How to Design an Effective Case Study

Abigail Wilson¹, Ashley Rhodes¹, Timothy Rozell²

¹Division of Biology and the ²Department of Animal Sciences and Industry, Kansas State University, Manhattan KS

**Introduction**

Active learning has become a widely accepted method for improving student engagement and understanding of complex concepts in undergraduate courses. This approach involves the active participation of students in the learning process, which can be facilitated through various methods such as case studies, discussions, and problem-solving activities. Case studies are a valuable tool in this regard, as they provide students with a realistic context in which to apply their knowledge and skills. They are particularly effective in courses where students need to develop critical thinking, problem-solving, and decision-making skills. However, to be effective, case studies must be designed carefully to ensure that they are meaningful and relevant to students.

**Elements of Case Study Design**

- **Case Study Preparation**: This involves selecting a case study that is relevant to the course material and that will engage students in active learning. It is important to choose a case study that is not only interesting to students but also provides an opportunity for them to apply their knowledge and skills. Case studies should be selected based on their relevance to the course material and their ability to engage students in active learning.

- **Case Study Design**: This involves designing a case study that is appropriate for the course level and that provides an opportunity for students to apply their knowledge and skills. Case studies should be designed to be as realistic as possible and should be designed to be engaging and relevant to students. This can be achieved by selecting a case study that is relevant to the course material and that provides an opportunity for students to apply their knowledge and skills.

- **Case Study Implementation**: This involves implementing the case study in the classroom and ensuring that it is effective in improving student engagement and understanding of complex concepts. This can be achieved by designing a case study that is appropriate for the course level and that provides an opportunity for students to apply their knowledge and skills. Case studies should be designed to be as realistic as possible and should be designed to be engaging and relevant to students. This can be achieved by selecting a case study that is relevant to the course material and that provides an opportunity for students to apply their knowledge and skills.

**From Higgly Timmy to Tubby Timmy**

The case study described in this paper is an example of the use of case studies in undergraduate physiology courses. The case study is designed to be engaging and relevant to students and provides an opportunity for them to apply their knowledge and skills. The case study is based on a real-life scenario and is designed to be as realistic as possible. The case study is designed to be as realistic as possible and provides an opportunity for students to apply their knowledge and skills. The case study is designed to be as realistic as possible and provides an opportunity for students to apply their knowledge and skills. The case study is designed to be as realistic as possible and provides an opportunity for students to apply their knowledge and skills. The case study is designed to be as realistic as possible and provides an opportunity for students to apply their knowledge and skills.

**Critical Elements**

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**References**

4. Timmy is plopped on the examination table. Dr. Wilson states as she walks into the patient room where Timmy continues his type II diabetes.
5. Instructions: Consider a drug that is used to treat diabetes. Describe the drug actions and explain how it works.