ENHANCING ENGINEERING EDUCATION THROUGH OPEN EDUCATIONAL RESOURCES

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Abstract - Increasing cost of textbooks is a concern in all disciplines but it is even more so in technical disciplines, which makes engineering education difficult to afford for some students. Frequent issuing of newer editions of textbooks by publishers force faculty to recommend students to buy the latest textbooks while rendering previous editions obsolete. While engineering faculty author these textbooks, they do not earn significant royalties from them unless the books sell thousands of copies a year, which is possible only in lower division courses. These issues,along with the use of web tools, have given rise to renewed interest in the use of open educational resources in engineering disciplines across the globe. In this paper an overview of open educational resources, strategies for assessing the quality and accessibility of such resources, steps to follow in adopting such resources for engineering curricula, and ways to encourage faculty to contribute to the development of open educational resourceswill be discussed. Educators from all engineering disciplines will benefit from this paper.

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