need to examine carefully faculty roles in this work. Melnick and Zeichner (1998) specifically encourage institutions to recruit faculty of color, integrate teacher education for diversity across programs, including staff development, and develop consortia to share ME expertise, including partnerships across institutions predominantly composed of majority and minority populations.

Methods

Research Purpose and Design

This study asked how a faculty infused ME across program experiences to prepare secondary education teachers to teach diverse student populations. Specifically, this research examined how 10 faculty contributed to infusing ME across 7 courses to make MTP a coherent program experience (Cochran-Smith et al., 2004), particularly for a cohort of 20 TCs. This research task sought strengths of practice other programs might emulate and pressing challenges that emerged, as a vital source of information for other programs seeking greater ME infusion. Integral to this research was to examine the experiences and perspectives of not only credential
program faculty, but also the 20 TCs in the cohort, as well as instructors of and undergraduates enrolled in four prerequisite introductory ME courses serving as an important reference for understanding if and how ME was infused throughout the teaching credential program.

This research responds to a dearth of in-depth examinations of how faculty infuse ME across teacher preparation programs and the impact of this on preparing TCs to teach diverse student populations. While our findings may be applicable to a variety of teacher preparation settings, this study is contextualized in a program preparing teachers to teach at the secondary level, the content-centered nature of which makes ME infusion particularly challenging (Gay, 1997; Author, 2009). A related limitation was that despite multiple attempts to recruit secondary content area methods instructor participants, none were available to participate for a variety of personal and professional reasons (e.g., one instructor did not want to be under the microscope during her first term of teaching a course). To account for this limitation, we took careful note of ME-related connections made to content methods in other cohort courses.

We approached this research employing a qualitative case study (Merriam, 2001; Yin, 2009), because “the reality” of every program “is so complex that it is virtually impossible to communicate that complexity to an outside audience short of the kind of systematic and detailed analysis that case studies provide” (Zeichner, 1999, p. 9). In other words, large-scale studies may not offer critical, descriptive details regarding how teacher educators and TCs conceptualize and integrate ME concepts in practice. The inductive approach taken in this study sought depth of insight over broad generalizations (Williamson, 2006) by investigating one program throughout one academic year to understand it as an entire unit and as a system of components.

This research veers from the abundance of self-studies currently existing in MTP (Cochran-Smith et al., 2004; Grant & Gibson, 2011) by offering a blended ‘insider-outsider’
Multicultural Infusion

(Banks, 1998) perspective on a faculty’s ME program infusion. Initially approaching this work as a doctoral student-associate professor team of two, and completing the draft as teacher preparation colleagues, we have been honored by the opportunity to learn from Western University’s faculty and as “insiders” in the field, yet “outsiders” regarding the specific context and institution (Banks, 1998, p. 6). Moreover, we entered this process recognizing that our “biographical journeys” (Banks, 1998, p. 4) as researchers shape our views, and that our research questions and findings have been informed by our perspectives as 1) a middle-class, white female with three terms of teacher preparation and six years of secondary teaching experience, including teaching English Language Learners; and 2) a middle-class, first-generation Colombian American with five years of elementary teaching experience in two Title I schools in California and 14 years in teacher education as a graduate instructor and professor, whose first language was Spanish. To account for personal bias or any limitations due to our insider-outsider status, we routinely processed our intentions, observations, and interpretations with the program director, course instructors, TC participants, and colleagues at conferences and work settings. In this work, we aimed offer a strengths of practice and illustrate common challenges to ME program infusion, serving as “a mirror, helping to make practitioners aware of their own practice” (Jervis, 1996, p. 549).

Study Context

In approaching this study, we hoped to find a program that might offer strengths of practice and common challenges in approaching ME infusion in teacher preparation for the secondary level. Western University’s teacher preparation program was purposively selected (Maxwell, 2005) as the research site, as it is a two-semester, graduate, preliminary single- and

1 All names in this study are pseudonyms to protect participant and site anonymity
A multiple-subject licensure program that has received accreditation from the National Council for Accreditation of Teacher Education, a professional organization that establishes rigorous teacher preparation standards which affiliated institutions are held accountable to meet as evidence that they are preparing K-12 teachers who will be effective in the classroom. In addition, Western University’s program has been recognized at national and state levels for teacher preparation excellence (program director intv), and for noted accomplishments in preparing TCs to support diverse populations (Anonymous, Year)\(^2\), including providing professional development for integrating ME into faculty coursework (Anonymous, Year). Moreover, as part of a large urban university, the program created smaller learning communities, or ‘cohorts,’ for TCs preparing to teach at the secondary and elementary levels. Cohorts were composed of 20-30 TCs, two faculty cohort leaders, student teaching supervisors, and school-site cooperating teachers.

Finally, Western University’s location made it an ideal research site. As part of a large, public university located in an area rich in cultural and linguistic diversity in the Western U.S., program faculty and TC participants may recognize the need to prepare to support the learning needs of diverse student populations. In Fall of 2008, when data collection began, roughly 31% of all enrolled undergraduate and graduate Western University students identified as Asian, 28% as white, 16% as Hispanic, 5% as Black, and 0.5% as American Indian.\(^3\) In contrast, of the 36 tenured faculty at Western University, 24 identified as white, while only 5 identified as Asian, 5 as Hispanic, and 2 as African American. Interestingly, in 2008, 54% of all students were women and 46% were male, while 29 of the 36 tenured faculty were female, and only 7 were male.

**Participant/Course Selection**

\(^2\) References here are anonymous to maintain site anonymity.
\(^3\) References here are anonymous to maintain site anonymity.
Table 3 presents the 7 of 9 required credential program courses observed\(^4\), as well as the 10 faculty and approximately 160 graduate TC and 90 undergraduate student participants. Course selection was guided by the requirements for the secondary education program, though additional factors played a key role in our identifying courses and participants to follow. In light of the participant and program transparency required in a study with our established objectives, our being allowed access to gather data was dependent on the interest and willingness of the program director, course instructors, and student participants. Thus, we relied to great extent on a convenience sample (Maxwell, 2005) of faculty participants recommended by the director who expressed interest in the study’s objectives. It is unclear how this sampling process impacted the findings, though we took note that suggested faculty with interest in ME infusion may represent a subset of faculty already engaged in this work, perhaps not representative of the program at large. The program director assured us that one cohort’s work ideally should reflect practices across the entire program, as supporting diverse populations was an established aim for all cohorts. At the same time, some degree of variation across cohorts inevitably existed.

All participants completed an informed consent form before agreeing to participate. To maintain participant and site anonymity and confidentiality, and to ensure participation would not impact professional or academic standing, ethnic background descriptors of participants are not specified in instances throughout the study. In taking a broader view of participants, faculty identified as being African-American, Japanese-American, Latina, Latino, Jewish, white, as well as visually challenged. While this set of faculty backgrounds is promising in offering a diversity of perspective, we also took note that the program director and four instructor participants in the credential program were white, while all four introductory ME course instructors identified with

---

\(^4\) This number includes the prerequisite introductory ME course.
another ethnic background. Moreover, the one credential program instructor identifying as Latina taught a methods course for teaching English learners. A parallel observation is that the majority of students across courses included in the study were female and white. While questions are raised in our discussion as to why these trends may have existed and what implications they may hold, we account for these trends in seeking to learn from the experiences and perspectives of a diverse set of faculty and students via the interview process to examine from multiple vantage points the program’s ME infusion and its impact on participants.

**Data Collection**

Triangulating data sources and collection methods via observations, interviews, and document analyses (Merriam, 2001) provided “a broader and more secure understanding of the issues” examined (Maxwell, 2005, p. 93-94). Observations included detailed field notes—rich, thick descriptions (Geertz, 1973)—of nearly everything said in each class observed. Total observation time in this study equaled approximately 130 hours and focused primarily on one cohort led by Drs. Jones and Dr. Rogers and composed of 20 TCs enrolled in the same Student Teaching Seminar, joint Educational Psychology and Sociology course, and online Social Foundations of Education course. Cohort members also met with additional TCs in their Sheltered Academic Instruction, Reading Methods, and content methods courses. In addition, we examined the program prerequisite introductory ME course to ascertain the extent to which faculty built upon and TCs continued to connect with ME concepts in the credential program. To achieve this aim, Dr. Williams’ prerequisite introductory ME course of 30 undergraduates was observed in full, in addition to one-time class observations of three other instructor’s ME course sections. We initially had hoped to include observations of TCs applying ME principles in
Multicultural Infusion

student teaching contexts as well. However, due to data saturation, the goal to observe theory-to-practice transfer in TC student teaching practices became a recommendation for future research.

Interviews complemented these observations. The program director, eight additional faculty, seven TC, and four undergraduate participants were interviewed mid-study to foster inquiry into previous and inform future observations. The interview questions were derived from Cochran-Smith et al.’s (2004) MTP framework, which guided development of a comprehensive set of questions parallel with the objectives of this study. Seven TCs were selected from the cohort based on availability and heterogeneity (Maxwell, 2005) across ethnicity, gender, and subject-matter taught, including math, science, English Language Arts, history, Spanish, music, and Physical Education. This group included four female, two male, two Latino-American, and five white TCs, as well as one TC who identified as being gay. In addition, four undergraduates from Dr. Williams’ ME course were selected for a focus group interview, based on gender, ethnicity, and content area. These four students included two females and two males, as well as one Filipino-American, one bi-racial African-American and white female, one Latino and one white male.

Other data collected included course syllabi and key assignments with corresponding work completed by interviewed students across all observed courses. The program’s application brochure and documentation for meeting state standards for teacher preparation quality and effectiveness also were examined along with standards, handbooks, and rubrics for a mandated teaching performance assessment, and completed TC work for this assessment.5

Data Analysis

5 How this assessment impacted the programs infusion of ME is discussed in-depth in another paper.
This study involved ongoing data analysis (Merriam, 2001; Strauss & Corbin, 1998) during data collection and editing, memo and code development and application, researcher reflection on and discussion of findings, presentation of preliminary findings developed mid-study at a national conference, as well as an extensive drafting process that extended across two years of focused revision work. To approach data analysis, researchers developed open and theoretical codes applied at the end of both the first and second semesters of data collection. As noted in the conceptual framework, the theoretical codes outlined in Table 4 were applied to data evidencing one or more of Cochran-Smith et al.’s (2004) 12 MTP categories, program aspects reflecting one of Gay’s (1997) three program types, or Melnick and Zeichner’s (1998) identified promising practices for preparing teachers for diversity. (In Table 4, the actual codes applied are directly derived from these three perspectives and listed in all caps.) In this process, Cochran-Smith et al.’s (2004) eight questions for MTP emerged as particularly useful in examining data in light of our research aims, and were used the most extensively. In addition, three open codes emerged during the process of collecting data. “CAR” noted emphasis on a caring approach to education, which emerged as a common prevalent theme across course observations and instructor interviews. In addition, the open code “FAC” marked faculty approaches to integrating ME into a given course, while “TC” noted TC response to a faculty’s approach to do so. This distinction between FAC and TC was helpful in initial data analysis to focus on faculty approaches to ME infusion and TC learning that resulted. However, in grouping the data into themes later, this distinction was dropped, as the dynamic between these two players emerged as essential in analysis.

The researchers used the above codes to categorize data and then employ constant comparative analysis to develop patterned themes (Merriam, 2001), ultimately with the hope of
demonstrating conceptual connections and variations across the contexts or conditions under which ME program infusion may be approached (Strauss & Corbin, 1998). Memo use created analytical distance from the data to minimize bias (Strauss & Corbin, 1998). ATLAS.ti 5.5 (1993–2009) qualitative research software was employed in this process to mark sections of data with one or more codes, as well as any memos, and then to group all data corresponding with a given code or cross-section of codes. An initial set of findings were developed mid-study that were not bound by the conceptual framework used in the data analysis, so that we would remain open to how the evidence might “illustrate, support, or challenge theoretical assumptions held prior to the data gathering” (Merriam, 2001, p. 38). We then re-analyzed and revised patterned themes and connected data from the findings in light of our conceptual framework. Cochran-Smith et al.’s (2004) eight questions for MTP emerged as a helpful organizational structure, due to the comprehensive nature of these questions and their relevancy to our study’s objectives. Further building on this organizational support, subsequent conference presentations, collegial conversations, and paper revisions led to our development of a final set of themes that more authentically ‘told the story’ of the data itself. This story is what we present in this paper.

Findings

Approaching Multicultural Program Infusion

Western University’s faculty approached ME infusion by establishing a vision in support of diversity and ME, and creating professional learning communities offering a safe context for critical reflection on theory-to-practice transfer in helping diverse populations access curricula.

Setting a vision in support of diversity and ME.

The school’s mission statement aimed to cultivate practices based on “social justice, caring, and educational equity” (Western University, 2002, p. X), practices evidenced by the
intentional collaboration with school districts facing inequitable conditions. In addition, multiple course syllabi (i.e., Student Teaching Seminar, Sheltered Academic Instruction, Reading Methods, and joint Educational Psychology/Sociology) aimed to prepare TCs to help diverse learners access curricula by teaching academic language and drawing upon “students’ linguistic and cultural backgrounds, experiences, interests, and developmental learning needs” (Ed. Psychology/Sociology syllabus). The introductory ME course, a prerequisite for entering the credential program, cultivated TC reflection on how “cultural assumptions, beliefs and values about self and others” may impact practices supporting all students academically (ME course syllabus). In addition, Western University recruited TC populations reflecting “the racial, ethnic, and linguistic composition of the student population in public schools” (Western University, 2002, p. X). Applicants completed pre-requisite courses in ME and special education and articulated their motivation for teaching diverse populations (Western University, 2008).

**Establishing cohorts as professional learning communities.**

Western University’s program included several cohorts to prepare TCs for the secondary and elementary levels that were composed of 20-30 TCs, two faculty cohort leaders, student teaching supervisors, and school-site cooperating teachers. TCs applied to a particular cohort based on its objectives; the cohort of 20 TCs observed in this study partnered with a low-income school with a number of English Language Learners. Familiarity and trust grew over time as TCs shared reflections in-class, as well as online via a forum created by Dr. Jones in response to a previous communication gap across cohort participants. TCs appreciated this online “cognitive apprenticeship” (Dr. Jones intv) for minimizing isolation and enabling reflection on lesson plan construction and revision with peers, instructors, supervisors, and cooperating teachers, while

---

6 The full reference of program documents are not provided to maintain anonymity and confidentiality.
faculty felt the online forum supported TCs in organizing “their instruction around some core pedagogical ideas” (Dr. Rogers intv).

**Preparing TCs to make content accessible.**

Faculty across courses prepared TCs to help students access curricula by addressing varying language and literacy needs and connecting curricula to student background. TCs across content areas practiced academic language instruction, defined by Dr. Jones as teaching the language “needed by students to understand and communicate in the academic disciplines” (Ed. Psychology/Sociology obsv), by pre-teaching difficult vocabulary and using heterogeneous grouping. TCs found that by pairing high- and low-achieving students, the former was able to “cement his/her understanding by explaining it to others,” thus increasing confidence for both learners (Spanish language TC Sheltered Instruction Methods assignment). The Spanish language TC uniquely drew upon English Language Learner strengths by pairing “Heritage learners” with high-tracked students who “tend to be good spellers but sometimes lack certain insights into the language like expressions or figurative translation,” while “Heritage Learners tend to interpret sentences in the proper context but lack academic language and spelling skills” (Spanish language TC Teaching Performance Assessment).

Evidencing connection of curricula to student background, a math TC related a parabola to a football throw curve, as several of her students were athletes. In recognizing that many of her students struggled with peer acceptance and rejection, an English TC led her class in reading Langston Hughes’ poem, “I, Too,” dealing with “the desire to overcome discrimination” and inspiring discussion about times students felt left out (English TC Teaching Performance Assessment). In her class, TCs discussed Maya Angelou’s poem, “I Know Why the Caged Bird Sings,” examining the impact of racism on identity and expanding student “tolerance and
acceptance” (English TC Teaching Performance Assessment). The Spanish language TC drew upon his students’ backgrounds by creating leadership roles emphasizing their strengths, such as asking Heritage Language Learners to pronounce words correctly for peers. He also considered socioeconomic limitations by not assigning homework requiring the Internet.

**Fostering TC examination of background, bias, and inequity.**

Undergraduates across the four prerequisite ME courses examined personal background and bias, and institutional inequity. However, graduate TC reflection on personal background and bias in the credential program’s courses was minimal, and TCs exhibited misunderstanding regarding issues of inequity in some cases. Despite the observed need for the credential program to grow in emphasizing these aims, a number of connections regarding this reflective work across the ME and credential program courses were noted.

**Reflection on background and bias.**

Program courses built on the prerequisite ME course by cultivating positive TC regard for one’s students and their learning abilities. Dr. Williams encouraged undergraduates to assume an “I can” attitude regarding their ability to help their future students “achieve great things” (undergraduate focus group intv), and all ME instructors encouraged learning from student strengths. Likewise, the program director asserted that “all children have the capacity to learn” and deserve teachers with “high expectations” and unique ways to support students (program director intv). Similarly, program cohort instructors coached TCs to view students in terms of their strengths rather than their weaknesses, and the math methods instructor supported TCs in helping all students feel capable of learning math concepts and problem solving. In addition, the Sheltered Academic Instruction instructors reminded TCs that both high- and low-achieving students need to “hear praise” and engage in critical thinking (Sheltered Academic Instruction
In completing an assignment in this course, the Spanish language TC realized he mentally labeled his students as “‘high-achievers,’ ‘low-achievers’ ‘native speakers,’ and the ‘mentally challenged,’” and did not challenge or reconsider his “different expectations” of students (Spanish language TC Sheltered Academic Instruction final assignment). Upon reaching this realization, he arranged a support meeting for a failing student whose father expressed his appreciation for the “the first teacher to contact him and show concern for his son” (Spanish language TC Teaching Performance Assessment).

A practice central to the prerequisite ME course, but observed minimally across core program courses, was employing autobiographical reflection in connection to examining issues of inequity. A key ME course aim articulated by Dr. Williams and observed in his course syllabi and instruction was to develop comfort in discussing one’s own racial and ethnic background in order to understand and connect curricula to students’ diverse backgrounds more effectively.

Evidencing a need to build on this work beyond the prerequisite ME course, many students in this course questioned having an ethnic identity at all, while others reflected on painful personal experiences with prejudice. Similarly demonstrating need to continue this autobiographical work in the credential program, a music TC shared with her cohort that her superintendent seemed “hostile to gays,” causing her to vacillate between maintaining a public or private identity as a teacher who is gay (Ed. Psychology/Sociology obsv). This prompted supportive TC comments, including questions of how to support students also struggling with identity in school contexts.

While the ME course further emphasized engaging TCs in reflection on bias and prejudice, explicit follow-up work on how TC bias might impact the teaching and learning process was not evident across core program courses. To illustrate, two ME course instructors immersed undergraduates in intercultural field experiences followed by guided reflection on
TC’s realized biases. In contrast, instructors of core program courses did not ask TCs directly to reflect on their biases, though faculty expressed the need for TCs to engage in this practice, and even modeled it at times. For instance, Sheltered Academic Instruction instructors shared with TCs their realized bias of showing more attention to high-achieving students, as well as their response to aim to “interact equitably” with both low- and high-achieving students (Sheltered Academic Instruction obsv). Dr. Jones also shared a previous instance of bias in selecting an eighth-grade English text reflecting her own ethnic and socioeconomic background rather than the backgrounds of her students, who did not empathize with the text’s main character as she anticipated, but felt the protagonist needed to realize his privileged position (Dr. Jones intv).

In the joint Educational Psychology/Sociology course, an English TC reflected on a biased view she felt a student held toward her, but not biases she might hold toward her students. She shared feeling that a student resented her guidance, and attributed this resentment to her being a white teacher. Rather than taking this personally, Dr. Jones encouraged becoming a “learner” of her students and acknowledging that students may “assume things” about her, as she also may make “assumptions about them without realizing it” (Ed. Psychology/Sociology obsv). The Spanish language TC similarly encouraged the English TC to demonstrate interest in her students, as he had felt labeled by assumptions his own teachers made of him as a student. TCs additionally considered bias in this same course in reading a case study about four English Language Learner students involved in a case of plagiarism. TCs considered if plagiarism held the same meaning across cultures, and if their responses to the case reflected institutional bias. While insightful, such reflection on bias was not the norm in the program.

**Reflection on institutional inequity.**
The prerequisite ME course offered multiple opportunities to examine institutional inequity, including “how social inequities prevent students from learning, and are perpetuated by schools” (Dr. Williams intv). Dr. Williams’ class examined graduation rates as connected to the distribution of school resources and quality teachers, and analyzed across subject areas how “implicit cultural assumptions, frames of reference, perspectives, and biases within a discipline influence ways in which knowledge is constructed within it,” as well as how to create culturally relevant curricula (ME course obsv). Building on this work in the joint Psychology/Sociology course, TCs had the opportunity to reflect on institutional inequity when Western University’s Diversity Director visited to discuss how the “dominant ideology” in a given context “determines codes of power, codes of conduct, social norms” (Ed. Psychology/Sociology obsv). The speaker asked TCs to consider peers without key privileges, such as those plagued by limited wheelchair access. He recognized the discomfort TCs felt, yet found it critical to “identify and acknowledge that discomfort and then work through it” by surfacing prejudice that is “clouding judgment” (Ed. Psychology/Sociology obsv). This discussion opened doors for TCs to engage in sensitive discussions regarding race, prejudice, and inequity, yet TCs still were visibly hesitant.

In the Educational Psychology/Sociology course literature circle presentations, TCs exhibited progress in examining institutional inequity, while also demonstrating need for deeper inquiry into this complex topic. For instance, an English TC observed during a presentation that her group’s book contrasted “domesticating education” with “liberating education;” the former rewards passive obedience by engaging students in the recitation of facts unconnected to students’ lives, while the latter prepares students for leadership positions by emphasizing critical analysis and creative expression (Ed. Psychology/Sociology literature circle group presentation). Another group’s book caused a science TC to question, “if you’re a man and if you’re white and
if you…become aware of those privileges that you have, why would you want to change it?” and then later ask “when applying for a job, [should I ask] are you only hiring me because I’m white?” (Ed. Psychology/Sociology obsv). Such reflection evidenced a more critical inquiry regarding how his own background may interact with institutional inequity, and how he might respond to this realization.

**The Pressing Need for ME Infusion across the Program**

The need for ME to be infused more extensively across the program was evident by the lack of connection between the ME and core program courses to support TC learning, as well as discrepancies among participant perspectives on the extent of infusion being achieved.

**The need for greater connection across ME and core program courses.**

TCs expressed desire for greater connections between the prerequisite ME and core program courses. For example, the English TC found “the most beneficial course” for her was Dr. Williams’ ME course, and described a key learning moment when asked to find representations of one’s culture in magazines catering toward cultural groups different from their own; the English TC shared feeling “agitated” as “the content was [not] representative of who [she] was” (English TC intv). This ‘agitation’ actually was an objective of the assignment: to experience similar feelings as students who do not see themselves represented in school curricula. Despite gratitude that she “learned so much in [her ME] class” and hoped to build on this learning in the teacher preparation program, this TC found such discussions “never happened” (English TC intv).

The need for greater connection between the ME and core program courses became further evident when TC perspectives contrasted sharply with ME-based concepts and practice. To illustrate, contrary to the ME course instructors’ encouragement to see and welcome diverse
student backgrounds as essential to caring for one’s students (ME course obsv), the music TC discussed taking a colorblind approach in her teaching practice, as she felt not seeing race would help her care for and connect with students. Similarly concerning, in the joint Educational Psychology/Sociology course, a Physical Education TC stated that diversity was not a relevant topic for him, as his students are “all kids…and that’s that. It just doesn’t come up. It’s just me giving instruction and then them going out and doing what I asked of them” (Physical Education TC intv). Yet another TC commented that math is universal and not influenced by culture. Dr. Rogers took this an opportunity to remind TCs that math teachers can connect to student background (i.e., cultural context in word problems) (Ed. Psychology/Sociology obsv).

Further evidence of this ME-program disconnect was found in TCs’ need for a more complex understanding of institutional inequity. ME course instructors asserted that majority and minority populations need a more accurate insight into our nation’s cultures and histories, as well as the role of schools in perpetuating inequity via offering limited resources to lower performing students and reinforcing stereotypes in school texts. Yet, TCs did not evidence clear transfer of this idea to core courses. For instance, during a literature circle presentation, Dr. Jones intervened to correct a group’s misunderstanding that their author asserted only white people can exhibit prejudice. She later expressed regret that TCs had missed larger perspectives their authors offered on prejudice and inequity, specifically that institutional prejudice and socioeconomic obstacles hinder achievement for some students, but not others. Dr. Jones concluded, “we need to become comfortable” talking about and examining in more depth how race, ethnicity, and gender impact teaching and learning (Ed. Psychology/Sociology obsv). Dr. Jones aimed to help TCs realize “the achievement gap is evidence we are still dealing with educational inequality around race and ethnicity” (Social Foundations of Education online discussion), and acknowledged that
assessing TC dispositional growth is a challenge “the whole teaching profession is trying to figure out” (Dr. Jones intv). More broadly, Dr. Jones recognized that educators are limited in impacting students’ life circumstances and called for greater contribution and accountability across professional fields and policies to change uneven playing fields (Social Foundations of Education online discussion).

**Discrepancies across participant views on achieving ME infusion.**

TC and faculty participants held divergent views on the extent to which ME was integrated across program courses, though most participants indicated the need for program growth in this regard. To illustrate, the Physical Education TC asserted most course discussions addressed diversity in some way, yet the music TC observed a lack of program attention on gay and lesbian students, and the Spanish language TC noted need for greater discussion on inequity and how socioeconomic status impacts student achievement. The English and math TCs also expressed disappointment that some of their colleagues described learning about diverse backgrounds as a “chore” (math TC intv) and did not reflect more deeply on diverse student needs. In contrast, the English TC expressed commitment to make curricula culturally relevant and reach “resistant” students who questioned if she could relate to them (English TC intv), while the math TC sought ways to introduce new curricula connecting to student background, despite frustrations met in being required to teach to a standardized school curriculum (Student Teaching Seminar obsv).

Faculty perspectives on the extent of ME infusion being achieved in the program also differed. While the program director focused on how ME infusion was being accomplished, many instructors centered on how further integration should be attained. For instance, ME course instructors lamented many course participants did not learn to become “critical thinkers and
doers” (ME instructor intv), and that prejudice was not addressed effectively across the program. Moreover, a Sheltered Academic Instruction instructor applauded the program for its ME infusion by partnering with diverse school districts to establish student teaching placements, yet also noted their course did not “do a lot of the white teacher and kids of diversity…not that multicultural thing” (Sheltered Academic Instruction instructor intv). The cohort instructors expressed that ME infusion was not being achieved across the program, but differed on the depth of ME integration taking place in their cohort courses. Dr. Rogers described the cohort as a safe context for discussing sensitive topics related to ME. Yet, Dr. Jones noted desire to take a stronger “multicultural stance,” and shared feeling alone among faculty in believing that “teaching is a moral act based on an ethic of care” requiring TCs to reflect deeply on the diverse backgrounds and political powers in a classroom (Dr. Jones intv).

Dr. Jones expressed hope that faculty participation in this study would inspire a deeper level of collaboration and communication, which there is “never enough” of within a program, “or it’s not productive or not challenged properly” (Dr. Jones intv). She suggested that ME and other program faculty might collaborate further by asking ME instructors to participate in cohort leader meetings, or having ME and other faculty observe one another’s courses to build on each other’s work. The program director noted that such collaboration might offer faculty ideas for how TCs can integrate ME principles into practice, while also allowing ME course instructors to find new ways ME principles may be made relevant to secondary content areas.

**Discussion**

This study responded to the need for more in-depth examinations of how teacher preparation faculty infuse ME across entire programs (e.g., Jennings, 2002), yet findings did not neatly place Western University’s program into one of Gay’s (1997) three program types (i.e.,
traditional, ME specialization, or ME infusion). Evidence demonstrated significant ways faculty approached the complex task of making ME a coherent learning experience across program courses (Cochran-Smith et al., 2004), as well as the pressing need for the faculty to continue pursuing this aim.

**Strengths of Practice for Programs to Emulate**

Western University’s professional learning communities, or “cohorts,” provided a fertile context for cultivating TC attitudes and practices reflective of the school’s vision for “social justice, caring, and educational equity” (Western University, 2002, p. X), a practice described as central to preparing teachers to support diverse student populations (e.g., Cochran-Smith et al., 2004; Gay, 1997; Hammerness & Darling-Hammond, 2005; Melnick & Zeichner, 1998). TCs in the program engaged in a professional learning community right away, as they examined cohort visions to select one to join. Thus, TCs entered the observed cohort with some degree of shared commitment to partnering with a school dealing with educational inequities. In this community, we observed TCs risking transparency in learning from others, examining their thinking, and gaining new approaches for supporting diverse populations, particularly making curricula relevant and accessible by integrating student backgrounds and academic language instruction into curricula. Such meaningful community connection is a critical component for cultivating TC commitment to and capacity to care for their students, particularly as effective teachers of diverse populations place “caring relationships” as central to the teaching and learning process, and have “high expectations and a strong affinity for their students” (Gay, 1997, p. 164).

The observed cohort particularly highlighted the importance of relationally contextualizing TC inquiry into how personal backgrounds and views might impact practice. The Spanish language TC was able to coach the English TC to reach out to a student who rejected
her, as he also had mistrusted teachers who previously had made assumptions about his background as a student. Moreover, TCs heard first-hand how painful it was for the music TC to experience discrimination from her district for being gay. As her colleagues offered support and considered how to reach out to students facing similar issues, the music TC found courage to press forward in her career. In gaining insight from their shared stories, TCs demonstrated learning to “acknowledge and honor the importance of assuming responsibility to be informed before making moral judgments” (Brooks & Normore, 2010, p. 59). The cohort experience expanded TC perspectives, better preparing them to support, understand, and welcome diversity in their classrooms. This finding corroborates research showing that engaging TCs in supportive learning communities leads to deeper TC reflection over time (Cochran-Smith et al., 2004; Gay, 1997; Hammerness & Darling-Hammond, 2005; Melnick & Zeichner, 1998), and serves as a vital program practice beyond “mere exposure to culturally diverse situations [that] may reinforce stereotypical thinking” without adequate guidance (Castro, 2010, p. 206).

**The Pressing Call for ME Infusion across Teacher Preparation Programs**

Western University’s program demonstrated progress toward Gay’s (1997) “dual approach” (p. 160) to ME infusion, yet also evidenced need for greater coherency of ME principles by re-visiting them more consistently on a deeper level across multiple program experiences. Many faculty and TC participants articulated support for diversity and ME, yet few instances across credential program courses evidenced critical TC reflection on personal background and bias, and how these interact with complex understandings of institutional inequity (Castro, 2010). This is not surprising, as TCs must have “guided practice within well established parameters” to counter the “denial, silence, and confusion” exhibited when asked to talk publically about these sensitive topics across courses (Gay, 2010, p. 148). TCs may not fully
comprehend the import of exploring ME-related issues across program experiences, or even in ME courses, and need guidance in connecting personal reflection to analyses of inequity, including identifying ways they may have benefited from institutional systems in ways their students may not (Castro, 2010).

Moreover, instructional and administrative program leaders also should engage in this reflective work by exploring how mainstream societal narratives shape their own attitudes toward diversity. Such reflection must ask faculty to look beyond “oneself to seeing the greater systemic discrimination related to language [and other differences] in our country” (Jacobs, Assaf, & Lee, 2010, p. 509). It may not be surprising that the ME instructors and one cohort leader expressed feeling alone in this work, as faculty reflection on ME principles largely lacks institutional support (Jacobs, et al., 2010). ME program infusion is a complex, “synthesis-evaluation” task at the top of Bloom’s Taxonomy, yet there are few educators with the training in ME needed to “translate the theory of infusion into the practice of curriculum development and classroom instruction” (Gay, 1997, p. 158-159). In addition, it can be challenging for faculty to find time to connect autobiographical reflection and institutional inequity (Jacobs, et al., 2010), or to identify “inconsistencies between what they intend or espouse and what is instantiated in their own everyday practice” (Cochran-Smith et al., 2004, p. 962). Balancing this reflective work with institutional pressures to publish and seek tenure adds further challenge.

Thus, supportive program cultures are vital to the long term success of faculty multicultural development (Cochran-Smith et al., 2004; Gay, 1997; Melnick & Zeichner, 1998). Faculty cohorts, in-person or online, might cultivate MTP practices, including “self-renewal,” nurturing “motivation, stamina, perseverance, hope, constant striving, and feelings of personal competence” in serving as “culturally sensitive agents of change” (Gay, 1997, p. 166). Moreover,
establishing consortia across institutions to share ME expertise supports this growth (Melnick & Zeichner, 1998) and ensures that diversity issues are not relegated solely to the expertise of the ‘other.’ Individuals without significant intercultural experiences, as well as institutions without the support of diverse populations, cannot afford to abdicate responsibility for preparing TCs to teach in diverse settings (Melnick & Zeichner, 1998), particularly in an era of increasing need for ‘glocal’ TC perspectives able to understand global and local expressions of diversity (Brooks & Normore, 2010).

As reflection on background, bias, and institutional inequity may raise discomfort (e.g., Gay, 2010), educators must keep in mind that multicultural growth is a developmental process requiring stages and time (McAllister & Irvine, 2000). Likewise, programs need developmental time to implement a process of ME infusion. As programs are at different stages in implementing ME infusion, stakeholder perspectives on the degree of infusion achieved and desired inevitably will vary; complete unity may be unattainable. Divergence may be due in part to stakeholders’ differing roles, responsibilities, and concentrations. Some instructors may be keenly aware of needed progress in TC or faculty multicultural growth, and how a program might support this. In contrast, program directors may not see this as easily while maintaining a macro view balancing multiple agendas and gauging progress toward program or other mandated goals. Directors may emphasize areas of program achievement to build morale, perhaps shedding light on why the director’s optimistic view about the program’s ME infusion contrasted with others’ views.

In an era of rapid globalization, leaders, including teachers and administrators, must ensure that their constituents feel part of a bigger picture with clearly identified goals in which they are invested (Brooks & Normore, 2010). A key question raised in this study is if ME course and credential program instructors felt connected to one another, and to a larger program picture.
Multicultural Infusion

While the professional learning cohorts served as an effective organizational structure, many ME faculty expressed feeling distant from other faculty in their course aims. ME program infusion not only entails integrating ME principles across program courses, but also involves merging the lives and work of ME and other program instructors. Moreover, recruitment of a diverse faculty is a vital program aim alongside of recruiting a diverse student population (Cochran-Smith et al., 2004; Gay, 1997; Melnick & Zeichner, 1995, 1998), as well as ensuring that diverse faculty perspectives are integrated across credential program courses. Achieving such organizational aims is no small task for program administrators, but must be pursued.

Recommendations

This study illustrated that ME program infusion is not a box to check or a linear “progression from immaturity to maturity” (Britzman, 2007, p. 1), but rather an ongoing process and perpetually “unfinished work” (p. 3). As teacher preparation faculty develop and implement visions for this complex task, challenges will be met, including TC (Mueller, 2006), faculty (Jennings, 2007), and ‘institutional’ resistance (McDonald, 2005). This study recommends that faculty set high standards for ME program infusion, while realizing program growth will be as “uneven” (Britzman, 2007, p. 1) as it is for individuals (McAllister & Irvine, 2000).

Create Professional Learning Communities Focused on ME

To support ME infusion, programs should create professional learning communities where faculty (i.e., administrators, course instructors, and student teaching supervisors) partner with cooperating teachers to guide TCs in applying ME principles to practice in diverse contexts. The cohort is an ideal context to engage in collaborative inquiry on how background, bias, and institutional inequity impact the teaching and learning process. This study also suggests faculty engage in a cohort experience to prepare to guide TCs in this work. Faculty development must
involve critical reflection on autobiographical journeys and institutional inequity, perhaps via observation of one another’s courses, participation in an online learning community, or cross-institutional workshops led by shared expertise (Melnick & Zeichner, 1998). Administrators must make ME faculty and courses central to program development by creating time, processes, and incentives for faculty cohorts to examine how their attitudes regarding diversity “interact with program design, program priorities, and student outcomes” (Jennings, 2007, p.1266).

**Partner with External Stakeholders**

It is important to acknowledge the role outside political agendas and societal influences play in achieving these aims, and recognize the need for external support (Cochran-Smith et al., 2004). Programs, bodies of program accreditation, and state policy makers should partner via advisory groups (Martone & Sireci, 2009) to revise accreditation standards such that program curricula, experiences, and assessments do more than prepare TCs to support diversity in general (Vavrus, 2002); they must build learning communities nurturing TC and faculty reflection on personal background and bias, and complexities of institutional inequity. Moreover, stakeholders must develop, implement, and examine standards-based assessments so that curricula aligned already with ME principles, program accreditation benchmarks, state standards, and program outcomes are emphasized and not lost.

**Incorporate Research-Based Frameworks into Program Practice**

Research-based conceptual frameworks are needed to guide faculty and institutional collaboration in approaching ME program infusion and TC preparation for diversity as a global reality. Longitudinal and multi-site studies must examine how trends toward “standards, high-stakes testing, and narrow views of what counts as research” are impacting international “notions of multiculturalism, diversity, equity, and social justice” (Cochran-Smith et al., 2004, p. 965).
This research must demonstrate how ME program infusion impacts teaching practice over time and if such training should extend formally into teacher induction, including what partnerships might support this. As standardized comparisons homogenize curricula, international collaborative inquiries must shape and preserve multicultural teacher preparation.
References


Author. (2009).

Author. (2012).


Multicultural Infusion


Mills, C., & Ballantyne, J. (2010). Pre-Service teachers' dispositions towards diversity:


Western University. (2008). Teacher preparation program application brochure.

Western University. (2002). Program documentation for meeting state standards for quality and effectiveness as a teacher preparation program.


Table 1

Eight Questions for MTP (Cochran-Smith et al., 2004)

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diversity Question</td>
<td>How is the demographic imperative constructed as a ‘problem’ for teacher education and what are desirable solutions?</td>
</tr>
<tr>
<td>2. Ideology Question</td>
<td>What are views on the purpose of schooling, social and economic history of the nation, and role of public education?</td>
</tr>
<tr>
<td>3. Knowledge Question</td>
<td>What are the knowledge, interpretive frameworks, beliefs, and attitudes considered necessary to teach diverse populations?</td>
</tr>
<tr>
<td>4. Teacher Learning Question</td>
<td>How, when, and where do adults learn to teach, including supporting pedagogies?</td>
</tr>
<tr>
<td>5. Practice Question</td>
<td>What are the competencies and pedagogical skills teachers are assumed to need to teach diverse populations effectively?</td>
</tr>
<tr>
<td>6. Outcomes Question</td>
<td>What are the outcomes of teacher preparation and how/why/by whom should these be demonstrated and measured?</td>
</tr>
<tr>
<td>7. Recruitment/Selection Question</td>
<td>What are the perspectives by which candidates should be recruited and selected for the teaching force?</td>
</tr>
<tr>
<td>8. Coherence Question</td>
<td>How is MTP positioned in relation to other program issues?</td>
</tr>
</tbody>
</table>
Table 2

Four External Forces (Cochran-Smith et al., 2004)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Institutional Capacity</td>
</tr>
<tr>
<td>2.</td>
<td>Relationships with Local Communities</td>
</tr>
<tr>
<td>3.</td>
<td>(Non-) Governmental Regulations</td>
</tr>
<tr>
<td>4.</td>
<td>Larger Societal Contexts</td>
</tr>
</tbody>
</table>

- Institutional constraints and supports for MTP
- A program’s value for and relationships with local families, schools, communities, regions, etc.
- Teacher preparation requirements from agencies that govern and evaluate programs and their approaches
- Larger social, historical, economic, and political contexts
### Table 3
Courses Examined and Participants Selected

<table>
<thead>
<tr>
<th>Course</th>
<th>Participants</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Program director</td>
<td>NA</td>
</tr>
<tr>
<td>Introductory ME course</td>
<td>Dr. Williams, 30 PTCs</td>
<td>15 sessions - 38 hours</td>
</tr>
<tr>
<td></td>
<td>Three other ME instructors, two classes of 30 PTCs</td>
<td>(13 sessions in Dr. Williams’ course)</td>
</tr>
<tr>
<td>Joint Educational Psychology and Sociology course</td>
<td>Dr. Jones (cohort leader)</td>
<td>18 sessions - 54 hours</td>
</tr>
<tr>
<td></td>
<td>Dr. Rogers (cohort leader)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cohort of 20 TCs</td>
<td></td>
</tr>
<tr>
<td>Student Teaching Seminar</td>
<td>Dr. Jones (cohort leader)</td>
<td>7 sessions, 11 hours</td>
</tr>
<tr>
<td></td>
<td>Dr. Rogers (cohort leader)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cohort of 20 TCs</td>
<td></td>
</tr>
<tr>
<td>Sheltered Academic Instruction</td>
<td>Two Sheltered Academic Instruction course instructors</td>
<td>8 sessions - 9 hours</td>
</tr>
<tr>
<td></td>
<td>120 TCs, including cohort</td>
<td></td>
</tr>
<tr>
<td>Reading Methods</td>
<td>Dr. Jones (cohort leader)</td>
<td>11 sessions – 18 hours</td>
</tr>
<tr>
<td></td>
<td>60 TCs, including cohort</td>
<td></td>
</tr>
<tr>
<td>Social Foundations of Education</td>
<td>Dr. Jones (cohort leader)</td>
<td>7 online discussion threads</td>
</tr>
<tr>
<td></td>
<td>Cohort of 20 TCs</td>
<td></td>
</tr>
<tr>
<td>Math Methods&lt;sup&gt;7&lt;/sup&gt;</td>
<td>Math Methods instructor</td>
<td>NA</td>
</tr>
</tbody>
</table>

<sup>7</sup> The Math Methods syllabus was examined and the instructor interviewed, but the course was not available to be observed.
Table 4

Data Analysis Codes

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Diversity Question (DIV)</td>
<td>1. Multicultural Specialization (MS)</td>
<td>1. Cultivate TC Self-reflection (Self-knowledge) (SK)</td>
</tr>
<tr>
<td>2. Ideology Question (IDEOL)</td>
<td>2. Embedded ME Infusion (EMI)</td>
<td>2. Cultivate TC Cultural Knowledge (CK)</td>
</tr>
<tr>
<td>4. Teacher Learning Question (LEARN)</td>
<td></td>
<td>4. Field Experiences (FIELD)</td>
</tr>
<tr>
<td>5. Practice Question (PRAC)</td>
<td></td>
<td>5. Partnerships with Diverse Institutions (PARTNER)</td>
</tr>
<tr>
<td>6. Outcomes Question (OUT)</td>
<td></td>
<td>6. Consortium for ME Expertise (CONSORT)</td>
</tr>
<tr>
<td>7. Recruitment/Selection Question (REC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Coherence Question (COH)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Institutional Capacity (INST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Community Relationships (COMM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Governmental and Non-governmental Regulations (GOV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Larger Societal Contexts (CONTEXT)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8 The actual codes applied are capitalized.