Abstract

The importance to recognize a learner’s Learning Style (LS) is ever-essential as to substantiate success in a teaching and learning process. At the same time, the learner’s IQ and personality traits such as Stress also being actively investigated in educational research as educationists consistently attempted to understand learners in a more adept way. Nevertheless, the effort was usually confined to psychoanalysis test. With the emergence of Electroencephalography (EEG) technology, learner’s brain characteristics could be accessed directly and the outcome may well hand-in-hand supported the conventional test. In this study, the participants (n= 80) are grouped to the LS of Diverger, Assimilator, Converger or Accommodator using the Kolb’s Learning Style Inventory (KLSI). Subsequently, their brain signals were then recorded using EEG at resting baseline state of Open Eyes and Closed Eyes. A statistical tool of SPSS 16 was used for data analysis purposes. Using the Two Step Cluster analysis, the participants’ EEG datasets were 100% classified to the corresponding LS. Then, EEG Alpha band was selected to link between LS, IQ and Stress. The study concluded that Diverger is the LS with highest IQ while Converger and Diverger are the LS that prone to Stress.

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