Academic presentation skills are recognised as an important component of all required communication skills at higher education, particularly for higher degree by research (HDR) students. While some scholars have addressed the need for strategic and practical training programmes in response to the growing demand for the development of doctoral programmes, there is still insufficient knowledge as to how and which communication skills students should learn (Bourn, 2011, Danby and Lee, 2012). Consequently, few studies have reported on the development of programmes for improving student academic presentation skills. In this paper, we report how HDR students improved their scientific presentation skills when opportunities to give regular student seminars were provided and students were given written feedback. We present an extensive case study of 97 HDR students (21 Australian and 76 International) who presented seminars at the Ian Wark Research Institute (IWRI), University of South Australia (UniSA) over a period of 6 years. The seminar scores underwent detailed statistical analysis. We discuss our findings from the viewpoint of student language background and the process of adaptation to academic culture. Based on our findings, we propose possible designs for better student seminar-based training programmes to assist HDR students improve their academic presentation skills.