

1035-97-1977 **May F Hamdan*** (mhamdan@lau.edu.lb), Lebanese American University, Beirut, 13-5053 F6,
Lebanon. *Choosing the right representation: a key to successful proof.*

There is pedagogical evidence that choosing the right representation for a term, concept, definition, or an element plays a big role in the success and the effectiveness of a proof, and, in general, is key to a successful communication in Mathematics. This choice is immaterial when it comes to the creation of Mathematics. A new definition or concept is easily reached by a learner if the representation is appealing, suggestive, and above all, iconic in a way that is clear to the learner. Iconicity of the chosen symbol, for one, helps acquaint the student with the new notion and shortens the distance between the mathematical object and the student. When an instructor makes students aware of the choice of the external representation of a newly defined concept, then he or she is highlighting the importance of that choice and insinuating that there need not always be a one-to-one correspondence between the concept and its representations, facilitating the acquisition of the ability to recognize one concept in different forms and representations, which is key to broadening and deepening knowledge and allowing connections between different notions. In paper, I present illustrations of cases that support my argument. (Received September 21, 2007)