Study on Virtual Learning Environment System in the Field of Construction Technology - A Sri Lankan Universities Perspective

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In order to maintain a good relationship in teaching and learning activities among students and university academic staff, a system called Virtual Learning Environment (VLE) can be used. A VLE system was designed among the students and university academic staff members in the field of Construction Technology in Sri Lankan universities to encourage a positive approach in knowledge achievement and to support active learning within the university. This study was carried out to analyze the factors influencing the VLE system and to explore the relationship between the students and university academic staff members on the VLE system. The factors influencing VLE were identified through the literature review and the interviews which were conducted among the university academic staff and the industry experts. A paper-based questionnaire survey was carried out among the students and university academic staff members who used the above created VLE system in the field of Construction Technology in order to measure the severity of the factors influencing the VLE system. There were 40 nos. of responses from the students and 14 nos. of responses from the university academic staff members received. The respondents were requested to indicate their level of contribution on various factors in the survey questionnaire with a 5-point Likert scale. The Relative Importance Index (RII) was calculated for each factor. The severity of each factor was identified based on its RII value. The factors were ranked based on their severity and Spearman's rank correlation coefficient was calculated. It was found that there was 48.4% of positive degree of agreement between the students and university academic staff on the factors influencing VLE in the field of Construction Technology. The students stated that time saving, infrastructure, collaborative learning, frequent feedback, sustainability and flexible learning are the most significant factors influencing the VLE system, where the university academic staff members identified that collaborative learning, time saving, frequent feedback and infrastructure are the most significant factors influencing the VLE system in the field of Construction Technology from Sri Lankan universities.

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