# NATIONAL FOREIGN LANGUAGE RESOURCE CENTER

# Checklist: Evaluative Criteria for Computer-Delivered Language Learning Systems

compiled during the Invitational Symposium on Assessing and Advancing Technology Options in Language Learning (AATOLL) February 1998

### General description of the program

Name/version

#### Intended users

age

- children
- □ high school
- □ college
- □ learners with special interests (tourists, businessmen, etc.)

#### ability level

- □ beginning
- intermediate
- □ advanced

#### Intended use

- □ self-instruction
- L textbook/classroom supplement
- combination of above

#### Content

- content likely to be of interest to intended users
- instructional units logically sequenced
- Lessons build on material presented earlier

#### **Program goals**

- **u** goals and objectives of the program clearly described
- **u** program capable of meeting the stated goals

#### Scope

number of lessons or instructional units

equivalence in terms of hours, semesters, years of instruction

Invitational Symposium on Assessing and Advancing Technology Options in Language Learning (AATOLL). (1998). *Checklist: Evaluative criteria for computer-delivered language learning systems*. (NFLRC NetWork #31t) [HTML document]. Honolulu: University of Hawai'i, Second Language Teaching & Curriculum Center. http://nflrc.hawaii.edu/NetWorks/NW31/NW31t.pdf [access: today's date].

#### Documentation

- discussion of program's goals, design, and contents
- L tutorial on program's operation
- demonstration lesson included
- lesson plans for use in a course or guidance for individual use
- □ research results on effectiveness of the program available
- □ information about independent reviews of the program

#### Customization

- choices depending on user level
- users can customize the operation of the program
- variety of options to support different types of learners

#### Installation/operation

- installation instructions clear
- D program easy to install/uninstall

How often does the system crash?

Is there a particular action that causes regular crashes?

#### Hardware requirements

type of computer
version of operating system
memory (RAM)
disk space
CD-ROM drive/DVD-ROM drive
speakers
microphone
monitor
sound card/video card
network/browser requirements
other

#### Media

- graphics, video and audio help users to concentrate on content
- Lext easy to read
- audio clear
- □ colors and graphics crisp and clear
- video runs smoothly
- □ hypertext links work well
- animation serves a pedagogical purpose

# Feedback

- users receive quick feedback to responses
- Level of feedback language appropriate for intended users

availability of feedback (e.g., item-by-item, logical content break, end-of-unit or session, learner-controlled)

type of feedback is available

- □ indication as to whether response is correct or incorrect
- □ invitation to try again
- □ hint leading to correct response
- explanation as to why a particular response is incorrect
- □ a "give-up" option
- □ directions to relevant part of program for review
- □ intelligent feedback depending on learner response history

#### **Evaluation/tests**

- □ frequency of the tests
- □ type of scores is made available to users
- explanation of test scores
- □ cumulative log of scores to track progress
- □ recommendations for remedial action given
- Lests and/or test scores can be printed out

#### Special features:

- □ speech recognition
- □ system requires initial training

What do users need to do to train the system?

How extensively is speech recognition/processing utilized in each unit of the program?

function of speech recognition/processing in this program

- voice navigation
- □ pronunciation instruction
- □ speaking practice

#### **Developer/distributor**

name
street address
telephone
telephone fax
e-mail
URL

#### Price

indi	vidual		
inst	itutional		
users likely to get their money's worth		kely to get their money's worth	

# **Checklist for listening software**

#### Listening input

audio

- **u** conditions against which the audio is played authentic
- Lempo of the sound track natural
- variety of voices and dialects
- □ sound track supported by video or graphics

listening passages

- passages authentic
- □ topics of interest to intended users
- variety of topics
- □ users can choose among several passages on the same topic
- □ variety of genres
- passages of an appropriate length for intended users
- □ vocabulary appropriate for the intended level
- □ syntax appropriate for the intended level

#### **Listening activities**

pre-listening activities

- program adapts to different levels of users' prior knowledge
- pre-listening activities that activate prior knowledge

listening activities

- □ listening activities emphasize comprehension of the passage
- □ listening activities authentic
- □ variety of listening activities
- □ users have a choice of listening activities
- □ activities motivate learners to keep listening

post-listening activities

- post-listening activities based on selected features of passages
- □ features selected for special attention well chosen
- D post-listening activities promote acquisition of vocabulary

# Listening strategy instruction

- explanation about the benefits of using listening strategies
- Systematic practice in the use of listening strategies
- users can see that certain tasks are more easily accomplished when strategies are used
- choice of listening strategies depending on learning style
- □ feedback on the effectiveness of strategy use

# Listening tools

links to the written version of passage

- □ the whole passage
- □ sentence-by-sentence
- □ phrase-by-phrase
- word-by-word
- spoken glosses
  - monolingual
  - bilingual
  - □ hint-type
- written glosses
  - monolingual
  - bilingual
  - □ hint-type
- visual glosses
  - □ images
  - □ graphics
  - $\Box$  videos
- additional resources available
  - □ online talking dictionary
  - online written dictionary
  - □ online reference grammar
  - □ background information
  - cultural notes

# Listening interface

- ease of navigation
- navigation between audio, activities, glosses, and tools simple
- navigation between screens fast

playback control

- users can control the speed of audio playback
- playback can be stopped
  - □ after each phrase
  - □ after each sentence

### timing

□ enough time to complete activities

archiving

- $\hfill\square$  users' work can be saved
- □ users' work can be printed out

# Checklist for reading software

### **Reading input**

How authentic is the appearance of the passage?

- Iayout
- □ fonts
- □ illustrations
- □ colors

content of the reading passages

- reading passages authentic
- □ topics of interest to intended users
- variety of topics
- topics not likely to become outdated
- ❑ variety of genres
- users can choose among several passages on the same topic
- □ length appropriate for intended users
- □ vocabulary appropriate for intended users
- □ syntax appropriate for intended users

# **Reading activities**

pre-reading activities

- program adapts to different levels of users' prior knowledge
- **u** pre-reading activities that activate prior knowledge

reading activities

- □ reading activities emphasize comprehension of the passage
- reading activities authentic
- variety of reading activities
- users have a choice of reading activities
- □ activities motivate learners to keep reading

post-reading activities

- post-reading activities based on selected features of the passages
- □ features selected for special attention well chosen
- D post-listening activities promote acquisition of vocabulary

# **Reading strategy instruction**

- explanation about the benefits of using reading strategies
- Systematic practice in the use of reading strategies
- users can see that certain tasks are more easily accomplished with strategy use
- Choice of reading strategies depending on learning style
- □ feedback on the effectiveness of strategy use

# **Reading tools**

links available to the spoken version of the passage

- □ the whole passage
- □ sentence-by-sentence
- □ phrase-by-phrase
- □ word-by-word

written glosses available

- monolingual
- bilingual
- □ hint-type

spoken glosses available

- monolingual
- bilingual
- □ hint-type

visual glosses available

- □ images
- □ graphics
- videos

additional resources available

- topical glossaries
- background information
- cultural information
- online dictionary
- □ online reference grammar

# **Reading interface**

ease of navigation

- □ navigation between text, activities, glosses, and tools simple
- navigation between screens fast

appearance of the text

- □ texts preserve their original format
- □ texts presented in a variety of fonts and typefaces
- □ fonts and typefaces attractive and easy to read
- □ illustrations and graphics aid in text comprehension

glosses

- equal access to different types of glosses
- Glossed items marked unobtrusively
- glosses cover up text or make it disappear
- □ different types of glosses can be customized by users

timing

enough time to complete activities

archiving

- □ users' work can be saved
- □ users' work can be printed out

#### Checklist for speaking software

#### Speaking input

general qualities of the input

- □ authenticity
- □ situational appropriateness
- □ cultural appropriateness
- □ interest to intended users

topics

- □ topics of interest to intended users
- □ variety of topics
- □ topics logically sequenced
- □ users have a choice of topics

vocabulary

- □ vocabulary appropriate for the intended level
- □ vocabulary organized into well-defined thematic units
- D program focuses users' attention on specific vocabulary
- □ vocabulary recycled throughout the program

grammar

- **G** grammar appropriate for the intended level
- □ presentation of grammar logically sequenced
- D program focuses users' attention on specific structures
- Grammar recycled throughout the program
- Grammatical explanations clear

# **Speaking activities**

- speaking activities simulate real-world interactions
- activities challenging and fun
- activities progress from mechanical drills to open-ended responses
- activities require integration of linguistic, sociolinguistic, and pragmatic skills
- □ speaking activities contextualized
- variety of activities
- users have a choice of activities

What is the quality of the speaking prompts?

- examples for the activities to be performed responses allowed
  - only one
  - more than one

# Speaking strategy instruction

- program explains why the use of communication strategies can be helpful
- □ systematic practice in the use of communication strategies
- □ users can see that a task is more easily accomplished when a particular communication strategy is used
- □ choice of communication strategies depending on learning style
- □ feedback on effectiveness of strategy use

# Speaking tools

online tools are available

- □ reference grammar
- monolingual dictionary
- bilingual dictionary
- □ talking dictionary
- □ thesaurus
- □ sociolinguistic and cultural notes

# Speech interface

□ speech interface user-friendly

speech recognition (SR)

- □ pedagogical goals of the program could be achieved without SR tasks associated with SR
  - □ creating a sentence with audio and/or visual cues
- □ conversing with the system (conversation changes depending on response) Feedback from SR
  - □ Is the feedback from SR correlated with how well something was said
  - □ feedback relies only on learners' own assessment
  - **users can record and compare their responses with correct models**

SR program provides feedback on accuracy

- □ in responses chosen from a closed set
- □ in open-ended responses

archiving

 $\hfill\square$  users' work can be recorded and saved

### Checklist for writing software

### Input for writing activities

input provided in order to contextualize writing tasks

- written texts
- □ listening passages
- videos
- □ input at the appropriate level of difficulty
- □ variety of input
- users have a choice of type of input

# Writing activities

- writing tasks have counterparts in the real world
- Let tasks at the appropriate level of difficulty
- Lasks culturally appropriate
- u writing prompts clearly and concisely worded

writing prompts specify

- an audience
- □ a function
- □ a motivation for writing
- choice of writing tasks

# Writing strategy instruction

- explanation of he benefits of using writing strategies
- **D** program offers systematic practice in the use of writing strategies
- □ users can see that certain writing tasks are more easily accomplished when strategies are used
- choice of writing strategies depending on learning style
- □ feedback on the effectiveness of strategy use

# Writing tools

macro-aides available

- online templates for brainstorming writing tasks
- online templates for organizing the writing tasks
- □ online samples for imitation

micro-aides available

- online bilingual dictionary
- online thesaurus
- online grammar reference
- editing aides available
  - online spell checker
  - online grammar checker

# Writing interface

- enough time given for task completion
- program can save successive drafts of users' work
- users' work can be printed out
- D program can keep track of user queries
- D program includes a network component for group work or peer editing

# Checklist for vocabulary learning software

### Input for vocabulary learning

basis for the choice of vocabulary included in the program

- □ frequency
- □ association with a particular topic or topics
- □ association with a particular textbook
- vocabulary appropriate for the intended users in terms of
  - □ level of difficulty
  - □ interest
  - usefulness

# Vocabulary learning activities

- □ activities challenging and fun
- users have choice of difficulty level
- activities relate new vocabulary to vocabulary previously introduced
- users have a choice of activities

vocabulary learning activities offered

□ repetition of the word

□ recognition/matching activities pairing the word with its native language equivalent

- □ pairing the word with its target language synonym
- pairing the word with its target language antonym
- □ finding the related word in a list
- □ pairing the word with a picture
- □ pairing a word with a video
- □ listening to the word being pronounced and finding it in a list

production activities

- **u** giving the target language equivalent for a native language word
- □ finding the right word to describe a picture
- □ finding a target language synonym for a word
- □ finding a target language antonym for a word
- D putting a word in the appropriate semantic group
- □ producing derivationally related words (e.g., noun from a verb)
- □ using the word in a sentence
- □ games

# Vocabulary learning strategy instruction

- explanation of different kinds of mnemonic strategies
- explanation of why the use of certain strategies can improve retention of vocabulary
- systematic practice in the use of mnemonic strategies
- users can see that a task is more easily accomplished when a mnemonic strategy is used
- users offered a choice of mnemonic strategies depending on their learning style
- **G** feedback on whether the use of a particular mnemonic strategy was effective or not

# Vocabulary learning tools

□ vocabulary search engine

glosses provided

- monolingual
- bilingual
- □ hint-type
- □ examples of usage
- visual
- audio
- video

# Vocabulary learning interface

vocabulary search engine

glosses provided

- monolingual
- bilingual
- □ hint-type
- examples of usage
- visual
- audio
- video

# Checklist for software to teach pronunciation

### **Pronunciation input**

### words presented

- □ in citation form only
- in different contexts
- suprasegmental features included in the program
- intonation included in the program
- anative-speaker models include a variety of voices and dialects

# **Pronunciation activities**

- □ activities well-sequenced
- activities challenging and fun
- activities progress from easier to more complex
- users have control over selection of activities
- opportunities to review the material

tasks associated with the use of speech recognition

- reading one word at a time
- □ filling in a blank in a sentence
- □ reading from a selection of several words
- □ reading one sentence at a time
- □ reading from a selection of 2-5 sentences
- □ reading from a selection of 6 or more sentences
- □ creating a sentence with audio and/or visual cues

# Pronunciation interface

speech recognition system reaction to nonnative speech

- □ recognizes despite mistakes
- □ asks for repetition
- does not recognize
- **u** recognition system robust to various disfluencies
- recognition system sensitive to ambient noise

feedback recognition system provides

- correlates with how well something was said
- □ relies only on learners' own assessment
- users can record and compare their responses with correct models

mistakes in learner responses are marked and displayed

- accuracy of vowels and consonants
- □ accuracy of speech rhythm and timing
- □ accuracy of intonation contours

method by which visual pronunciation feedback presented

- □ speaker's face
- vocal tract
- □ spectrum information
- □ speech waveforms

# Checklist for software to teach script

# Script input

basis for selection of characters

- □ frequency
- □ topic association
- textbook association
- □ information about the history of the writing system
- **u** general description of the writing system and its distinguishing features

# Script learning activities

characters (or symbols) practiced

- □ in isolation
- □ in combinations
- □ in meaningful sequences
- $\hfill\square$  from the more simple to the more complex
- □ characters (or symbols) presented earlier are recycled throughout the program
- variety of activities
- users have control over choice of activities

# Script strategy instruction

- program explains what techniques are helpful in learning to write the target language script
- D program provides systematic practice in the use of these techniques

# Script learning tools

Characters (or symbols) linked to their pronunciation

links to glosses

- monolingual
- bilingual
- □ images
- video

# Script learning interface

- D program shows stroke order of the characters or symbols
- animation of how characters or symbols are written
- search engine
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