Abstract

Curriculum includes series of planned instruction that is coordinated and articulated in a manner designed to result in the achievement by students of specific knowledge and skills and application of this knowledge. The curriculum consists of both plans for learning and the actual delivery of those plans. The Curriculum should focus on the Higher Order Thinking Skills (HOTS). A study was conducted to find out the effectiveness of the Power Electronics curriculum of B. E. Degree programme that is offered in engineering colleges of Tamilnadu. The objectives of the curriculum were classified into 13 clusters based on the category of knowledge dimension and cognitive process dimension according to Bloom's revised taxonomy of objectives. To judge the relative contribution of each cluster of objectives to the Lower order Thinking skills and the Higher order thinking skills (HOTS), Criterion Referenced Tests (CRTs) were developed for the 13 cluster of objectives of the curriculum. The study revealed that in the Power Electronics Curriculum 75% of the Lower order skills were mastered whereas only 42% of the Higher order skills were mastered. This paper suggests the three Dimensions of Power Electronics Curriculum that help the students in achieving Higher Order Thinking Skills (HOTS) as per Blooms Taxonomy.

References
- Bhutto, 2005. Enhancing chemical engineering curricula in Pakistan to adapt to the new challenges of industrialization Published in the journal world transactions on engineering and technology education 2005, Vol. 4, No. 2, pages 239-244.

Index Terms

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Power Electronics

Keywords
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Higher Order Thinking Skills(HOTS)

Revised Blooms Taxonomy(RBT)