

## Electronic Response Systems: Getting Past Gimmick

Susan WG Batten RN PHD  
Carlos AC Baptista MD PHD



## Clicker generation

- cellular telephone
- television remote
- digital camera
- game devise
- MP3 player
- calculator
- laptop
- PDA



Batten & Baptista 4-11-06

## Privacy issues

- tracking
  - attendance
  - participation
  - identify bias
- right to not participate

Batten & Baptista 4-11-06

## Immediate feedback

- assess level of understanding
- correct misconceptions
- clarify complex content

Batten & Baptista 4-11-06

## Rapid assessment

- practice items
- quizzes and tests
- no return feature
- timed response

Batten & Baptista 4-11-06

## Capability for consensus

- gather opinion
- poll group
- fast round Delphi
- tool to subdivide group

Batten & Baptista 4-11-06

## Response system terminology

- electronic
- personal
- audience
- classroom

Batten & Baptista 4-11-06

## Features

Batten & Baptista 4-11-06

## Hardware

- computer
- receivers
- transmitters
- network
  - wired
  - wireless

Batten & Baptista 4-11-06

## Software

- presentation
  - PowerPoint
  - whatever
- system
- plug-in for presentation
  - prep station
  - delivery station

Batten & Baptista 4-11-06

## Compatibility

- Platform
  - Window
  - Mac
- Wireless
  - not interfere with network

Batten & Baptista 4-11-06

## Systems

- Radio
- Infrared

Batten & Baptista 4-11-06

## Products

- PRS
- Ubiquis (Europe)
- Xpress
- Meridia
- ARS Technologies
- Turning Point
- Option Technologies Interactive
- Reply Systems
- Padgett Communications
- and many more.....

Batten & Baptista 4-11-06

## Cost, our experience

- Decreasing substantially
  - more competition
  - broader implementation
  - wireless option
- an example
  - clicker \$27 to \$35 (one per participant)
  - receiver \$250 (one per 50-70 clickers)
  - wireless antenna \$250 (2 per room)
  - installation (site dependent)

Batten & Baptista 4-11-06

## Environment prep

- vendor will advise on placement
- install receivers on wall
- setup wireless configuration
- adjustment and testing
- install and setup software
- distribute clickers
  - assigned
  - random

Batten & Baptista 4-11-06

## Session prep

- check for plug-in
- prepare slides
  - content
  - questions
- determine response timing
  - limited
  - Unlimited
- technical support standby

Batten & Baptista 4-11-06

## Delivery prep

- save session on delivery computer
- open presentation
- distribute clickers
- test functionality
- begin class
- use clickers
  - collect data
  - provide feedback

Batten & Baptista 4-11-06

## Review data

- instantaneous
  - with participants
  - store for retrieval
- collation
  - download or export
  - merge into statistical program
  - view as a report

Batten & Baptista 4-11-06

## Pitfalls

- clickers
  - make certain students bring to class
  - need time to distribute daily
- setup time
  - dry run
  - allow for query
- participation
  - voluntary
  - required
- computer glitches
- not planning ahead
- investment issues

Batten & Baptista 4-11-06

## Questions?

Batten & Baptista 4-11-06