The Swiss admission test to medical schools (EMS) was introduced at the Medical school of Innsbruck in 2006. This study aims to find out whether this test has an effect on the distribution of Kolb’s learning styles in Medical students. The distribution of the 4 learning styles according to Kolb (diverging, assimilating, converging and accommodating) was determined in the medical students who were successful in the EMS test and compared to those of students of 2002, 2003 and 2004 who had been admitted without any admission test. In the unselected students the relative proportions of Kolb’s learning styles were 21.5%, 47.4%, 21.3% and 9.8% for diverging, assimilating, converging and accommodating, respectively. Students who were selected by the EMS showed a significant different distribution: the frequency of assimilating and accommodating remained unchanged (47.0% and 8.4%) but the frequency of “converging students” had increased (35.1%) to the expense of student with diverging learning style (9.5%). When the EMS points were compared between the 4 learning styles students with the diverging learning style had significant lower marks (p=0.008) than students with one of the other learning styles. Since students with the diverging learning style are predominantly female this effect on the learning style distribution might explain also a significant part of the gender effect (reduction of females) that was visible after the introduction of the EMS.