THE ART OF WEB-BASED LEARNING

Past Achievements
Present Objectives
Future Strategies

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OBJECTIVES OF WEB-BASED LEARNING

I thought you said the chemical composition for water was H to O.
WEB-BASED TEACHING/LEARNING

- Enhancement of Knowledge Delivery
- Reinforcement of Conceptual Understanding
- Instigation of Active Learning
- Fortification of Macroscopic Overview of Concepts
- Facilitation of Communication Channeling
STEPS IN WEB-BASED DEVELOPMENT
Biochemical Laboratory Techniques
(BICH 172/182)
You must memorize all the metabolic pathways.

Intermediary Metabolism
(BICH 122)
BIOCHEMICAL DISCIPLINES

Introduction to Biochemistry
(BICH 121)
Objectives

• Conceptual Learning
• Reflective Thinking

Approaches

• Development of animation series on biochemical methods
• Highlight availability of online resources on interactive tutorials
BICH 122

Objectives
• Integrative Learning
• Reciprocal Learning

Approaches
• Construction of Interactive Metabolic Pathways
• Development of Interactive Assessments
Objectives
• Perceptual Learning

Approaches
• Use of multi-mediated learning aids for knowledge reinforcement

http://ctz106.ust.hk/test/bich121/1_protein_03.swf
PRELIMINARY EVALUATION

Effectiveness of WEBCT in communication

Effectiveness of animations on conceptual understanding

Overall effectiveness of WEBCT 172/182

[Bar charts showing data points for each category]
FUTURE DIRECTIONS

Development of Virtual Laboratory

Promotion of Online Discussion Forum