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Problem-based Learning to Increase Sustainability Awareness: a Case Study in the Real Estate Branch

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Abstract

The topic of sustainability has become an increasingly critical consideration in all aspects business. Higher education should prepare graduates to identify and solve problems and to develop sustainable business strategies which satisfy the environmental, social and governance (ESG) criteria as defined by the United Nations Sustainable Development Goals (SDGs).

Traditional instructor-centered lectures often concentrate on rote, reproduction of existing knowledge and thus fail to inspire first-year students to develop analytical, problem-solving skills. Student-centered, constructivist teaching methods can be better suited to help students learn critical thinking and interdisciplinary collaboration.

This work presents a Problem-Based Learning (PBL) concept to integrate sustainability goals into a first-year undergraduate course on business for students of information systems. A multi-faceted real-world problem from the real estate sector serves as an interdisciplinary case study. Each week, students concentrate on one specific aspect of business, such as marketing, supply chain management, finance or human relations for the real estate case study. Students actively work in teams to identify problems and competing stakeholder interests, use design thinking to generate ideas and collaborate to develop original solutions. Student teams present their proposals to the entire class. The entire class participates in critical evaluations of different solution alternatives, with a main focus on the fundamental tension of balancing enterprise profitability with fulfillment of long-term sustainability goals.

This PBL course concept guides students in developing analytical competencies vital for their future careers. It can be adapted to other subjects to integrate sustainability into course curricula.

Keywords: Problem-based Learning; Sustainability; Business; Higher Education; Case Study; Real Estate