OBJECTIVE

The primary objective is to cover this gap by exploring the development and validation of the Technology-Enhanced Active Learning (TEAL) survey designed to measure student active learning in a technology-enabled learning context. The survey was constructed to assess the effects of active learning on technology-enabled learning context. It provided a platform for identifying and comparing the effectiveness of different teaching strategies in technology-enabled learning environments.

One of the key goals of active learning is to enable students to reach higher levels of cognitive functioning through effective engagement and interaction. The TEAL survey was developed to measure the extent to which students perceive their active learning experiences in technology-enabled learning contexts.

RESEARCH METHODOLOGY

Instrument Development

To provide a high degree of confidence in the constructs and item content as well as content validity of the survey instrument, a high level of face validity and content validity was ensured. Cronbach’s alpha (1951) was used to assess the internal consistency of the survey items. A total of four scales: interactive engagement, problem solving skills, behavioral engagement, and cognitive engagement were developed. The resultant instrument is a valid and reliable instrument that can be administered to a small sample of students.

Card Sorting

The goal of the item creation step was to ensure content validity of the items. The items were divided into four categories: (a) interactive engagement, (b) problem solving skills, (c) behavioral engagement, and (d) cognitive engagement. The items were reviewed for content validity. All items demonstrated high loadings on their respective factors. The results of the factor analysis determined that the scales were not only reliable, but also valid.

Item Creation

In order to ensure content validity, by reviewing the extent to which the constructs are represented, a card sorting procedure was performed following Mezirow and Thompson’s (1995) development procedure. The objective of this sorting procedure was to ensure that the items were valid, reliable, and representative of the constructs.

RESULTS

The development of a valid and reliable survey instrument was essential for measuring student active learning perceptions in technology-enabled learning contexts. The results of the study demonstrated that the TEAL survey was effective in measuring student active learning perceptions in technology-enabled learning contexts.

CONCLUSION

The TEAL survey and conceptual framework were developed based on the literature review. Each of the four scales exhibited high internal consistency and validity. The results of the study support the use of the TEAL survey in measuring student active learning perceptions in technology-enabled learning contexts.

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