Virtual Practice of Biochemistry: Ascendant Chromatography on Paper of Amino acids.

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Chromatography is a method used for analyses of mixture components based on different criteria: adsorbility, solubility, molecular mass, ionic charge and affinity. It is an important subject of Biochemistry. This work reports the development and the validation of a software that simulated a laboratory activity named *Ascendant Chromatography on Paper of Aminoacids*. The organization and the multimedia material collection were done during the 2008/2 semester. The most representative images were inserted into the learning object. The tool used for the software development was Adobe® Flash® CS3. The first application of this object was in Biochemistry I (Pharmacy-UFRGS) in 2009/1. Using this experience, a new version was developed which was tested by the students of the same subject in 2009/2. After a 50-minute class (theoretical-practical), the students of both semesters were divided in two groups. Group I answered a questionnaire about chromatography basic concepts and after used the software. Group II was submitted to an inverse protocol. The groups also evaluated the technical aspects of the software animation/simulation and the activity carried out. Associating both applications results (2009/1 and 2009/2), the present learning object can be valid as a support for practical teaching of basic biochemistry. (Supported by SEAD-UFRGS)

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