# Schema Theory

In a general sense, reading is what happens when people look at a text and assign meaning to the written symbols in that text. The text and the reader are both necessary for the reading process to begin. It is, however, the interaction between the text and the reader that constitutes actual reading. Reading is an interactive process in which readers interact with the text in order to make meaning. This process involves the use of comprehension or reading strategies. Readers bring to each text, areas of knowledge (content, formal, and linguistic schema), plus reading strategies that are crucial in shaping what happens in the reading process. While the text remains the same, the information the reader brings to the text fluctuates as comprehension grows.

**Content schema** refers to systems of factual knowledge, values, and cultural conventions. It provides readers with a foundation or a basis of comparison. For example, you may be very familiar with how a marriage is performed in your own culture but may not be aware of these cultural conventions in another culture or context.

**Formal (genre) schema**, which is also referred to as textual schema, has to do with organizational structure forms and rhetorical structures of texts and genres (mystery novels, recipes, advertisements, autobiography, plays, letters, short stories, journal articles, newspaper articles, etc.). Your schooling and cultural experiences have most likely given you a knowledge base of formal schemata.

**Linguistic schema**, sometimes known as language schema, refers to sentence structure, grammatical inflections, vocabulary, cohesive structures. For example, if you have studied a particular grammar rule in your first language, you might be able to make use of that information to decipher the meaning of a word, phrase, or sentence. In essence, to read efficiently, you must make use of reading strategies and various types of schemata.

**Schema Theory and Listening Comprehension**

[Schema theory] suggests that, in developing courses, materials, and units, it is important, not only to teach bottom-up processing skills such as the ability to discriminate between minimal pairs, but alsoto help **learners use** what they **already know** to understand what they hear. If teachers suspect that there are **gaps in their learners’ knowledge**, either of content or of grammar or vocabulary, the listening itself can be preceded by **schema building activities**.

Source: Nunan, D. (1999). *Second language teaching and learning.* Boston, MA: Heinle & Heinle

# Top-down and Bottom-up Processing

To understand how people make sense of the stream of sound we all hear, it is helpful to think about how we process the input. A useful metaphor often used to explain reading but equally applicable to listening is “**bottom-up** vs. **top-down processing**,” proposed by Rumelhart and Ortony (1977) and expanded upon by Chaudron and Richards (1986), Richards (1990), and others. The distinction is based on the way learners attempt to understand what they read or hear. With bottom-up processing, students start with the component parts (**linguistic schema**): words, grammar, and the like. Top-down processing is the opposite. Learners start from their background knowledge, either **content schema** (general information based on previous learning and life experience) or **formal schema** (awareness of the kinds of information used in a given situation).

In the classroom, pre-listening activities are a good way to make sure [top-down/bottom-up integration] happens. For example, before listening, students can brainstorm vocabulary related to a topic or invent a short dialog relevant to functions such as giving directions or shopping. In the process, they base their information on their knowledge of life (top-down information) as they generate vocabulary and sentences (bottom-up data). The result is a more integrated attempt at processing. The learners are activating their previous knowledge. This combination of top-down and bottom-up data is also called **interactive processing** (Peterson, 2001).

Adapted from: Nunan, D (ed). (2003). *Practical English language teaching.* New York: McGraw-Hill.

# Agreeing on a Purpose

It is important for teacher and students to agree on both **general and specific** purposes for their reading or listening. Are the students trying to discover detailed information or just get a general understanding of what something is about? Perhaps they are listening to find out the time of the next train; maybe they are reading in order to discern only whether a writer approves of the person they are describing.

If students know why they are reading or listening they can **choose how to approach** the text. If they understand the purpose they will have a better chance of knowing how well they have achieved it.

Adapted from: Harmer, J. (2001). *The practice of English language teaching (3rd ed).* Harlow: Pearson Education Limited.

**Question Types**

Closed and Open questions

Factual questions, usually ‘yes or no’ questions or questions beginning with ‘what,’ ‘when,’ ‘who,’ or ‘where,’ are **closed**. These types of questions result in detailed facts about subject matter. Closed questions often result in a limited amount of student talk. In contrast, **open** questions asking ‘how’ or ‘why’ aim at eliciting information arrived at through reasoning. Such questions encourage students to respond with extended discourse. Open questions ask students to think about a topic and require a great deal of student-generated language.

**Display and Referential questions**

While the terms *open* and *closed* refer to the nature and/or length of the response, the terms *display* and *referential* express the nature of the interaction between parties (Tsui, 1995). Display and referential questions use the same interrogatives as open and closed questions but answer *why* such questions are asked. A **display** question is a typical pedagogical question to which the teacher (or other questioner) already knows the answer, whereas a **referential** question is one to which the teacher (or other questioner) does not know the answer (Long and Sato, 1983).

Adapted from:

Brown, HD. (2001). *Teaching by principles.* White Plains, NY: Pearson Education.

Long, M., & Sato, C. (1983). Classroom foreigner talk discourse: Forms and functions of teachers’ questions. In H. W. Selinger and M. H. Long (Eds.) *Classroom- oriented research in second language acquisition*. Rowley, MA: Newbury House.

Tsui, ABM. (1995). *Introducing classroom interaction*. London: Penguin.

**Question Types Table**

|  |  |  |  |
| --- | --- | --- | --- |
| **Type of Question** | **Refers to the**  **nature of:** | **Interrogatives Used** | **Result of**  **Question** |
| **Closed** |  |  |  |
| **Open** |  |  |
| **Display** |  |  |  |
| **Referential** |  |

# Listening Tasks & Objectives

**Task: Listening for the Gist (Gisting) or the Main Idea**

Objective: Students should be able to IDENTIFY products that are being advertised by matching pictures of the products to the passages heard.

**Task: Identifying Genre**

Objective: Students should be able to DISTINGUISH between the formal register of announcements and the informal register of conversation.

**Task: Listening for Specific Details**

Objective: Students should be able to NOTE DOWN (e.g., on a calendar or planner) the specifics of an activity (e.g., time, place, etc.).

**Task: Predict**

Objective: Students should be able to PREDICT the next event in a narrative (news story, fictional story, etc.).

**Task: Describe and Draw**

Objective: Students should be able to IDENTIFY and DRAW common shapes and objects (e.g., geometric shapes, household items, etc.).

**Task: Listening with Visuals**

Objective: Students should be able to ENTER information they hear (e.g., flight information) from a recording into a graphic organizer.

**Task: Taking notes**

Objective: Students should be able to TAKE NOTES in an activity with a series of associated production tasks in writing and speaking.

**Task: Pantomiming/Gesturing**

Objective: Students should be able to MIMIC actions they hear and/or see associated with language from a recording.

# Listening Tasks

Instructions: personalize this list by assigning each task a *cognitive complexity* and a *learning style* (Multiple Intelligence) from the previous page, according to your opinion. Think carefully.

**Gisting:** Identifying the main idea of the speaker

**Filling in graphic organizers:** Filling in charts, graphs, pyramids, etc.

**Matching:** Matching descriptions to visuals

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Clue searching:** Listening for cues to meaning (key words, form, characters)

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Interacting with realia:** Using realia related to the context

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Sequencing:** Putting a jumbled list or set of ideas in the right order

**** Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Inferring:** Identifying underlying ideas that aren’t explicitly stated

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Paraphrasing**: Rephrasing the speaker’s message

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Repeating (other students or source):** Remembering what others said

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Summarizing:** Summarizing the ideas of the speaker

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Outlining:** Making an outline/taking notes of the heard text

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Reacting:** Stating an opinion or an argument for/against what the speaker said

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Elaborating:** Creatively adding more details to what was heard

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chanting:** Speaking/singing along with rhythmic speaking or musical intonation

Complexity: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Learning Style: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Reading Strategies

* **Skimming:** Looking through a text **quickly** to get **main ideas**

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Scanning:** Looking through a text very **rapidly** for **specific information**

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Determining purpose for reading:** Identifying **why** you want/need to read the text

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Previewing:** Finding out information about the text **before** actually reading it

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Predicting:** **Guessing** what will happen next in the text

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Identifying genre:** Determining the **type** of text to figure out the organizational pattern and categories

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Visualizing:** Making use of **visual aids** accompanying the text to derive meaning

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Recognizing topics:** Finding out what the text is about

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Identifying structure:** Recognizing the **organization** of a sentence, paragraph, chapter, etc.

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Guessing unknown words:** Using **context clues** and **morphemes** to comprehend unknown words

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Inferring:** Identifying **underlying ideas** that aren’t explicitly stated; “reading between the lines”

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Identifying cohesive devices:** Recognizing connections between ideas signaled by transition words, conjunctions, & proforms

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Evaluating:** Reading critically and **judging** the accuracy or quality of the text

EX: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Teaching Reading: A Comprehensive Approach

By Joy Janzen

1. Teaching reading is **embedded in a content area** so that students are learning strategies while they are engaged in their regular reading for a variety of purposes.
2. Strategies are taught through **direct explanation, teacher modeling, and feedback**. Students are never in doubt as to what the strategies are, where and when they can be used, and how they are used. The teacher models expert behavior by reading and thinking aloud. The students also read and think aloud in class, and their strategy use is supported by teacher feedback.
3. Strategies are constantly **recycled** over new texts and tasks. The students encounter individual strategies and groups of strategies time and time again. In this way, students better understand the usefulness of strategies, and there is transfer of training from one type of text or task to another.
4. Strategy use **develops over the long term**. It is estimated that it takes several years for L2 students to develop as strategic readers (Beard El-Dinary, Pressley, & Schuder, 1992). Certainly, the decontextualized teaching of individual strategies for a short period is not likely to have a long-term impact on students or to effectively help them develop as strategic readers (Gaskins 1994; Pressley, Beard El-Dinary, & Brown, 1992).

MCj02921120000%5b1%5d

Richards, JC & Renandya WA. (eds.) (2003) *Methodology in Language Teaching: an anthology of current practice.* Cambridge: Cambridge University Press.

<http://allrecipes.com//Recipe/best-peanut-butter-cookies-ever/Detail.aspx> submitted by Sandy