



Title: Intelligent system in sensory and cognitive development for the pre-reading stage

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Introduction

Pre-reading stage in basic education

Communication in the preschool classroom

Sensory and cognitive processes: hearing – listening

Problem: differentiating tones

Mazes from science

Theoretical reference

Softwares

Methodology

Intelligent system: expert system + development system

Game: Learning by playing

**Heidegger,
2006**

**Huitzinga,
2000**

**Vygotsky L. S.,
1933**

**Fokin S., Learning to read
2008**

Tempered music system

**Pythagoras
569 - 475 AC**

**Zarlino
1517 - 1590**

**Werckmeister
1645 - 1706**

Results

Creation of intelligent system in sensory and cognitive development for the pre-reading stage

- **Data Acquisition and Analysis**
- **Development of the ability to differential tones by balance of the tonal ear**

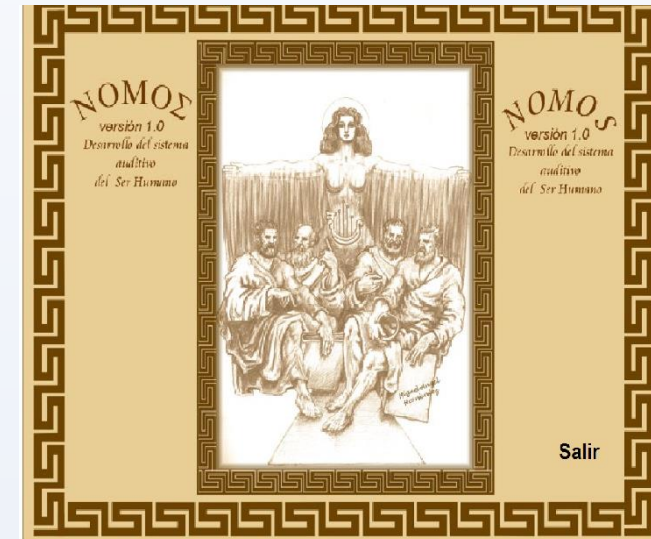
Results

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Annexes

Software's TOTEM + NOMOS



Conclusions

- The intelligent system, cognitive and sensory software, is a kind game in the form of guessing for children and adolescents, which allows to acquire necessary information, analyze, present results for the development of the tonal ear and its balance in the auditory system of the Human Being.
- The pre-reading stage was completed with the establishment of tonal ear balance and the formation of phonetic-phonological knowledge and skills, so necessary so that the child can begin to learn to read.

EVERYONE HEARS, EVERYONE LISTENS!

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