

EXPLORING CHANGE IN TEACHERS' PERSPECTIVES OF TEACHING AND LEARNING WITHIN A PBL SETTING

Judith (Jude) Williams¹

¹Centre for Educational Development, Republic Polytechnic,
Woodlands Campus, 9 Woodlands Avenue 9,
Singapore 738964.

ABSTRACT

The aim of this study is to explore the change (or lack thereof) in the beliefs and actions of staff as they develop as facilitators of problem-based learning. The introduction of Problem-based learning (PBL) at Republic Polytechnic is unique – as most people in the Singaporean cultural context have had mainly educational experiences that emphasise transmission modes rather than the active and constructivist perspective needed in a PBL approach. Given this radical change in educational pedagogy, a successful facilitator of PBL seems to require a shift away from traditional beliefs about learning to those that are more aligned with constructivist theory.

The literature regarding the influence of teacher's beliefs on educational change is extensive. Michael Fullan, in a recent work (Fullan 2001) places little emphasis on structural or system level change and emphasises the need to change the culture of classrooms and schools. He believes a key focus for any radical educational change is personal relationships and the values within an educational institution. If this is the case, then the success of the educational paradigm shift being undertaken by Republic Polytechnic rests largely with staff and their beliefs about teaching and learning.

This study examines how teachers – coming from personal educational experiences of traditional and transmission pedagogy – experience changes in their beliefs about learning once confronted with a different educational environment. This study is curious (1) whether teachers' beliefs actually change according to the new environment, (2) if there is a change, what the direction of the change is, and finally (3) how teachers account for the changes in their belief system.

METHOD

Participants

This study will follow a cohort of approximately 20-30 new teachers at the start of their teaching duties at Republic Polytechnic. The data reported in this study will be collected before their initial training in teaching skills within a PBL context. This study will report the initial findings collected in September 2006 – providing a description of pre-teaching beliefs about learning and how these beliefs are connected with their previous educational experiences. The study will continue after the conference, following the participants at 6 and 12 months to gauge changes in their belief systems as well as indexing how participants account for these changes.

The teachers at Republic Polytechnic tend to be recent graduates from local universities and institutes of higher education. They come with a history of success in local schools and have obtained degrees from institutions who by and large adopt a teacher-centred approach to higher education. According to Republic Polytechnic's Office of Human Resources many of the new staff have no formal teaching qualification and, little if any, teaching or training experience.

Measures

Beliefs about Teaching and Learning.

Beliefs about teaching and learning will be assessed via the Teaching Perspectives Inventory (TPI) developed by Dan Pratt and John Collins at the University of British Columbia. The TPI describes five perspectives on teaching and learning: The Transmission Perspective – where mastery of content or subject matter is emphasised; The Apprenticeship Perspective, that highlights the need to socialise students into new behavioural norms and ways of working; The Developmental Perspective with a focus on “learner-centredness”; The Nurturing Perspective which emphasises the role of motivation and emotional support in the learning process; and The Social Reform Perspective that seeks to change society through education. (Pratt, 1998).

Interviews about Previous Educational Experiences and Formation of their Teaching Beliefs.

Each participant will be interviewed about their previous educational experiences and the formation of their current beliefs about teaching and learning. While a number of variables will be examined, one aspect that will be examined is whether the participants view their belief system as being rather abstract and philosophical or as being more rooted in experiences in his/her life (including any experiences as a teacher). The coherence of their belief system and their anticipations of their future as a teacher in this PBL setting will also be examined.

ANTICIPATED RESULTS AND DISCUSSION

As the Developmental Perspective is most aligned with constructivist theory, I anticipate that Republic Polytechnic attracts a fair number of prospective teachers with this perspective. This study will further examine these individuals and provide a description of the coherency of their belief system. This paper will discuss how these different individuals will interact with the prevalent institutional culture.

In contrast, the Transmission Perspective is seen as most opposite to constructivist theory and such a PBL-based teaching system. This study will examine the prevalence of such beliefs in staff recruited by Republic Polytechnic. Furthermore, this paper will discuss whether these beliefs have been internalized into a coherent system or whether they are superficially maintained merely based upon previous educational experiences. How such persons will negotiate their beliefs in conjuncture with experiences as a PBL teacher will be discussed.

The other perspectives will be discussed in the paper. In addition to such individual differences, this paper will also examine whether disciplinary cultures affect the prevalence of various beliefs and potentially predict changes in beliefs as staff become more experienced in teaching within a PBL setting. Finally, this paper will discuss implication for professional development and the design of training programs for teachers beyond their initial training.

KEYWORDS

Change, Beliefs, Experiences, Problem-based learning, Perspectives, Qualitative.

REFERENCES

Fullan, M., *The New Meaning of Educational Change*. (3rd ed), (2001) Teachers College Press, Columbia University. New York, NY.

Pratt, Daniel D. (1998). *Five Perspectives on Teaching in Adult & Higher Education*. Malabar, Florida: Krieger Publishing