Place in Service-Learning: A Case Study of the Connection Between Sense of Community and Service-Learning with Rural Teachers

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Abstract

Research on teacher motivation to implement service-learning is yet to explore the role of teachers' sense of community as a defining factor in implementing service-learning. This case-study of six teachers explores the intersection of rural teachers' motivation to implement service-learning and their sense of community. The Sense of Community Index (SCI-2), as well as qualitative data from interview and observation, was analyzed to understand what, if any, connection exists between a teacher's high sense of community and his or her use of service-learning. Exploratory findings indicate that rural teachers with a high sense of community are more likely to implement service-learning than their low sense of community colleagues. These findings suggest that the SCI-2 may be a useful tool in working with pre-service and practicing teachers to predict and support the development of teachers' sense of community and their commitment to service-learning.

Keywords: service-learning, rural education, sense of community

While recent research has documented the motivations underpinning higher-education faculty implementations of service-learning (Abes, Jackson & Jones, 2002; O'Meara, 2008; O'Meara, Sandsmann, Saltmarsh & Giles, 2009), there is a limited amount of research that focuses on what motivates K-12 teachers to implement service-learning into their classroom and instruction (Krebs, 2006). Similar to the lack of research focused on service-learning and K-12 teachers, research specific to rural teacher motivations has not kept pace with the increasing amount of research devoted to urban teachers (McClure & Reeves, 2004). Therefore, as an explorative research project, this article seeks to start a dialogue about the intersections between motivation to implement service-learning and an individual teacher's connection to community. More specifically it asks the question, "what, if any connection, exists between rural teacher motivations toward and implementation of service-learning and their sense of community?"

Teacher Motivation

In the past seven years, several meta-analyses of faculty motivations to implement service-learning

(O'Meara, 2008; O'Meara et. al., 2009), have identified some clear factors that motivate faculty to implement service-learning. These factors include increased student learning, institutional support, personal identify and demographics (Abes, et. al, 2002, Hammond, 1994; McKay & Rozee, 2004, O'Meara & Niehaus 2009).

Research also suggests that another factor motivating faculty to implement service-learning is connection to community (Colbeck & Janke, 2006). However when exploring motivations based on community connections, the research suggests that connection to community centers around a faculty member's particular connection to an individual nonprofit agency or specific issue (Colbeck & Janke, 2006; O'Meara & Niehaus, 2009). While recent research by Kimball & Thomas (2012) has begun to apply place-based theory to a university's community engagement, research on faculty motivation, both within higher education and K-12, has not yet explored the intersections of an individual teacher's sense of community and their intent to utilize service-learning within his/her instruction.

Place versus Community

The study of place has gained attention in numerous fields including architecture, ecology, geography, anthropology, philosophy, sociology, literary theory, psychology, and cultural studies (Gruenewald, 2008). Within the field of education, place as an important construct is found in the areas of: life-long teacher education (Theobald & Howley, 1998; Howley & Howley, 2005); school leadership (Budge, 2005); rural student achievement (Theobald, 1995; Beck & Shoffstall, 2005), and rural school reform (Barley & Beesley, 2007). Furthermore, conversations about the connection between critical pedagogy and are unfolding through the work of Gruenewald (2008), Theobald (1997), Bowers (2008), and Nespor (2008).

While such research paves the way for the serious consideration for how place impacts outcomes from developing highly-qualified teachers to improving achievement in mathematics, much of this research either treats places – such as rural and urban – as unchallenged constants or focuses in such theoretical and discursive detail on what place actually means that it becomes difficult to formulate a clear definition for it. Adding to the complication and confusion, research often uses the terms place and "community" interchangeably. Nespor (2008) reminds us that "defining a connotation-rich term like 'place' is always going to be difficult" (p. 478). However, such a definition is critical.

Towards that end, this research adopts Rodman's (1992) definition of place as being both geographical and social; organized around the meanings individuals and groups give to a place as unique and separate from other places. Place is marked by "shared meanings" of the individuals within it (Alvesson & Berg, 1991). It is these "shared meanings" that determine even the geographic boundaries of a given place. As an example of this let's look at Adams, the pseudonymous rural town in which this research was conducted: there, a shared meaning of the majority of residents in this geographic area was that the "place of Adams" extended into the nearby Valley including "pine creek" (pseudonym), but did not include the nearby village that was just a three-minute drive from the center of town.

We can contrast this sense of place with a sense of community. While there was a shared meaning of Adams as a place, that was both geographic and inclusive of a variety of social structures, the community did not appear to include the same boundaries. While it was not always explicitly stated, community members of the place of Adams were often identified as the families that had farmed the land for generations. Families that had come to the place through the migrant labor movement often felt they belonged to a different community, one that spoke Spanish and shared cultural norms from Mexico.

Cohen (1985) reminds us:

The "community" as experienced by its members—does not consist in social structure or in the 'the doing' of social behavior. It inheres, rather in 'the thinking' about it. It is in this sense that we can speak of the "community" as a symbolic, rather than a structural, construct. In seeking to understand the phenomenon of "community" we have to regard its constituent social relations as a repository of meaning for its members, not as a set of mechanical linkages. (p. 98)

In Adams, there are historical, social, economic and ethnic factors that shape each of the members "thinking of" and thus, their definition of community. The next questions, then, is "can that 'thinking of' community be measured?"

Measurement of Sense of Community

In an effort to explore both individual and communal action as it pertains to a connection with sense of place, community psychologists have worked to quantify sense of community as a catalyst for action. However, despite an interest over the past thirty years to define a sense of community there is inconsistency on a standard measurement for Sense of Community (SOC). Several reviews of SOC measurement (Puddifoot, 1996, Chipuer & Pretty, 1999) settle on two indices as those most used and respected in the field: Glynn's (1981) Perceived Sense of Community Index and McMillan and Chavis' (1986) Sense of Community Index. Research on the Sense of Community Index suggests that "it is the most used and broadly validated measure of SOC" [authors' emphasis] and has clearly defined subscales that can be compared with what educational researchers have labeled as characteristics or habits of place (Chavis & Pretty, 1999, p. 637).

McMillian and Chavis (1986) developed the Sense of Community (SCI-2) scale based on the definition of sense of community as "a feeling that members have of belonging and being important to each other, and a shared faith that members' needs will be met by the commitment of being together" (Chavis, Hogge, McMillan & Wandersman, 1986, p. 11). The measure, which originally consisted of 23 openand closed-ended items, measures participants in four subgroups. According to McMillan and Chavis (1986), these four subgroups represent one's sense of place and include:

- 1. Membership;
- 2. Influence;
- 3. Fulfillment of needs; and
- 4. Emotional connection.

However, as the development of this tool occurred in community psychology, it has yet to be utilized in educational research. Therefore, this study is the first to utilize the Sense of Community Scale (SCI-2) to establish individual teacher's sense of community and to explore, if any connection exists between sense of community and classroom practice.

Methodology

This research was born out of a larger case study of six rural teachers that explored the connections between individual teacher's sense of community and their teaching practice. Case study was chosen with the understanding that case study "is not a methodological choice but a choice of what is to be studied" (Glesne, 2006, p. 13). Since this research studied teachers in the naturalistic settings of their classrooms, case study was an appropriate choice. Furthermore, the research was guided by constructivist grounded theory as a "flexible, heuristic [of] strategies rather than formulaic procedures" (Charmaz, 2000, p. 510). While embracing many of the procedures of grounded theory such as coding and journaling, a constructivist stance also encourages the use of selective or focused coding. This type of coding allows for more conceptual analysis of data. The stance also asks researchers to use reflexive journaling, to unmask the researchers and their perceptions through the process of data collection, analysis, and reporting (Charmaz, 2000, p. 516).

In addition to utilizing specific practices within the theory of constructive grounded theory such as focused coding and reflexive journaling, Guba (1981) delineated four criteria of trustworthiness that any rigorous qualitative research design must heed. Krefting (1991) states that "not all qualitative research can be assessed by the same strategies," and provides a table (see Appendix A) that outlines strategies which were used in this qualitative analysis (p. 214).

Steps of the Research Process

The first step in data collection was to determine the community orientation of each participant. To obtain participants, the researchers presented this opportunity to one rural middle school in the mountain West of roughly 35 teachers. Six participants independently selected to participate. After informed consent, the six participants were given McMillan and Chavis' (1986) Sense of Community Index (SCI-2) to determine their sense of community. While the fundamental research approach was qualitative, this quantitative measure allowed for the identification of those teachers with a strong sense of community. Because the SCI-2 assigns a quantitative number to a sense or feeling, utilizing such a measure ensured that participants were assigned to a group not based on their or the researchers interpretation of their actions or perceptions of self but based upon their SCI-2 score, again allowing for a consistent assignment to group. Within the six participants, two scored with a low sense of community, two with a medium and two with a high sense of community.

The second step in the process was to conduct interviews. Each of the participants was interviewed once during the first two weeks of data collection. The interviews took between 30-60 minutes and were audio-recorded and transcribed. In all six cases, a structured interview protocol was used (see Appendix B for interview protocol).

The third step in the data collection process was conducting classroom observations using an observation protocol (see Appendix C for observation protocol). Each participant was observed four times throughout the study. Observations spanned an entire class period and promptly began at the opening class bell and continued until the ending bell. As an additional credibility strategy, the researchers debriefed two of the four observations with each teacher within two days after the observation was made. The debriefing was organized using an adapted version of the classroom observation protocol.

Data Analysis

Throughout the data analysis process, there were

four major points of analysis. Figure 1 graphically represents these points (see Appendix D for illustration of data analysis). The first data analysis point was the scoring of the Sense of Community Index-2 based on the instructions given by the tool. Following the administration and scoring of the SCI-2, the next step in data analysis was coding participant interviews. To code, key points within each interview were marked for codes and compared using Charmaz' (2005) constant comparison method. Convergent codes for each of the individual interviews were then grouped as similar concepts using a branching tree diagram (see Appendix E, Figure 2, for example of branching tree diagram for Roger, a study participant.)

Finally, data reduction matrixes were used to reduce the observation data. This reduction was done by transferring data from the four individual observation protocols onto one master sheet to look for consistent practices in each of the fifteen measured continuums (see Appendix F for data reduction matrix for observation data). From the reduction, a short synopsis for each participant's practice was written to encapsulate the general demeanor of the classroom and the participants' approach toward knowledge. These synopses were use as member checks and shared, via email, with each of the six participants.

Findings

The larger purpose of this study was to examine what sense of community exists for rural teachers and what, if any, impact that sense of community has on a rural teachers' practice. While teacher's motivation to implement service-learning was not a specific focus of the research questions for the study, one of the unexpected findings was that the two teachers with the highest sense of community, Kate and Abby (both pseudonyms), also implemented service-learning.

This exploratory finding corresponding use of service-learning with a high sense of community suggests a connection to the study's larger findings that rural teachers with a high sense of community had different motivations around three major areas: 1) coming to a rural place 2) connection to community, and 3) insight into the community. Branching tree diagrams can be used to illustrate comparisons of participants, thus directly contrasting the teachers (see Appendix G for illustration comparing Abby and Roger, teachers with the highest and lowest sense of community).

There are clearly many differences between Roger and Abby; however, it is their feelings or what this research calls "insight" that best characterizes an important difference and thus motivation for these two teachers. While both teachers voiced concerns that rurality was limiting, that limitation was perceived in very different ways. Roger talked frequently about helping students obtain the skills to be in the world, while Abby wanted students to consider a future rural life much like her own. That is, Roger as a kind of outsider, wanted to shape students in his own image, to move away from and beyond what he felt was a stifling, small-town way of thinking. In contrast, Abby wanted students to gain knowledge in order to return to the place from whence they came, enriching it and ensuring its survival as a community. It is our belief that this motivation to either stay or leave rural life may also have implications on how and why teachers engage students in community-based service-learning.

O'Meara and Neihaus (2009) found that more than half of their faculty participants cited a motivation to use service-learning as a way to shape civic or moral dispositions. Moreover, this goal of civic disposition appeared to be rooted in a sense of social justice. One of the most interesting findings of this study is the teacher, Roger, who often mentioned justice and equity and chose novels in his classroom that centered on such topics, did not implement service-learning. Rather it was Kate and Abby, who both identified as insiders and were committed to preserving the rural roots of the community that chose service-learning. Moreover, this motivation to implement service-learning appeared to move beyond previously cited motivations of an interest in a community issue to a seemingly deeper interest in preserving or sharing a rural way of life. (Colbeck & Janke, 2006; O'Meara & Niehaus, 2009).

Although neither teacher identified what they were doing as "service-learning," both teachers implemented extensive service projects as a part of their course design, both formally and informally. For these teachers, it seemed to be just a way of life in their classrooms and choice of instructional practices.

For example, when discussing her concerns that

the younger generation may no longer have a sense of where things come from, Kate describes the Ag Expo her high school students put on for area elementary students:

We do an Ag Expo—we'll have 400 and 600 elementary kids at the fairgrounds, and they learn about bees, they make applesauce, they make butter and they milk a cow. We [the students in her classes] grow sugar beets, cotton, peanuts, wheat, and potatoes in the greenhouse all year for it. So where your clothes come from, where milk comes from. We have horses, pigs, chicken, beef cows, dairy cows, sheep . . . (Beyer Hansen, 2011, p. 145)

For Kate, service is just one of the ways for students to connect with the agrarian roots of the community. However, service for Kate also meant pitching in during a time in need in an informal way. When a local boy from the community was killed in a car accident, Kate described the way in which her students met at the house of the family who had lost their son.

We ended up with over 20 kids out there. We planted the garden. I had more Roto-tilllers, lawn mowers and edgers than—[we] planted all the flowerbeds, the garden, mowed the lawn, everything, and the kids were so happy when they were finished. They just felt so good about it. There's the nice thing. (Beyer Hansen, 2011, p.136)

The same was true for Abby. As a part of her eighth grade science class, Abby wrote a grant in order to buy GPS monitors and utilized these GPS monitors to track noxious weeds for the local county extension office. While Abby never directly attributed this service to her sense of community, she did articulate her strong feelings that:

[the agricultural community] feel[s] like their kids are actually being alienated from them in the school system—in terms of science and natural resource speaking—like they're learning about these far off things. And yet you ask some of these kids about something right out their back door and they can tell you. (Beyer Hansen, 2011, p. 135)

This desire to bring students closer to home, to understand the creek that runs behind the school or the type of plants that are native and sustainable, appeared to strongly motivate Abby to service. This research makes the claim that place matters, particularly in rural places, in K-12 teachers motivation to implement service-learning. Data collected from both interviews and observations suggest that there is a difference between teachers with a high sense of community and those with a low sense of community, and moreover, this research suggests that this difference may have implications on K-12 rural teachers' decision to implement service-learning.

Clearly, this is a very early and explorative study with several limitations, including a single rural site and a small number of participants. However, there are several implications of this study.

Implications

While more research is most certainly needed to connect sense of community to a commitment to service-learning, this study suggests the Sense of Community Index (SCI-2) has implications as a tool to understand and develop teacher's motivations towards implementing service-learning into their own classroom. It suggests that those individuals with higher senses of community, and established relationships with the place in which they practice, are more likely to implement service-learning within their classrooms. That, indeed, service-learning for these individuals is so deeply ingrained within their instructional practice set that they do not consider that it would not occur within the learning contexts they provide.

This is encouraging information when one considers what this may mean for the teacher education programs preparing future teachers. Specifically, this research suggests that teacher education programs interested in place-based pedagogy and service-learning could utilize the SCI-2 as a tool for:

• Pre-service teachers to reflect on their sense of community upon entering into the program, and

• Facilitating or developing an understanding of rurality and place with pre-service teachers who express an interest in working within rural contexts.

While our particular study focuses on a rural context, we see relevance for all teacher education professionals who acknowledge that schools are "of place" and that service-learning demands even more attention to the community in which students are serving and learning. While service-learning and place-based education separately have gained a footing in the field of education, the connection between place, service-learning, continuing teacher education and preparing pre-service teachers is ripe for exploration. Therefore it is our hope that these initial findings begin to ask the question, "what larger role does place occupy when thinking about the pre-service teacher education and the role of service-learning within it?"

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References

- Abes, E. S., Jackson, G., & Jones, S. R. (2002). Factors that motivate and deter faculty use of service-learning. *Michigan Journal of Communi*ty Service-Learning, 9(1), 5-17.
- Alvesson, M. & Berg, P.O. (1991). Corporate Culture and Organizational Symbolism. Berlin: De Gruyter.
- Barley, Z.A. & Beesley, A.D. (2007). Rural school success: What can we learn. *Journal of Research in Rural Education*, 22(1), 1-17.
- Beck, F.D. & Shoffstall, G.W. (2005). How does rural schools fare under a high stakes testing regime. *Journal of Research in Rural Education*, 20(14), 1-12.
- Beyer Hansen, Faith. (2011) Place, Purpose, and Practice: A Case Study Examining Rural Teachers' Sense Of Community and Its Impact in the Classroom (Doctoral Dissertation). Retrieved from http://scholarworks. boisestate.edu/td/273 (273).
- Bowers, C.A. (2008). Why a critical pedagogy of place is an oxymoron. *Environmental Education Research*, 14(3), 325-335.
- Budge, K.M. (2005). Place as problem or possibility: The influence of rurality and a sense of place on leaders in one rural school district. Retrieved from Dissertation Abstract International, 66(7), 2448. (UMI No. AAT3183343).
- Charmaz, K. (2005). Grounded Theory in the 21st Century: Application for Advancing Social

Justice Standards. In N.K. Denzin and Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.

- Chavis, D.M., Hogge, J., McMillan, D., & Wandersman, A. (1986). Sense of community through Brunswick's lens: A first look. *Journal of Community Psychology*, 14, 24-40.
- Chavis, H.M. & Pretty, G.M.H. (1999) Sense of Community: Advances in measurement and application. *Journal of Community Psychology*, 27(6), 635-642.
- Chavis, D.M., Hogge, J., McMillan, D., & Wandersman, A. (1986). Sense of community through Brunswick's lens: A first look. *Journal of Community Psychology*, 14, 24-40.
- Chipuer, H.M. & Pretty, G.M.H. (1999) A review of the sense of community index: Current uses, factor structure, reliability and further development. *Journal of Community Psychology*, 27(6), 643-658.
- Cohen, A. (1985). *The Symbolic Construction of Community*. London: Routledge.
- Colbeck, C., & Janke, E. (2006) If not for the rewards...Why?" Theory based research about what motivates faculty to engage in public scholarship. Symposium presentation and the Annual Conference of the Association for the Study of Higher Education. Anaheim, CA.
- Glesne, C. (2006). Becoming qualitative researchers: An introduction. Boston: Pearson.
- Glynn, T.J. (1981). Psychological sense of community: Measurement and application. *Human Relations*, 34, 780-818.
- Gruenewald, D. (2008). The best of both worlds: A critical pedagogy of place. *Environmental Education Research*, 14 (3), 308-324.
- Guba, E.G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Resources Information Center Annual Review Paper*, 29, 75-91.
- Hammond, C. (1994). Integrating service and academic study: faculty motivation and satisfaction in Michigan higher education. *Michigan Journal of Community Service Learning*, 1, 21-28.

- Howley, A. & Howley, C.B. (2005) High-quality teaching: Providing for rural teachers' professional development. *The Rural Educator*, 26(2), 1-6.
- Kimball, M.J. & Thomas, D.F. (2012). Place-Building theory: A framework for assessing and advancing community engagement in higher education. *Michigan Journal of Community Service Learning*, 18, 19-28.
- Krebs, M. (2006) Service-learning: Motivations for K-12 teaches. (Doctoral dissertation). Retrieved from ERIC. (ED498642).
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. The American Journal of Occupational Therapy, 45(3), 213-223.
- McClure, C & Reeves, C. (2004). Rural teacher recruitment and retention: Review of the research and practice literature. Retrieved from http:// www.edvantia.org/products/pdf/Rural%20 Recruitment%20Report.pdf
- McKay, V. C., & Rozee, P.D. (2004). Characteristics of faculty who adopt community service learning pedagogy. *Michigan Journal of Community Service-Learning*, 10(2), 21-33.
- McMillian, D.W., & Chavis, D.M. (1986). Sense of community: A definition and theory. *Journal* of *Community Psychology*, 14, 6-23.
- Nespor, J. (2008). Education and place: A review essay. *Educational Theory*, 58(4), 475-489.
- O'Meara, K. (2008) Motivation for public scholarship and engagement: Listening to exemplars. *Journal of Higher Outreach and Engagement*, 12(1), 7-29.
- O'Meara, K., & Niehaus, E. (2009). Service-learning is: How faculty explain their practice. *Michigan Journal of Community Service Learning*, 16(1), 17-32.
- O'Meara, K., Sandmann, L., Saltmarsh, J., & Giles, D. (2009). Studying the professional lives and work of faculty involved in community engagement. Unpublished manuscript.
- Puddifoot, J. (1996). Some initial considerations in the measurement of community identity. *Journal* of *Community Psychology*, 24(4), 327-337.
- Rodman, M. (1992). Empowering place: Multilocality and multivocality. *American Anthropologist, New series*, 94(3): 640-656.

- Theobald, P. (1995). Accountability and the struggle over what counts. *Phi Delta Kappan*, 76 (6), 462-466.
- Theobald, P. (1997). *Teaching the commons: Place, pride and the renewal of community*. Boulder, CO: Westview Press.
- Theobald, P. & Howley, C. (1998) Public purpose and the preparation of teachers for rural schools. *Teacher Educator*, 33(3), 150-164.

Appendix A Table 1. Strategies for Trustworthiness

Criteria for Rigor	Strategies
(Lincoln and Guba, 1985)	(Krefting, 1991)
Credibility	Prolonged Reflexive Experience
	Reflexivity (Reflexive Journal)
	Triangulation
	Final Member Check
Transferability	Nominated strategy—SCI-2
	Dense Description of the Participants
Dependability	Triangulation of methods: interview, observation. and
	journaling
Confirmability	Triangulation of methods: interview, observation, and journaling

Note: Adapted from Krefting, 1991, p. 217.

Appendix B Interview Protocol

I would like you to talk about your understanding of what it means to be "from Adams" either for yourself or for your students and how that connection to this community has or has not shaped what you do in the classroom. If you have any questions during the interview, please feel free to ask them. Also, if at any time during the interview, you would like a break or feel uncomfortable, please let me know.

1. Please describe your teaching experiences. (Context Question)

- a. Number of years taught
- b. Number of schools taught
- c. Subject/grade levels taught

Please describe how you came to teach at Adams Middle School. What factors most influenced your decision to teach in this school? (Relevance: RC #1—probing if teaching cite rurality as a factor that influenced decision)

Adams Middle School serves a rural town. Can you describe your connection to the larger community of Adams. (Relevance: RQ #1-What are teachers connections to the community)

Building on the last question, can you give me an example of a time when you felt that the larger community of Adams had a direct impact on your classroom? How did you feel about that impact? (Relevance: RQ #1—does the community impact the teachers' individual classroom.)

Can you describe the typically life trajectory of a Adams Middle School student? Or in other words, in your opinion what happens to the majority of HMS students after they leave the middle school? the high school? (Relevance: RQ #2: What do teachers believe they are preparing the majority of students for)

Now, I want to switch gears a bit to talk about your teaching practice. More specifically, I want to give you an opportunity to describe the things that most impact the choices that you make in the classroom. Since it is sometimes difficult to talk about teaching in the abstract, I am going to give you a scenario and ask you to base your responses on this scenario. Remember this is only a scenario.

The school board has recently argued that with all the emphasis on standardized testing—and the universal skills and knowledge sets connected to such tests—the students in the district do not seem to understand what it means to be "from Adams" anymore. More specifically, they argued that students no longer know the history of the town or seem to understand what it means to live in rural place. They are worried that students today will not be able to take over the major roles and responsibility of the community. They are asking teachers to consider gearing aspects of classroom instruction towards providing opportunity for students to learn more about the community from which they are from and the skills/knowledge necessary to support the community in the future?

1. What would be your reaction to the school board argument? Would you agree with their claim that students do not know what it means to be "from Adams?"

2. How important do you think it is for students to know the history of the community? What skills/ sets of knowledge do you think students need to have? Are those skills/sets of knowledge directly connected to living in a rural community?

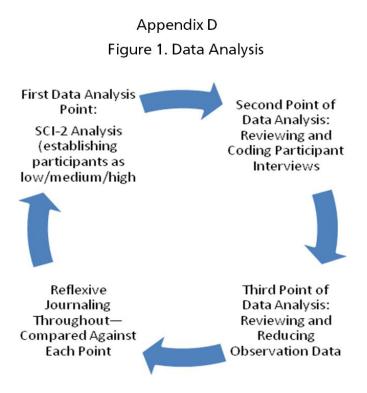
3. If you were to act on the board's request to incorporate more local knowledge into your curriculum, what would you include? Would you need to find sources in the community or do you feel you have enough experience/knowledge of your own to add this to your curriculum?

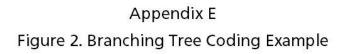
This covers all the things that I wanted to ask. Is there anything you care to add?

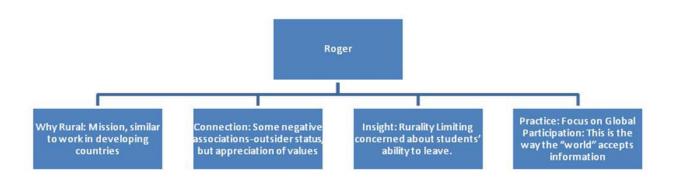
Appendix C Observation Protocol

Class	room Observation Protocol
Teacher's Name:	
Date of the Observation:	
Knowledge is presented as	Knowledge is rarely presented
facts isolated from wider bodies	
of knowledge.	bodies of knowledge
Description of Practice	Reflection on Practice
Knowledge taught is not related	Knowledge taught is always
to the lives and experiences of	
the students.	
Description of Practice	Reflection on Practice
Teachers do not explain how	Teachers do explain how
assignments are related	assignments are related
	assignments are related
Description of Practice	Reflection on Practice
Work is easy	Work is hard
Description of Practice	Reflection on Practice
Knowing the answers is valued	Value creativity and expression
Description of Practice	Reflection on Practice
V and de franktische de	Therefore is the secole data in
Knowledge from textbooks is more highly valued.	Textbook knowledge is validated by experience
more mgmy vance.	vandated by experience
Description of Practice	Reflection on Practice
Discussion of challenges to the	Discussion of the challenges to
Status quo rarely occur	the status quo frequently occur
Description of Practice	Reflection on Practice

T:	D 1 1 1 1 1			
Instruction is typically copying	Rarely copying notes and writing			
notes and writing answers to	answers to factual questions			
factual questions				
Description of Practice	Reflection on Practice			
Work is evaluated in terms of following steps. My way or its	Work is sometimes following			
wrong	steps, but students have choice and are rewarded for originality			
Description of Practice	Reflection on Practice			
Writing is filling in blanks on worksheets	Writing is taught in workshop			
Description of Practice	Reflection on Practice			
Both students and teachers focus on grades as the objective	Grades are not the objective			
Description of Practice	Reflection on Practice			
Student access to materials and movement is restricted	Students access is not restricted			
Description of Practice	Reflection on Practice			
Students are rewarded for passivity and obedience	Students are rewarded for initiative and inquisitiveness			
Description of Practice	Reflection on Practice			
Students are rarely given a chance to express their own ideas	Students are frequently given an opportunity to express their ideas			
Description of Practice	Reflection on Practice			
Teachers make derogatory comments to and about students	Teachers never make such comments			
	Reflection on Practice			







Appendix F

Table 2. Data Reduction Matrix for Observation

	OLI	VIA	
	h in the textbook and connected er to learn are most successful v	to other modes of informatio	
Domesticating Characteristic		Characteristics	
		Discussion of Status Quo	
		2013	Assignments are connected
Textbook is more valued than experience			
Following Steps is important			
	ROG	GER	
However, there is also a place	d and students are encouraged t for knowledge outside of the in the answers is important and	dividual students, i.e., gramma steps may need to be heeded.	
			Discussion of Status Quo
			Students have access to Materials
	Knowing Answers is Valued		iviatciiais
	Following Steps is important		
	STE ^v ugh a variety of activities for part especially sports knowledge, and	icular skills/understandings. Th	
Domesticating		0	
Characteristic		Characteristics	
			Knowledge is related to lives of students (sports)
			Students have access to Materials
Discussion of Status Quo			
	Assignments connected		
	PHII	LIP	
	of skills/understandings that stud connected to the lives of studer move to access materials and	nts through activities. The envir	
Discussion Status Quo			
Piscussion status Quo		Assignments are connected	
		0	Students have access to Materials
	Knowing the Answers is valued		Triancliais

	AB	BY		
through hands-on experience	tant scientific knowledge and und which are most often connected self motivated and ha	to the concept at hand. Studer ve a sense of inquiry.		
Characteristic	Liotraung		Characteristics	
			Textbook knowledge is validated by experience	
			Work is Hard	
			Students are rewarded for inquiry	
Discussion of Status Quo				
	Students encouraged to express ideas			
	KA	TE	14	
encouraged to develop skills f outside knowledge is valu	some important skills/understan for local leadership. As such kno led it is important that students t environ	wledge is rooted in the local liv o follow particular steps so the mment.	es of students. However, when	
Characteristic			Characteristics	
			Related to lives of students (local issues)	
Following Steps is important				
			Students encouraged to express ideas	
	Students access is restricted			



