

Proximal Mentoring

Dissertation Defense
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- 50% non-completion in doctoral programs
 - Dorn & Papalewis, 1997
- Admissions to doctoral programs growing
- Support by faculty for students
 - Hagar, 2003; Bean, Readece, Barone, & Sylvester, 2004; Palincsar & Brown, 1998
- Support by students for students
 - Tutoring
 - Social Peer Mentoring
 - Dorn & Papalewis, 1997
 - Apprenticeship
 - Legitimate Peripheral Participation - Lave & Wenger, 1991

Introduction

Teaching Model

The term *Tutor* is operationally defined as “the process by which a competent pupil, with minimal training and with a teacher’s guidance, helps one or more students . . . learn a particular skill or concept” (Thomas, 1993, p. 1).

- Tutoring Meta-analyses
 - Topping, 1995
 - Kalkowski, 1995
 - Magin & Churches, 1995
 - Townsend & Mohr, 2002
- Peer Tutoring
 - Brenno & Teaff, 1997
 - Greenwood, 2001
 - Gut, Farmer, Bishop-Goforth, Hives, Aaron, & Jackson, 2004
 - Thrope & Wood, 2000

Tutoring Outcomes in the Literature

Mentoring Model

The term *Mentor* is operationally defined as a person with many years of experience within a discipline who can *guide, counsel, and sponsor the mentee* (Milner & Bossers, 2004) or novice in *learning the ropes* (Hagar, 2003) of the profession.

- Barton-Atwood, Jolivet, & Massey, 2000
- Bean, Readece, Barone, & Sylvester, 2004
- Boreen & Niday, 2000
- Carrington, 2004
- Chan, 2000
- Diamond & Mullen, 1996
- D'Souza, Miller, & Barnatt, 2005
- Dopp & Block, 2004
- Edwards & Gordon, 2006
- Grove, Strudler, & Odell, 2004
- Hagar, 2003
- Kram & Isabella, 1985
- Milner & Bossers, 2004
- Mietwa & Kwari, 2003
- Mullen, 2006
- Mullen, Whatley, & Kealy, 1999
- Murray, 1999
- Pullins & Fine, 2002
- Pyatt, 2002
- Rymer, 2002
- Shank, 2005
- Spouse, 2001
- Treston, 1999
- Wang & Odell, 2003
- Wang, Strong, & Odell, 2004
- Young & Cates, 2004

Mentoring Outcomes in the Literature

- The current mentoring paradigm relies on self-report to elucidate the benefits of mentoring to the mentor.
- Mentors may be receiving benefits from the mentoring process that they do not acknowledge or perceive.
- It may be that the mentor is so focused on the success of the mentee, any benefits to themselves are over (or under) looked
 - Pullins & Fine, 2002

Reports of Mentor Benefits

Missing Link?

- A Proximal Mentor (PM) would be someone who is slightly more advanced, or knowledgeable, than the novice learner and who is vested in the novice’s learning needs.
- A PM is not a peer in the traditional sense.
- A PM can be older, younger, or the same age as the novice learner.
- A PM can hold the same job title or position as the novice learner.
- What separates the PM from the novice learner is recent knowledge or experience in the discipline.

Proximal Mentor (PM)

- Investigate adding the construct of *Proximal Mentoring* as a unique way for students to develop continuing expertise while providing an additional level of support to the educational process based on Vygotsky's Zone of Proximal Development (1978, 1987).

Purpose

- Obtain the perceptions of *Proximal Mentoring* from **all the participants** in order to clarify and define the role of the *Proximal Mentor*.

Goal

- What are the perceptions of the course professor regarding the role of the proximal mentor?
- What are the perceptions of the mentees regarding the role of the proximal mentor?
- How do the mentors come to negotiate, define, and express the proximal mentoring role?
- What outcomes will be obtained by the proximal mentors after having participated in proximal mentoring?

Research Questions

- Vygotsky's Theory of Learning and Development (Vygotsky, 1962, 1978, 1987)
 - Two central ideas:
 - Reciprocal relationship of thinking and speech
 - Internalization of higher psychological functions (social to intrapsychological)
 - Development is
 - "progressive unfolding of meaning inherent in language through the interaction of speech and thought" (Bruner, 1987, p. 11)

Theoretical Framework

- Actual Developmental Level (ADL)
 - Mental development *retrospectively*
 - What the learner can do independently
 - Determined after the learning takes place
- Zone of Proximal Development (ZPD)
 - Mental development *prospectively*
 - Functions that have not yet matured but are in the process of maturing
 - What the learner can do with assistance
- Process is recursive and progressive

Vygotsky's Developmental Levels

- In order to examine learning, Vygotsky (1962) reflected on the social aspect of education:
 - Language is the common denominator in all social interactions.
 - Without language (a symbol system of some sort) active, conscious, self-directed learning could not happen.
- Understanding the relationship between language in use and thinking is crucial for understanding higher mental functions.

Learning is Social

- ZPD in adult learning
 - Instruction becomes a collaborative mentoring process
 - Collaboration
 - Instruction
 - Dialogic discourse

*Situated in context.
More research is necessary to determine the actuality of the ZPD

Extending the ZPD to Adult Ed

- Qualitative Cross-Case Study
 - Case 1 – 2nd semester doc students / EPY Master's students
 - Case 2 – 2nd & 3rd year doc students / 1st semester doc students
- Why Case Study?
 - Proximal Mentoring is an educational innovation that could "affect and perhaps even improve" educational practices (Merriam, 1998, p. 41)

Design

Differences	Case 1	Case 2
PM Experience	1 st time PMs	2 nd time PMs
Time with PMs	8 weeks	14 weeks
Assessments	3 tests of multiple choice and short answer essay 1 group presentation	Final culminating paper
Content	Read 1 chapter per class meeting	3-5 Empirical articles per week plus 1 page critique on each article
Nature of Course	Lecture	Seminar
Level of mentees	Master's students	Novice Doctoral Students

Structural Differences

Spring 2006	Fall 2006
Master's Adolescent Development Course	Doctoral History & Philosophy of Educational Psychology Course
1 Professor	1 Professor
17 Master's Students	18 first-semester Doctoral Students
3 Second-semester doctoral students (two of whom were students in the pilot study)	2 third-year (PMs in the pilot study) and 1 second-year (student-mentee in the pilot study) doctoral students

Participants

Data Collection Type	Frequency	
	Spring	Fall
Meet with professor	4	1
Mentor-only meetings	3	1
Pre- and Post-survey	2	2
Classroom Observations	3	2
Interviews	5	1
Online Discussion Questions	12	14
Focus Group	1	

Data Collection

- Conventional taxonomy and tabular formats were used (Spradley, 1980; Miles & Huberman, 1994)
 - Domain analysis – the search for patterns
 - Semantic relationships are identified
 - Taxonomic – categorization
 - Organize the data by central themes
- Data Analysis & Display**

- **Trustworthiness** (issues of validity/verification)
 - (Lincoln & Guba, 1985; Shadish, Cook, & Campbell, 2002)
 - **Credibility** (internal validity)
 - Triangulation
 - Prolonged engagement
 - **Transferability** (external validity)
 - Rich, thick description
 - **Dependability** (reliability)
 - Audit review of data
 - **Confirmability** (objectivity)
 - Constant comparative
- Trustworthiness**

- Introductory interview with professor & PMs
 - Introduction to students in course
 - Collect pre-survey info
 - Divide students into PM groups
 - Stratified random sampling
 - Weekly PM online discussion questions
 - Observe:
 - Classes, groups, PM meetings, PM meetings with professor
 - Concluding post-survey info
 - Focus Group (spring PMs and pilot study PMs)
- Procedure**

- Common: Achievement for all involved
 - Fall Professor
 - Good papers were “as good as I have ever gotten”
 - More students could be classified as “doing well” in the course even though “I don’t think they were, on the whole, any smarter”
 - There were “fewer horrible papers”
 - Lack of understanding not the issue
 - Students admitted to not doing the reading
- Common - Fall Professor**

- Spring Professor
 - On student tests from previous classes:
 - “I can actually remember thinking: ‘They are not taking this seriously.’ or ‘maybe they are in a rush and they are just kind of sketchy responses.’”
 - On student tests with PMs:
 - “These were very well expressed and thorough. I guess that is just a good descriptor, they were so thorough. That became more the exception. This time it was the rule that it was thorough.”
 - “The evidence that they had planned, organized their responses, supported their examples, made very strong arguments -- so I was really pleased”
- Common - Spring Professor**

- Divergent: Enrichment
 - Personal (spring)
 - Research (fall)
 - Divergent: Role
 - Extension (spring)
 - Partnership (fall)
- Cross-Case - Professor**

- Common:
 - Role of tutor
 - Perceptions of graduate program
 - Variability of individual responses
 - Class format, working in groups, choice in PM
 - Divergent:
 - Research study (Spring)
 - Perceptions of knowledge (Fall)
 - Fear PMs will replace professor (Fall)
- Cross-Case - Student**

- Occurred in first 10 minutes of PM meeting
 - Spring negotiated PM meeting time
 - Fall negotiated for suspending PM meetings
 - Both groups agreed to do weekly online questionnaire

Cross-Case – PM Negotiation

- PMs in both cases defined
 - a peer as an equal;
 - a mentor as one who has additional experience, wisdom, or knowledge who guides you through.
- They defined a tutor as one who teaches specific content.
- As with the student mentees, the PMs did NOT see their role as a tutor.

Cross-Case – PM Definition

- Common
 - Lead, Advise, Respond
- Divergent
 - Contact & Research (Fall)
 - Depth of involvement (Fall)
 - Outside-of-class contact (Fall)

Cross-Case – PM Expression

- Common
 - Groups
 - Learning
- Divergent
 - Depth of Experience
 - Answer lecture questions (Spring)
 - Theoretical stance (Fall)
 - Interaction with student mentees outside of class (Fall)
 - Involvement in research projects (Fall)

Cross-Case – PM Reward

- This research introduced the construct of *Proximal Mentoring* within the Zone of Proximal Development (ZPD) as an opportunity for the PMs to re-experience course materials at a more in-depth level while providing mentoring guidance and assistance to novice students in the course.

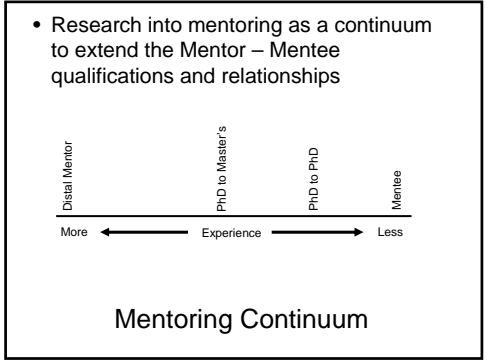
Summary Statement

- Role of PM NOT seen as tutoring by any of the participants
- Role of PM seen as NOT QUITE mentoring in the traditional sense

NOT Tutoring

- Spring –role was more teacher acting as a more experienced other within the ZPD of their student mentees
- Fall –role was more mentor providing program guidance, advice, and collaboration for the student-mentee acting as a more experienced other within the ZPD of their student mentees.

PMs in the ZPD



- Professor's role in implementation of PMs
 - Insight into differences between teaching and mentoring
 - Both professor saw their role with the PMs as teachers
 - Neither professor saw their role with the PMs as mentoring
 - Reflection of professor on their role as mentor vs teacher
 - Would a professor shifting from teaching role to more a role of mentor help to reduce non-completion rate of future doc students?

Future Research - Professor

- Is there a relationship between a person's view of knowledge and their ability to accept peer assistance in learning?
- Would an explanation of PM role change perceptions of expertise level of PM?
- Will students who received PM assistance complete doctoral studies at a rate better than the nationwide 50%?

Future Research - Students

- What is the impact of prior knowledge on the PMs ability to act independently within the course?
- What is the most productive way of gaining the acceptance of students for the addition of PMs?
- What is the impact of future implementations of the *Proximal Mentoring* construct if all parties understand the role of the PM in the classroom?

Future Research – PM Construct

- Study of the long-term benefits for PMs as well as for students who were *Proximal Mentored* to include investigation of:
 - completion of programs of study
 - increased knowledge of the subject matter
 - increased ability to interact in collegial and collaborative ways
 - long-term relationships with the student-mentees and the professors

Future Research – PM Rewards

- Levels, grades, and/or years
- New teachers
- As another step in the transformation of novices to experts
- Ability of doctoral programs reduce the rate of non-completion

Potential Significance

