This study presents an analysis of secondary school-based mentors’ preparedness in supervising student teachers on teaching practice at Midlands State University in the Faculty of Education in Zimbabwe. The major question that guided the study was how the school-based mentors were prepared to supervise the student teachers on teaching practice or work related learning. The method employed in this study was the descriptive survey research which enabled the researchers to work with a limited number of cases and drew up conclusions that cover the generality of the whole population. The population comprised of 87 current student teachers undergoing teaching practice/work related learning, 102 former student teachers who were either in level 4 in the Faculty of Education or already teaching in secondary schools, 76 school-based mentors were the students are or have done their teaching practice and 43 lecturers in the Faculty of Education. The sample was selected through purposive sampling procedure. The sample comprised of 50 current student teachers, 50 former student teachers, 50 school-based mentors and 33 lecturers. The methods of data collection used were content analysis, questionnaire and focused group discussions. Content analysis was done of the available official documents in institution such as teaching practice guidelines, module outlines and policies. Qualitative data collected were analysed using the constant comparative approach and cross case analysis. Quantitative data collected were analysed using the descriptive statistics through converting figures into percentages. The findings revealed that the school-based mentors were not helpful in assisting the student teachers in developing teaching or pedagogical skills. There was no collaboration between the schools and the Faculty of Education and this reflected ineffective mentoring practices and mentoring relationships. The researchers recommend the Faculty of Education to design a participatory training programme with school—based mentors and student teachers for effective development of pedagogical skill.