The use of asynchronous online discussion (AOD) in teaching and learning has become rather common in many higher learning institutions. At Universiti Utara Malaysia, a learning management system (LMS) named LearningCare with capability of providing asynchronous online discussion was introduced in 2001. Several courses in the education faculty are integrating this technology as a support medium to face-to-face teaching. This study aims to identify students’ perceived interaction in asynchronous online discussion and their perception towards their online competencies, content knowledge, instructor’s role and the asynchronous online discussion system capabilities among final year educational technology undergraduate students. This study found that students reported highest interaction in terms of cognitive dimension, followed by interactivity and meta-cognitive. The lowest interaction found in this study was interaction that relate to social dimension. This study also found a positive significant relationship between students’ perceived interaction in asynchronous online discussion with students’ perception towards their online competencies, content knowledge, instructor’s role and the online discussion system capabilities. In terms of gender, this study found no significant differences between male and female students’ perception of their interaction in asynchronous online discussion and other variables studied. The findings from this study reveal that students’ interaction in asynchronous online discussion could encourage active construction of knowledge among students through interaction with peers and lecturers. Thus, the use of asynchronous online discussion is very valuable in the development of students’ learning process and teaching development.