

# Strategies in teaching Braille

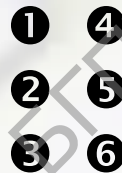
## Part 1



# About Braille






















- **Composition:**
  - six dots in vertical columns
  - each column three dots high
  - produces 63/64 (blank cell used as a space) one cell symbols



РЕПОЗИТОРИЙ БГУ

# Braille english alphabet



 A	 B	 C	 D	 E	 F	 G	 H	 I	 J
 K	 L	 M	 N	 O	 P	 Q	 R	 S	 T
 U	 V	 W	 X	 Y	 Z				

# Levels of Braille



- **Grade 1. Uncontracted Braille**
  - entirely spelled out
  - consists of only the letters of the alphabet the numbers, and a few punctuation marks
  - rarely used for published works
  - used on braille displays

РЕПОЗИТОРИУМ БГТУ

# Levels of Braille

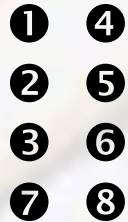


- **Grade 2. Contracted Braille**
  - english braille: 189 contractions
  - developed to reduce the size of books (approx.30%)
  - increases reading speed
  - used for most works of fiction and non-fiction, including textbooks
- **Grade 3 Braille**
  - used in shorthand for taking personal notes
  - used in professions that contain word processing

# Levels of Braille



- Grade 0 / Computer Braille / 8-dot Braille (PC-Braille used in Europe):
  - consists of 8 dots to cover up the ASCII-Code (256 combinations possible)
  - 1 to 1 representation of what is on the screen
  - used with Computer Braille displays
- Last but not least...:
  - science and mathematics notation - music notation
  - foreign language Braille



# Uniqueness of Braille



- Unique perceptual aspects
  - needs more space
  - lack of redundancy
  - total analysis of the cell is necessary
  - complexity of code
  - slowed recognition time: combination of dots makes one letter
  - Braille reading rates are slower than those for print reading
  - portrayal of print, with special rules and multiple uses of each sign (configuration)
  - it is a code

# Visual Reading compared to Tactile Reading



- Visual reading
  - in the centre of the human eye are about 140.000 rod and cone cells per square millimeter located
  - simultaneous perceptions of various aspects of a single object or concept
  - eyes cooperate independently
- Tactile reading
  - In fingertips the ends of tactual perception neurons are 1,2 millimeter apart from each other
  - the tactual sense requires that information must be derived by the exploration of one aspect at a time slowed recognition time
  - cooperation between both hands has to be trained



# Strategies in teaching Braille

## Part 1



РЕПОЗИТОРИЙ БГПУ