Background

New Engineering Graduate Student Instructors (GSIs) attend a teaching orientation that provides training in best practices for learning and teaching and creates awareness of classroom climate issues. During the term, new Engineering GSIs complete ongoing professional development (OPD) training, which gives GSIs opportunities to learn new skills and apply them to their current teaching positions through written reflections. Originally, Advanced Practice Teaching (APT) was required of all new GSIs. However, some GSIs did not feel that APT was the best fit given their teaching responsibilities. To give GSIs more flexibility, additional OPD options were introduced.

Theoretical Framework

This project explores new engineering GSIs’ perceptions of their pedagogical professional development through the lens of Wlodkowski’s motivational factors for adult learners. CRLT-Engin has designed the ongoing professional development with this framework in mind.

Research Question

To what extent does the GSIs’ ability to choose from a variety of pedagogical professional development opportunities lead to greater satisfaction with their required training and confidence in their teaching abilities?

Experimental Design

Methodology: All new engineering GSIs were invited to participate in an online survey which explores their backgrounds and beliefs about teaching, professional development, and self-efficacy.

Sample: 158 first-term engineering GSIs in Fall 2013 (46% response rate)

Results

Respondents were equally distributed among the training options. Did not complete, 2%

GSIs who chose Advanced Practice Teaching (APT) report higher confidence in the their ability to promote participation (APT = 3.41, MSF = 2.78, Workshop = 3.20; p = 0.015). Otherwise, there is no significant difference between the choice of OPD and level of confidence.

The midterm student feedback (MSF) received the highest mean score (4.95/6.0), but there is no significant difference between categories.

GSI Confidence & Beliefs

Overall Engineering GSIs are confident in their teaching abilities with mean ratings of 3.23/4.0 on the College Teaching Self-Efficacy Scale (CTSES), Prieto (2006) and report positive perceptions about teaching.

References

