Adapting Instruction to Learning Styles

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GPS: Ignorance is NOT Bliss

Problem
Introductory physics courses at WPI do not utilize differentiated learning styles.

Goal
To assess learning styles in physics classes at WPI and encourage teachers to adapt differentiated instruction.

Method
12. I enjoy:
   a) Watching movies, looking at photos/art, or people watching
   b) Listening to music, or talking to friends
   c) Doing activities, playing sports, building models, or being active

Data
Amount of Students Who are Certain Types of Learners

- Auditory: 48%
- Visual: 36%
- Kinesthetic: 16%

N=27 students

Amount of Students Who Learn in Different Settings

- Group: 84%
- Individual: 16%

N=27 students

Data Analysis
The results of our survey showed that the students in this specific Physics 1120 are auditory learners and prefer to work in group settings.

Solution
- Conference should be altered by varying speed, volume, and pitch to create aural texture. Class work should be given in groups.
- If students polled:
  • Visual: There should be more visual aids like pictures or diagrams.
  • Kinesthetic: There should be more demonstrations and lab based work.
  • Individual: Give independent assignments.

Recommendation
- Survey each conference at the beginning of each term.
- Establish a common learning style within each specific conference.
- Implement corresponding instruction.

References

Analyzing survey results
Adapt instruction based on survey results
Post-survey to analyze effectiveness

Sounded:
Vlc.

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