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The 'Misconception' of 'Common Sense': An Introspective Approach

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Students' introduction to physics is not devoid of prior schools of thought, where the students are the blank slates upon which the knowledge of physics is inscribed. Students possess their own prerequisite theories, concepts and intuition that have been extensively formed through their personal experience. This prior system of thought that has been fashioned from personal experience will commonly construct conclusions that are divergent from the academically accepted viewpoint of physics. These divergent viewpoints share an assortment of terms in physics education being labelled as preconceptions, alternative conceptions, misconceptions, common sense concepts and spontaneous knowledge. This prior established system of thought is resilient to change, where the student is not easily persuaded to abound their common sense belief simply because it has been branded as erroneous and exiled to the wilderness of 'misconceptions'. The common sense theory that is in contention to the established scientific theory can be further reinforced, if it was not adequately addressed, by the student's prior academic exposure, with the one feeding off the other. To address this dilemma requires an introspective approach, mixing the practical with the theoretical. How this is being done, and what other approaches physics education can utilize will be addressed.

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