

## Analysis of the Experience of a Virtual Learning Environment Integration Into a Biochemistry Course Offered to Undergraduate Students

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### **ABSTRACT**

As Information and Communication Technology (ICT) becomes available in educational contexts, it is important that educators experiment different ways to deal with ICT tools in the teaching-learning process at the University basic sciences level. The challenge is to integrate ICT throughout the learning subjects in order to improve the quality of the learning process to students. This paper presents the results of an experience using a Virtual Learning Management System (VLMS), named *Constructore*, applied in the Biochemistry discipline at the Federal University of Rio de Janeiro (UFRJ) for undergraduate medical students. Using *Constructore*, we developed a learning environment intended for integrating online activities and traditional course content. The course was focused on the integration of energy-yielding metabolism, exploring metabolic adaptations in different physiological or pathological states such as starvation, diabetes and exercise. The course environment was structured with three modules, each of them presenting problem-based exercises to be answered after retrieving relevant information in original scientific articles. Based on the analysis of a semi-open questionnaire, the results provided evidence that the virtual environment stimulated students to critically read relevant scientific articles and to acquire skills to build and to integrate their knowledge through content association.

Key Words: Biochemical Educational, Virtual Learning Environments, Information and Communication Technology

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