

The study tried to improve on students' conceptions in an introductory chemistry course, Introduction to Inorganic Chemistry, through the constructivists' instruction. This was effected through micro practical activities to see how it enhanced pre-service chemistry teachers' conceptual understanding. Data were collected from 48 pre-service chemistry teachers at the University of Education, Winneba in Ghana by means of a concept test, students' responses in class and class work as well as a semi-structured interview. Results showed that pre-service teachers had some alternative conceptions about chemistry topics. A constructivists' instructional strategy was used to help teacher trainees to reconstruct their concepts of many scientific phenomena. Keywords: Conceptual understanding, alternative concepts, microchemistry equipment.