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Jeanne Hager Burth
University of Pittsburgh at Greensburg

Melissa J. Marks
University of Pittsburgh at Greensburg

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About the Author(s)

Jeanne Burth IS Director of Field Placement and Teacher Certification, Associate Professor. Jeanne Burth acted as a teacher and principal in the Laurel Highlands School District for 28 years before taking her position at the University of Pittsburgh as a professor and director. Her research interests include special education and professional development.

Melissa Marks is Director of ECE and Secondary Education and Associate Professor. Dr. Melissa J. Marks, a former eighth grade teacher, an Assistant Professor of Education at the University of Pittsburgh at Greensburg. Her research interests include teacher education, preservice teacher socialization, and diversity in education.

Keywords

Social capital, pedagogy in higher education

SOCIAL CAPITAL: INCREASING PEDAGOGY IN HIGHER EDUCATION INSTITUTIONS

Jeanne Hager Burth, *University of Pittsburgh at Greensburg*
Melissa J. Marks, *University of Pittsburgh at Greensburg*

Abstract

The paper utilizes the fundamental components of social capital theory. It assesses a hypothesis that higher levels of social capital result in benefits for professional development of pedagogy in higher education institutions' faculty. A year-long study was conducted that offered faculty training in increasing critical thinking skills in teaching. The research explored the benefits to faculty when learning alongside colleagues in the higher education institute. Qualitative methods were used to analyze pre-and post-surveys, focus groups, descriptions of lesson plans, and real-time observations. Findings focused on the power of collegial collaboration and peer reviews, the lack of pedagogical knowledge, and the need for time, interest, and accountability.

Introduction

Constant and persistent learning is necessary for most professionals for their occupations and their clients, patients, and students. By contrast, professional development within higher education is perplexing in that faculty tend to associate ongoing learning with research in the discipline, not teaching or pedagogy. While some institutes have teaching centers specifically for faculty, the regular development of teaching is not expected (Haras, 2018). While faculty welcome learning opportunities, the opportunities generally focus on delivering information in one-and-done type workshops rather than ongoing learning that would allow experience in-depth and breadth of pedagogy, or teaching methodology or strategy, with multiple experiences designed to develop understandings.

Social Capital in Higher Education

Many similarities exist in professional development in the worlds of both school-age educational establishments and higher education institutions. Some characteristics of quality professional development include teacher collaboration (Wei et al. 2009), continuous/ongoing study (Easton, 2008), and collegial and administrative support (Gabriel, Peiria & Allington, 2011). This yearlong study includes all of these characteristics of professional development with an emphasis on social capitalism.

Three "intellectual capitals" encompass the value of knowledge and skills in the workplace: human capital, social capital, and structural or organizational capital. These three have distinct differences yet are all essential in the workplace. In the context of schools, human capital is a teacher's cumulative abilities, knowledge, and expertise developed through formal education and experience and the abilities of the individuals (Youndt et al., 2004). Human capital accomplished through formal education and certification before entering the profession increases throughout an educator's career (Leana, 2011), with professional development becoming a critical part of the learning. In contrast to K-12 teaching, teaching at a higher education institution does not require ongoing teaching techniques, strategies, best practices, and pedagogy.

Professors often are experts in their content area but often have little or no background in teaching. Thus, the human capital of professors is usually based on content expertise rather than pedagogy.

In comparison to human capital, social capital is not distinguishing the individual educator but instead exists in the relationships among teachers. Social capital is the knowledge available through interactions and relationships of individuals and their networks with others in their fields of study (Subramaniam & Youndt, 2005). Social capital looks at where the educator acquires knowledge. When an educator needs information or advice about how to do the job more effectively, that educator goes to other teachers. However, in higher education institutes (HEIs), the building of relationships may be more challenging. Professors work at different times of the day and on different days of the week. Divided among departments, professors are also logistically scattered throughout a campus or several campuses, making it difficult to reach out to a colleague for help.

Structural capital stems from the knowledge of individuals and is combined with methods within the organization for efficiency, practicality, and access to information (Edvinsson and Malone, 2001). In other words, structural capital is the way we archive information to revisit it or share it. Attention to students' education is in greater demand than in the past, emphasizing research, teaching quality, and the ability to reach the students (Bidabadi et al., 2016). To gain knowledge and practice using these skills, professors need access to community forums, making professional development available and allowing collective learning. Creating these forums on local campuses offers a venue for learning and provides professors with colleagues for advice and expertise.

Each area requires unique investments: human capital involves the hiring, training, and retaining of employees, and social capital requires the development of routines for collaboration to facilitate interactions and relationships (Youndt et al., 2004). Historically, instruction has been an autonomous process; teachers go into their classrooms, close the doors, and teach. However, more and more, we see multiple teachers within one classroom, addressing the varying needs of learners. Teachers with different roles depending on one another for planning and decision-making. The cultivation of collective abilities leads to potential shared aims and changes in teaching and learning (Hurley, 2004). Por (2008) refers to this as collective wisdom representing change, noting that one must go beyond the individual to be part of this transformation. Social capital rests on the premise that 'my connections can help me' (Cross & Cummings, 2004). Hargreaves (2001) adds that intellectual investments can increase by creating new knowledge and transferring knowledge between situations and people. Special jargon binds groups of colleagues together. These groups of people share common stories, passion, and relationships tying them to the group. Growth toward social capital increases connectivity and intentions to act on behalf of the group or the group. Being aware of sharing knowledge with others adds to the worth of the group. Cohen and Prusak (2001) advise organizations to invest in social capital by giving people space and time to connect, communicating beliefs and goals, and rewarding participation. For example, joint, small group discussion periods devoted to professional development provide an opportunity to promote social capital growth (Cohen, 1991).

Methods

The faculty at a small branch campus voluntarily participated in a yearlong professional development that focused on increasing critical thinking in the classroom. This year-long focus was the initial implementation of a continuous cycle of professional development at the campus. The activities were coordinated through the community for the Advancement in Teaching (CAT), a faculty-led group on campus, and the principal investigators of this study. Faculty members who fully participated received a $100 stipend, supported by a small grant. Full participation included completion of pre and post-surveys, attendance at a full-day workshop, implementation of at least one idea from the workshop to their course curricula (syllabus, assignment, assessment, or lesson design), and observations of and by at least one other participant's classroom. Other opportunities were encouraged but not mandated for the stipend, for example, two additional workshops and a luncheon discussion and sharing forum. Three invited presenters explained and demonstrated methods of incorporating critical thinking into teaching. Speakers emphasized using technology, questioning, and one demonstrated critical thinking in the higher education classroom.

The suburban campus at total capacity has 1800 students. In the year of this study, there were 1,602 students (annual unduplicated headcount). The faculty includes 73 full-time and 69 part-time professors. Forty-three faculty participated in at least one aspect of the yearlong project, and twelve participated fully. The campus offers twenty-nine majors, and the faculty who participated fully included professors of Psychology, Biology, Education, Foreign Language, History, Business Management, and Chemistry. Also invited to workshops were over one hundred pre-service teachers, and approximately twenty of these future teachers joined one or more workshops.

The objective of this study was twofold. First, the authors investigated the faculty's perception and use of critical thinking through a one-year, voluntary professional development series. They questioned whether faculty understood the concepts within critical thinking and whether a long-term professional development series at the university level could produce increased use of critical thinking across disciplines. The secondary focus was whether university faculty would be more inclined to understand and implement critical thinking if they collaborated with other faculty members. Based on the theory of social capital, faculty members answered questions about whether they felt more committed to the focus on critical thinking based on their social interactions and team or partner expectations. In this paper, the secondary focus of social capital relates to the challenges presented in the professional development of pedagogy initiatives in higher education institutions. In particular, the paper utilizes the fundamental components of social capital theory. It assesses a hypothesis that higher levels of social capital result in benefits of professional development of pedagogy for instructors in HEIs. This research seeks to interpret professors' perceptions and render explicit their processes to understanding through reflexive interpretation of their experiences with learning opportunities and to study whether the options to learn with colleagues have deepened their experiences and learning.

The initial introduction of the yearlong focus was in January of the implementation year, 2017. The actual year for this project officially began in May 2017 at faculty workshops and implementation activities spanning the entire academic year through May 2018. All activities took place on the campus. Faculty self-selected and chose to participate in this year-long project for several reasons, including to discover techniques to inspire students to participate, to gain

depth in teaching, to make more meaning for students, to increase 21st Century skills, to compare implementation to other disciplines, and to include new methodologies and techniques in their teaching. Of the forty-three faculty who participated in at least one aspect of the yearlong study, twelve were able to complete all requirements for the stipend or the full-participation status. Analysis was not limited to those who participated fully, except one question on the survey, which asked for preferences of working alone or with others. For example, if someone did peer observations but did not partake in the survey, we still analyzed that person's contributions.

Pre- and post-surveys explored changes in perspectives of the participants, and focus groups added qualitative data to the perceptions. Investigators also collected documentation regarding changes to syllabi, lesson plans, assignments, and assessments, which indicated increased use of critical thinking. Notes from the given observation template were analyzed for evidence of the use of critical thinking in teaching. The project analysis compared the pre and post-surveys, considered the viewpoints expressed in the focus groups, and searched the implementation plans and observations for increased critical thinking.

Anonymous online pre- and post-surveys were used to assess changes in perceptions of social capital. Questions that dealt with perceptions on social capital included the following on the pre-survey, with only the final question being reassessed on the post-survey:

- How often do you participate in a group, club, or place of worship, meet other people, help each other out for faith reasons, or enjoyment and relaxation?
- How often do you volunteer for an organization?
- How often do you donate money to an organization?
- How often do you participate in service work connected with work?
- How often do you work with a colleague to conduct research?
- How often do you work with a group of people to conduct research?
- How often do you try to incorporate new ideas and practices to improve your teaching?
- How often do you research new ideas through readings and websites
- when you seek to improve your teaching?
- When you seek to improve your teaching, how often do you collaborate with a colleague in your department?
- How often do you collaborate with a colleague in your division but outside your department
- when you seek to improve your teaching?
- How often do you collaborate with a colleague outside of your division
- when you seek to improve your teaching?
- How often do you collaborate with a colleague outside of your home campus
- when you seek to improve your teaching?
- How often do you invite a colleague to observe your teaching and offer feedback?

Complete one of the following statements.

- I prefer working alone because _____
- I prefer working with others because _____

The answers were used to consider the importance of collaboration for those who participated in the study. The final response was open-ended, and investigators sought to see if a change existed after full participation in the project. Therefore, only the twelve total participants' post surveys were analyzed for changes in perception on the final question. However, all (24) pre-surveys were analyzed to validate whether participants value social interactions, including collaboration with colleagues. The initial 24 respondents intended to participate fully; however, there were restraints of time and other responsibilities limiting partaking in all required areas for the stipend.

Three small focus groups were held to gain qualitative information from fourteen volunteers/participants. Participants included professors of sciences, psychology, history, management, and foreign languages. Questions that evaluated social capital included:

- Was it helpful to work with colleagues/peers in this process? Why?
- Did working with others (e.g., discussing your ideas during the meetings, speakers, and before and after teaching) help you gain confidence in your abilities to implement critical thinking in your classroom?
- Along with that, did working with others (see above) make you want to implement it more/better or help you understand critical thinking more?

Participants in the study were also asked to utilize critical thinking in their teaching through changes in instruction, syllabi, assessments, and the like. Sharing ideas and implementation plans demonstrated ideas that were successful or challenging. The collection of these plans showed evidence of the implementation of critical thinking in teaching.

Three workshops were offered, and data were collected informally by observing participants and asking participants for their views afterward. Qualitatively analyzing the data from the workshops allowed us to conclude whether social capitalism influenced the power of professional development. Observation and conversation notes were analyzed for patterns across the participatory group.

Another element used in the study was peer observation. Participants observed a colleague and offered written feedback (using a provided template) on critical thinking in the lesson. Though the implementation plans were not critical to the findings of the social capital investigation, the plans did lend information on the increased understanding and use of critical thinking. In addition, pre-and post-survey results were compared for differences in perception, qualitative data from focus groups and meetings for sharing learnings lent additional information, and finally, the peer observations were studied for the use of critical thinking and value of the feedback from a peer.

Findings

Learning Preferences. To evaluate preferences in learning related to social capitalism, faculty answered questions on a survey and in focus groups. The survey included a response to one of two statements, specifically "I prefer working alone because….." or "I prefer working with others because…." with an explanation. In the focus groups, they expanded on their responses to provide a richer understanding.

The themes that rose from the open-ended responses for working alone were logistics and personality differences, including "conflicting and busy schedules" and "It's simpler." Personality differences centered on their views of collaboration, such as "Professionals in each field do not often agree with each other, and often they choose among standards or ways of

working instead of adhering to a checklist," and "I feel like some folks are less interested in working with others and more interested in just telling others what they do." However, the list from professors who chose the "working alone" option was much shorter than those who chose to work with others.

The benefits shared for working together included others' expertise, motivation, inspiration, and accountability. One participant noted, "I believe that working with others allows for more exchanges of ideas, exercises, strategies, philosophies and makes me a better teacher and person overall." Learning from others' experiences, knowledge, and 'bouncing around ideas' were the main benefits regarding others' expertise. Benefits surrounding motivation included working with others to maintain timeline accountability and having social support. One participant wrote, "It gives me a social support group to motivate me." Echoing their written responses, participants in the focus groups noted the benefits of working with a group that shares ideas and being inspired to create and implement changes to courses to increase the depth of the content. Having common concerns or questions regarding new learning or implementation helped build a sense of community, and feedback from sharing ideas and observing provided further insights. Several respondents noted that there was a sense of responsibility to the group and the project.

Accountability as Motivation. The accountability of working with peers motivated participants to learn and apply techniques to their teaching. One participant commented, "I prefer working with others because it provides me with a sense of accountability and ensures that everyone equally contributes their ideas and perspectives." In addition, the commitment gave them a sense of unity and a feeling of leadership.

Participants admitted entering the yearlong project in the focus group because they wanted to be accountable to others, forcing themselves to commit to learning. As one participant explained, "Doing [critical thinking] in a context of a group will inspire me to do things that I may let slide if I were on my own." In addition, most members of the focus groups agreed that once they committed to the program and another faculty member, they persisted in the program due to the commitment to the group.

Increased Collective Intelligence. Participants noted the ongoing activities within the yearlong project (multiple workshops, peer observations, implementation plans) made them more aware of their teaching, reflecting more on their instructional methods, especially as their colleagues observed them. One stated, "The whole process helped me. I was more aware of using critical thinking strategies in different ways."

However, being part of a group did not mean that the participants all moved equally fast or in the same direction. For example, one participant commented, "The awareness has come about for this project…. For me, for this year, it was looking at my materials. I think the next step is, am I effective with these materials? Those are two very different things." This indicates that the participant viewed materials and instruction as separate entities within courses.

Others expressed pride in their implementations. However, it was apparent that despite this pride, not every faculty member fully grasped what critical thinking was and how to implement it, which was the aim of the professional development. Some professors still thought of critical thinking as a fragmented strategy rather than a methodology integrated into multiple facets of teaching: planning, objectives, instruction, assignments, assessment, and feedback. For example, one participant said, I want to plan more days of students doing critical thinking exercises, i.e., problem-solving. In the past semester, students who would not come to class on

those days because it did not 'do anything for them.' I was having trouble creating buy-in. So when I am thinking about my syllabus for the future, I still want to do these exercises because I feel overall it is beneficial, but I need to incentivize the students to come to class on those days. Another commented, "I actually did my critical thinking thing in the fall and then again in the spring with a very similar class." Critical thinking was a single "thing" that was finite rather than an integrated process for both of these professors. Some examples of the implementation plans included timelines for comparing child development milestones, case studies, flipped classrooms, and business plans.

Increased Bonds and Working Relationships. Increased bonds or relationships was another theme evidenced in both the survey and focus groups. Some of the pairings for observing interdisciplinary, and professors voiced that they would like to see implementation across different disciplines. One commented, We are Ph.D.'s, and we know what we are doing, and we are experts in our field, but we can all stand to learn from one another. If you do it in this individualized capsule, you do not get the same results when you cross-pollinate. Sometimes departments are all insulated, and they think about just their content. But it is great to know that I can work with a psychologist, a biologist, or work with a chemist. I don't have to be stuck in my field. I think that I learn a lot about my strategies through the connection with others.

Others noted that they preferred to work with others in their field, commenting that they could literally "yell down the hall" and get the answers they wanted quickly and easily without explaining the context or content. A professor who was new to the campus specified, "I wouldn't hesitate to contact faculty at this table if I thought they had a resource or an activity." There was also mention of the necessary internal motivation to learn the content without support, scheduling, and committing to the time needed to learn independently.

These increased bonds did not occur instantly or without challenges. For example, professors expressed anxiety about colleagues observing them. One said,
It put the pressure on you a little to step up to the plate and perform and do the critical thinking exercises to the best of your capabilities because there was someone there watching, and it goes back to that accountability. I have to do this because I also have to help out my partner and complete the process. So, I was like…. okay, they are watching me, and I need to impress them and show them that I did my homework and am serious about it.

Another stated, "I was sweating bullets when [my colleague] was watching my class." Finally, one participant captured the desire to impress by observing, "Isn't it interesting that even though we have friends in the department, we still are afraid that we are not going to impress." This collective desire to impress and support others helped strengthen the bonds and working relationships among faculty.

Although professors were nervous about the observations, they expressed that the feedback was supportive. One professor stated, I felt a lot better when I sat down and (Colleague) was like… 'you hit all of this, this, and this.' It was nice to have some sort of confirmation of knowing that I did something. That means that my students are getting something out of it, which is, to me, probably the most essential part. An unexpected finding was that a few faculty members felt inferior after attending a workshop or observing a colleague teach.

In the post-survey, professors noted needs for "the opportunity to chat with my colleagues on a more regular basis," "someone to bounce ideas off of," and needing support and feedback from colleagues, all of which relate to social capital.

Continuation of Study

At the end of the study, the participants questioned whether they would be willing to partake in another yearlong focus group to improve teaching. Unanimously, the responses were positive. Faculty explanations for their desire to continue included benefitting from continuous learning, sharing work, providing accountability, help with the implementation of strategies, and forming relationships with colleagues.

Summary and Conclusions

The process of the yearlong study formalized some relationships with colleagues and gave them a sense of comfort in contacting a colleague as or for a resource. Specifically, the reoccurring theme of motivation and support from colleagues inspired further work in social capital in higher education. The collaboration, including setting specific times, was key for keeping faculty involved, interested, and motivated. Professors worked alongside other professors, wanting to assist and learn. We also saw that the fear of embarrassment or fear of being judged by a colleague also increased the implementation of the critical thinking aspects learned throughout the year.

One question that originated from the study was about ways to get more faculty involved in learning groups. While only 12 participated fully in the study, the finding that logistics and personalities affected participation was no surprise. Social capital rests on the premise of human involvement; without that, there is no shared knowledge or collective intelligence. To that end, despite monetary incentives, our lack of participants surprised us and was our most significant limitation in this study. Further studies would help find significance in the conclusions, as this study was limited to a small campus with few participants. In addition, a longitudinal study over several years and with several campuses would have added implications.

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