

# [Related literature](https://assignbuster.com/related-literature/)

[Literature](https://assignbuster.com/essay-subjects/literature/)

Enabling many programs for the students so that they can enhance their academic performance in the subject area of Mathematics. In this regards this literature review regarding about the different factors that could affect the students’ performance subject towards Mathematic subject and having tendency of receiving a failing grade. This paper would deal with the following study: The factors that affect students’ performance either external or internal to have an effective teaching it is necessary to use different strategies that promote students greater achievement.

Many students have experience mathematics anxiety. This kind of anxiety was detected in the late 1950s. It was recognized since the early 1970s, Mathematics anxiety has been defined as “ feelings of tension and anxiety that interfere with the manipulation of mathematical problems in a wide variety of ordinary life and academic situations” (Richardson & Suinn, 1972, p. 551). The consequences of being anxious toward Mathematics include the avoidance of mathematics and the decline in mathematics achievement.

College students, who are undergraduate reacting emotionally to calculus and Mathematics (Dreger and Aiken 1957). Although the reaction is appeared to be similar to test anxiety in general, they found out that mathematics anxiety is a potential factor prose. They have labelled it ‘ number anxiety’, which is often assumed to be a high level of anxiety impairs performance. Student motivation Motivation facilitates students to become cognitively engaged. “ Motivation refers to the incentive for goal directed behavior,” writes Dr.

Susan Davis (2007), and is developed through socialization. Interestingly, motivation can be attained in varying ways and is adaptive. Different motivational beliefs effect students’ ability to successfully complete basic mathematics by promoting, sustaining or facilitating learning. One motivational focus is student perception of ability to complete the task; self efficacy, “ Can I do this task? ” (Pintrich & DeGroot, 1990). A second motivating focus is task value belief, or intrinsic motivation; the individual’s perception of the task’s importance, “ Why do I need to do this task? The third focus is goal orientation (Pintrich, 1999). “ What did I felt after I did this task? ” (Pintrich & deGroot).

Three general goal orientations are identified; mastery learning, extrinsic motivation, and relative ability orientation. Self-efficacy Self-efficacy is the degree to which a student believes they can accomplish a goal (Pintrich, 1999). Albert Bandura and Edwin Locke (2003), from Stanford University and University of Maryland respectively, report “…perceived self efficacy and personal goals enhance motivation and performance attainments”(p. 7). Bandura and Locke understand “…efficacy contributes significantly to the level of motivation and performance” (p. 87). Pajares (2002) believes self efficacy to be intuitive. Summary of Literature Review All students deserve to have a quality education that meets their needs. Education in mathematics achievement for low performing students is an area with scant research and attention. Few researched based studies are available to teachers regarding mathematic intervention programs.

Strategies that have been employed in classrooms for students who are behind academically center around more time-on-task (Balfanz et al. , 2004) or remediation classes in mathematics are limited to narrow test preparation and life skills. Views on learning mathematics are wide ranging, from a set of procedures that must be memorized, to a conceptual view of integrating algebra and geometry to make sense of the world (Balfanz et al. , 2004). What is needed is an early identification system using diagnostic and formative assessments, and required intervention using scaffolding instruction (Balfanz et al. 2004).

Self efficacy beliefs in students must be regularly scrutinized by teachers to keep students from becoming discouraged. It is imperative that low performing students are taught explicit learning strategies and have caring, supportive teachers, with high expectations for behavior and achievement. Synthesis of studies indicates a significant need for more research in the area of mathematical achievement. Attention to student motivation, teacher behavior, and explicit teaching of learning strategies needs to occur in a timely manner for all students.