



## **Innovation in Teaching and Learning**

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### **Abstract**

This paper discusses the universal pedagogy which could allow teaching in any type of school, university or country. I will argue that all new pedagogy and teaching should ideally reflect the informational structure of students' thinking and not only to be based on the experiences of teachers and educators themselves. The three-dimensional model of the macrostructure of the thinking or active brain of a student according to its functions has been identified in the process of the research work carried out in two schools in Moscow in the period from 2007 to 2009. The functions were defined as follows: perception (recognition) of the information, an estimation of the content of information and the response to this information. As such, the developed model accordingly represented three interrelated parts. Testing of each of the parts and estimation of their work is carried out with the help of specially developed questionnaires. On the basis of such testing, the abilities and learning preferences of individual students can be identified. One of the benefits of this approach is grouping and streaming of students according their abilities. It is recognised that students' development in school should be in harmony with their abilities and characteristics. So the developed approaches allow to observe the development of each of the parts of the informational brain of a student so that the 'part' which deemed to be behind the development appropriate to the age of a pupil, could receive as much attention as possible through assigning creative project work in the classroom or by getting involved in a group work.

The paper discusses the ways in which the developed approaches can be beneficial to students' education. Among those are: a better adaptability to changing settings of the classroom, all-round development on any stage of students' learning without the dependency on the effects of their previous educational experience and their attainment. The paper also discusses other findings such as the better attainment of the students, their increased interest to school and learning in general, improved communication skills and better rapport with teachers and even their parents.