

328a Incorporating Life Cycle Analysis into the Curriculum

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Life Cycle Analysis is an important sustainability tool that should be incorporated into the curriculum. Products and processes all have a natural life cycle. For example, the life cycle of a product starts from the extraction of raw materials for its production and ends when the product is finally disposed. In the production, use and disposal of this product, energy is consumed and wastes and emissions are generated. A life cycle assessment is an analysis in which the use of energy and materials are quantified and the potential environmental and societal impacts are predicted. Life cycle thinking is progressively being adopted by industry as an essential tool for analyzing processes and products. We have developed examples, problems and case studies that can be incorporated into the curriculum starting at the freshman level. Several examples will be given in this presentation.