CONSTRUCTIVISM APPLIED TO THE DISCIPLINE: ADVANCED EDUCATION ON BIOCHEMISTRY

Maia, W. B.¹; Santos, B. S.²; Vasconcelos, A. S.²; Beltrão, E. I. C.²³; Lima, V. L. M.²

¹ Hospital das Clínicas - UFPE; ²Departamento de Bioquímica CCB/UFPE; ³ Laboratório de Imunopatologia Keizo Asami LIKA/UFPE

Constructivism employs models that include epistemological knowledge and strategies to stimulate and motivate students so that they need to construct their own understanding of any subject concept. Under this process, the primary role of teaching is not to lecture, explain, or otherwise attempt to transfer knowledge, but to create. This principle was used in the Biochemistry Master Science Program of the Universidade Federal de Pernambuco. The model applied was divided into four phases: (1) acquaintance of the student previous knowledge (using a pre-test); (2) presentation of the knowledge using a Science Teaching CD-Rom; (3) submission of the learned content by the student to teacher critical analysis and (4) application of Interactionism (teacher/student/contents). Each phase was individually evaluated. In the first phase, the average of correct answers of the group (13 students) was 64%, whereas the second and third phases presented 61% and 53%, respectively. These results reveal a great cognitive unbalance into the group. They also showed that the previous ideas and hypothesis of the students were in conflict with the scientific concepts. After teacher intervention (phase four) the group presented an increase in the knowledge (86% of correct answers). Based on these results one can conclude that this four-phase model applied and based on Constructivism for acquiring knowledge can be useful in Biochemistry teaching.

Supported by UFPE and CAPES