

ASTRI

Hong Kong Applied Science
and Technology Research Institute

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ASTRI

builds

people infrastructure

*technologists, engineers, scientists,
business development, marketing,*

with strong linkages to
universities and industries



ASTRI

- ASTRI** Funded by Hong Kong Government
 - Operation (HK\$ 90M to 240M per year)
 - R&D projects (HK\$ 3B ITF allocated)
 - Building construction (HK\$ 720M allocated)
- ASTRI** Earns royalties or equities through licensing, technology transfer and start-up

ASTRI

Sept 2001	Commenced operation
Jan 2002	40+ technical staff
Summer 2002	60-70 technical staff
Summer 2003	120-140 technical staff
Steady state	250-300 technical staff

Interactive Learning Technology

AI and Speech Technology
for
Online Interactive Learning of
Spoken English

Sonic Ranger

- Phonics learning software for primary students
- Practice Native English through Listening and Pronunciation exercises
- Key Features
 - Voice Recognition (phoneme level)
 - Interactive Games
 - Internet-Based
 - Native English

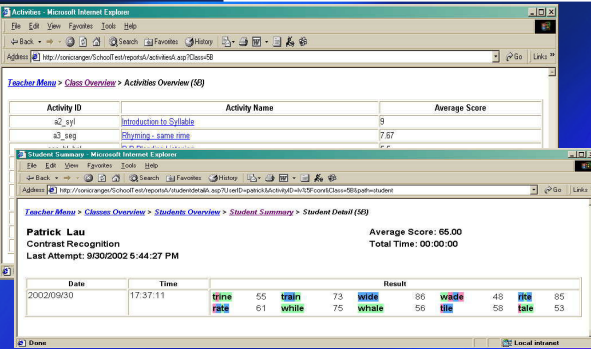


Contents

- ❖ Awareness (Syllable Counts, Segmentation, Blending, Rhyming, Onset, Nucleus, Ending)
- ❖ Short Vowels
- ❖ Long Vowels
- ❖ Digraphs
- ❖ Consonants
- ❖ Contrast and Blending



LMS for Teachers



YMCA Summer Camp 2002 An All-English-Speaking Camp Environment

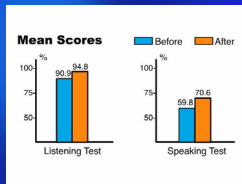
- Test-run our software system
- Test effectiveness as an English teaching tool
- Native speakers as camp leaders
- Other activities: Arts, sports and recreation
- Team competition
- Before-and-after English pronunciation test



Results – Learning Effectiveness

➤ Before-and-after Test

- ❖ Listening Test – to differentiate two spoken words (15 questions)
- ❖ Speaking Test – to pronounce words as shown on screen (29 questions)



Results – Software Design

- Graphics, Characters and Games
 - ❖ Like: 80%; A little: 19%; Dislike: 0%
- Listening Exercises & Improvement in Listening
 - ❖ Like: 71%; A little: 26%; Dislike: 1%
- Pronunciation Exercises & Improvement in Speaking
 - ❖ Like: 62%; A little: 32%; Dislike: 4%
- Use “Sonic Rangers” again
 - ❖ Yes: 91%; No: 1%

School Based LAN Deployment

- HKUGA Primary School (Primary 1-3)
港大同學會小學
- Wai Chow Public School (Primary 3-5)
上水惠州公立學校

