A set of plastic pieces to represent structures to build amino acids and proteins was developed and named as “Building Amino Acids and Proteins Molecules”. The kit was evaluated, in a first step, by graduate students using specific assessment questionnaire. This step guided the final adjustments of the plastic parts and the evaluation methodology. The last assessment of the kit was performed in a workshop for 256 teachers in the fields of natural sciences from Regional Boards of São Paulo State Department of Education. The data presented refer to the evaluations carried out by Biology and Chemistry high school teachers regarding a ludic activity consisting of the construction of tridimensional models with the kit. The evaluation results show that the material had great acceptance by the community of teachers and can become a valuable tool for teaching about amino acids and proteins structures. Regarding the answers given to the question “Would you use this material to teach this topic in high school? Comment”, 80% of the teachers chose YES and the 58 who justified their answers raised some questions concerning the use of the instructional material proposed, which will be discussed in the present work. This material has been certified and integrated the Guide for MEC Educational Technology 2008.

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