

Improving Listening Skills with Interactive Web-based Systems

- LESSON/J and iCampus -

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ACTFL2004 (Friday, November 19, 2004: 1:30 - 2:45 PM)

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Two Systems for Improving Listening Skills

- **LESSON/J (June, 1997): Primary Learners**
Japanese Language Education System for Speech
on an On-demand Network
Dictation Quizzes for words, sentences and so on.
Java Applet and Web Server Technology
No-login Required but Score Displaying
- **iCampus (Aug., 2004): Advanced Learners**
Integrated Campus using Advanced Multimedia Processing
in a Ubiquitous Society
Listening and Reading-Listening Comprehension
Java Sever Pages and Database Technology
Login Required for Score Storing

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Contents for Dictation Quizzes in LESSON/J

- Kana Syllables (98 Questions)
- Words (30 Questions)
- Sentences (31 Questions)
- Consonant Set (13 Questions)
- Special Morae (18+25 Questions)
(Long Vowels and Gemimates)
- Word Accent (42 Questions)

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LESSON/J Top Page

<http://www.sp.cis.iwate-u.ac.jp/sp/lesson/j/index.html>



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An Example of LESSON/J

Japanese Language Education System for Speech on an On-demand Network



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Spoken English and Japanese

	English	Japanese
Rhythm	Stress-Timed Language	Mora-Timed Language (Special Mora)
Accent	Stress Accent	Pitch Accent (Word Accent)

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Quizzes for Special Morae

• Long Vowels

音	時	形	度	国	工口	船形	針形	針形
音	時	形	度	国	工口	船形	針形	針形

Examples: 叔父さん(おじさん)[ojisaN] :Uncle in English
お爺さん(おじいさん)[oji:saN] :Grand father in English

• Geminates (Double Consonants, 促音)

音	時	形	度	国	工口	船形	針形	針形
音	時	形	度	国	工口	船形	針形	針形

Examples: 糸(いと)[ito] : Thread in English
伊藤(いとう)[ito:] : Ito (Japanese family name)
一等(いっとう) [itto:] : First prize in English

Japanese Word Accent

When a word has N morae, no. of accent types is commonly $N+1$.
For example, “hasi” consists of 2 morae, so “hasi” has 3 accent types.

Type 1 HL(L)	Type 2 LH(L)	Type 0 LH(H)
箸が[hasiga] Chopstick	橋が[hasiga] Bridge	端が[hasiga] Edge

Quiz for Word Accent



Quiz for Consonant Set

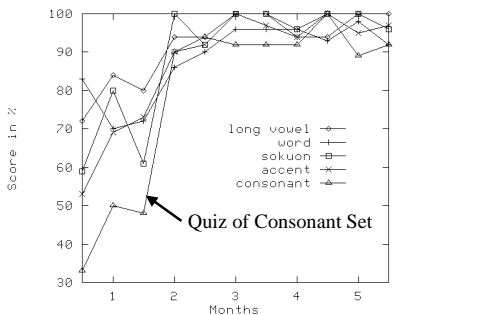
Set: [eNki], [keNki], [geNki], [seNki], [zeNki], [teNki], [deNki],
[neNki], [heNki], [beNki], [peNki], [meNki], [reNki]

Miss Listening: for examples [deNki] and [teNki]

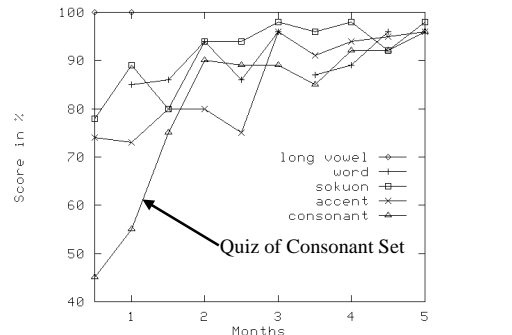
	Chinese	Japanese
Plosives	Aspirated Plosives ([p ^h], [t ^h], [k ^h])	Voiced Plosives ([b], [d], [g])
	Unaspirated Plosives ([p], [t], [k])	Unvoiced Plosives ([p], [t], [k])

Korean: 3 plosives (aspirated, slightly aspirated and unaspirated)

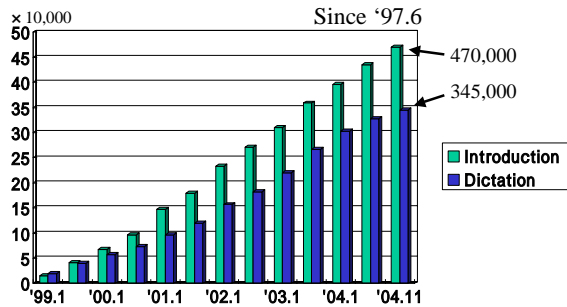
History of Scores for a Chinese Student



History of Scores for a Chinese Student



Access Counts for LESSON/J

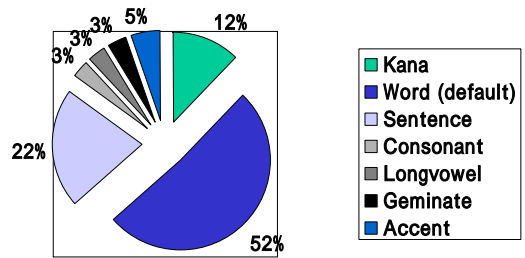


<http://www.sp.cis.iwate-u.ac.jp/sp/lesson/j/>

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Rates of Contents for LESSON/J



Period: April 2004 – Oct. 2004

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Contents in iCampus

EJU(Examination of Japanese University Admission)
by SASSO (Japan Student Services Organization)

- Japanese Reading Comprehension (20 Questions)
- Japanese Listening Comprehension (20 Questions)
- Japanese Reading and Listening Comprehension (20 Questions)

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iCampus Top Page

<http://www.sp.cis.iwate-u.ac.jp/icampus/icampus.jsp>



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An Example of Reading-Listening Comprehension Test

Menu

Hamburger	¥550
Noodle	¥500
Coke	¥300
Coffee	¥500
Tea	¥450

Select an answer.

1. [¥550](#)
2. [¥600](#)
3. [¥1,050](#)
4. [¥1,100](#)



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An Example of Scoring Results



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Connection to Reading Tutor



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How to Use iCampus

- Access to iCampus page
<http://www.sp.cis.iwate-u.ac.jp/icampus/icampus.jsp>
- Register to member
Input your e-mail, name, password and so on
- Receive acceptance from iCampus administrator via e-mail
- Login to iCampus by using registered information
- Select a subject of “Examination of Japanese University Admission”
- Examine the reading, listening, and reading-listening comprehension test (every 20 questions)
- Display your examination scores
- Logout

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Discussions

- User Environment
 - Japanese Fonts
 - Java Virtual Machine and Java Setting
 - Audio Player (Windows Media Player, Quick Time Player)
- Access Time
 - Narrow Band to Broad Band Network
 - Speech Compression (AU: SUN Audio Format 64kbps, AAC: Advanced Audio Coding 32kbps)
- Copyrights
 - Audio Streaming Technology
- Patents
 - UNISYS GIF Patent: Expired 2004

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Freely Accessed Related URLs

- LESSON/J (June 1997):
<http://www.sp.cis.iwate-u.ac.jp/sp/lesson/j/>
- Introduction to Japanese:
<http://www.sp.cis.iwate-u.ac.jp/sp/lesson/j/doc/japanese.html>
- iCampus (Aug. 2004):
<http://www.sp.cis.iwate-u.ac.jp/icampus/icampus.jsp>
- iCampus Project:
<http://www.sp.cis.iwate-u.ac.jp/icampus/project.jsp>
- iCampus Student's Manual
<http://www.sp.cis.iwate-u.ac.jp/icampus/doc/iCampusdoc.pdf>
- This Report:
<http://www.sp.cis.iwate-u.ac.jp/icampus/doc/actfl2004.pdf>
- Reading Tutor by Professor Yoshiko Kawamura
<http://language.tiu.ac.jp/>

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- 2) Y. Omoto, J. Miwa, Y. Kawamura and K. Schneider: “Teaching Japanese in the Internet Era - Implementation and Evaluation of a Testing System for Listening and Speaking Skills of Japanese Using the Information Technology-”, ATJ, Chicago, USA (Mar. 2001).
- 3) J. Miwa and Y. Kikuchi: Integrated Campus System Using Advanced Multimedia Processing in a Ubiquitous Society, Proc. of the 2004 Conference of JSET (Japan Society for Educational Technology), (Sep. 2004). (in Japanese)

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