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## How to Increase Students' Motivation to Learn Magnetism

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Electromagnetism is considered one of the most complex topics of physics. Students face significant difficulties trying to get familiar with magnetic and electric phenomena. If the laws of electricity and magnetism and their theories are unclear to students, these phenomena become even more challenging to understand. In these situations, students usually start memorizing concepts without understanding them. One of the main reasons is that students are not paying attention to the basic fundamental operations, meaning students do not participate enough in inter-curricular activities to practice. Another reason that intensifies the difficulties that students face is time pressure. Limited-time to learn and practice will most likely cause a decrease in the ability of students to store this knowledge and use it in the long run.

In order to overcome this difficulty, there is a need for students to practice more, which in most cases, practice is missing, leading to not understanding phenomena entirely. Numerous experiments give a more practical understanding of magnetism and electricity, using easy-to-find and cheap materials. Experimenting with materials before reading about the theory and concepts behind phenomena will most likely increase students' curiosity and will to learn about the phenomena and understand them instead of simply memorizing. On top of that, students gain the needed expertise to watch the phenomena and make a replica of it.

This paper aims to present the strategy and the steps needed to do these experiments, which are most likely to increase students' interests in learning and understanding magnetism.

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