

DOCUMENT RESUME

ED 442 276

FL 026 279

AUTHOR Tatsuki, Donna
TITLE Alleviating Comprehension Problems in Movies. Working Paper.
INSTITUTION Kobe Univ. (Japan). Inst. of Economic Research.
REPORT NO WP-179
ISSN ISSN-0286-0295
PUB DATE 1999-09-00
NOTE 15p.; Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages Pan Asia Conference (2nd, Seoul, South Korea, 1999).
PUB TYPE Reports - Evaluative (142) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Auditory Perception; *Auditory Training; English (Second Language); Foreign Countries; *Foreign Language Films; Japanese; Language Proficiency; Language Skills; *Listening Comprehension; Listening Skills; Second Language Instruction; Second Language Learning
IDENTIFIERS Japan

ABSTRACT

This paper describes the various barriers to comprehension that learners may encounter when viewing feature films in a second language. Two clusters of interfacing factors that may contribute to comprehension hot spots emerged from a quantitative analysis of problems noted in student logbooks. One cluster had a strong acoustic basis, whereas the other had a more cognitive or memory and attention basis. Acoustically-based misperceptions include the following: phonological misperception of consonant/vowel segments through addition/loss/substitution; misperception of proper nouns and foreign words and expressions; misperception based on loss, deletion, or substitution of entire syllables, especially if weakly stressed; faulty segmentation of word boundaries; phonological dialect or foreign accent difference; what the listener expects or does not expect the interlocutor to say; the listener's lack of information (or correct information) with respect to the topic under discussion; and the speaker's use of idiom or colloquialism. Among the suggestions for mitigating these barriers to understanding are pre-teaching foreign words, technical language, idioms, and colloquialisms; sensitizing learners to varieties of spoken English; encouraging the learners to reflect on what their assumptions are about the target film's genre and structure; and segmenting the film into scenes and then clustering and labeling the scenes according to learner generated analysis. (KFT)

ED 442 276

ALLEVIATING COMPREHENSION PROBLEMS
IN MOVIES

DONNA TATSUKI
(KOBE UNIVERSITY OF COMMERCE)

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Donna Tatsuki

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to
improve reproduction quality.

• Points of view or opinions stated in this
document do not necessarily represent
official OERI position or policy.

Institute of Economic Research,
Kobe University of Commerce,
Nishiku, Kobe, 651-2197, Japan

BEST COPY AVAILABLE

F 026 279
ERIC
Full Text Provided by ERIC

ALLEVIATING COMPREHENSION PROBLEMS
IN MOVIES

DONNA TATSUKI
(KOBE UNIVERSITY OF COMMERCE)

The Institute of Economic Research
Kobe University of Commerce
September, 1999

ALLEVIATING COMPREHENSION PROBLEMS IN MOVIES¹

Donna TATSUKI

Abstract

This paper describes the various barriers to comprehension that learners may encounter when viewing feature films. Two clusters of interacting factors that may contribute to comprehension hot spots emerged from a qualitative analysis of problems noted in student logbooks. One cluster has a strong acoustic basis while the other has a more cognitive or memory/attention basis.

INTRODUCTION

One of the most frequently expressed worries about using feature films for language learning centers on comprehension problems (Arcario, 1992; Allan, 1985). Learners approach the viewing of movies with trepidation since one misstep in understanding could lead to 90 minutes or more of confusion. Teachers are similarly wary because there seems to be so many potential barriers to comprehension. Investigations into the prediction and eradication of certain comprehension problems would no doubt benefit both the teachers and learners that wish to use film and video.

When students are given control of a video or laser disk player, it has been my observation that they stop the disk and repeat the viewing of certain passages. Among the reasons they gave me for stopping or repeating a section was, they could not understand the scene or they felt lost. I started explicitly asking the students to keep a log of comprehension "hot spots" so that I could see how much overlap there was among the class members and to see if there were any patterns in what would cause comprehension breakdown. Based on three years of student logs, I began to compile a preliminary list of the factors that appear to contribute to listening hot spots. The examples were gathered from student logs made while viewing the movies, *The Graduate* and *Raiders of the Lost Ark* using laser disk video players. The students were instructed to record the laser disk frame

¹ This article was prepared for the TESOL Second Pan Asia Conference (PAC2) held in Seoul South Korea.

number and a short description of the problem whenever they had trouble understanding what was said or what was going on in the film. If they did not understand a word or phrase, the students were asked to write down the beginning and ending frame numbers of the video segment with as much of the phrase or word as they could produce.

INTERACTING FACTORS CONTRIBUTING TO HOT SPOTS

There are two clusters of interacting factors that contribute to comprehension hot spots. One cluster has a strong acoustic basis and is similar to the sources of "slip of the ear" phenomena (Laufer, 1991). The other cluster seems to have a more cognitive or memory/attention basis. The reason they are described as interacting is that in some cases there appears to be more than one explanation for poor comprehension. This makes sense since films are "multi-modal" (Meinhof, 1998) texts in which moving and still images, music and sounds, written and spoken language are all combined in a tapestry of meaning. According to Meinhof, one goal in language learning is to enable a learner to "engage with texts made up of potentially conflicting verbal, visual and musical codes where the different codes may be in a contradictory relation to each other" (p.5). Although the examples provided below have been selected because they most clearly illustrate a particular problem it should be noted that they might have more than one potential for difficulty.

Acoustically-based Misperceptions

Phonological misperception of consonant/vowel segments through addition/loss/substitution.

Phoneme Addition or Loss: Adding a phoneme where none exists can lead to confusion. For example, Indy said that he wanted one of the pieces that her "father collected" but a student thought that he said "father's collector." The added possessive and the substitution of "or" for "ed" caused the student to assume that Indy was seeking a person rather than a thing.

Phoneme Substitution: The consonant pairs [b/v], [r/l], [f/h] and the vowel pairs [æ/ə] are constant sources of confusion and substitution errors for Japanese learners of English. One student, for example, wondered why Indiana Jones' burly Egyptian archeologist friend had a woman's name. It transpired that the student substituted "L" with "R" and thought that the man's name was "Sarah" rather than "Sallah." This is also part of an explanation for the misperception of proper names.

Indy is searching for the "staff of Ra" which is a long stick with an ornamental headpiece on top. Many students thought that he was looking for the "stuff of Ra" in other words, the personal belongings of the Egyptian God of the sun.

Misperception of proper nouns.

Learners are not familiar with the full range of English proper names, especially when they have gone out of popular usage. In *Raiders of the Lost Ark*, Indiana Jones goes looking for his former teacher Abner Ravenwood. The name Abner is not very common these days. Many of the learners mistook Abner for the name of an object related to a missing headpiece. The word was often rendered, "arbner" or "arpner". Another misperception centered on a clue to find the lost ark. Indy was looking for the "map room" but many learners heard this as "Maprum" which they assumed was a city or the name of a location. Likewise, the city named "Tanis" was rendered as "tennis" which is a far more familiar word to Japanese learners, but unfortunately not the name of the ancient city. In another situation, the name "Marcus" (Indy's friend and sponsor) was confused with "Marrakesh" the possible place that Belloq would sell his stolen goods. Both words occurred in the same scene and the listeners confused one for the other.

Misperceptions of foreign words and expressions.

A unit of measurement in *Raiders of the Lost Ark* was the "kadam" (about 30 centimeters). Although Indy and Sallah explicitly define the kadam in the scene, the learners were unable to connect this foreign word with its definition. Also, when Belloq said, "It was not meant to be,

Cherie" and then bid "adieu" to Marion, the learners asked if her name was "Sherry" or if he had said "It was not meant to be actually".

Misperception based on loss, deletion or substitution of entire syllables, especially if weakly stressed.

A number of students reported being confused when Mrs. Robinson quietly said to Benjamin "Do you want to get us a room?" One of the renderings of this sentence was "Do you want to get a swim?" In this case, the unstressed article "a" was omitted, and the remaining words were incorrectly segmented yet preserved much of the phonological shape.

Misperceptions based on faulty segmentation of word boundaries.

A common type was a simple mistake in segmentation. For example in *The Graduate*, Mrs. Robinson asks Benjamin "Did you know I'm an alcoholic?" Several students reported hearing "a nalcoholic" and thus were confused because there is no such word in the dictionary. This is similar to "phonologically based language changes that occurred in the past due to widespread errors of misperception" (Celce-Murcia, 1980, p. 208). For example, an eke name became a nickname, a norange (narancia in Spanish) became an orange, a napron, became an apron, and a nadder became an adder, to list just a few.

Misperceptions based on phonological dialect or foreign accent differences.

Although vowels are main problem in different dialects and regional varieties of English, speakers of English as a second or foreign language can be difficult to understand because of both consonant and vowel changes. In *Raiders of the Lost Ark*, several characters are speakers of English as a second or other language. They are much more difficult for learners to understand and are the source of many comprehension problems. The villain Belloq, for example is a French archeologist. Not only does he speak with a stereotyped French accent in English, his vocabulary is full of less frequent words with Latinate roots. The first sentence he utters is "Dr. Jones, again we see that there is nothing you can possess that I cannot take away." Several students caught only "Dr. Jones,

again ___ nothing you _____." The "th" was pronounced as a "z" sound in "that" and "there", syllable stress and prosody was not native like and "possess" was an unexpected word choice when "have" or "own" could have sufficed.

Other characters in the movie include Sallah (Indy's Egyptian friend), Imam (the ancient writing expert, an Egyptian), Toht (the Nazi Gestapo agent, a German) and various minor characters of Spanish, African or other speaking backgrounds. The student logbooks abound with questions about the utterances of these characters.

Memory/Attention-based Misperceptions

Misperception based on the listener's strong and immediate word images.

In *Raiders of the Lost Ark*, the Gestapo agent Toht points to Indy who is fighting with another man and makes an announcement. The learners see the smile of amusement on his face and many render his utterance as "ShowTime. ShowTime both". In reality he has said, "Shoot them. Shoot them both" but the way he pauses and jokingly delivers the line leads the learners to look for an alternative.

In another scene, a monkey has just died from eating poisoned dates. Indy throws a date into the air but his friend Sallah snatches the fruit before Indy can catch it in his mouth. Sallah then says "Bad dates" an understatement of the seriousness of the situation. The learners who until that point had fully believed that the substance they saw poured over the dates was poison, hesitate because they have heard something that seem contradictory.

Misperception based on the listener's current preoccupations or what is visually prominent.

In this situation, there is a mismatch between what is said and what is seen in the conversational context. The listeners assume relevance and depend on a "here and now principle" but the conversation is not about here and now. For example, in one of the final scenes of *Raiders of the Lost Ark*, Belloq and Dietrich (the Nazi commanding officer), who are both foreign speakers of

English, discuss an upcoming scene while standing on the deck of a submarine. Dietrich expresses his discomfort with Belloq performing a "Jewish ritual". The learners invariably came away from this conversation with no clue as to its content and unsuccessfully try to link it to the previous submarine trip or with something to do with the port.

In another scene, the director gives a little bit of stage business to an extra that caused trouble for learners. The extra simply put an apple on Indy's desk at the end of his lecture as he left the room. The action was of no consequence to the scene. It was just a filler before Indy and a minor character could get together to speak. Nevertheless, almost every student remarked on it and wondered what the action meant.

Misperception based on what the listener expects or does not expect the interlocutor to say.

In some cases, the character will take some action that the learners do not understand or can find no motivation for. In one scene, Indy greets a smiling Marion who suddenly becomes violently angry. The students became confused by this sudden and apparently unprovoked display of anger. A careful analysis of Marion's angry words revealed that she has carried a grudge against Indy for the past ten years but the swift change in emotion distracted them initially.

The learners also find it difficult to suspend belief at times and ask things like how Indy knew about a trap or could find his way out of a dangerous situation. Furthermore, lies and false behavior can bring comprehension to a stop. For example, in *Raiders of the Lost Ark*, a small monkey is a Nazi collaborator (the enemy). After the scene of Marion's death, the monkey cries and acts sad. Many learners commented that this did not seem consistent with the facts and wondered if they had missed something.

Misperception based on what the listener's lack of information (or correct information) with respect to the topic under discussion.

Pronouns can be very confusing for learners because the people or things that they refer to may or may not be on screen at the time. For example in *Raiders*, Indiana Jones declares "It was

beautiful. I had it in my hand" during a conversation with his friend Marcus Brody. The students wondered "What is beautiful" since Indy was holding nothing in his hand. He was referring to the golden idol that had been stolen from him in the previous scene so the flouting of the "here and now" principle also plays a role in the students' lack of information.

One memorable scene in *The Graduate* occurs during Ben's graduation party. A guest who is an old family friend (Mr. McGuire) takes Ben outside for a confidential talk. He exhorts Ben to listen carefully to what he is about to say and then pronounces the word "plastic" and later clarifies, "there is a great future in plastic". Ben looks justifiably confused because he was expecting rather more practical advice. However, the learner misses the humor and "artificiality" of Mr. McGuire's character by not knowing the extended range of meaning for the word plastic.

Misperception based on the speaker's use of idiom or a colloquialism.

Some characters are built on their unconventionality. Indiana Jones is a wisecracking, down to earth man who just happens to be a skilled academic. He uses slang, colloquialisms and idioms frequently in his speech and this leads to great difficulty for language learners. For example, he calls his friend Sallah "The best digger in Egypt" where the word "digger" is a nickname for an archeologist. Also, he comments that "This is where Forrestal cashed in", meaning "This is where Forrestal died". The proper name poses its own difficulty, but paired with the idiom "cashed in" most of the learners in my class were at a loss.

In *The Graduate*, Mr. Robinson is a one-man cliché festival. This is of course meant to make his character less sympathetic and more banal. Some of the phrases he uses are "Sow a few wild oats", "I bet you are quite a lady's man" and "You look to me like the kind of guy who has to fight them off." They all show him for the pervert that he is but they became stumbling blocks for my language learners.

WHAT TO DO ABOUT COMPREHENSION HOT SPOTS

Having described a variety of potential problems, the next step is to propose ways to deal with each of them. It must be remembered, however, that each learner attempts to construct meaning from scenes in a film differently because they bring to the task differences in "predisposition, motivation, interest, attention and prior knowledge" (Meinhof, 1998, p.5). Therefore in order to alleviate comprehension hot spots the teacher/facilitator needs to develop a "richly resourced learning environment in which learners can select what is most suitable for them" (Meinhof, p.8). That means, the teachers needs to create support materials or strategies to help learners deal with local hot spots as well as develop general/global media literacy.

Before viewing

Local Materials and Strategies

Pre-teach foreign words, technical language, idioms and colloquialisms

The teacher should go through the script and look for vocabulary items that are not likely to be known and that have relevance to the story. Many movies have screenplays available, both commercially and on the internet. A caption decoder can be used to print out dialogue in closed captioned movie versions. If no script is available, the teacher may need to make his or her own transcript or at least become very familiar with the scenes to detect potential troublesome words and phrases. Once these items have been compiled, there are many ways to pre-teach. Some examples include, matching activities, cross words, and cloze exercises. Matching activities include word-definition matches both in L2 and L1, picture-sentence matches, idiom-definition or idiom-synonym matches.

Sensitize learners to varieties of spoken English.

It is sometimes hard for even skilled English listeners to understand speakers that of an uncommon variety of English, or speakers who have foreign accents. However, since there are

often regularities in the ways these speakers differ from so-called "standard" English, these should be pointed out. For example, a stereotypical French character may use "z" instead of "th". A Spanish character may use /iy/ in the place of /i/ and will appear to say "sheep" instead of "ship". The point is that foreign or stereotyped non-standard English speakers are quite predictable if the learners are given a de-coding key ahead of time. A de-coding key could be a short list of words that are likely to be mispronounced by the character. In one column the English word with the standard pronunciation could be listed. In the next column the character's version of the word could be listed.

Global Materials and Strategies

Encourage the learners to reflect on what their stereotypes and assumptions are about the target film's genre and structure.

According to Meinhof (1998), language learners tend to rely more on global comprehension strategies than native speakers in compensation for their linguistic deficits. This positive strategy can be encouraged by getting the learners to recall other films of the same genre that they may have seen in their own or other language. By constructing their model of the genre, they can set some expectations for plot line, characterizations and perhaps, dialog topics.

The instructor should segment the film into scenes, then cluster and label the scenes according to the learner generated genre analysis.

To reinforce the assumptions and predictions that the learners have made about the target film based on their own knowledge of similar films, create a scene "road map." For example, if a particular scene is mostly devoted to character development, the learners would benefit by knowing this before viewing.

While viewing

Local Materials and Strategies

Provide contextualized help

The listener needs to have access to information relevant to the hot spot at the moment of listening breakdown. My learners used Sony View system laser disk player that used an on-screen control panel. A modified control panel was created to include context-dependent help. This meant that if a student was having difficulty with a word or phrase, he or she could stop the disk and click the right-hand mouse button. On the screen, some hint or a partial gloss of the dialogue at that spot would appear.

A low-tech alternative would be to include a partial transcript of the scene for reference in a study guide or textbook. The learners could even fill in a cloze exercise based on the transcript to draw their attention to the trouble spot. Because learners sometimes can make out the initial sound of a problematic word, it can be helpful to provide a short alphabetized list of words to listen for in the scene. This list can be compiled by the instructor, based on his or her hunch of possible hard to hear spots or based on actual student log keeping. Student logs are the best way but they take time to collect and then compile.

Global Materials and Strategies

Encourage observation of the situation and other contextual cues that may assist comprehension.

This is perhaps the most important tool for the learner. Before viewing a scene, it is valuable for the learners to activate their own knowledge of the situations that will be coming. This can be done without giving away the point of the scene. For instance, in *The Graduate*, the main character checks into a Hotel. The scene is supposed to be funny but if the learner is over taxed with trying to understand all that is being said, there is not much processing capacity left for catching or even understanding the inanity of some of Ben's actions. My approach is to get the students to construct

the possible interaction between a guest and a front clerk. When the students have done this, they are ready to watch and enjoy the scene. The deviance from what one expects is what makes the scene funny.

When comprehension breaks down, often the answers are right in front of the viewer's eyes. Ask the "who, what, where, when and why" questions and then treat the comprehension problem as something to solve like a mystery rather than an obstacle. For example, one student could not understand what Mrs. Robinson meant when she said, "Did you get us a room?" even after he was able to correctly identify all of the words. I asked him to consider where Ben and Mrs. Robinson were having their drink (a Hotel) and then to think about what plans they might have for afterwards. When all of the pieces clicked into place, the student and I shared a good laugh.

CONCLUSION

The hot spots that were described in this article were mainly concerned with misperceptions at the linguistic level. When learners hear incorrectly or can not make sense of sounds, they panic and the result is a comprehension breakdown. The same kind of comprehension breakdown can occur when the learner sees unexpected behaviors or when the scene is so full of information that they have difficulty knowing what to focus on. Because many of these problematic spots can be predicted, it should be possible to prepare more effective study guides and supplementary materials. Learners can and should be a part of this process either by cataloguing their comprehension hot spots or by generating their own predictions of the film genre that is under study.

REFERENCES

- Allan, M. (1985). *Teaching English with video*. Harlow UK: Longman.
- Arcario, P. (1992). Criteria for selecting video materials. In S. Stempleski & P. Arcario (eds.).
Video in second language teaching. Alexandria VA: TESOL.
- Celce-Murcia, M. (1980) On Meringer's corpus of "Slips of the Ear". In V. Fromkin (ed.). *Errors in Linguistic Performance*. New York: Academic Press.
- Laufer, B. (1991). Some properties of the foreign language learner's lexicon as evidenced by lexical confusions. *International review of applied linguistics*, 24, 317-330.
- Meinhof, U. (1998). *Language learning in the age of satellite television*. Oxford: Oxford University Press.

FL026279



U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)



Reproduction Release (Specific Document)

I. DOCUMENT IDENTIFICATION:

Title: ALLEVIATING COMPREHENSION PROBLEMS IN MOVIES
Author(s): TATSUKI, DONNA
Corporate Source: _____
Publication Date: 1999/Sept.

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign in the indicated space following.

<p>The sample sticker shown below will be affixed to all Level 1 documents</p> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY</p> <p><i>Donna Tatsuki</i></p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>Level 1</p> <p><input checked="" type="checkbox"/></p> <p>Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.</p>	<p>The sample sticker shown below will be affixed to all Level 2A documents</p> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY. HAS BEEN GRANTED BY</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>Level 2A</p> <p><input type="checkbox"/></p> <p>Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only</p>	<p>The sample sticker shown below will be affixed to all Level 2B documents</p> <p>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY</p> <p>_____</p> <p>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</p> <p>Level 2B</p> <p><input type="checkbox"/></p> <p>Check here for Level 2B release, permitting reproduction and dissemination in microfiche only</p>
<p>Documents will be processed as indicated provided reproduction quality permits.</p> <p>If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.</p>		

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche, or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Signature: Donna Tatsuki
 Organization/Address: Kobe University of Commerce
8-2-1 Gakuen Nishimachi Nishi-ku Kobe JAPAN

Printed Name/Position/Title: DONNA TATSUKI / FOREIGN LECTURER
 Telephone: 078-794-6161 Fax: 078-51-1988
 E-mail Address: tatsuki@kobe.com.ac.jp

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
 Address:
 Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
 Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC/REC Clearinghouse
 2805 E 10th St Suite 150
 Bloomington, IN 47408-2698
 Telephone: 812-855-5847
 Toll Free: 800-759-4723
 FAX: 812-856-5512
 e-mail: ericcs@indiana.edu
 WWW: http://www.indiana.edu/~eric_rec/