Building Blocks: Project Based Learning in Human Development Research

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**Research Questions:**

- Does mentoring have a place in the HD PBL research process?
- What are the challenges of participating in a PBL research project?
- What are the benefits of participating in a PBL research project?

**Project Based Learning (PBL):**

- Guides learning through project goals for which students tackle complex questions or tasks by positing and implementing possible solutions (Jones, Rasmussen, & Moffitt, 1997).
- Provides a framework for students and faculty to align interests while helping students develop proficiency in human development research.
- Offers students a 'first-hand feel' of particular work scenarios and requires students to take an active role in the development of the project.
- Used frequently other fields, PBL experiences in the training of developmental researchers is rarely detailed in the extant literature.

**Problem Statement:**

Research opportunities for students in human development (HD) are often related to funded projects with specific timelines and product requirements which may limit students to working on mentors' existing projects that allow minimal student influence.

**Research Methodology**

- Building this project from the ground up showed student researchers the utility of using literature to identify unanswered questions in the field. *The steps of research became clear when students needed to plan and prepare for data collection with people rather than using extant data."
- "We were able to see it from the writing of the IRB and slowly we saw a glimpse of the big picture, the potential, and how this little project fits into the big picture. Better than any class I've had because it is applying everything in a hands on way."
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**Home Observation of Parenting and Early Development (HOPED):**

This professor guided, student run project tests an established observation measure of parent and child interactions (PICCOLO) with parents of younger infants (4-9 m) in relation to children's concurrent and later development (14 m). Some students also gain home visiting experience.

**Parenting Observation Skills Training (POST):**

Two teams of four student researchers are learning the PICCOLO & HOVRS-A+ observational measurement tools. Each team is led by one graduate student, reliable on the measure and knowledgeable about the theory underlying the research constructs.

**Challenges:**

- Multi-level mentoring takes time and group members are busy. *Some short-term tasks need to be negotiated and the team may take a long time to reach consensus. *Different mentors learn at different rates due to varying interest, commitment, and experience.
- "Finding time and organizing the unique thinking of each partner has been tough."

**Benefits:**

- Multiple possible mentors, depending on the topic. *New student researchers present new mentoring opportunities. *Everyone feels they belong and the long-term goals are team driven.
- "Motivated students can test ideas and learn collaboration together. Additionally, the professor can be efficient in teaching a group of learners rather than solely focusing on one person at a time."

**Implications:**

- *Professor is investing in future of the field. *Students are motivated and rewarded through the experience of gaining intensive learning experiences.
- "I get to explore my interests and start to see how those interests might turn into a career after graduation."

**Collaboration:**

- Smaller group work with interest driven teams made work more efficient. *Larger group conversations provided opportunities for more creative answers to questions about research.
- "Our meetings facilitated collaboration. Everyone participated and made comments. We all felt safe stating our opinions, even if they differed from other group members."

**Mentorship:**

- Project tasks, when learned can then be taught to a less experienced student. *Professor models mentoring behaviors actively and passively in the group context.
- "I get to mentor, be mentored on research, and be mentored on how to mentor. There is a tiered structure that provides each piece of mentorship opportunity, which is rewarding in preparing me for the next step of my education."

**Selected References**


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