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Students' understanding of physical components of electrical circuits.

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In many cases, the teaching of electricity starts from the basic use of ohms law and its mathematical interpretations. Less is done in terms of defining and explaining qualitatively the role of the electric circuit elements like a resistor, a conductor, a switch and lastly a battery. Since the learning of electricity is predominantly conceptual, it is perceived as difficult because it cannot be physically touched or seen and those physical components are less dealt with qualitatively. The physical components are used during representations to explain the conceptual interactions of what takes place in each component in terms of current, resistance and potential difference. This research is aimed at determining how students define and explain the role of some basic electric circuit elements, that is, resistors, conductors, batteries and a switch. In addition, this work aims to determine how the knowledge of these physical components can enhance the understanding of electricity as a whole.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

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