

## Outgrowing the mode effect study of paper and computer based reading.

Equivalence of reading on printed materials on paper or the same materials on computer screen had been examined ever since working on a computer has become common experience for many of us. It is an expected condition when we cross digital river from paper and pencil testing to computer based testing, to examine two modes on difficulty of items, reliability of items, dimensionality of items, and equivalence of inferences of underlying proficiency. This is most critical now since our shift from paper to digital media has gained speed in recent years and changes are implemented in most of information communication areas, novels, magazines, textbook, reference books, historical records, and testing of various skills, etc.

This presentation will discuss equivalences and differences between skills used to understand and making inferences based on the information presented on the written materials using the evidences available from the mode effect study of international large-scale survey. Focusing on the item presentation modes and their effect on item difficulty is probably not the most fruitful direction to continue, rather we should focus on the future structure of information, new skills we may need to thrive, and managing skill development as we continue on the direction of digital world.