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## **ABSTRACT**

This workshop is intended to provide teachers of English as a Second Language (ESL) and English as a Foreign Language (EFL) in the Columbus (Ohio) Public School District an opportunity to examine their own teaching, and the strategies and materials they use in the classroom, in the light of recent research in reading. It provides participants access to theory and a chance to appreciate its practicality. The workshop is aimed at 30 participants for a 2-day meeting in the fall or a 2-day meeting in the spring. Participants must have an ESL/EFL degree and have taught ESL/EFL for at least 2 years. A questionnaire is distributed at the beginning of the workshop to survey the general expectations and objectives of each participant in order to target the workshop to group needs. General objectives include identifying strategics used by students in ESL/EFL reading classes, familiarization with interactive models of the theories of reading in ESL, establishing the connection between the interactive models and actual reading strategies used in their classrooms, selecting reading materials based on these interactive models of reading, and adopting instructional strategies that promote reading strategies based on these interactive models. Workshop materials include multilingual handouts, texts, articles, and tape recordings of think-aloud protocols. Assessment is on-going: participants must maintain a journal, and a questionnaire is administered a month after the workshop as a follow-up. Session-by-session.workshop lesson content plans and all handouts are included. (Contains 22 references.) (NAV)



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## THEORIES OF READING

## AN INSERVICE WORKSHOP FOR ESLAEFL TEACHERS

Designed by

## **HEMA RAMANATHAN**

## THE OHIO STATE UNIVERSITY

**APRIL 1994** 

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## **ABSTRACT**

The gap between theory and practice is not often bridged, especially in inservice training. If the results of extensive research in reading in first and second languages are to satisfy utilitarian principles of knowledge, they must be used by practitioners in their own planning and teaching.

The purpose of this workshop is to provide the teachers of ESL/EFL an opportunity to examine their own teaching, and the strategies and materials they use in the classroom, in the light of recent research in reading. It provides the participants access to theory and a chance to appreciate its practicality.



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## INSERVICE WORKSHOP FOR ESL\EFL TEACHERS THEORIES OF READING

## **LOGISTICS:**

The workshop will have a maximum of 30 participants. The schedule will be a two-day meeting in Fall and another two-day meeting in Spring.

The participants for each of these workshops do not have to be the same, since the objectives can be chosen to accommodate those who did not attend the first.

Each workshop will consist of two days with two sessions on each day. Each session will be of three hours duration.

The workshop will be held in a school building which is most convenient to all the participants.

Coffee and lunch will be provided.

## PROFILE OF PARTICIPANTS:

The participants will be teachers in various schools of Columbus Public School District. They will have an ESL \ EFL degree or an endorsement for ESL \ EFL and will have taught ESL \ EFL for at least two years. Some of them will be non-native speakers of English, either Hispanics or speakers of Asian languages.



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The participants will be stratified by the level of school in which they teach - Elementary, Middle or High school. The feeder schools will be represented to enable continuity.

At the workshop, the participants will form cohort groups on the basis of interest (theoretical or classroom-oriented), grade level at which they teach, and the feeder and host schools with which they identify.

## **QUESTIONNAIRE:**

A questionnaire will be distributed prior to the workshop to survey the expectations of the participants. The participants will have a choice of the objectives and will decide which ones they want to concentrate on that particular workshop. Based on the findings, the objectives of the workshop will be specified.

## **OBJECTIVES:**

The participants will be able to

- 1. identify various strategies used by students in reading in ESL \ EFL classes.
- 2. familiarize themselves with the interactive models of the theories of reading in ESL.
- 3. establish the connection between the interactive models of the theories of reading and the reading strategies their students use in the classroom.
- 4. choose reading material for use in the classroom that will be based on the interactive models of the theories of reading in ESL.
- 5. adopt instructional strategies that will promote reading strategies based on the interactive models of the theories of reading in ESL.



## **MATERIALS:**

- Handouts prepared for the workshop.
  - Excerpt from: Fortún, C. (1984). <u>Animales Legendarios</u>. New York, NY: Regents.
  - 2. Objective type questions based on Handout 1.
  - 3. Some reading techniques and strategies.
  - Excerpt from: Tang, G. (1992). Effect of graphic representation of knowledge structure in ESL reading comprehension. <u>Studies in Second</u> <u>Language Acquisition</u>, 14, 177-195.
  - 5. Worksheet with three short-answer questions based on Handout 4.
  - 6. Guidelines for journal entries.
  - 7. Lecture outline.
  - 8. Activity chart to identify classroom materials and their use.
- Books that are used by ESL teachers in the classroom.
- Excerpts from More than meets the eye by M.A.Barnett.
- Books and articles on theories of reading in ESL \ FL listed in the bibliography. .
- Participants will bring cassette players (with recording function) and tapes to record their analysis of reading strategies they used for a "think-aloud" protocol.



## FILE:

Prior to attending the workshop the participants will be given a file that contains the following:

- A letter explaining the purpose of the workshop.
- A copy of the proposed format of the workshop.
- Two relevant articles on reading theories and their application.
  - 1. Carrell, P. L. (1984c). Schema theory and ESL reading: Classroom implications and applications. <u>The Modern Language Journal</u>, 68, 332-43.
  - 2. Mason, D. (1992). The role of schemata and scripts in language learning.

    System, 20(1), 45-50.
- A bibliography for theories of reading in ESL.

## **CONSIDERATIONS:**

Through all the activities of the workshop, the participants will take into consideration the variety of students they have in the classroom - students who are motivated and academically inclined, students who are identified as Exceptional and Gifted, and students who are motivated but not academically inclined.



## **EVALUATION:**

The assessment will be on-going. Participants will maintain a journal for the duration of the workshop and will make entries after every session. There will therefore be a minimum of four entries. Teachers will also be encouraged to maintain their logs for a month after the workshop.

They will also bring with them cassette players that have a recording function. Those who feel more comfortable speaking into the tapes may record their reflections and impressions.

A month after the workshop as a follow-up, another questionnaire will be administered to all participants. The focus of the questionnaire will be to find out to what extent the theories are used and to identify further needs that may be met in further workshops. This questionnaire will be accompanied by a reasonable for activity reports from the participants of the first workshop which may be in the form of the journals they have maintained.



## WORKSHOP FORMAT

SESSION	DAY 1	DAY 2
	Introduction to the theories of reading.  Reading in a First / Second Language.  Analysis of reading strategies used in reading in a Second Language as compared to reading in a First Language.	Analysis and reformulation of books and materials used in their classrooms by the participants with respect to the reading theories they exemplify and the strategies required for the readings. Participants may group themselves by virtue of grades and the kind of students they teach, e.g. Special Education, Elementary \ Middle \ High school. (and/or) Further readings on the theories of reading. Group work to analyze the efficacy of certain theories and studies e.g. Reading-Writing model.
	Evaluation of Day 1 Session 1	Evaluation of Day 2 Session 1
2	Interactive Theories of Reading - Lecture Activities to relate materials used in the classroom by the participants.	evaluated / reformulated.  (and/or)  Presentation of research on reading theories.  Panel discussion on the use of the theories of reading in ESL in a classroom, problems and advantages.  Choose material they want to use in their classrooms.  Prepare to fill in reports a month later to follow up on decisions made in the workshop.
	Evaluation of Day 1 Session 2	Evaluation of Day 2 Session 2



HOUR	DAY 1	DAY 2
1	Analyzing participants' reading strategies in First and Second Languages. A passage in Spanish will be used. Participants will take a test of comprehension with books closed.	Analysis of books and materials used in their classrooms by the participants with respect to the reading theories they exemplify and the strategies required for the readings.  (and/or)  Further readings on the theories of
2	Analyzing participants' reading strategies in First and Second Languages. A passage in English will be used to compare with the passage in Spanish used earlier. Participants will take a test of comprehension with books closed	Analysis of books and materials used in their classrooms by the participants with respect to the reading theories they exemplify and the strategies required for the readings.  (and/or)  Further readings on the theories of reading.
3	Participants will take two more tests of comprehension with books open. Discussion on the different strategies used in each of these formats in the ESL \ EFL context and in the First language context.	Reformulation of books and materials used in their classrooms by the participants with respect to the reading theories they exemplify and the strategies required for the readings.  Participants choose the materials they want to use in their respective classrooms.  (and / or)  Group work to analyze the efficacy of certain theories and studies, e.g. Reading-Writing model.
4	Evaluation of Day 1 Session 1 Interactive Theories of Reading -	Evaluation of Day 2 Session 1  Presentation of material evaluated /
	Lecture	reformulated.
5	Activities to relate teaching materials used in the classroom by the participants.	ļ
6	Activities to relate evaluation materials used in the classroom by the participants.  Evaluation of Day 1 Session 2	<u> </u>
	Lyaluation of Day 1 Session 2	Dialitation of Day 2 occident 2



# **LESSON PLAN**

## DAY I

THEORY	APPLICATION	TIME	ACTIVITY	MATERIAL REQUIRED
	% 001	15 mins	Participants will read the handout, and time their reading speed. Participants who finish reading will be welcome to browse through the books on display.	Hand out I - Passage in Spanish - Excerpt from Fortún, C. (1984). Animales Legendarios. New York, NY: Regents. Spanish-English dictionary. ELT books on reading skills and strategies. ESL \ EFL books that are classroom material for various levels and all the skills, especially reading.
	% 001	10 mins	Participants will take a test of objective-type questions without referring to the passage in Handout 1. The questions will be based on the passage they read.	Handout 2 - Multiple-choice \ True-False 8 questions. [2 - global comprehension; 3 specific details; 3 vocabulary points.]
30 %	70%	10 mins.	"Think aloud protocol." Participants will refer to the passage in Spanish and think aloud about the strategies they used while reading the passage. They will record their analysis on a cassette tape.	
70 %	30%	25 mins	At a group discussion the participants will analyze what techniques they used to read.	Handout 3 - List of techniques and aids in reading

# COFFEE BREAK 15 mins

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THEORY	THEORY APPLICATION	TIME	ACTIVITY	MATERIAL REQUIRED
	% 001	15 mins	Participants will read the handout, and time their reading speed Participants who finish reading will be welcome to browse through the books on display.	Hand out 4 - Passage in English - Excerpt from: Tang, G. (1992). Effect of graphic representation of knowledge structure in ESL reading comprehension. <u>Studies in Second Language Acquisition</u> , 14, 177-195.  English-Spanish dictionary.  ELT books on reading skills and strategies.  ESL \ EFL books that are classroom material for various levels and all the skills, especially reading.
	% 001	10 mins		Handout 5 - Participants will take a test consisting of 3 short-answer questions.
30%	70 %	10 mins.	"Think aloud protocol." Participants will refer to Handout 4 and think aloud about the strategies they used while reading the passage. They will record their analysis on a cassette tape.	
% 0./	30 %	25 mins	Participants will analyze what techniques they used to read and how they were different or similar to the strategies they used to read the first passage in Spanish.	Handout 3 - List of techniques and aids in reading

# COFFEE BREAK 15 mins

% 001	10 mins	10 mins Participants will re-take the test of objective-type questions in Handout 2 - Multiple-choice \ True-False Handout 2 based on Handout 1. They may refer to the passage as 8 questions. [2 - global comprehension; 3 and when necessary.	Handout 2 - Multiple-choice \ True-False 8 questions. [2 - global comprehension; 3 specific details; 3 vocabulary points.]
%001	10 mins	10 mins Participants will make a note-plan of the passage in Handout 4. Handout 4 - The passage in English.  They may refer to the passage as and when necessary.	Handout 4 - The passage in English.



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MATERIAL REQUIRED	Handout 3 - List of techniques and aids in reading	Journals or tape recorders. Handout 6
ACTIVITY	<ul> <li>Participants will discuss the following:</li> <li>Strategies they used for each of these readings.</li> <li>How they arrived at decisions to vary these strategies.</li> <li>Why they varied the strategies.</li> <li>The different strategies for open- and closed-book tests.</li> <li>The kind of questions they found easier to answer in each of the different tests with and without recourse to the passages.</li> </ul>	Evaluation of Day 1 Session 1 Participants will make a journal entry or speak into their tapes
TIME	40 mins.	10 mins
THEORY APPLICATION	30%	70 %
THEORY	70%	30 %

# LUNCH BREAK 50 mins.

% 001		45 mins	45 mins Lecture on Interactive Theories in Reading	Lecture notes
				Handout 7
% 02	30%	I 5 mins	15 mins Discussion following lecture	
40 %	% 09	60 mins	To relate the theory to their work, participants will look at their own materials and pick out the units they use to teach reading.  Then they will examine these units and fill out Handout 6 to define what skill they teach, the strategy they use, the theory of reading handout 8 - Activity chart.  To relate the theory to the classroom by the participants  Handout 8 - Activity chart.  Handout 8 - Activity chart.	Materials used in the classroom by the participants Handout 3 Handout 8 - Activity chart.

# COFFEE BREAK 15 mins

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Handout 8 which they have filled out.	Journals or tape recorders. Handout 6
Participants will form cohorts depending on the grade level they teach and the Handout 8 which they have filled out. feeder\host school they are attached to. They will compare their charts with each other and check responses, especially if they use the same materials.	10 mins Evaluation of Day 1 Session 2 Participants will make a journal entry or speak into their tapes
50	10 mins
40% 60% 50	30 % 70 %
40 %	30 %

## DAY II

THEORY	THEORY APPLICATION	TIME	ACTIVITY	MATERIAL REQUIRED
% 01	% 06	60 mins	Group 1: Each participant will select one unit s/he finds difficult to reach or is not satisfied with. In their cohorts, they will select one of these units and reformulate it or make suggestions how this unit classroom.	Handout 8 filled out on Day 1. Materials that the participants use in their classroom.
			Group 2: Participants who would like to read more about the theories of reading materials may choose one of the articles in the bibliography for study.	Copies of articles in the bibliography.

# COFFEE BREAK 15 mins

10%	% 06	60 mins   Gro	Group 1: Each participant will select one unit s/he finds difficult to Handout 8 filled out on Day 1.	Handout 8 filled out on Day 1.
			teach or is not satisfied with. In their cohorts, they will select one of   Materials that the participants use in their	Materials that the participants use in their
			these units and reformulate it or make suggestions how this unit	classroom.
,			should be taught.	
			Group 2: Participants who would like to read more about the	
			theories of reading materials may choose at least one article in the	
			bibliography for study.	

# COFFEE BREAK 15 mins

50 %	50%	50 mins.	Participants will prepare for a presentation of their discussion. This Poster boards may take the form of poster tables, lecture notes, transparencies, Overhead transparencies and pens and/or visuals of any kinc.  There may be group precentations where participants present an idea or a poster as a team.	Poster boards Overhead transparencies and pens Photocopiers
30 %	% 0.	10 mins	10 mins Evaluation of Day 2 Session 1  Participants will make a journal entry or speak into their tapes	Journals or tape recorders. Handout 6



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## **LUNCH BREAK**

50 mins

THEORY	THEORY APPLICATION TIME	TIME	ACTIVITY	MATERIAL REQUIRED
30 %	70%	60 mins	Group 1 will make their presentation.	
			Participants will be encouraged to look at the poster boards before	
			they sit down and listen to the presentations.	
			The time allotted to each will depend on the number of	
			presentations and posters.	

## COFFEE BREAK

5 mins

Participants will think of questions they can ask the panelists and write them down on slips of paper that will be passed around. Participants will write down the name of 3 members of their group they would like t nominate as a panelist.

Group 2 will make their presentation.	Time allotted to each participant will depend on the number of	presentations.	
60 mins			
30 %			
% 02			

# COFFEE BREAK

5 mins

Participants will think of questions they can ask the panelists and write them down on slips of paper that will be passed around.

60 mins A panel discussion with three members from each group. The chair will be elected by and from among the six panelists.  Panelists will address the questions that have been handed in.  Questions that arise from the floor will be dealt with at the discretion of the Chair and the panelists.	10 mins Evaluation of Day 2 Session 2 Participants will make a journal entry or speak into their tapes Handout 6
60 mins w	10 mins P
%0%	70 %
%05	30 %

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## **HANDOUT 1**

## **PIRAÑAS**

Read the following passage for comprehension.

Use the Spanish-English dictionary provided, if necessary.

If you have not finished reading the entire passage when time is called at the end of 15 minutes (as is likely if you are not a Spanish-speaker!), mark the point to which you have read.

Time begun:	
Time ended:	
Total time taken:	minutes
Reading speed = Tot	al number of words / Total time taken
	216 / Total time taken =  Fotal number of words read / 15 =

Hay muchas películas con las pirañas. En estas películas las pirañas comen personas muy rapido, a veces en segundos. Por eso, muchas personas piensan que las pirañas son muy peligrosas. Pero, en realidad esto no es verdad. Por lo general, las pirañas nadan solas y comen otros peces pequeños o plantas. Solamente son peligrosas si ellas nadan en grupos grandes.

Hasta 1961, era muy fácil tener una piraña en una colección de especies exóticas. El precio era entre \$20 y \$50, por lo general depende del tamaño y la especie del animal. Pero, en 1961, el gobierno de los Estados Unidos se sintió inclinado a prohibir la entrada al pais de un animal tan peligroso. La medida resultaba innecesaria porque se creía que las pirañas no se reproducían fuera de su medio habitual. Por muchos años, los científicos estudiaban el comportamiento de las pirañas. Hay casi 25 especies de las pirañas. En 1960,



en Chicago, una de las especies menos peligrosas logró tener cría. La hembra y el macho prepararon el nido cortando y arreglando las plantas del fondo del tanque. La hembra depositó los huevos. El mucho protegió los huevos. Cuatro días más tarde, las pirañas nacieron.

Es muy caro cuidar de las pirañas. Por eso, muchas personas que no desean cuidar de los peces los ponen en los lagos y los ríos de los Estados Unidos. Los pirañas resisten muy bien los rigores del clima. Por esta razón, una ley federal declaró ilegal la importación de pirañas. Solo pueden entrar en el país las pirañas destinadas a los acuarios o a las investigaciones científicas.

- Lund and Baichi



## **HANDOUT 2**

## TEST I

The following questions are based on the passage in Spanish that you read. Answer the questions without referring to the passage.

- I. Conteste si las siguientes oraciones son ciertas o falsas de acuerdo con la selección. [State whether the following statements are true or false according to the passage.]
  - 1. La importación de pirañas a los Estados Unidos de America siempre ha sido ilegal.
  - 2. Una piraña puede costar tanto como \$30.
  - 3. Las pirañas no se reproducen fuera de su medio habitual.
  - 4. El piraña macho protege los huevos.
- II. Escoja la mejor alternativa. [Choose the best alternative]:

Es muy probable que la selección se encuentre en

- 1. un libro de ciencias
- 2. un periódico
- 3. un diario personal
- 4. un guía de turismo
- III. Dé el significado en inglés [Give the English word for]:
  - 1. acuarios
  - 2. tanque
  - 3. făcil



## **HANDOUT 3**

## LIST OF READING SKILLS

Think back to what you actually did as you read the passage.

Below are some strategies for reading.

Can you add to the sugg..stions and complete the list?

Letter identification

Identifying cognates

Recognizing cohesive devices e.g. ellipses, transition forms, etc.

Detecting coherence relations e.g. main idea, supporting detail,

Inferring goals, participants and situations

Detecting basic cognitive relations e.g. cause-effect, comparison, spatial sequence,

condition



## THE EFFECT OF GRAPHIC REPRESENTATION OF KNOWLEDGE STRUCTURES ON ESL READING COMPREHENSION

Gloria Tang
University of British Columbia

Research suggests that English as a second language (ESL) students take upwards of 5 years to acquire a level of proficiency in academic language that is comparable to their English-speaking peers. They are likely to be denied full access to school knowledge unless teachers help to bring about student content knowledge learning and second language acquisition simultaneously.

This article reports on an experiment that was designed to discover the effect of graphic representation of knowledge structures (Mohan, 1986) on intermediate (seventh grade) ESL students' comprehension of content knowledge and acquisition of a second language for academic purposes. This experiment, part of a larger study conducted in all elementary school in Vancouver (Tang, 1989), is based on a pretest-posttest nonequivalent-control group quasi-experimental design. A pretest and a posttest were administered on 45 seventh-grade ESL students. Findings suggested that a teacher-provided tree graph, representing a text passage of the knowledge structure of classification and used as a teaching strategy to present knowledge to seventh-grade ESL students, facilitated comprehension and immediate recall. Moreover, students in the graphic group agreed that using graphics to present knowledge facilitated learning.

This paper studies one aspect of second language acquisition: the acquisition of academic language proficiency (Cummins, 1989). Recent research suggests that while English as a second language (ESL) students take about 2 years to achieve peer-appropriate levels in conversational English skills, they take 5 or more years to acquire proficiency comparable to their English-speaking peers in the academic aspects of language (Collier, 1987; Cummins, 1984). The implication of these research findings is that ESL students are denied full access to school knowledge—and



thus, the full benefits of education—in North American schools because content-area knowledge is presented in English. How can teachers help ESL students to learn content knowledge that is written and spoken in English and, at the same time, facilitate student acquisition of a second language for academic purposes? In other words, how can teachers address the two-part problem of (a) bringing the language in content textbooks and instruction to ESL students' comprehensible level and (b) bringing students' English proficiency to a level at which they can comprehend expository text and discourse written and spoken in English?

The two parts of the problem are not necessarily unrelated. According to Krashen (1985), comprehensible input is the true and only causative variable in second language acquisition; that is, people acquire second languages only when they obtain comprehensible input. Although Krashen is concerned only with language acquisition and not with content knowledge acquisition, content knowledge can be used as a source of comprehensible input. Input of comprehensible content knowledge can effect second language acquisition.

Therefore, an effective solution to the problem might be to employ a model that systematically integrates language and content. According to Mohan (1990), integrating language and content aims beyond second language acquisition to acquisition of a second language for academic purposes, and beyond second language learning to content learning. Such a model, the researcher contends, would involve explicit teaching of text/knowledge structures (Mohan, 1986) by means of graphics. Graphics have the potential for lowering the language barrier and making the input of content knowledge more comprehensible. They can also be used to highlight the linguistic devices of knowledge structures, which is a step toward academic second language acquisition.

Recently, considerable research effort has gone into exploring the organization patterns of expository text and the value of familiarizing students with expository text structures. Findings suggest that training in text structures can significantly facilitate comprehension during the reading process in ninth-grade students (Bartlett, 1979), seventh-grade students (Taylor & Beach, 1984), fifth-grade readers (Armbruster, Anderson, & Ostertag, 1987), high-intermediate proficiency ESL students at the university level (Carrell, 1985), and adult students in academic ESL programs (Carrell, Pharis, & Liberto, 1989).

The recognition of the importance of identifying and utilizing text structures in the reading process and in the understanding of knowledge in expository prose has prompted teachers and educators to devise and employ various strategies to draw students' attention to text organization. Among these strategies is the use of graphic representation of text and knowledge structures.

Various learning theories have contributed to the use of graphic representation of knowledge structures to facilitate learning. Ausubel's (1968) cognitive learning theory, which holds that to learn meaningfully, individuals must choose to relate new knowledge to known concepts, and schema theory, which "maintains that processing a text is an interactive process between the text and the prior background knowledge or memory schemata of the listener or reader" (Carrell, 1982, p. 482), have prompted educators to devise graphic tools to tie new knowledge to



background knowledge. The Gestalt theory of perception, that is, the idea that whenever possible students should be presented the whole picture rather than discrete parts, has contributed to the use of graphics to condense descriptive materials into more "intellectually manageable" visual displays (Holliday, 1975, p. 21). Some educators have become more interested in graphic communication as a result of Paivio's (1971) dual code model. In addition,

... researchers have proposed that certain types of information are stored in memory as image-like structures (Anderson, 1978; Kosslyn. 1980, 1981; Shepard, 1978; Shepard & Cooper, 1982) which retain some, though not all, of the properties of the pictures, the graphic forms or the direct visual experience that gave rise to them [and that] graphic forms encourage students to create mental images that, in turn, make it easier for them to learn certain types of material. (Winn, 1987, pp. 158–159)

Among the graphic techniques that have been developed and studied are graphic organizers (Alvermann, 1981, 1982; Boothby & Alvermann, 1984; Dana, 1980; Hawk, 1986); flowcharting (Geva, 1983); flow diagram, picture-word, and block-word (Holliday, 1976; Winn, 1980); networking (Dansereau, 1979); mapping (Armbruster & Anderson, 1980; Berkowitz, 1986); and semantic mapping (Carrell et al., 1989; Heimlich & Pittelman, 1986). Results of much of the research on the techniques cited indicate that using graphics to present knowledge can facilitate comprehension and recall in varying degrees for students at various levels.

If theory recognizes the value of graphics in student learning, and research in the effect of graphic representation of text/knowledge structures on English-speaking children and ESL adults (Carrell et al., 1989) has positive indications, would graphic representation of knowledge structures have a similar effect on school-age ESL students? It is a well-known fact that students, especially intermediate and high school students, are required to read and write a considerable amount of English text in order to acquire and demonstrate their knowledge of content-area subject matter. It is also a well-known fact that their low English proficiency impedes ESL students' comprehension of English texts. Studies that can establish the facilitative effect of teaching/learning strategies, such as graphic representation of knowledge structures, on the comprehension of second language texts would contribute greatly to ESL pedagogy. However, no formal study for investigating the effect of graphic representation of knowledge structures on learning by intermediate-grade ESL students has been reported. To fill a gap in research about the value of graphics in intermediate ESL student acquisition of the academic aspect of a second language and to inform ESL pedagogy, an experiment was conducted to discover the facilitative effect of using one kind of graphic representation-a tree graph-of one type of knowledge structure-classification (Mohan, 1986)-on comprehension and recall. The study also aimed to explore students' attitudes toward graphic representation of knowledge structures.

More specifically, this study addressed two questions that were triggered by the findings of an ethnographic study conducted in the same seventh-grade classes (Tang. 1989). The ethnographic study indicated that graphics failed to facilitate ESL



student comprehension and suggested that the failure might be due, in part, to the fact that although graphics existed in instructional materials, students did not pay attention to them or take advantage of them to facilitate learning. The first question was the following:

1. Did drawing students' attention to one kind of graphic representation of knowledge structures, namely, a tree graph, and using a teacher-provided tree graph to present a classification text passage facilitate comprehension and immediate recall of the text?

Another interesting finding of the ethnographic study was that students did not perceive graphics as an alternative way of communicating knowledge. To them, graphics was synonymous with art. While they loved drawing for decoration, their attitude toward graphics as a means of communicating knowledge was negative, or one of indifference. According to them, graphics did not facilitate comprehension or recall. This could be due to the fact that they had not been taught that graphics could be used to perform functions other than decoration. The second question the present study addressed was the following:

2. What were students' attitudes toward a teacher-provided tree graph used as a teaching device to present classification text passages after the experiment?



## **HANDOUT 5**

You have 10 mins. in which to answer any two of the three questions given below.

Do not refer to the passage in Handout 4 when answering these questions.

Each answer does not have to be more than 75 words.

Explain your ideas as fully as you can.

- 1. Mention any two theories that influence or have a bearing on second language acquisition / learning that the author mentions in this article.
- 3. What problems that the ESL students face in a classroom in North America are discussed in this paper? How critical are they in your opinion?
- 2. What questions were the focus of this study? Do your experience and observation support the results?



## **HANDOUT 6**

This is a learning journal, not a diary of events. So you don't have to confine yourself to recording only what happened and the topics that were discussed! Feel free to comment on what took your fancy (or didn't!!)

Some suggestions / lines that you can think along
What did you like in the session?
What interested you the most? Why?
What did you dislike in the session?
What idea are you least comfortable with? Why?
What would you like to explore further?
How would you like to see this workshop develop?
What activities should be included?
What ideas do you expect to discuss?
How useful are these activities / ideas for your classroom activities?
What changes do you expect to make in the classroom?



## HANDOUT 7 INTERACTIVE PROCESSING MODELS

- 1. Rumelhart (1977a)
  - Levels
    - 1. Feature
    - 2. Letter
    - 3. Letter cluster
    - 4. Lexical
    - 5. Syntactic
    - 6. Semantic
- 2. Kintsch and van Dijk (1978)
  - Emphasize comprehension to the exclusion of word identification
  - Text reduction
  - Microstructure
  - Microstructure)
  - · Macrorules -
- 3. Stanovich -(1980)
  - Strength in processing stage can compensate for weakness in another area.
- 4. Just and Carpenter (1980)
  - Processes
    - 1. Seeing the next word and extracting its physical features
    - 2. Seeing the next word as a word and comparing it to the mental lexicon
    - 3. Assigning a case to the word
    - 4. Relating the word to the rest of the words
    - 5. Wrapping up a sentence when it is complete



- 5. Anderson and Pearson (1984)
  - Schema-theoretic view of mental processes
  - Inferences
    - 1. Deciding which schema should be activated
    - 2. Deciding into which schema slot any textual item best fits
    - 3. Assigning default values
    - 4. Drawing conclusions based on lack of knowledge within a schema
- 6. Pearson and Tierney (1984)
  - 1. Planner
  - 2. Composer
  - 3. Editor
  - 4. Monitor
- 7. Rumelhart and McClelland (1986)
  - Parallel distributed processing
- 8. Implications for teaching
  - Curriculum
    - 1. Text use / choice
    - 2. Recognition level
    - 3. Rate of reading
    - 4. Grammar
  - Vocabulary teaching
    - 1. Neglected area
    - 2. Large vocabulary needed
    - 3. Features
  - Cultural schemata
    - 1. Text genres
    - 2. Discipline bias
    - 3. Provide background pre-reading exercise
  - Teaching strategies
    - 1. Pre-reading activites:
    - 2. Post-reading activites:



## **HANDOUT 8**

GRADE LEVEL : TITLE OF BOOK(S) :

UNIT SUB-SKILL TAUGHT

STRATEGY USED BASED ON INTERACTIVE THEORY OF READING EVALUATION METHODS USED



## THEORIES OF READING INTERACTIVE PROCESSING MODELS LECTURE NOTES

## Rumelhart (1977a) - OHT

- Interactive-activation model
- Reading is at once a perceptual and cognitive process
- Guiding power of semantic knowledge over word perception easier to recognize words which are related, e.g. bread-butter, nurse-doctor, rather than nurse-butter, bread-doctor
- Explain the diagram
  - 1. visual information store pulls out critical features of the word more experienced less features needed
  - 2. pattern synthesizer previous knowledge of spelling patterns, syntax. vocabulary, semantics and context
  - 3. most probable interpretation of text.
- Levels Both bottom-up and top-down

Feature - recognize letters

Letter - frequency - easier to recognize e than z

Letter cluster - letter sequences; hypothesizes from lexical level

Lexical -

Syntactic -

Semantic - hypothesizes from lexical and syntactic levels

## Stanovich -(1980)

- Interactive-compensatory model
- Added new feature to Rumelhart
- Strength in processing stage can compensate for weakness in another area.
- Explains the anomaly of poor readers showing greater sensitivity to contextual constraints than better readers in certain cases could be using strong semantic \ syntactic knowledge to compensate for weak knowledge of orthography or lexicon.
- Problem with bottom-up do not allow for higher-level processing stages
- Top-down do not account for readers with little knowledge of the text not being able to predict

## Kintsch and van Dijk (1978)

- Emphasize comprehension to the exclusion of word identification, though they assume that the latter exists.
- Multiple microprocessing of elements or propositions in the text
- Text reduction finding the gist or superordinate proposition
- Use of memory and reader schemata



- Reader creates a text that varies in degrees from the writer's
  - Microstructure local levels of discourse, structure of the individual proposition
  - Microstructure global meaning that characterizes the text as a whole
  - Macrorules semantic mapping rules that organize propositions into appropriate levels
- Short-term memory holds chunks of information. Is reader -written, varies in efficiency
- Cyclical process of proposition interpretation and processing automatic

## Just and Carpenter (1980) - OHT

- Like the Kintsch model, comprehension processes.
- used eye movements
- Attempts to interpret a word immediately upon seeing it, not waiting till he can get the context.
- Processes:
  - 1. seeing the next word and extracting its physical features
  - 2. seeing the next word as a word and comparing it the mental lexicon
  - 3. assigning a case to the word
  - 4. relating the word to the rest of the words
  - 5. Wrapping up a sentence when it is complete
- Interactive any of the stages can affect the processing of the other
- Serial nature of word recognition account for the word-for-word reading of some readers

## Anderson and Pearson (1984)

- Schema-theoretic view of mental processes
- readers rely on knowledge and particular cases as well as general and abstract schemata
- Inferences
  - 1. deciding which schema should be activated
  - 2. deciding into which schema slot any textual item best fits
  - 3. assigning default values (imagining what is lacking in the text to complete the schema)
  - 4. drawing conclusions based on lack of knowledge within a schema
- Questions:
  - 1. Which schema do readers choose during comprehension?
  - 2. Are inferences made while encoding or retrieving information?



## Implications for teaching

- Curriculum Automacity and lower-level processing
  - 1. Text use / choice
    - a. Ss write own text to read dictate to teacher (scribe)
    - b. Narrow eading (Krashen) ecognize style and epetition of vocabulary of writer
    - c. Localized setting and special low-frequencey words (Carrell, 1988)
    - d. Sustained Silent Reading ss select own text (Carrell, 1988).
  - 2. Recognition level
    - a. Consciousness-raising pronunciation difference Spanish j /h/ (Eskey and Grabe, 1988)
    - b. Chunking serise groups (Nuttall, 1982).
  - 3. Rate of reading (Eskey and Grabe, 1988) speed and pace (genres)
  - 4. Grammar

Cohesive devices - substitution, ellipses, conjunction, lexical cohesion (Carrell, 1988) - help predict

- Vocabulary teaching
  - 1. Neglected area (Grabe, 1988)
  - 2. Large vocabulary needed language ceiling or threshold (Eskey, 1973; Clarke, 1979)
  - 3. Features

Key words, semantically and topically related,

- Cultural schemata (Steffenson et al)
  - 1. Text genres
  - 2. Discipline bias (Alderson and Urquhart)
  - 3. Provide background pre-reading exercise (Carrell, 1988)
- Teaching strategies
  - 1. Pre-reading activites:
    - a. Concept maps
    - b. Analogies
    - c. Contrats and comparisons
    - d. Communicative purposes
    - e. Prediction
    - f. Free association with topic
    - g. Surveying the text
  - 2. Post-reading activites:
    - a. Unscrambling two texts
    - b. Re-ordering paragraphs



## Pearson and Tierney (1984) - OHT

- Composing model of reading reader like a writer
- Comprehension act of composing for the inner reader
- Four interactive roles (OHT Fig. 1)
  - Planner creates goals procedural, substantive, intentional
     goals can emerge, change, be redefined, discovered, replaced and be
     conflicting or complementary
     mobilizes knowledge or prior experience
     decides how to align with the text (agreement) fixes viewpoints
  - 2. Composer searches for coherence, fills in gaps in the text with inference
  - 3. Editor examines developing interpretation. Rereading, annotating the text with reactions, question and selecting versions of the text most suited, revising. Directs the role of the other three, deciding which should dominate. Role contradictory to traditional models of reading maximum recall after one reading.
  - 4. Monitor Distance from text, objective. decides which model of meaning can be turned over to the inner reader
- Drafting if text doesn't fit with hypothesis may be ignored or rejected

## Rumelhart and McClelland (1986)-

- Parallel distributed processing information processing takes place through the interactions of a large number of simple processing elements called units that send out excitatory or inhibitory signals to other units.
- Signals relate to the various hypotheses and the interconnections refer to the constraints among various hypotheses.



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