

Apply the Body Tracking in the E-Learning Evaluation System

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In the typical teaching environment, there is a ten-minute time break between classes. Learners usually take this time to stretch their body and do some relaxing activities. However, this is hard to achieve in the E-learning environment. The online courses are packaged as a file and provided for learners to operate by their own. Learners are often seated in front of the computers for a long period of time completing the whole set of courses with highly concentration, unconsciously muscle tightness and emotional tension. In consequence, the learning effectiveness would decrease due to the accumulated physical and psychological discomforts.

Therefore, this research proposed an evaluating system which combined the body tracking technique, KINECT, to improve the side-effect caused by long-time learning. In this evaluating system, the answer was designed with an accordant body-stretch movement. Learners are required to stand up and do the designated movements to complete the evaluation, and that urges them to relax muscles and banish the tightness and tension. The body tracking evaluating system helps increasing the learning effectiveness and learner's health through the interesting and relaxing evaluation method.

This system aims to attract the students' attention with this innovative evaluating process. Forty students were chosen and separated into two groups randomly to carry the experiment. One took the traditional evaluation by merely clicking the options to answer questions, while another used the body tracking evaluating system after the same online course were given. After one week online course assessment, both groups have great evaluating grades. However, the tester using the body tracking evaluating system expressed that they were more willing to take the after lesson test through the body tracking evaluating system than the ordinary one.