

GIFTED LEARNERS: STRATEGIES TO SUPPORT AND ENGAGE GIFTED STUDENTS IN THE SENIOR HIGH SCHOOL PHYSICS CLASSROOM

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GIFTED LEARNERS IN PHYSICS

Characteristics and strategies

The characteristics of gifted students are well established in the literature (Silverman, 2003) yet teacher understanding of these characteristics and their implications are not as widespread (Walsh & Jolly, 2018). These characteristics include learning rapidly, excellent memory, keen observations, good reasoning ability and curiosity. This presentation provides an overview of these key characteristics to take into account when teaching gifted students in the Physics classroom, and outlines pedagogical approaches to help meet the needs of these students (Centre for Education Statistics and Evaluation, 2019) including examples from the author's experience. Some of these approaches are a faster pace of learning, increased depth and complexity, and extension. It is important to note that gifted students require scaffolding of learning tasks as much as other students. Additionally, the role of 'pre-testing' as a formative assessment tool to maintain appropriate pace and challenge will be addressed. Lastly, the issue of low participation of girls in physics is visited (Jaremus, Gore, Fray & Prieto-Rodriguez, 2018) with reference to perfectionism and the forced choice dilemma facing gifted girls (Pfeiffer & Stocking, 2000; Gross, 1989). The forced choice dilemma refers to a choice between peer acceptance and the pursuit of academic excellence. This choice is a consequence of the asynchronous development of the social and emotional characteristics and the intellectual capabilities of many academically-gifted students.

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