This report summarizes my activities during my Spring 2012 Professional Development Assignment (PDA) leave. It should be noted that initially my application and approval was for Fall 2011. However, following a request from the Department of Computer Science I agreed to switch from Fall 2011 to Spring 2012. The Dean’s office approved the change.

The PDA is meant to be a great opportunity for professional growth and strengthening one’s research, mentoring, and teaching skills. To this end, I planned to spend (most of) my PDA leave at an external, prestigious institution where I could be exposed to different approaches to research, mentoring, and teaching. Also, due to the numerous ongoing projects funded by federal agencies I had to spend the remaining of my PDA leave working on them and on mentoring my 5 PhD students. I spent the following effort on the various federally-funded projects during my PDA leave: 20% - my Deeptutor grant (I am the PI; Department of Education’s IES Award# R305A100875), 10% - AutoMentor: Virtual Mentoring and Assessment in Computer Games for Stem Learning NSF Award # 0918409 (Dr. Graesser - PI), 10% - of effort on: NSCC/LA: Collaborative Research: Modeling Discourse and Social Dynamics in Authoritarian Regimes NSF Award # 0904909 (Dr. Graesser - PI).

I present below more details regarding my trip to The University of Sydney, one of world’s top universities and Australia’s best.

While I have planned to spend about 8 weeks at The University of Sydney initially, and my host expected so, I spent a much shorter period, about 3 weeks, due to the volume of work needed on externally funded projects and in particular due to a suggested agreement by The University of Memphis’s Research Office regarding my federally funded project DeepTutor.

During my visit at The University of Sydney I collaborated closely with Dr. Rafael Calvo, a Senior Lecturer in Software Engineering in the School of Electrical and Information Engineering, and his research group. In particular, I worked with two of his students, Ming Liu and Marco Garcia. My collaboration with Ming Liu and Professor Calvo resulted in a research paper entitled “A Hybrid Question Generation Approach for Critical Review Writing Support” that was submitted to The 4th Workshop on Question Generation, and a journal paper, “G-Asks: An Intelligent Automatic Generation System for Academic Writing Support”, to appear in the Special Issue on Question Generation of the Journal of Dialogue and Discourse. We intend to submit a research proposal based on our work so far during Fall 2012 or early Spring 2013. The joint work with Marco Garcia and Professor Calvo is continuing remotely and will soon result in a research paper.

I also gave an invited talk in the School of Electrical and Information Engineering which was extremely well received.
Furthermore, I attended several research seminars in the Department of Electrical and Information Engineering at The University of Sydney to broaden my scientific knowledge and to identify new project ideas and collaborators.

Among other accomplishments during my PDA leave, I would like to mention a BEST PAPER AWARD received in March 2012 for the following paper.

Rus, V., Niraula, N. (2012). Automated Detection of Local Coherence in Short Essays Based on Centering Theory”, Cicling 2012, March 11-17, IIT Delhi, India. (BEST PAPER AWARD)

Overall, my PDA leave served its intended purpose of offering a great opportunity for professional growth and strengthening one’s research, mentoring, and teaching skills. I found it extremely useful to spent some time at another prestigious university and would highly recommend any faculty to strive to do so.