Interdisciplinary Ways of Knowing:
A Collaborative Teacher Education Project for Culturally Responsive Pedagogy in Rural White America

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ABSTRACT

This project explores pre-service teacher attitudes while participating in literacy and humanities upper division education coursework within an outreach program in central Wyoming. A yearlong qualitative study was conducted to develop pre-professional experiences that may influence the preparation of teachers from rural settings for culturally diverse classrooms. Through collaborative planning across disciplines, the researchers provided parallel opportunities for pre-service teachers to acquire practices that are culturally responsive. Qualitative data was analyzed for themes that indicate the nature of their understanding. Results showed that 33% are novice, 41% are developing, and 26% are proficient on a rubric for culturally responsive awareness developed by the researchers, noting implications for collaborative, interdisciplinary learning at the pre-service level.

Preparing future teachers for work in diversity in a rural context poses unique challenges and opportunities for collaboration across disciplines. As teacher educators of literacy and humanities working in an outreach program in central Wyoming, we began a yearlong study to identify and develop pre-professional experiences that may have a significant influence in preparing teachers from rural settings for work in culturally diverse classrooms. Through collaborative planning across courses, we provided parallel opportunities for pre-service teachers to acquire practices that are responsive to the diverse backgrounds of their future students. While seeking to understand our students, we discovered new ways of thinking about culturally responsive pedagogy, what it means to teach in an isolated environment, and how to bridge traditionally separate disciplines to advance
our work with future teachers in rural settings so they are prepared to teach in a variety of contexts and respond to the challenges of living in a global society.

As a qualitative study, it is not our intention to identify causal relationships between prior knowledge and that gained from pre-service teachers’ experience in our courses. Our purpose is to highlight how pre-service teachers in rural settings become aware of culturally responsive practices as they are taught through our courses, and how collaboration between two faculty members through an interdisciplinary approach is perceived.

THE CONTEXT AND RELEVANCE OF THIS STUDY

Wyoming is currently rated ninth lowest in the United States for percentage of ethnic minorities, according to the US Census Bureau (Casper Star Tribune, 2008). The University of Wyoming, Casper College Center is located about 150 miles north of the main campus in Laramie, where we report to our respective departments through telephone conferencing, the internet, and occasional travel. Our program consists of five full time Education faculty, and a fluctuating number of adjuncts who teach courses in the Elementary and Secondary Education programs. Connected to the local community college feeder program, students can transfer to upper division Education courses directly from Casper College, in which we are housed. This context creates a hybrid environment that lends itself to autonomy and academic freedom on the one hand, while on the other, we experience isolation from the mother institution and vital collegial connections to our departments and disciplines. As the only full time Elementary Education faculty teaching methods courses, we became the principal investigators of our own unique program: our scholarship, our classes and our students.

Situated in a rural context of a sparsely populated state, the majority is white and working class. According to the US Census (2006), 88 percent of Wyoming’s roughly 500,000 are White (non Hispanic) with 6.9 percent claiming Hispanic origin, 2.5 percent Native American, a scant 0.9 percent Black and the rest Asian or Other. Approximately 6.5 percent speak a language other than English in the home. However, rural demographics are changing.

Rural communities all over the country are finding themselves with growing populations of racial and/or ethnic minorities. They are finding themselves having to deal with the same differences in culture, including religious, social, and linguistic, that urban schools have been struggling with
for years. Nor are they doing any better at it than urban or suburban schools have (Yeo, 1999).

States located in the intermountain west: Colorado, Idaho, Montana, Utah and Wyoming are also experiencing such demographic shifts (US Census Bureau, 2006). This includes certain areas of Wyoming, particularly those impacted by rapid growth in industry, farming communities and tourism.

Most of our students have been raised in rural areas of Wyoming, and have had little or no exposure to working with learners from ethnically different backgrounds. Teachers who work in the schools and mentor our students as they complete their residency are also primarily from the local community, and do not have experience in diverse settings. The emerging literature on rural pre-service teacher education echoes this phenomenon. Universities situated within a rural context may have difficulty enhancing perspectives related to diversity because of limited access to diverse classroom settings with culturally responsive teaching role models (Powell, Sobel, Hess & Verdi, 2001; Wenger & Dinsmore, 2005). The problem can be viewed within a framework of situated knowledge, the everyday contextual knowledge that influences pre-service teacher understanding and transfer of new concepts into practice, therefore:

“Information related to culturally competent teaching practices presented in university courses may become marginalized because it does not fit within the situated knowledge of the students. There is no reinforcing culture to support the practice” (Powell, et al., 2001 p. 81).

Currently, Wyoming State requirements for teacher certification do not mandate diversity education, nor methods for teaching students whose first language is not English. As a consequence, teachers in Wyoming have not only had little exposure to cultural diversity in their communities, they have also not been exposed to current approaches in working with ethnically and linguistically diverse learners.

This phenomenon presents a sharp contrast to the growing diversity in the United State, the increasing demands for teachers to address issues of diversity in public schools, and the resulting pedagogical advances made in teacher education. Research in multicultural education has established that pre-service teachers must engage in a self-examination of their identity, beliefs and assumptions concerning such issues as white privilege, group membership, class, gender, language, as well as religion, in order to bring change to status quo educational practices (Gollnick, 1995; Ladson-Billings, 1995; Sleeter & Grant, 2003).
Our project was designed to address the larger question of how to prepare and evaluate pre-service teachers in becoming culturally responsive educators in a rural White America through a collaborative, cross disciplinary approach.

A FUSION OF THEORETICAL FRAMEWORKS

The interpretation of culturally responsive teaching, as applied across distinct courses calls for sound theoretical and pedagogical claims. Our combined points of reference, literacy and humanities, provide a complex and layered framework, which includes contributions from several bodies of scholarship. Therefore, several theoretical frameworks represent the growing knowledge base in teacher education and its distinct disciplines.

A culturally responsive approach recognizes students’ knowledge claims must be considered valid within students’ own cultural contexts (Gay, 2002). Critical pedagogy (Freire, 1970, Freire and Macedo, 1987; Giroux, 1988), social constructivism (Vygotsky, 1970), and a diverse social constructivist view of teaching and learning (Au, 1998) are relevant when considering the social and political contexts for language and literacy development. According to Au, a diverse constructivist orientation inquires into “the ways that knowledge claims, of educators and their students, are related to cultural identity and shaped by ethnicity, primary language, and social class” (p.306).

Frameworks developed for multicultural education (Banks, 1995, 2000; Nieto, 2007; Sleeter, 1996; Sleeter and Grant, 2003) are instrumental when considering epistemological assumptions in curriculum development. These assumptions can be translated as the unquestioned curriculum, while in contrast, what we teach and whose story we teach are negotiable constructs in a culturally responsive pedagogy, as well as the how we teach it. Sleeter explains how these assumptions are played out in the choices teachers make in classroom lessons:

Teachers will often frame multicultural education in terms of merely teaching about cultural differences. This is a sort of a stereotypical way that often happens. I remember talking with a kindergarten teacher who had this lesson around Thanksgiving about the Pilgrims and the Indians sitting down together at the first Thanksgiving. She wanted to use that as a tool for teaching about the cultures of indigenous people. “But that isn’t the story,” I said. “From the perspective of indigenous people, the real story has been one of genocide and of taking land away. It’s important for kids to understand that story. From the
perspective of indigenous people today, what’s important is reclaiming land, reclaiming sovereignty, rebuilding economies, reclaiming and rebuilding cultures that have been devastated. If kids today really want to understand relationships between Whites and indigenous peoples, we need to understand that within an accurate historical context. (Sleeter, 2000/01, http://www.rethinkingschools.org/archive/ 15_02/15_02.shtml)

Further analysis of these underlying principles will highlight specific contributions to culturally responsive pedagogy in teacher education, in order to clarify cross-disciplinary connections. For example, when teaching about issues of linguistic diversity, it is necessary to understand that language is one of the strongest elements in our self-definition, therefore, principles of bilingual education that foster esteem for the home language is a component of culturally responsive pedagogy (Ada, 1995; Cummins, 2001; Krashen, 1981; Skutnabb-Kangas, 2000).

Critical theory (Freire, 1970) adds a social justice component to our work, in that it forces us to take responsibility for the construction of our social realities, including those relationships, hierarchies and realities in schools. When we incorporate a critical pedagogy component into teacher education we create spaces in our classes that encourage students to critically analyze issues such as colonization, racism, heterosexism, classism and poverty. We ask our pre-service teachers as members of the White majority culture to reflect upon their own role in either perpetuating social inequities by taking a passive stance, or becoming agents of change through their daily actions. Infusing a critical stance in teacher education renders the necessary but difficult conversations, as it disrupts the status quo and student perceptions of themselves, often making them feel uncomfortable.

An examination of one’s future responsibilities as a culturally responsive educator cannot take place without an examination of culture. As the overwhelming majority of our pre-service teachers come from the dominant group in society, they often need to unlearn what they have grown accustomed to thinking as the “norm”. Diversity awareness (Nieto, 1992, 1999) means that many realities exist, as we are all unique, different and special. By respecting and embracing diversity, teachers can better be prepared to be responsive in their approach to diverse learners, and confront biased material in the curriculum, and school culture.

Experiences students bring to the learning environment may depart significantly from those of their teachers. Therefore, the overarching frameworks of teacher attitudes and classroom conditions for culturally relevant pedagogy developed by Gay (2000) and Ladson-Billings (1995)
have been helpful in defining the pedagogical knowledge and dispositions
needed by teachers in order to be culturally responsive educators. Additionally, Villegas and Lucas (2002) outlined classroom-based practices
essential to promoting the development of culturally responsive teachers in
pre-service courses. Their work underscores the need to develop a socio-
cultural consciousness so that teachers can learn to accept students as cultural
beings. In particular, for those pre-service teachers whose own experience
with cultural diversity is limited, these dispositions can be critical to their
development.

Finally, some scholars have described a transformative educational
pedagogy that derives its foundations from all the above mentioned theories
of social constructivism, critical pedagogy, multicultural education, bilingual
education, and diversity pedagogy. As such, transformative education
embraces multiple frameworks that can be used in teacher education to
describe this stance as an “integrated synthesis of theoretical principles
from various disciplines” and emphasize that, “we are describing not just an
intellectual point of view, but also a social stand on issues concerning equity,
 inclusion, justice, and peace, a stand born out of a deep and unconditional
respect for all human beings and all forms of life” (p. 11).

RELEVANT LITERATURE

While the above discussion outlines a theoretical framework for culturally
responsive pedagogy, it is important to note contributions derived from studies
of literacy development, multicultural pedagogy, curriculum development,
and pre-service teacher education. Owocki and Goodman (2002), in their text
of early literacy development state, “Children develop the capability to use,
talk about, and learn through language (oral and written) as they use it within
the social cultural context of their lives” (p. 16). Children’s identities also
develop under the influence of language, culture, race, class, gender, family
values, patterns of domestic organizations, and political, social and religious
ideologies (Owocki & Goodman, 2002). Teachers should therefore be aware
of culturally responsive practices that enhance each child’s acquisition of
oral and written language.

Culturally responsive teachers know how to determine multicultural
strengths and weaknesses of curriculum designs and instructional materials
and make changes as necessary to improve the existing curriculum (Gay,
2002). Gay (2002) claims that culturally responsive teachers are critically
conscious of the power of symbolic curriculum as an instrument of teaching
and use it to help convey important information, values, and actions about
ethnic and cultural diversity. Culturally responsive teacher preparation
programs include content that helps pre-service teachers understand that communication styles of different ethnic groups reflect cultural values and shapes learning. These programs also help pre-service teachers gain knowledge and skills that are key to modifying classroom interactions in order to cater to culturally diverse learners. “They include knowledge about the linguistic structures, of various ethnic communication styles as well as we contextual factors, cultural nuances, discourse feature, logic and rhythm, delivery, vocabulary usage, role relationships of speakers and listeners, intonations, gestures, and body movement” (Gay, 2002 p. 111).

The interdisciplinary approach used in this study furthers connections that can be constructed between social studies teaching and literacy. “Interdisciplinarily teaching can provide a powerful model of academic engagement for both instructors and students. It allows the exchange of new information, a shift in intellectual paradigms formerly based on ownership, and the pleasure of collaborative effort” (Brown & Pollack, 2004). Additionally, social studies education provides a rich context in which the reading and writing processes can be investigated. Jarolimek (1990) offers several strategies for attending to diverse learning needs in content area reading and writing. Culturally responsive elementary teachers devise language arts teaching strategies that integrate social studies and other curricula areas, critical in helping learners acquire communication and writing skills. They select a wide variety of content based material with good quality illustrations and writing (Zarrillo, 2004). It is therefore crucial to train teachers using a cross disciplinary approach in methods courses to facilitate acquisition of pedagogical skills. In summary:

Interdisciplinary teaching whether in the form of limited classroom visits or ongoing, shared courses, can be a rewarding experience for faculty members. It permits teachers to create a community of educators who share their interests and offers them the opportunity to adopt sometimes different but useful pedagogical strategies in the classroom. (Brown & Pollack, 2004, p. A14).

An emerging body of literature that is increasingly coming to bear upon our work is the study of whiteness in teacher education. Theories to describe stages of “consciousness” about race are particularly relevant in terms of understanding some ways that White pre-service teacher may perceive their roles as cultural beings, and how their perceptions may reinforce institutionalized racism and embedded racist structures in the curriculum. A synthesis of this area of advancing research is captured in a study by Hill-Jackson (2007), in which theories of whiteness, (Helms, 1993; McIntosh,
are mapped against pre-service teachers’ experiences in multicultural curriculum, and developed into a model for White pre-service teachers. Hill-Jackson’s model, labeled the ICCP Model (Identity and Cross-cultural Curriculum Perspectives) for White Pre-Service Teachers (Hill-Jackson, 2007), incorporates Helm’s (1993) White racial identity development, Hanvey’s (1975) Four Levels of Cross-Cultural Awareness and Banks (1995) Four Approaches of Curriculum Integration. In Hill-Jackson’s study, pre-service teachers’ reflections were analyzed in a multicultural education course. Using these frameworks as points of reference for White pre-service teacher awareness, three stages of shifting perspectives emerged, the Unconscious Stage, the Responsive Stage and the Critical Consciousness Stage (Hill-Jackson, 2007).

In a study investigating attitudes of rural pre-service secondary teachers in Utah, Huerta and Flemmer (2005), suggested that religious beliefs (Mormon) might also affect the ability to teach equitably in a public school context. They found that pre-service teachers who had little exposure to diverse perspectives, were challenged by their own negative views or low expectations for students from different religions, cultures, levels of English language proficiency or sexual orientation: “We found that, on occasion, some of the participants took on an aura of defiance when introduced to these issues, because they felt they already held ‘truths’ relevant to teaching” and concluded “this study further establishes the need for an across the curriculum approach to critical pedagogy that goes beyond the single multicultural education course teacher education programs often require” (p.14).

Another study comparing attitudes between rural and urban teachers presented some evidence that might underscore significant differences between these two groups (Irwin, 1999). Irwin, (1999), suggests:

Urban teachers may be more familiar with and sensitive to the issues of diverse students as a result of the visible presence of minorities in large populations in urban schools and communities. These teachers therefore may understand and be more aware of the severity of the needs of their multicultural student populations, than would exist in rural localities where minority student populations may be negligible. (p. 42).

That is, rural teachers may not see multicultural education as a concern.

Furthermore, diversity issues among a seemingly homogeneous community may present themselves and add to the need to develop a community specific culturally responsive pedagogy for rural areas that have
not been abundantly identified in the literature. Heilman (2004) argues that marginalized ethnic white students can be an under-recognized population in many seemingly homogeneous communities, such as Midwestern urban and rural white working-class communities. These less visible issues of diversity, such as language variations, educations level, social class, religion and other cultural norms, can pose a unique challenge in terms of practicing a culturally responsive pedagogy in rural settings.

Hill-Jackson’s study (2007) is relevant to our work, in that we found similar results (levels of awareness) while investigating an interdisciplinary approach, revealing White pre-service teacher awareness of culturally responsive pedagogy. Hill-Jackson concluded that 63 percent of her students were in the second stage (responsive), in which “they may flip-flop between acceptance and denial, which causes a state of suspended consciousness, or multicultural purgatory: an unstable state full of promise or peril for the White pre-service teacher” (p. 34), and that “The predominant narrative of the White pre-service teachers in my course was that they did not have a culture, did not belong to a racial group, were immune to stereotyping, and ethnicity was something that belonged to ‘others’” (p. 34). The study indicates that:

One multicultural course, as mandated by national teacher preparation standards, cannot assist White pre-service teachers in getting to the Social Action level so they can become future equity pedagogues. It may be that we are doing more of a disservice to teachers by supplying one course to impart knowledge, skills, and refined attitudes upon prospective teachers. Many White pre-service teachers, due to the multicultural purgatory that they experience, are leaving our one multicultural course mandate more frustrated than before they began the course (p.34).

In summary, although there is a large body of literature on culturally responsive pedagogy and White pre-service teacher education, little research has captured the tension between White rural America and growing diverse student populations, which further delineates the need to examine the potentials for pre-service teacher development of diversity awareness in rural areas.

**RESEARCH DESIGN AND METHODS**

To address limitations of one course, we developed an interdisciplinary approach to infusing culturally responsive pedagogy across two or more courses in teacher education, and conducted an investigation into the extent
to which it results in deeper gains in pre-service teacher awareness. We implemented assignments in three of our teacher education courses that involved students in 1 - observing and studying children in classroom settings, 2 - reading, analyzing and applying multicultural children’s literature, 3 – engaging in group discussions and journal reflections about culturally responsive practices and 4 - developing an interdisciplinary humanities unit.

Approximately 45 teacher education program students at University of Wyoming, Casper College Center were involved from three classes: Oral & Written Language Development, Elementary Literacy Education, and Humanities Education. Ninety percent of our pre-service teachers are White and female. The remaining are a mix of Latinos, Native American and African Americas. The majority of our students are non-traditional (age 25 and older), and from working class background. Many are also working parents.

The research questions we intended to address were:

1. How do pre-service teachers perceive culturally responsive teaching of literacy?
2. How might a collaborative interdisciplinary approach influence pre-service teachers’ perceptions regarding culturally responsive literacy?

Interdisciplinary Strategies

We engaged participants in a variety of cross disciplinary curricular activities, such as sharing outstanding multicultural children’s literature selections, reflective journaling on relevant coursework, case studies, observations and classroom dialogue. These activities were designed to promote a deeper understanding of what culturally relevant teaching is and how to design learning experiences that address issues of diversity. This project also attempted to help pre-service teachers make connections across disciplines and find creative ways to apply these connections in their future practice.

Case Studies

In two of our courses, Oral and Written Language Development, and Elementary Literacy Development, case studies were used to help pre-service teachers understand how diversity is manifest at the individual level. By spending a significant part of their time outside of the college classroom working with children in elementary classrooms, students learned how
children respond to a variety of literacy challenges, and how each child brings a different world view into the formal classroom setting. Students were asked to develop relationships with the children in their case studies through observation, interviews, conducting informal literacy assessments, and discovering each child’s unique assets and learning style. Additionally, students were asked to meet and talk to the parents of their case study child in order to further their knowledge about the cultural background and social context of the individual. Each case study took place over one semester, and culminated in a portfolio and reflective paper in which they were asked to discuss what they learned (Appendix C).

Multicultural Children’s Literature

Multicultural children’s literature was presented across our courses as a means of developing cross cultural awareness, increasing our students’ knowledge of alternative perspectives, and helping them develop sensitivities in facilitating discussions about issues of race, class, gender and ability. We purposefully selected literature that challenged traditional narratives used in language arts and social studies classrooms. These works were integrated in a variety of assignments and activities in our classes, such as modeling read alouds, developing Readers Theatre, and facilitating critical dialogue on sensitive topics. While reviewing books for children, one particular activity was common to both the Elementary Literacy Education (methods) course, and the Humanities Education (methods) course. During this activity, pre-service teachers critiqued children’s literature based on criteria we provided for analyzing texts for racism, sexism and other potential biases (Appendix D), in hopes they would then use similar criteria when selecting books for their own classrooms.

Discussions and Reflective Journaling

The reflective component was important to us so that we could communicate with our students through their written reflections and related discussions. For the Oral and Written Language Development course, we selected a common text during alternating semesters in which we took turns teaching this course. The text, *Sociocultural Contexts of Language and Literacy* (Perez, 2004), provided ample material from which to base our discussions with students, as well as their written journaling. In particular this book provided a common core of readings related to diversity in language development, with a focus on distinct ethnic groups within the US with which most of our students in Wyoming were unfamiliar.

Students then formed teams to present chapters about a particular
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ethnic group in US culture. Reflective papers were also required in connection to this assignment. The class dialogues, chapter presentations and written reflections were strategies designed to infuse a culturally responsive component to this course on Literacy Development (see Appendix E).

Interdisciplinary Humanities Unit Development

An assignment completed in the Humanities methods course required pre-service teachers to develop a unit plan that integrated seven or more areas of humanities and included culturally relevant materials in: literacy, social studies, global education, geography, the arts and history. They also presented a short version of a culturally responsive lesson to their peers. Other subcomponents of the unit required them to write letters to students and parents at their practicum site regarding their unit, develop an evaluation plan, explore culturally relevant children’s literature regarding their theme and write a brief description of how they would incorporate these into their teaching.

Data Collection

Data were collected during class from all participants (45 students) enrolled in Literacy and Humanities courses between spring 2006 and spring 2007. These data consisted of questionnaires (Appendix A) given to individual students after they had taken at least one of the target courses with one of us. Additional data consisted of individual reflections and notes taken during class discussions toward the end of a subsequent target course taught by the other researcher. These notes and reflections gave further insights into students’ perception of culturally responsive literacy pedagogy, particularly as they perceived their learning across courses.

Questionnaires were assigned a number code for each respondent, and recurring themes were coded and synthesized for conceptual understanding with respect to each question (Bogden & Bicklin, 1992). By reviewing student responses to the questions and emergent themes, we were able to develop a rubric to determine students’ perceptions with respect to becoming culturally responsive educators. Criteria on the rubric are based on Banks hierarchical curriculum framework (2000), and Howard’s White identity orientations framework (1999). This rubric represents students’ perceptions during their senior year in methods courses.

We analyzed the questionnaires looking for statements and themes that conformed to the four level rubric we created. Statements from students were mapped into levels of culturally responsive awareness that correspond to the above-mentioned frameworks. We describe our rubric of Teacher
Awareness of Culturally Responsive Education as follows:

**Zero**: this level is most efficiently described as the *Fundamentalist* orientation (Howard, 1999), in which educators “demonstrate a monocultural and Eurocentric approach to teaching.” And “they resist multicultural education and pride themselves on preaching an assimilationist doctrine”. Some even hold onto beliefs of colorblindness, and “when confronted with the issue of their own racism, respond in anger, denial, or defensiveness” (p. 101).

**Novice**: this level correlates to Banks’ (2000) levels one and two, the *Contributions* and *Additive* Approaches to multicultural education. Pre-service teachers responses could be described as the “heroes and holidays”, or *tourist* approach to culturally responsive pedagogy. The underlying attitude indicative in this approach aligns to Howard’s *Integrationist* thinking where diverse perspectives are acknowledged, however, “Integrationist thinking does not question the legitimacy of Western hegemony and does not acknowledge the need for fundamental shifts in White consciousness. Although differences are acknowledged, a tacit acceptance of White superiority remains” (p. 103).

**Developing**: Bank’s *Transformational* and Howard’s *Transformationist*. At this level culturally responsive pedagogy is expressed as an integration of diverse perspectives into the curriculum, and empathy for diverse cultures is developed. At this level, teacher education students are beginning to deconstruct Western European dominance in the curriculum, and confront their own White privilege.

**Proficient**: Bank’s *Social Action*. There is a marked difference between level three and level four, in that pre-service teachers not only acknowledge and confront whiteness, and cultural dominance in the curriculum, they are committed to social action. They have moved from thinking about culturally responsive pedagogy as something they can just “tweak” in their teaching lessons, to teaching with intentionality towards changing the status quo, and becoming agents of change.

We reviewed the data both holistically and analytically, as both methods of analysis provided helpful insights into pre-service teacher understandings of culturally responsive literacy instruction. Individual questions revealed specific and interesting trends, which will be addressed in the findings. We followed with a holistic analysis of each questionnaire using all of the questions, which helped us to identify where individual students might be mapped across the rubric.

In order to determine students’ response to the integrated learning activities used by both researchers across courses, we analyzed data from class discussions and student reflections gathered throughout the coursework. For these data, we focused on students while they were taking Literacy Methods
because we knew that they had already taken or were concurrently enrolled in Oral and Written Language Development, and or Humanities Methods. Reflections and discussion notes from students were similarly analyzed for emergent themes that addressed culturally responsive pedagogy through interdisciplinary learning (Appendix B).

Finally, we reviewed our own anecdotal notes and themes that emerged during dialogues from the planning for teaching, during teaching and after teaching our courses. These notes were our own responses to learning from our students and each other.

**FINDINGS**

*How do pre-service teachers perceive culturally responsive teaching of literacy?*

Among all 45 students, the responses to questions #1, “What is literacy” did not reveal any connection to a cultural context. Students described literacy as something consisting of separate and discreet practices, such as “reading and writing”, “decoding”, “oral language” and “phonemic awareness”. Subsequently, we analyzed the following questions: “What does it mean to be culturally responsive?”, “What comes to mind when you think about a culturally responsive literacy classroom?”, and “In your opinion, what are some literacy practices that are culturally responsive?” in a similar manner, looking for phrases and terms that would correspond to the rubric. Under these questions, students’ responses indicated varying nuances and characteristics of understanding concepts of culturally responsive pedagogy. These subsequent responses also indicated close connections between culture, literacy and classroom practice.

Upon reviewing holistically, that is, evaluating each questionnaire as a sum of all the parts, we were able to identify general stages of culturally responsive awareness. Three main groups emerged, indicating *Novice* 33% of respondents, *Developing* 41%, and *Proficient* 26%.

*Zero*

None of our students exhibited characteristics of being at this level. There were no responses indicating blatant resistance to cultural diversity, or defensiveness of assimilationist views.
Novice

We found 33% of our students corresponded to Novice. At this level, students articulated that teaching about diverse cultures was important. However, they tended to express culturally responsive pedagogy as bringing in cultural celebrations, putting posters on the wall, wearing costumes and reading from books that have stories about people from different ethnic backgrounds. The following quotes were typical of those questionnaires:

Not being bias with students, gender, using sticks to call on students, always know your students background (Sue).

In this case, the student was referring to a strategy they have observed in which popsicle sticks with students’ names are drawn from a jar to make sure that each student has one turn to respond in a whole group activity. Sometimes called “equity sticks”, this practice only underscores the need to re-think practices that on the surface may seem equitable, but in practice do not attend to individual learning styles and cultural backgrounds. Another response was: “really the thing that comes to mind is that, I think it is a good thing to have” (Tiffany). This indicates that the pre-service teacher could agree with the concept of culturally responsive pedagogy, but either could not describe what it meant to them, or possibly they were not interested in providing a detailed response.

The following responses are what we interpreted as the tourist approach:

Reading books about different countries. Putting posters of different countries on the wall, asking about students’ backgrounds, talk about foods and other aspects of different culture (Lenny).

African American dances, word walls with all kinds of words, enchilada, Chinese food, some way to connect with all kids. Books of all cultures (Amy).

These responses in themselves are not ineffective; however, they represented a beginning level of awareness when not accompanied by an explanation of how these examples might be infused into the curriculum, or centered upon students’ realities, as we determined more evident in the responses that follow.
Developing

At this stage, pre-service teacher reflections indicate they are thinking about transforming instruction, and incorporating a variety of cultural perspectives into the mainstream curriculum. The largest number of our pre-service teachers (41%) fell into this category:

Celebrating all cultures in the classroom! Have posters and displays of books to include all ethnicities. Have students bring something to school that represents who they are (Jane).

Cultural responsiveness is the awareness that all children are not the same – in that they all have different environmental factors that shape who they are and drive who they become (Gloria).

There is also evidence that pre-service teachers at this level were able to identify some specific practices, such as,

Children can talk about or read/write about different cultures in their class and understand that they are all different (Jane).

Reading books aloud about the different parts of the country. … Send home a questionnaire about the child’s background for parents to fill out (Gloria).

Touch more on foreign languages while selecting books to reading you classroom. Have students keep a journal on new foreign words they encounter (Sidney).

These responses all demonstrate pre-service teachers’ ability to identify culturally responsive strategies that are infused into the curriculum.

Proficient

Pre-service teachers’ responses that were placed at this stage indicated they were moving towards self-transformation and social action. We determined that 26% of our students fit into this category. Culturally responsive pedagogy tended to be defined more towards acknowledging personal bias, changing the framework of the curriculum, as well as incorporating diverse
learning styles into the curriculum. The following quotes capture what we found to be characteristic of responses in the proficient stage:

This means to be aware of the children’s “world”. To know what influences them both in the home and the outside world and then using those influences to tailor lessons in personal growth and academic success. (Violet).

Being compassionate and empathetic to all cultures, races. Understanding there are different biases and dealing with ones own in an honest and proactive manner in order to educate yourself and hopefully eradicate the personal bias (Amber).

Teachers look at all learning styles, all cultures and incorporate them into the literacy program. Teachers use different techniques and types of literature to explore reading and writing (Connie).

Some specific strategies that were offered also indicate a more evolved way of planning for cultural diversity, and the ability to elaborate several strategies:

Think-pair-share (talking in pairs / small groups) - everyone child needs a chance to share. Have multilingual media - not all children are fluent in the dominant language. Encourage questions, not taunts - letting children know that questions are OK will discourage assumptions about culture and the child. Variety of teaching methods - not all children learn the same. Explore the world – exploring the world to understand) (Violet).

Sending home an introduction letter and asking families for help in getting to know their children better. Host events that involve the community. Include many cultural poster and pictures in classroom. Explore new cultures frequently. Give children the opportunities to share their cultures, but do not force them (Amber).
Be alert. Be aware of all cultures that enter your classroom. Find a way to connect with each child in your class and involve your students. They will listen and have the drive to want to learn different cultures (Connie).

These last quotes from pre-service teacher responses included and built upon the less evolved stages of culturally responsive literacy instruction. To us, they demonstrated that a significant number of our pre-service teachers exhibit a solid understanding of culturally responsive pedagogy, and can move into more sophisticated and thoughtful practices as a conscious effort to become teachers who are responsive to students from all backgrounds.

Moving towards a better understanding of culturally responsive literacy

At the beginning of our first semester pre-service teachers in Humanities and the Oral and Written Language courses showed a limited understanding of culturally responsive literacy. The following responses are evidence:

Culturally responsive literacy is where the teacher and students use literacy skills to grow and develop. That is what comes to mind when I think of a culturally responsive literacy environment (Anna).

What comes to mind is a classroom full of all kinds of literature from all different parts of the world (Dona).

Literacy which is taught in one language in all American schools. The use of American literature and typically the English language (Tinny).

Towards the end of the second and final semester with these students we collected and analyzed data from class discussions. Data revealed that interdisciplinary course work may have played a key role in helping pre-service teachers develop a deeper understanding of culturally responsive literacy practices. The question, “What have your learned so far in your method courses in this program about culturally responsive literacy responsive practices?” was intended to elicit cross disciplinary connections. Anna who had initially defined culturally responsive literacy as a “place where the teacher and students use literacy skills to grow and develop” during her first semester response showed greater awareness of cultural issues. In her exit reflection, she now described culturally responsive literacy as:
[A] place where teachers provide a variety of cultural experiences. These experiences relate to the students’ home background. Every student is given the opportunity to learn, regardless of their cultural backgrounds. In addition, from both humanities and literacy courses, I learned that when selecting children’s literature for my classroom, I need to consider selecting low, middle, and accelerated levels to meet the needs of diverse learners in my classroom. I also need to select books that are representative of cultures in the community and the United States. This material should also represent different values, gender, and different ages. I also learned the value of incorporating books with different languages. It is also important to use different teaching styles to meet the needs of diverse learners (Anna).

Dona also showed a better understanding of what culturally responsive literacy environments should look like. She offered the following written reflection, “You need to find good quality literature that addresses all students’ identities. You also must help them share their lives and appreciate the lives of others. A teacher does not allow their own culture to supersede those of their students”. Tinny who had initially described culturally responsive literacy as “the use of American literature and typically the English Language” apparently moved beyond this bias. She now described a culturally responsive literacy environment as one that has;

Children’s literature from different genres that foster multiculturalism. The teacher uses poster, labels, signs, and pictures that depict cultural differences. The teacher includes materials that reflect the cultures represented in his or her classroom. Such materials can be books on math, stories, science and other subjects so kids can see connection like we did in the methods classes (Tinny).

To check for deeper understanding, pre-service teachers were asked to share their personal reflections in small groups and explain why they thought the practices they had identified were culturally responsive. Group discussion notes revealed that where previously a majority of pre-service teachers had described being culturally responsive as, “Being aware of cultures in the world”, they now stated, “Culturally responsive practices are exceedingly important because they provide students with opportunities to appreciate their cultures and learn about other cultures.” In addition, “these practices help students to learn to appreciate, not just tolerate differences” (Group
Discussion Notes.

As part of their reflective journaling at the end of the courses, we also asked these pre-service teachers what they would change, if anything in our instruction to train culturally responsive teachers. These reflections indicated that the variety and depth of materials, and strategies used across our courses had influenced their thinking. Many expressed a desire to expand upon and continue to build their repertoire of resources to become culturally responsive educators. The following scripts are evidence:

The assignments we did were very meaningful. I enjoyed learning about other cultures in the context of literacy development. I also learned that you can not ignore differences in your class. You need to praise differences. Literature needs to be something every child can relate to no matter what their cultural background is. It is also important to involve families in literacy decisions for your class (Pete).

Like Pete, Mina was also quick to add other important leanings during the course of our classes: “The materials and strategies we learned were very helpful. For example: Always know your students, allow for diversity in your classroom and recognize that a child’s acquisition of language is influenced by the culture where he or she grows.” There were also other “Aha moments” that included phrases such as, “I did not know children bring culture into the classroom. Teachers need to be aware of other cultures and not take away a home language from a child” (Merry). Other “Aha” moments were characterized by statements such as, “I was shocked,” or “I was surprised at the connection of subject areas and how material used in, for example, a language arts lesson could be used for social studies or science” (Dona).

Like Dona, pre-service teachers who responded this way were beginning to develop a new consciousness regarding culturally responsive literacy and had a better appreciation of the course work to a point where they could now apply their learning into real classroom situations.

Summary of the Findings

After analyzing all of our data, we determined the following. On individual questionnaires completed mid way through our study, approximately 33% fell into the Novice stage, 41% fell into the Developing stage, while 26% fell into the Proficient stage. These findings suggest that the majority of our students (67%) are embracing culturally responsive teaching; with almost one half (41%) believing that culturally responsive pedagogy translates into adding diversity content into the curriculum. Considering that the largest
number of our students (41%) demonstrated a developing level of awareness, and desire to bring diversity into their practice, we are somewhat encouraged, and hope their development continues. A significant number, while fewer (26%), are reflecting upon transformative practices (i.e. transformation of self and the curriculum) and examining their own cultural identity. In order to become culturally responsive educators, they see themselves as “change agents”, seeking ways to change the status quo in the curriculum and learning environment. This is more encouraging, as the intentional collaboration and focus on culturally responsive literacy instruction in our courses may have been influential in their perceptions.

An interesting finding was discovered from pre-service teacher responses to the question, “what is literacy?” All 45 of the questionnaires analyzed showed a distinct understanding of literacy that was not connected to culture. It would be difficult to make a case that this finding indicates that our pre-service teachers do not understand the connection between culture and literacy. If the questions were worded differently, asking them to describe such connections, we believe many of them could have. However, this finding does imply that as instructors of methods courses, we could certainly be more explicit in emphasizing the socio-cultural as well as the psycholinguistic processes that are involved in literacy development. By doing so, we would then expect our students to make immediate connections between culture and literacy.

Also worth noting was the distinction between the individual questionnaires, and the reflections from class discussions, which occurred later in the study. While comparing these responses, we discovered that the predominant theme for the majority of students in the questionnaire highlighted inclusion of different cultures as a main component of culturally responsive instruction. In contrast, the reflections from class discussions seemed to emphasize a closer correspondence to the more evolved levels of our rubric, i.e. embracing the lived experiences of all students into the curriculum, accommodating different learning styles, and understanding one’s own cultural identity.

Towards the end of our study, as we reviewed evidence from student discussion notes, and final reflections, we saw patterns of student awareness that a culturally responsive pedagogy was woven through their education courses through interdisciplinary teaching. Students attributed their deeper understanding of the meaning of culturally responsive teaching to this approach, and expressed satisfaction with having a continuing theme in literacy and humanities course work. Many pre-service teachers who were involved in the study recommended that in future all students in the University of Wyoming, Casper Center be engaged in similar activities.

**DISCUSSION**
This study provides some insights into a culturally responsive pedagogy that acknowledges and addresses the unique context among isolated populations of rural white students, and addresses the challenges already established in the literature. Although there exists a large body of literature that defines multicultural awareness for teaching in diverse settings, particularly as applied in urban environments, we believe our findings will add to the knowledge base for teaching pre-service teachers in rural settings, where diversity is not as visible and pronounced.

As evidenced from the data collected from questionnaires, our students mostly appear to be moving through what Au (1998) describes as a mainstream orientation to diverse social constructivism, that is, they tend to embrace the similarities in teaching about diverse cultures, and see culturally responsive teaching as integrating multicultural perspectives into the mainstream curriculum without really changing the frameworks. The perspective from the larger group (41%) is reflected within the rubric we created as the developing stage of teacher awareness of culturally responsive pedagogy. A smaller number of individuals (26%), and the results of group and individual reflections later in the study indicate a more advanced stage of awareness.

Participants in the research have been given opportunities to reflect on culturally responsive literacy instruction and what it means to be a culturally responsive educator in a rural environment in a predominantly White part of the country. Having our students critically look at the cultural context of language development in literacy and humanities courses influenced their perceptions in a positive manner. Incorporating such content across disciplines might therefore be critical to preparing culturally responsive educators.

From a group of pre-service teachers with little exposure to ethnic diversity in the rural spaces of Wyoming, these data also provide a point of reference for the population in our area. In particular, these findings will be important to us in the preparation of coursework, as we address and refine our own pedagogical practices.

Researchers Insights

From this project, there are many stories to share and even more that we learned. Helping pre-service teachers gain a better understanding of culturally responsive literacy practices was an important step for us as teacher educators in preparing teachers in rural settings. An interdisciplinary approach to addressing diversity issues across courses eases the burden of one faculty or one course being perceived as the educational maverick, and
distributes the responsibility for teaching topics that are considered sensitive, controversial, and unpleasant across the teacher education program. Topics such as classism, racism, linguistic privilege, gender bias, and ethnocentrism were presented and taught in different ways, as each of us came with distinct backgrounds and areas of expertise. In addition, we found collegial support to be critical as we worked together to unpack our experiences and struggles teaching a culturally responsive curriculum.

While planning and implementing this study, interdisciplinary themes emerged that provided rich opportunities to examine the curriculum and our own understandings of culturally responsive instruction. We shared common readings, the challenges of teaching and scholarship, and developed a deeper appreciation of each other’s perspectives across disciplines. By exploring the learning experiences we felt would have bearing upon outcomes for our student participants in this study, we were also developing interdisciplinary ways of knowing about culturally responsive pedagogy. Hence, this study created spaces for metacognition about our parallel work, while searching for student understanding of our intentions of advancing culturally responsive pedagogy.

Students’ perceptions of what we do are different, particularly when teaching complex issues and diverse perspectives that bump up against students’ identities and claims to truth, resulting in resistance, and often negative reactions. Knowing for example, that Researcher One, as a White woman, comes with entrée into a community of White pre-service teachers, making it possibly easier to approach some subjects with students. She feels less effective, however, talking about topics in which she has not suffered, such racism in the US. For Researcher Two, on the other hand, it is easier to talk about personal experiences as a woman of African roots in a White culture, however, her perspective can sometimes be perceived as blaming the majority culture, and sometimes students take offense. One lesson learned from these experiences, in which our distinct cultural perspectives and racial identities play a role, is to use other forms of materials to convey important themes. Children’s literature, primary source materials (e.g. biographies and photo journals), and guest speakers can play a leading role, as they allow voice from more than one source to convey an important message. In conclusion, we hope to improve our own understanding of how to present these issues to our students.
IMPLICATIONS AND DIRECTIONS FOR FUTURE STUDIES

As suggested, infusing a culturally responsive pedagogy throughout education courses in teacher preparation can provide an integrated and solid foundation for pre-service teachers to develop their own practice. A follow up study into our participants’ teaching practices would further inform the question of whether interdisciplinary teaching of culturally responsive pedagogy has taken hold in real classrooms. It also might determine whether other factors are more influential in teacher development that may either counter affect, or support our work with pre-service teachers.

An emerging body of literature has revealed the challenges faced in teacher education programs in addressing trends of increasing diversity in rural areas (Huerta & Flemmer, 1999; Irwin, 2005; Powell, et al., 2005; Hess & Verdi, 2001). It has been established that White pre-service teachers from the majority culture struggle with issues of diversity and multicultural awareness (Helm’s, 1993; Hill-Jackson, 2007; Howard, 2000; Sleeter, 2001). In rural areas, lack of exposure to diverse populations and pervasive majority cultural influences leave many unprepared or unwilling to embrace a culturally responsive stance towards diversity (Hess & Verdi, 2001; Huerta & Flemmer, 2005; Irwin, 1999). This problem creates steeper learning curves for pre-service teachers and unique struggles for teacher educators.

The lack of research on successful pedagogical approaches for educating pre-service teachers in isolated rural areas remains a critical area for further investigation. Furthermore, scholarship on the White majority culture has mostly ignored specific educational attention to poor and working class ethnic white students as a focus of study in multicultural education (Heilman, 2004). Since a number of pre-service teachers in rural areas come from poor and working class families, this aspect of diversity needs to be further explored. Our study has identified some promising interdisciplinary practices that may have value for teacher education programs in similar isolated contexts, or hybrid environments. The findings have expanded upon existing studies and should add to the knowledge base for multicultural pre-service teacher education in rural communities. Through innovative and collaborative efforts, our study suggests teacher education programs in rural contexts can help pre-service teachers in rural White America develop skills that will help them become culturally responsive teachers in their own classrooms and respective disciplines.

When two faculty members come together to collaborate on issues of diversity, there is self-reflection, deeper thinking and critical analysis of one’s own praxis. The jointly constructed knowledge has reinforced our philosophies, and provided more impetus to continue working transformative approaches into the teacher education curriculum. Based on our experience,
we believe that interdisciplinary collaboration can provide important information about teaching across disciplines, which helps students see connections, instead of compartmentalizing what they learn from one discipline to another. By infusing themes of diversity as a foundation, rather than an add-on to teacher preparation programs, we are attending to a vision that our future teachers will inspire in their own students; to see connections that will help them become critical thinkers and creative problem solvers in an increasing complex and diverse society.

References


Banks & C. Banks (Eds), *Handbook of research on multicultural education*, (pp. 44–64). New York: Macmillan.


APPENDIX A

Questionnaire: Pre-service teacher understanding of culturally responsive literacy instruction in a White rural community

1. What is literacy?
2. What does it mean to be culturally responsive?
3. What comes to mind when you think about a culturally responsive literacy classrooms?
4. a. In your opinion what are some (about 5) literacy practices that are culturally responsive? b. Why do you think these practices are culturally responsive?
5. From previous or current practicum experiences, describe some culturally responsive practices that you have observed or participated in.

APPENDIX B

End of Study Reflections: Interdisciplinary Learning - Discussion Activity

1. What have you learned so far in your methods courses in this program about culturally responsive literacy practices?
2. What do you still need to know to be a culturally responsive educator?
3. Discuss your answers with your table group. Choose a facilitator who will ensure that everyone has the opportunity to share what s/he wrote, and respond to each other. Choose a note taker who will write down a synthesis of the group discussion.

Turn in your individual & group reflections together.

APPENDIX C

Common Assessment Oral and Written Language: EDEC 4320
Abbreviated Guidelines for Case Study Assignment

Literacy Buddy Portfolio: Arrange to work throughout the semester with a K-1 or 2-3 Literacy Buddy. Gather relevant literacy data, such as observations, parent interviews, an oral language sample, story retellings, concepts about print, motivation interview, etc. Keep the data and analyses in
a portfolio; include a final summary of your Literacy Buddy’s development and recommendations. Your portfolio must integrate course concepts regarding children’s language acquisition about reading, writing, listening, and speaking. Your portfolio must reflect knowledge of how diversity in home culture, gender, learning style, etc. can influence language acquisition. References to professional readings support above, and are carefully chosen for their relevance.

APPENDIX D

*Literacy and Humanities Methods Parallel Assignments*

**Humanities Methods: EDEL 4109 – Assignment for Analyzing Texts**
- Is it fiction or fact?
- What is the figurative or literal meaning?
- Is it accurate or inaccurate?
- To what degree is the information biased or objective?
- Are there inferred as well as explicit messages?
- Is the author’s message subtle or obvious?
- Is there both cognitive and affective appeal
- What is the author’s purpose? (Duplass, J., 2004 p. 189).

**Literacy Methods: EDEL 4309 – Assignment for Analyzing Texts**
- Check the illustrations
- Check the story line
- Look at the lifestyles
- Weigh the relationships between people
- Note the heroes
- Consider the effects on a child’s self image
- Consider the author’s or illustrator’s background
- Check out the author’s perspective
- Watch for loaded words
APPENDIX E

Oral and Written Language Development Common Assignment Used by Both Instructors

Special Topics: Paper and Presentation on Language & culture. Small groups of students or individuals select a special topic related to assigned reading (readings from Perez or other) in which they have an interest. Students demonstrate, guide discussion, mini lecture, or share and show the selected topic in a short 20 minute presentation. Powerpoint presentations are fine. Interactive discussion and participation is required. Collaborative projects must reflect individual and group contributions. An individual paper is turned in. Demonstrate improved skills in research & writing. Use APA appropriately.

Language and Literacy in diverse communities (Perez Chapters): American Indian and Alaska, Native Communities (4), Puerto Rican Communities (5), Vietnamese American Communities (6), Chinese American Communities (7), African American Communities (8), Spanish Whole Language Classroom (9)

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