What is FONEMZ®?

FONEMZ is a teaching tool that uses a different color and a different shape for every phoneme.

Agenda

- What is FONEMZ?
- With what populations is it used?
- Supporting Research.
- Benefits of FONEMZ® & the CSTP
- Links to literacy
- Activities using FONEMZ®
- Current research and future plans
What is FONEMZ®?

FONEMZ is a “Bottom-up” program. This means that a learner needs no other information before beginning to use it.

Materials-Based Tool
- One-to-one phoneme/grapheme relationship
- Color & shape to assist memory
- Tactile qualities allow for physical engagement

Multimodal Approach
- Maximizes auditory, visual, tactile and kinesthetic modes
- Interactive play promotes autonomy and reflective learning
- Visual discrimination supports Auditory discrimination
- Sound can be compared & the order can be manipulated

Who Benefits?

- Visual Learners -deaf, autistic, DS….
- Very Young Learners
- Speech & Communication impaired
- Students at risk for literacy deficiencies
- English Language Learners (ELL’s)
- Others!
Types of FONEMZ®

- Felt FONEMZ®
- Fun FONEMZ®
- FONEMZ® Plus

Felt FONEMZ

Fun FONEMZ
Order of Introduction of FONEMZ®

- **VOWELS**
  - [a]  bö, [u]  öö, [i]  ii

- **CONSONANTS**
  - [p]  p, [b]  b, [m]  m

- It is most important to begin with sounds the student can make.

- Do not progress to target sounds until the student has demonstrated that she understands that each of the shapes represent a specific sounds.
The Issues

- Direct correlation for children with speech-sound disorders and poor phonological awareness.
- Phonological awareness skills are linked to literacy in a predictive way.
- The FONEMZ approach works on both articulation and phonology.

Articulation

- Training in articulation has been shown to concurrently increase phonemic awareness (Roberts, 2005).
- Kamhi (2006) found that children with speech delays can benefit from training in phonemic awareness because it may lead to improved articulation.
- Both articulation and phonemic awareness appear to be fundamental to academic achievement and literacy. Because of this, many therapy approaches have been developed to work on these skills (e.g., Allor, Gansle & Denny, 2006).

Phonemic Awareness

- Phonemic awareness and articulation are directly linked (Roberts, 2005).
- Phonemic awareness has the distinction of being the best predictor of early reading skill (Hulme et al., 2002).
- Phonological awareness abilities relate directly to future reading and writing achievement (Torgesen, Wagner & Rashotte, as cited in Gillon, 2005).
Research on Visual Processing

- The 2 neural systems for language and images are reinforcing and interrelated. (Gardner, 1979; Menard, Kosslyn, Thompson, Alpert, & Rauch, 1996)
- Reaction times to instructions are faster with image association. (Paivio, 1986)
- Children rely on imagery for long term memory retrieval. (Kosslyn, 1976)

Color & Memory

- Color is an important feature for children and aids in memory retention
- Automaticity of color
  - An individual encodes color without any deliberate intent
  - Aids in memory retention
- Can help sort out similarities and differences with phonemes.

Autonomy & Play

- Erik Erikson
  - Autonomy = developmental stage, toddler years (1 – 3)
  - Healthy independence of exploring their world
- Glaubman et al. looked at metacognition
  - Leads to improved short- and long-term learning
- Jean Piaget
  - Play as a tool for advancing children’s cognitive development
  - Practicing new skills in an enjoyable way increases learning
- Yopp (as cited in Zeece, 2006) for developmentally appropriate therapy, particularly the first recommendation to make the therapy playful and fun without relying on drill and rote memorization.
Consonants

Vowels

California Standards of the Teaching Profession

- an engaging environment
- autonomy, interaction and choice
- self-directed, reflective learning
- make the subject matter meaningful
• social development
• standards for behavior
• routines for learning
• using instructional time effectively

Benefits of FONEMZ®

• Color & shape assists memory
• Tangible - allows for physical engagement
• Eliminate confusion of Roman alphabet
• Each phoneme is represented
• Visual discrimination augments Auditory discrimination
• Sounds can be compared and the order can be manipulated

Research on FONEMZ®

• Finished 3rd preliminary study with California State University, Sacramento.
• *Listen, Speak, & Read With FONEMZ: A Treatment Efficacy Study* (on ASHA website)
• Single subject, ABCA design, comparing traditional speech therapy with the FONEMZ approach.
Future Research

• More research on the improvement in articulation using FONEMZ
• Research on the improvement in phonemic awareness using FONEMZ.
• Research on improving literacy skills using FONEMZ.

Future Plans

• FUN FONEMZ® Magnets
• The FONABET
• More research

Q & A
REFERENCES


Sandy Kaul ©2009