

# Independent Learning in Engineering Education: A Brazilian experience

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**Abstract** — This paper deals with critical success factors for implementing the Independent Learning (IL) in Engineering Education in a Brazilian university. Independent Learning is used here to emphasize independence in the process of learning or attainment of knowledge. The student is encouraged to become more self-reliant. The teacher's role is more of an education manager and resource person, whose experience and knowledge contribute strongly in this method. The critical success factors can be summarized as: (a) Clear learning objectives, (b) Definition and availability of resources, such as learning materials and access to good teacher support resources. (c) Definition of teacher and student roles based upon the Conscious Discipline concept; and (d) Definition of tools for the continuing evaluation of IL.

**Index Terms** — Engineering education, Independent Learning, OR education.