Do You Want To Know the Best Way To Study? We Can Help You!

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This student was curious about the use of EEG in creating a program to recommend an individual's most suitable learning method. In adolescence, when metacognition is still being formed, it's difficult to objectively evaluate brain activity because factors such as mood and previous episodes affect decision-making. Therefore, this student checked the degree of beta power and relaxation in real time through EEG measurements to evaluate learning in an objective manner. Brain activities of seven healthy first-year high school students(documented by code number) were measured by time (7:00/16:00), place (reading room environment), and subject(English/Math). It was examined by individual and group, classified into two patterns, and compared with the questionnaire. As a result, when analyzed by subject, Low-Beta rates(representing concentration) showed no significant difference, while High-Beta rates(representing stress) were higher in the afternoon. When analyzed by subject, the power ratio(Beta/Alpha) was higher when participants were studying English compared to Math. Personal results were also found. Individual characteristics were organized and classified by group and showed high correlation with the participant's answer rate. Hence, this student concluded that on the whole, students study better in the morning when learning English, and proceeded to create a program. If a new student's brain wave data were input, the program would find the most similar pattern(among the previously classified patterns) and evaluate the individual's concentration and recommend his or her most appropriate study method.

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