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## Vectors from students' point of view

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First year physics lecturers reported difficulties with students' learning of concepts and skills associated with studying vectors. The results of the investigation suggested that students had insufficient knowledge and understanding of magnitude, direction, and the significance of free-body diagrams in resolving the related vectors into components [1]. In the report [2], students were found to have knowledge of drawing free-body diagrams but lacked competence with the formulation of equations. The results revealed that most students did not do well in subsequent sub-questions. We report the findings obtained from the students when responding to the sources of their challenges in dealing with sections related to vectors.

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

No

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

N/A

**Would you like to submit a short paper for the Conference Proceedings (Yes / No)?**

Yes

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