

1098-97-40

Muhammad Shabeer* (m.shabeer@qu.edu.qa), Department of Mathematics, Foundation Program, Qatar University, Doha, 2713, Qatar. *Critical thinking skill; how it can be improved by changing teaching methodologies for college mathematics students.*

As it is, generally agreed upon that critical thinking skills are crucial to one's success in the modern world, where making rational decisions is increasingly becoming a part of everyday life. While teaching mathematics, it is undoubtedly easier for a teacher to teach the mathematics concepts in the traditional way of lecturing, but the question arises is; does it improve students thinking skills required to understand mathematical concepts in a clear and better way? The answer is not very optimistic. To cope with this issue, in this paper we have discussed different approach of lecture delivery, which helps students think critically to understand mathematical concepts in a better way. We will present some of the innovative teaching methodologies with illustrated examples from basic mathematics concepts. Examples for each of the "Compare-Contrast", "Whole-Parts", "Decision Making" or "Creating a Model" (aka creating a Metaphor or Making a Connection) are presented in this paper. (Received January 15, 2014)