DEVELOPING LANGUAGE SKILLS
THROUGH COGNITIVE-CONSTRUCTIVE INSTRUCTION

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1. Introduction

In this work, we will underline the significance of teaching four language skills, i.e. reading, listening, speaking and writing, from cognitive\(^1\)-constructive\(^2\) perspective. These four skills are interrelated and interdependent and can be learned more effectively in connection with each other, rather than in isolation, as they support each other. They should be integrated in ways that allow each process to support and extend learning in the others. For example, during the writing process students engage in talking about their writing, reading their own and others' written work, and listening to others’ responses to their writing. Each process clarifies and extends the others. Experiences with one language process foster development of the others, making the study of each relevant. Integrating language processes within a context encourages students to transfer the knowledge and skills learned to everyday situations in and out of school. Listening and writing skills are crucial in reading printed words, while speaking skill helps us to express our thoughts through reading, listening and writing.

2. Reading Skill

Reading is more than the decoding of written unknown words, and grammatical structures. It is a complex process, which requires thought and individual construction of meaning. During reading,

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readers comprehend, interpret, and respond to text according to what they already know. Each student constructs his or her unique meanings with a particular text. At the result of reciprocal interaction between readers and the text, readers construct their own meaning according to their background knowledge and experience. Good readers focus on meaning, rather than concentrating on every detail. They make predictions and inferences, based on their prior knowledge (e.g. knowledge of vocabulary, phrase, syntax, and experience of world), as well as the specific context and situation, and then confirm or correct their predictions by further reading, or rereading if necessary.

Readers construct meaning before, during, and after a reading experience depending upon their interest in and prior knowledge about the facts relative to the topic, concepts and related vocabulary. Students have organized networks of prior knowledge and experiences about topics in mind, which create expectations when reading about those topics. When students are involved in a reading task, their mental representations of concepts influence and aid their comprehension of what they read. The knowledge of language (e.g., the position of words in a sentence, and word relationships within sentences) also contributes to successful comprehension of new message. Readers can predict the possible meaning of a word by determining its grammatical use in a sentence (e.g., knowledge of word order rules, syntax). Semantic cues (the meaning of words surrounding the unknown word in the same or nearby sentences) can help students determine the unknown word. Students’ knowledge about the social appropriateness and conventions of language (pragmatic clues) in particular contexts, contributes to their understanding of what they read. For example, an accident event includes such components as location, time, involved people, wounded or killed people, police, ambulance, hospital, etc. The readers’ knowledge about text patterns and the structure of various genres, and their abilities to use such structural understandings and elements effectively, contributes to the construction of meaning. For example, a story may have repeating patterns, opening remarks and ending statements, usual characters, rhymes, etc. When students are aware of the structure of text, they will understand better what they

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3 Mayer, 1992, Cognition and Instruction..., pp 405-410.
read and remember it for a longer time period. To be able to use all of these language cues, students need meta-cognitive knowledge, which refers to the readers' awareness of how they make meaning and how they monitor their own understanding as they read. Proficient readers use a variety of comprehension strategies as they read, and often answer questions in their minds by visualising, predicting, and summarising to themselves and rereading as necessary. Examining their own thinking allows readers to understand how they arrived at a particular meaning and offers them the option of revising their understanding.

As readers become proficient, they internalise the language items and use them automatically to make sense of what they read. This is done most effectively in the context of what the student is reading. The following table summarises the main characteristics of a competent reader:

**Characteristics of a competent reader**

- knows that reading is a sense-making process, rather than thinking it as word decoding
- remembers their background knowledge on the subject before they begin to read
- uses their prior topical and linguistic knowledge as they read
- knows their purpose for reading
- gives their complete attention to the reading task and keep a constant check on their own understanding
- adjusts their reading rate to match purpose and reading material
- can match their reading strategies to a variety of reading materials
- decides if they have achieved their goal for reading
- evaluates their own comprehension of what was read
- Summarises the major ideas

**2.1. Reading Content**

The pedagogically graded materials help students manage their limited memory capacity efficiently, and motivate students. In the first years of language learning, the reading content might include

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simple and short texts about predictable subjects, straightforward descriptions of persons, places, and events, newspaper headlines and simple articles, dialogues, short stories, biographies, personal correspondence, diary, etc. The subsequent years might completely be devoted to media-based materials (e.g. excerpts from newspapers, journals, magazines). In this regard, Internet provides us a lot of materials; Tens of newspapers, and magazines already are online. Besides this, hundreds of personal and institutional language-based web sites are available, which include a wide variety of stories, articles, books, discussions, chat service, reports, dictionaries, free or demo language teaching programs, etc. Advanced levels may cover professional and academic texts, according to the target students’ needs and objectives.

2.2. Reading Strategies

While reading a text or paragraph, competent readers perform several tasks at the same time: decoding unknown words, discourse analysis, inter-actionable analysis, and meta-cognitive analysis. Readers try to predict unknown words by using many decoding techniques. Discourse analysis helps us to understand references in materials such as “Which person a pronoun refers to, when that person has been mentioned in a previous sentence?”, “What general words may be used to refer to a particular thing or person already mentioned?”; connectors like “when”, “while”, “and”, “who”, “but”, “however”, etc. When reading such discourses as narratives, descriptions, stories, letters, newspaper articles, novels, grammatical and lexical references help learners to keep track of specific people and objects, and to recognise which parts of the discourse are most prominent and which parts are supporting materials. Reading extensively in various materials can help students subconsciously recognise the discourse devices used by the writers. When reading a text, learners should also notice routines for opening and closing different kinds of conversations, rules of interaction between people (e.g. man and woman, personal and business letter), which apply in common communication situations. To be able to increase inter-actionable skill, learners should be encouraged to read materials on a variety of subjects in which there is interaction such as dialogue, plays, short stories, and novels. As an activity, students might be asked to browse through magazines, newspapers, and other printed sources of material to see examples of interactions. They look with the special
intent of noticing the way people interact. At the end of this activity, students write down their insights about interactions in a notebook, or as a project in the school newspaper. Meta-cognitive analysis deals with how people express themselves, accomplish social functions, and ask questions and reply. These four strategies are essential in a functional reading comprehension task.

Readers use pre-reading strategies that are appropriate to text such as discussion, making prediction about a passage or text based on its title, keywords, and a possible illustration, generating questions, previewing, anticipating content, purpose of writer, and organisation of a reading selection by using background knowledge. These pre-reading strategies make narrow of the field of prediction. For example, as soon as we predict that the text is related to an accident event, we immediately bring out the accident-related background knowledge, and in the light of this knowledge, we try to predict what an unfamiliar word is, or what main idea of text is. The processes of making inferences, prediction, drawing conclusion and finding main idea follow the pre-reading strategies. In this stage, readers try to identify unknown words or grammatical structures, and construct meaning from textual, graphical, and situational context clues. Underlined keywords or borrowed words, italicised unknown vocabulary and bold headings might help readers easily to construct the meaning. Supporting graphics, charts, maps, outline and other visual clues highly enhance the meaning construction process. These visual clues create a mental image of given text or paragraph in reader’s mind. Focusing on meaning rather than form or grammatical rules is essential in effective reading. The main function of these context clues is to make readers concentrate on meaning, as our short-term memory is not long enough to keep both forms and meanings of an input at the same time. Meaning of concepts or main idea of messages constructed by learners should be encoded in long term-memory. The final stage in reading comprehension skill is post-reading strategies such as summarising, retelling, note-taking, outlining, sequencing, re-reading, discussion, comparing and contrasting. These techniques immensely increase comprehension. To be able to apply these techniques properly into a task, students should

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be well trained in advance by teacher. The following outline might be used in any reading process, before or after reading task:

**Questions**
- Who?
- What?
- When?
- Where?

**Events**
- 1
- 2
- 3
- 4

Using various meaning construction techniques such as retelling, summarising, outlining, note-taking, etc., and multiple representations of information such as maps, charts, graphs, photos, drawings, and various written genres facilitates comprehension and encoding new information in long-term memory. Students should experience a variety of reading materials during the reading activities (e.g., novels, short stories, diaries, journals, biographies, and autobiographies, newspapers, magazines, informational books and articles, and electronic information). Multiple materials develop and strengthen creative and critical thinking skill, speaking, and writing. Through materials, students become more proficient at writing sentences, using advanced vocabulary, and recognising appropriate grammar, usage, and spelling. They increase their reading ability and capacity through increased interest and motivation.

**2.3. Reading Activities**

Initial reading experience should be teacher-guided. Teacher introduces students to concepts or themes in the reading selection. This enables the students to become acquainted with the primary concepts or themes and with the relevant vocabulary. Through teacher guidance, students will discuss pre-reading questions, use background knowledge, and set a purpose for reading. They engage students in discussion, and encourage them to ask questions, gain

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9 Hughes, 1975, *Reading and Reading Failures*, pp. 33-34.
vocabulary knowledge, and share related background experiences. Most importantly, students should begin to internalise the main concepts and themes as they the reading selection\textsuperscript{11}. Teacher has students read the selection, or read it aloud to them. To help students build a mental map before reading, students might be encouraged to generate lists of ideas and words related to the topic, and then organise these ideas graphically to provide a visual construct of ideas. This mental map provides structured overviews, which activate and build knowledge prior to reading, and helps students make connections among ideas. Categorising ideas and concepts, and visually illustrating the relationships between the ideas and concepts are very valuable in early age of learning. This activity may involve the entire class, small groups, or individual students\textsuperscript{12}. Students identify key concepts, and record them on a handout, chalkboard, or overhead transparency. They discuss the concepts briefly by using pictures or related instruments to the concepts to evolve discussion. Through the concept mapping and the discussion, the students become aware of what they know. Their interest is raised in preparation for reading the selection. As students internalise the events of a story, they can begin to make predictions about what will happen next. Asking students to stop at various points during reading to make predictions about upcoming events and issues encourages them to become intuitive readers.

Teachers may encourage students to keep a record of their reading selections. Reading aloud motivates students. Selection of appropriate material is crucial to the read-aloud activity. Knowing the students’ interests and what they have already read helps the teacher choose effective reading material. It is also important to read a variety of written forms (e.g., short stories, novels, newspaper/magazine articles, editorials, biographies/autobiographies, anecdotes, jokes and riddles, letters - business, friendly, books, television programs, plays, fables and fairy-tales, etc.). Daily reading opportunities are important for developing vocabulary and reading proficiency. While students read silently, teachers can provide instruction as they circulate about the room and spend a few minutes with individual students to observe and assist. Teachers can take the opportunity to broaden students’ vocabularies, and help for individuals who are experiencing difficulty

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\textsuperscript{11} Ericsson, K. A. and Oliver W. L., 1996, "Cognitive Skills", in Learning and Skills, pp. 42-43.
\textsuperscript{12} Hughes, 1975, Reading and Reading Failures, pp. 103-105.
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with some aspect of reading. Book talk is productive; readers present the books they have read and describe their responses to these books. This talk may be given in pairs, small groups, or large groups. Students summarize briefly their books for peers, and then groups get into discussion about book. Teachers can model this strategy before asking students to talk about books they are reading. Teachers should model the procedure. The goal is to interest students in the book by giving a short summary, and by expressing personal and critical responses to the book, not by retelling the entire story. Students who are reluctant to discuss reading materials with peers because of nervousness or embarrassment may, at first, write their comments in reading logs, then read it aloud. This method provides a scaffold for students and soon they should feel more comfortable about sharing informally, without having to read their responses. Group reading is another powerful activity. Each group selects a topic, and presents what they learned to whole class. Presentations may be visual, oral, dramatic, written, or a combination of all. This activity promotes thoughtful discussion that affirms, challenges, and extends each reader’s understanding of the text, and extends reading abilities and comprehension through the social act of discussion. Newspaper can serve as a class newsletter in the early levels of Arabic course. It is a good place for students to publish their own materials. It is also a good way for collaborative activities. Teacher makes students familiarized with various sections of the newspaper, and then discusses various tasks that they can apply for the newspaper such as news, sports, interviews, story, advertisements, etc. Students work in pairs and groups to produce their own materials. Each group’s work is later published on newspaper with their names. This newspaper project might serve throughout the whole teaching years.

As a sample classroom procedure, teacher asks each group to form a story. Each group prepares their own story benefiting from many sources like Internet (World Wide Web), library, and one of group members outlines the story (e.g. gives headings, keywords, topic, content) to whole class, and the second one reads that story, the third one make a brief summary of the story. During presentation, groups show pictures, graphs, relia, map, etc. to whole class to help them comprehend the story. Following each groups’ presentation, class asks questions to the presenting group, then the presenting group asks question to whole class to measure if they comprehend the story. Finally, teacher asks each student to write a paragraph summarising
the story. The class evaluates the summarised stories by students and the best voted writing is published in the newspaper.

3. Listening Skill

Listening is a critical component of reading skill due to pronunciation issue. Learners have to listen vocabulary items as much as possible to be able to read them correctly, when encountered in printed materials. So, at the beginning level of language learning, a significant amount of time should be devoted to effective and active listening tasks and strategies. It has also a prominent role in developing speaking skill. Students need to spend a lot of time listening before and as they develop their speaking skills. Listening is not hearing; rather, it involves the use of language and thought. Listening task should be in a meaningful, authentic context in order to acquire it, and it should be integrated with speaking, reading and writing experiences. Students actively attend to the speaker’s message if they have an intention of using or assessing that message. For example, if we want students to find the main idea of speaker’s message, or to take notes, or to summarise, or ask questions, they are more likely to attend to the message, and to construct the meaning. Listening requires the listener’s active participation. Good listener makes great effort to construct the meaning of the message by attending to the speaker’s verbal and non-verbal language. The meaning constructed depends on the listener’s previous knowledge of language and world, his/her ability and desire to engage in thinking and listening.

3.1. Listening Process

Initially, the listener hears a sound from a speaker and attends to it. Physical factors are critical in this phase; poor sound quality, noise, cold or hot temperature, overcrowded class size, etc. can easily discourage and distract listeners from the message. Focusing attention on the speaker without distraction requires desire, motivation, interest and effort on the listener’s side. The second phase in listening process is constructing meaning, or assigning meaning to verbal and non-verbal messages of the speaker. Basing on existing knowledge and world experiences, and the context of the listening situations, the listener makes alternating predictions and interpretations to understand.

the new information, and then evaluates and finally assigns a meaning to this information. The listener by using critical thinking makes his or her final judgment, and seeks clarity of understanding.

Isolated listening instruction is artificial and does not promote transfer to learner’s real life. However, in the first year of language learning, it might be applied to enable students to be competent in pronunciation of vocabulary items and vowels. Teachers provide opportunities for students to practise active listening for a variety of purposes in a variety of contexts (e.g., face-to-face, group discussions, oral reading, oral presentations, formal situations). The time is adjusted to the levels of students.

3.2. Listening Strategies and Activities

Students require strategies for becoming accurate, effective listeners. When students are aware of these strategies, they are more likely to recognise their own abilities and engage in activities that help them to be effective listeners. Listening instruction would be more efficient if it is integrated into speaking, reading and writing activities. We can group these strategies in three categories: pre-listening, listening, and post-listening strategies. Pre-listening strategies prepare students for what they are about to hear, and encourage them to listen at the interpretative and critical levels. First of all, teachers must raise listeners’ interest and motivation, so that they attend to the message of speaker. Topics and themes related to listeners’ own lives and exciting stories make them more willing to listen to actively to what is said. If purposes for listening are set clearly (e.g., to select descriptive vocabulary, to find main idea, to make a judgment, to interpret and analyse information, to follow directions, to collect information, to take notes, to summarise, to determine what is opinion and what is fact, etc.), students become active listeners and focus their attention to them. This enhances their comprehension and retention. As learning is a process of making connections between prior knowledge and new knowledge, listeners must be encouraged to relate their existing knowledge to the speaker’s message. When listener’s knowledge about the speaker’s content is activated, listeners begin to make predictions what they might hear, and make connections with what they already know. For example, if we inform students that the content of speaker’s topic is to be about holiday, they immediately recall their previously constructed concepts.
and vocabulary related to holiday event, and predict what the speaker is to say. This will enable students narrow the scope of prediction and interpretation, and thus lead to easier comprehension and meaning construction. It would be very helpful to familiarize students with key concepts and vocabulary related to a listening task. During listening, listeners construct meaning by interpreting the speaker's verbal messages and non-verbal cues (e.g. mimics, body movements). While listening, listeners must focus their attention on the speaker's purpose and intention, and then connect it to what they already know about language and the topic. Beside purpose and intention identification, learners might be asked to consider the organisation of the talk such as introductory and concluding statements, frequently used phrases, concepts, and clauses which they are more like to use in their own speaking experiences. During listening, students might be encouraged to take notes and ask questions. Post-listening strategies should immediately follow listening strategies for more effective results. When students are asked to apply what they have received from the message, they tend to be more attentive listeners. The teacher must provide students with enough opportunities to apply newly learned information immediately. Listeners might ask question the speaker or teacher and verify their understandings. Through discussion and writing following listening process, students construct their own meaning. Through analysis, synthesis, organisation, and expressing and retelling of the speaker's message, students interpret, evaluate, and determine meaning. Students develop a greater understanding of what they have heard if they are expected to summarise their ideas and respond to them through discussion, writing, drawing, diagram, thought web, etc. Post-listening activities encourage interpretative and critical listening, and thinking. They also provide opportunities for teachers to assess students' comprehension, perceptions, and clarify their understandings.

4. Speaking Skill

Speaking is a very important component of a language teaching and learning process. It provides a base for listening, reading and listening skills. Speaking enables students to make a link between what they know and what they are learning, and shapes students' perceptions of the world and represents these perceptions as knowledge in mind. It encourages students to reproduce, transform and transfer the knowledge in mind into real life. Such a process
increases students’ critical and creative thinking abilities and retention. Their perceptions change continuously as they participate actively in speaking process. As students learn new information, they revise their understanding and develop their existing schemata about language and world.

4.1. Speaking Strategies and Activities

There are many strategies and activities to improve speaking skill. Determining the actual content of message, how it should be presented, and who is the audience are important pre-speaking strategies. Students’ experiences, observations, and interactions have an impact upon what they say and how they say it. So, such activities as reading and listening about a chosen speaking topic, viewing a video, jotting down ideas, and constructing thought webs, are very effective pre-speaking activities. During speaking, the speaker should attend to such things as presenting a clear message, tone of voice, appropriate vocabulary, the environment, and non-verbal gestures. After speaking, the speaker may have to make comments, answer questions, and explain concepts not understood. Following speaking, teacher must discuss and assess the performance with him or her, which develops self-critical thought. If possible, using a camcorder is very helpful for a reflective assessment of students’ performance and progress. Before speaking process, students must be informed what goals are and what assessment criteria is. This helps students to recognise what they have done well and where they require improvement. Students’ oral presentations may be commented and questioned by peers and teachers during or after presentation. Speaking actively engages students in interactions with peers and teacher. Students must be provided with supportive, collaborative environment, and a variety of speaking situations. Teacher initially models a variety of speaking formats for students, and then asks students to prepare such a presentation or project. Such materials as audio and video equipment, computer, CDs, Internet, etc., are very helpful prior to formal or informal speaking situations. Learners should be encouraged to develop their speaking skill for different audiences, purposes (e.g. to inform, to persuade, to respond, to inquiry), formats (e.g. formal or informal speech), situations (e.g.

small or large group discussion, conversation, debates, story telling), and topics. A friendly, relaxed atmosphere is important for effective speaking task. Enough time should be provided. Collaborative and interactive classroom settings provide opportunities for students to practise the different thinking and oral skills. Teacher must give students the opportunities to collect information, question, interpret and assess.

5. Writing Skill

Writing is a complex process that allows writers to explore thoughts and ideas, and make them visible and concrete. When thought is written down, ideas can be examined, reconsidered, added to, reorganised, and changed. Writing encourages thinking and learning, and particularly enhances speaking and reading ability. Minimally, our main aim should be to develop students' writing ability as complementary for reading and other skills, as writing is interrelated with other skills. Writing compels students to think, remember, plan and organise the previously acquired information in mind, and then put them into practice. From the beginning of the instruction, writing should be practiced frequently and regularly. Students must be encouraged to write frequently and regularly. Instruction may be required about some writing skills and knowledge. Writing must be conducted within the context of students' writing. By choosing topics from their own experiences, observations, and interests, students get a sense of ownership of the writing in which they are involved. This promotes commitment and continuing interest. When students determine their own audience and purpose for writing, they are promoted to find a way to say it clearly, appropriately, and effectively. Encouraging students to express their ideas and meaning is critical. Although writing is an individual activity, collaborative writing might be encouraged.

5.1. Writing Strategies

During the writing process, students engage in pre-writing (e.g., thinking, remembering, jotting ideas, reading a lot, observe written patterns), planning (e.g., outlining, mapping, diagram, story frames, setting purpose, points of view, format), drafting (e.g., rough drafts, discussing with teacher and peers, revising, proof-reading), and

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post-writing activities (e.g., final draft, assessing and evaluating, publishing). It is the teacher’s responsibility to assist students by encouraging, modelling, and supporting their growth when and where needed. Students read such things as non-fiction books, novels, magazines, stories, newspapers, Internet, and jots down ideas, vocabulary, story plots, and characters while reading read. They talks in pairs or groups to collect information, and then lists their ideas, and perspectives.

5.2. Writing Activities

Although the following information describes sample-writing activities in classroom, it should be understood that the writing, reading, speaking, and listening processes are intended to be integrated. Several elements from each process should be at work in all language experiences in the classroom. Students might be given a list of words, or a topic and theme, and then asked them to think and write about it. Students list all their thoughts, ideas and associations that words generate, and then begin to make connections among the words and their lists of personal associations by writing phrases, sentences, and ideas that demonstrate a relationship among the words. As another activity, teachers may request that students bring pictures of people, scenes, events, or the teacher may supply them (photographs or pictures cut from magazines). Each picture should show several people in sufficient detail to reveal size, facial expression, dress, and other facets of character. They record the first thoughts and reactions that the pictures generate. The teacher should ask students to examine their pictures closely, and explain that they will need to use their imagination for the activity. Some questions the teacher might ask are: ‘Who are the characters?’ What emotions are they showing? What might characters be thinking or saying?, What do they wear?, What are their jobs?, What is the relationship among the characters?, etc.’. Instruct students to record ideas briefly, using phrases and words rather than sentences. Students then may take the opportunity to develop their ideas further, or save their notes and ideas for use at a later date. Teacher might prepare students for free writing by explaining that they should write whatever thoughts enter their head from the moment that the teacher says “go” to the moment he/she says “stop”. At the beginning level, teachers provide students with information necessary for their writing such as about language usage and conventions such as spelling, sentence structure. It is important to
allow time for students to practise concepts introduced lessons within the context of their own writing. Students must be given the opportunity to write in a variety of narrative, descriptive, expository formats such as advertisement, article, autobiography and biography, letter of complaint and request and inquiry, diary, role play, monologue, book review, report, fable and fairy tale, greeting card, etc.

6. Conclusion

The general goal of a language instruction should be to extend each student’s ability to understand and communicate meaning effectively. Instruction about language knowledge and four skills should be provided students within the context of their daily language use and experiences, as language develops through authentic and relevant language experiences. Students need opportunities to learn to use language in a variety of meaningful situations for a variety of purposes. They learn that language is a necessary tool for effectively communicating in their daily lives, and for applying their knowledge of language to their speaking, listening, writing, and reading experiences. At the beginning levels, teachers are expected to use brief lesson models, which are immediately meaningful because they connect the language concept or skill directly to the students’ current speaking, listening, writing, or reading experience. It can be provided at any time during a lesson, depending upon the students’ needs and the lesson objectives. Teacher introduces the language concept using examples from material, and provides students with any additional, relevant information about the concept and use more samples, if necessary, to explain further or exemplify the concept. Then, s/he provides a brief interactive activity to help students establish relationships between the new skill or knowledge and their current language use. Activities, in which students work in pairs or small groups, are useful because, as students talk, they clarify their own and others’ understanding. They should make use of language experiences in which students are currently engaged in order for learning to be relevant. After that, s/he reviews the major points made during the mini-lesson and record the information with some examples, and have students take brief notes for future reference, followed by having students apply the new knowledge in their own speaking, listening, writing, or reading experiences.
Finally, it should be noted that we suggest teaching four language skills together at the beginner and intermediate levels. One or more of these skills might be specialized depending on the learners’ needs and ability at advanced levels, soon after students have a good background in the target language.

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