Supporting Teacher Professional Identity
Through Mentoring Activities

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Abstract

Enhancing a teacher’s professional identity is a potential solution to the drift and disconnection experienced by many teachers during their career. The rational in this study is that mid-career teacher leadership involvement in a multi-experienced professional cohort presenting and attending together at a conference is one way to increase their professional identity. The potential of an enhanced sense of professional identity through self-awareness of their mastery experiences, collaborative skills and teacher leadership is that it may impact a mid-career teacher’s connection to the profession, resulting in a renewal of commitment to teaching. This research is grounded in both social learning theory and social cognitive theory.

Keywords

Professional identity, mentoring, professional learning, cohorts, collaboration.
1. Introduction

The enhancement to the professional identity of a teacher placed in a leadership role is accomplished through both formal and informal activities. Through these experiences teachers recognize that they are members of an active community of evaluative dialogue where ideas, methods and experiences are shared, and in so doing that they have special expertise in the profession and are able to share that knowledge. This interaction creates a process through which an active participant constructs personal knowledge, skill, and values directly from an experience within the environment. Self-realization occurs when carefully chosen experiences are supported by self and group reflection, critical analysis, and synthesis. Experiences are structured to require the learner to take initiative, make decisions, and be accountable for the results. The outcome is personal and self constructed, preparing for and leading to future experiences and personal recognitions. Relationships are developed and nurtured. Experiences may result in success, failure, adventure, risk-taking and uncertainty, since the outcome cannot be totally predictable. Everyone involved has their own perspective on a situation and event and these perspectives influence understanding and action. Lave and Wenger (1991) suggest that individuals learn as they participate by interacting with the community, its history, assumptions and cultural values, rules, and patterns of relationship; the tools at hand, including objects, technology, language and images; the moment’s activity, its purposes, norms, the practical challenges. Shared knowledge emerges from the interaction of these elements. The interactions and shared experiences result in what Davis and Sumara (1997) refer to as a `commingling of consciousness’. As each participates the relational space among them all changes. This is `mutual specification’ (Varela, Thomas, and Rosch, 1991), the fundamental dynamic of systems engaging in mutual action and interaction.

Activities that involve professionals in open and dynamic discussion, mutual problem solving and/or collaborative learning draw the participants into a community of learners (or what we refer to as a professional cohort) and contribute to an understanding of both theirs and the group’s capabilities. Thus it is suggested that teachers who participate together in meaningful and purposeful ways are more likely to remain in the profession because they feel valued and supported in their work (Beane 1998; Barth 1999). A variety of studies have also found clear evidence of the positive effect of professional experiences on teachers’ self-efficacy and level of morale (Little, 1995). These developed and then self-recognized qualities and behaviors are what define teacher leaders (Alverdo, 1997; Crowther, 1997; O’Hair and Reitzug, 1997; Paulu and Winters. 1998; Wynne, 2001). Indicators of these qualities are listed in the following Table 1.

Table 1 - Teacher as Leader

<table>
<thead>
<tr>
<th>Self Awareness</th>
<th>Social Skills</th>
<th>Social Awareness</th>
<th>Self Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Professional who makes a difference</td>
<td>• Encourages professional sharing</td>
<td>• Creates a sense of community</td>
<td>• Tolerant and reasonable</td>
</tr>
<tr>
<td>• Strong understanding of teaching and learning</td>
<td>• Willing and able to change</td>
<td>• Seeks professional opportunities for self and others</td>
<td>• Manages time and pressure in difficult situations</td>
</tr>
<tr>
<td>• Value teaching as an important profession</td>
<td>• Acts on opportunities for others</td>
<td>• Supports all teachers for positive student gain</td>
<td>• No-blame attitude for others</td>
</tr>
</tbody>
</table>

Adapted from Crowther et al, 2002
Mentoring of young teachers provides an opportunity to develop and model teacher leadership concepts. The more experienced teachers serve as a role model, encouraging, counseling, and befriending less experienced teachers for the purpose of promoting both groups professional and personal development.

Assessing the Impacts

This research is grounded in both social learning theory and social cognitive theory. The approach to leadership being developed is transformational leadership that emphasizes the significance of the person and personal traits in bringing about social and cultural change. The project was designed to develop an enhanced professional sense of self in both the mentor and those mentored. Two domains composed this evaluation aspect. (a). The effects of informal experiential activities on a teacher’s sense of professional self, and (b). The effects of participating as a mentor in this cohort on their sense of professional self as a leader. The assessment utilized a multi-method design that focused on teacher’s attitudes on professionalism —Likert-type questionnaires, in combination with interviews were used (Peterson, Fennema, Carpenter & Loef 1989). The feeling was that this comprehensive approach to assessment would be more likely to capture the complex aspects of the teachers sense of professional self and whether this had been accomplished by the project activities and being part of a cohort. Kagen (1990) supports this position.

The Experiential Setting

The University of Colorado at Denver and Health Sciences Center, School of Education & Human Development Mentoring Project is a leadership program that connected first and second year science teachers with experienced science teachers in presenting at the National Science Teachers Association Conference in Anaheim, CA. The purpose of the project was to positively impact both teacher groups’ sense of professional self. Five UCDHSC science workshops were accepted for presentation at the conference. Each had a team of 2-3 experienced teachers and 4-5 early career teachers, along with a number of university faculty assigned to each workshop. All participated in the planning and presentation. Table 2 lists the session titles, a brief description of each session and the presentation team makeup.

Table 2 - NSTA Presentations at Anaheim, Spring 2006

<table>
<thead>
<tr>
<th>Session Title</th>
<th>Session Description</th>
<th>1-2 year teachers*</th>
<th>Experienced Teachers*</th>
<th>University Mentors*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Issues Surrounding the Teaching of Science</td>
<td>Presented a workshop on the legal issues surrounding the teaching of science.</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Student Inquiry Activities with Dinosaurs and Other Fossil Life</td>
<td>Explored methods for student inquiry into prehistoric life and ancient environments. Includes hands-on workshop using fossil mold making, dinosaur track and environmental interpretation of</td>
<td>4</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Building Understanding Through a series of Connected Activities</td>
<td>Participants did a series of connected inquiry activities using flowers to demonstrating a method that moves students from base knowledge to more complex understandings.</td>
<td>4</td>
<td>6</td>
<td>3</td>
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<tr>
<td>Adventure Engineering: Exciting Students with Real World Scenarios</td>
<td>Explored an inquiry-based resource that allows students to solve real world problems in the context of volcanoes, asteroids, the rainforest and the biosphere.</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Environmental Literacy: Bridging the Science and Social Studies Education</td>
<td>Guided teachers to understand how to bridge curriculum standards and how to develop lessons and units that move children from awareness to citizenship.</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

* Some members of the group (28 total) participated in multiple workshops.

Expectations were that the new and experienced teacher groups would become more professionally connected through both the presentation and attendance at the conference as a community of practice. To assess this impact the study utilized a pre-assessment of expectations, a journal during the conference and a new technology: digital storytelling as a way for the teachers to tell their personal story of the experience after the event. Digital storytelling is commonly used to introduce, such as the professional story of an online course instructor or to stimulate a topic discussion. The stories were used as an assessment of the experience’s impact on the teachers self efficacy. A coding lens was developed with which to evaluate the stories to compare common themes highlighted by the teachers. Triangulation of the digital story data with the other more traditional survey and interview assessment tools was done to determine individual professional impacts.

The National Science Teachers Association National Conference is the largest professional conference in the U.S. Eighteen thousand science teachers attended. It was expected that involving new teachers with the teachers at this conference in a professional way (presenting workshops) would positively impact their sense of self and belief that they belong in this profession. Science teacher attrition rates in the first three years teaching are listed in a number of Federal reports as high as 30%. This number is even higher for urban school science teachers that make up the majority of teachers participating in this project. For the more experienced teachers in this cohort, teacher leadership in the form of mentoring is a potential solution to the drift and disconnection experienced by many teachers during their career. One rational for this study is that mid-career teacher leadership involvement in a multi-experienced professional cohort presenting and attending together at a conference is one way to increase their professional identity and generate a higher degree of engagement in the profession. The digital stories that we asked the teachers to complete created a kind of conversation that promoted
teacher self-understanding and differs from usual modes of teacher reflection. We anticipated that for the teachers the process would be more important than the product, bringing deeper understanding of self and the experience to the surface, recognizing that they are part of a worthy profession with significant impact, not just holding a job. Being around thousands of excited science teachers from across the U.S. as well as part of a stimulating learning community from their local schools would be the seed for this realization.

The teachers were taught the digital story technology prior to attending the conference, kept a journal at the conference and convert it to digital stories upon return. Each participated in a presentation of their stories at a group gathering to further embed the experience. Digital stories ranged in length from 3-5 minutes. In addition teachers filled out a number of pre surveys, concerning their conference expectations, which in the attending group they knew and in what context and how they viewed themselves professionally. Eight of the teachers in the project were considered experienced teachers. Data connected to these eight was evaluated in this study. The combination of these data sources developed the following observations and conclusions.

Method

The first step was to determine what themes relating to teacher leadership development were present in the data sources. Drawing from a constant comparative approach, data sources were coded sequentially, using emerging codes (with an eye toward indicators of professional leadership) arising from open coding. As each new data source was examined, new codes were added to the master code list. This method was used to develop five significant codes matching teacher comments derived from a number of sources. These include: a pre-conference expectations survey, a journal developed at the conference and a digital story completed after the conference. The developed codes are:

- Sense of connection with the profession
- Sense of connection to individuals
- Value of socializing at the conference
- Value of participating in the sessions
- Personal significance of the overall experience

An analysis of the coded statements utilized a framework using the three levels of reflection identified by Surbeck, Han, and Moyer (1991): (a) reacting – commenting on feelings towards the learning experience, such as reacting with a personal concern about an event; (b) elaborating – comparing reactions with other experiences, such as referring to a general principle, a theory, or a moral or philosophical position; and (c) contemplating - focusing on constructive personal insights or on problems or difficulties. Occurrences of codes were tabulated and combined from artifacts of each individual through axial coding.

To assign a level or degree of reflection to individual thoughts or chains of thought from the artifacts, each coded entry was situated within the reflection framework. Occurrences of reflection levels were tabulated and normed as a percentage of total entries for each artifact. Then, to determine which elements of professional identity were reflected
upon most deeply, themes derived from the first process were grouped according to their occurrences at the three reflection levels. Codes falling into level 2 or 3 indicated a level of reflection considered to be impacting their professional identity.

Finally, data were summarized for each of the experienced teachers, by answering the following questions:

1. Did journal and digital story reflections build on pre-conference descriptions of the teacher’s professional self?
2. What evidence exists to indicate a more developed sense of professional self as a teacher?
3. What evidence exists to indicate a more developed sense of professional self as a teacher leader?
4. What evidence exists to indicate a more developed sense of connection to the teaching profession or to other teachers in the cohort?

Results

The following Table 3 displays the coded data results and examples of the statements drawn from both the digital stories and the teacher journals.

Table 3 - Coded Data Observations

<table>
<thead>
<tr>
<th>Five Significant Codes</th>
<th>Framework Match</th>
<th>Examples of statements</th>
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</thead>
<tbody>
<tr>
<td>Sense of connection with the profession</td>
<td>23% were at level 1</td>
<td>“Last year I was ready to quit. Now I feel good to call myself a teacher again.”</td>
</tr>
<tr>
<td>197 total statements</td>
<td>56% were at level 2</td>
<td>“This conference rejuvenated me- and my career. Seeing all those incredibly smart people and all the cool things they are doing in their classrooms.”</td>
</tr>
<tr>
<td></td>
<td>21% were at level 3</td>
<td>“What I enjoyed most was simply being around educators like myself.”</td>
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<tr>
<td></td>
<td></td>
<td>“One of the best parts of this volunteer experience was the look of surprise on the faces of colleagues as they approached the exhibition hall and saw Susan and I behind the counter. Priceless!”</td>
</tr>
<tr>
<td>Sense of connection to individuals</td>
<td>67% at level 1</td>
<td>“I had a great time getting to know all the coworkers”</td>
</tr>
<tr>
<td>111 total statements</td>
<td>18% at level 2</td>
<td>“I’m late for my next session and my two new friends are going to it also.”</td>
</tr>
<tr>
<td></td>
<td>15% at level 3</td>
<td>“I had met everyone before, but felt like I knew them a lot better after this trip”</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Saying goodbye to everyone is hard but knowing that I will soon be seeing them again keeps it sane.”</td>
</tr>
<tr>
<td>Value of socializing at the conference</td>
<td>65% at level 1</td>
<td>“It was nice socializing when we went to the Prentice Hall party. We are planning on adopting their textbooks this year and this was a good connection for the district.”</td>
</tr>
<tr>
<td>78 total statements</td>
<td>19% at level 2</td>
<td>“We spent a couple of hours hanging out,”</td>
</tr>
</tbody>
</table>
having a few drinks and getting to know each other better. Almost every one ended up there so again we connected which I felt was lacking throughout the conference.”

“Elizabeth and I went to gather up some others that were worried about their presentation and still working on it. We chased them out of their room for a few hours and hopefully they had some fun and some relief from the stress of their presentation.”

Value of participating in the sessions
154 total statements
12% at level 1
70% at level 2
18% at level 3
“I don’t want to go out there and not be prepared, not have a quality session”
“Cynthia was at my table and I could see that she was uneasy at first. I assisted her and she did great.”
“Watching the young teachers prepare for their session amazed me, they so badly wanted to do well, and they did!”
“I found myself thinking how I could present at a future conference by myself.”

Personal significance of the overall experience
144 total statements
12% at level 1
65% at level 2
23% at level 3
“I’m still flying from yesterday’s sessions. We go see Bill Nye speaking- has me hook, line and sinker.”
“The new teachers were so excited to meet Bill Nye. It was wonderful to watch them as they approached and asked him for a signed picture”
“The collegial spirit of teaching is not found in all professions and is something that I value.”

For most of the experienced teachers- 88% (level 2-3) participation in the project was an important opportunity for them to participate in beginning teacher’s success and learning. All eight mentioned a number of times in the data the importance of enculturation of the new teachers into the profession. Commonly mentioned was their sense of leadership or being on the “road to leadership.” Although extracurricular socialization was mentioned as important to the enculturation process by most of the experienced teachers- 35% (level 2-3) there was disagreement on how important or whether it should be deliberate socialization or spontaneous. The use of digital stories to reflect on the experience proved valuable, not only as a tool for our evaluation but also for the teacher’s sense of the value of the experience. As one teacher noted when writing about viewing the stories “I see the same passion for education in others eyes as I do when I look in the mirror.” Another said, “I feel more connected and part of a community.” Evidence suggests that for at least- 77% (level 2-3) experienced teachers the culminating experience of the project did lead to feelings of being connected to a worthy profession and a belief that they had something to share with the novice teachers. Although one seem to feel disconnected with the younger teachers she mentioned her own “shyness as a cause of this disconnect” and if she “had more time with the group she likely would have become more involved.” With this said she went on to recognize the importance of the experience for herself and how it rejuvenated her career.
Analysis of the pre-connection data indicated the relational space among most of them changed. The multiple data evidence support this change. Teachers that did not know each other prior to the conference or had little prior contact became colleagues and spoke of future collaboration. Some of them have submitted joint proposals for next years NSTA Conference. Individual’s names appeared in the journals and digital stories that had no pre conference connection. These connections did not follow any experienced or inexperienced trend but rather a mix of experience. The expansion of one’s professional circle is a necessary support in the recognitions of one’s place in the profession.

Conclusions

According to Sergiovanni, Kelleher, McCarthy, and Wirt (2004), "Success involves learning and cultivating relationships, building the capacity of teachers, figuring out better pathways to success, and providing the support teachers need to come together as communities of practice."

Professional growth requires that teachers engage in intellectual work in various informal settings other than the classroom. The potential in these experiences is an enhanced sense of professional identity through self-awareness in mentoring experiences and collaborative opportunities which impacting a mid-career teacher’s motivation and persistence.

Typically, evaluation of a professional development activity such as this one is completed at the end of the activity. The evaluation usually is restricted to the participant's initial reaction to the experience. Although assessing these factors has value, the most important factor is the long-term impact of the professional development activity. An on-going connection with this group of educators that provides them additional opportunities to collaborate is necessary in assessing real changes in their professional sense of self, changes in their professional culture (such as increased collaboration and a feeling of connection), and sense that they can have an impact on the professional as a whole. Therefore this research is not ended only beginning.
References


