# Introduction:

In our limited time together, I've chosen to sidestep the conventional English for Specific Purposes (ESP) route. Instead, our focus is on something equally essential: equipping you with the skills to become autonomous language learners. Rather than confining ourselves to a narrow scope, we're shifting our focus to language acquisition itself. I'm here to guide you through the art of learning how to learn.

It's imperative to recognize the impact English as a language holds for students of mathematics and computer science:

- Global Lingua Franca: English stands as the global language of science, technology, and innovation, connecting professionals, researchers, and enthusiasts worldwide.

- Academic Accessibility: Proficiency in English ensures access to a vast repository of academic literature, research papers, and cutting-edge developments in mathematics and computer science.

- Industry Standards: In the fields of mathematics and computer science, English is often the language of documentation, coding, and industry best practices.

- Collaborative Advantage: A strong command of English enhances your ability to collaborate on international projects, fostering innovation through diverse perspectives.

- Networking Opportunities: English proficiency opens doors to conferences, workshops, and networking events, providing avenues to connect with leading experts and peers in your field.

- Global Career Mobility: Whether pursuing advanced studies or entering the professional arena, English proficiency is a key asset, facilitating career mobility and global opportunities.

- Communication in Technology: In the ever-evolving landscape of technology, English is crucial for understanding coding languages, software documentation, and engaging in tech communities.

The Four Pillars:

To unlock a language, one must master four key skills: listening, speaking, reading, and writing. These pillars form the foundation of our exploration. Throughout this lesson, we'll delve into practical strategies to elevate your proficiency in each skill, recognizing the interconnected nature of language development.

# The Four Skills

## 1.Listening

Listening is the foundation of language learning. It's not just about hearing words; it's about understanding tones, rhythms, and context. Mastering this skill is crucial for effective communication. As we start exploring the world of listening, get ready to understand language in a whole new way. Let's break down the steps to improve your listening skills and make it easier for you to catch the nuances of language.

At a first stage, listening is a matter of **detection** of the rise and fall of the language's most frequent sounds. Anyone listening to a foreign language for the first time would not understand a word of what is being said, but they would rather recognize meaningless sounds that are most prominent in that language. Then, the listener would start detecting some familiar elements without being able to recognize the interrelationship within the whole stream of sounds.

At a second stage, there is a conscious **recognition** of the crucial elements because of repetition but without retention in long-term memory. This means that the listener recognizes the essential elements of the language but is not able to remember what they have recognized. At this level, all their attention is taken up by recognition, and thus, they are unable to concentrate their attention on the language elements long enough because of the high rate of information in sound sequences with which they are not familiar. At this level, the short-term memory is in process.

At stage three, there is a recognition of elements with **retention**. When the learner is more familiar with the foreign language and the long-term memory has stored enough information, they recognize the elements and understand their relationship. Understanding is the basis of retention; one cannot retain information unless they understand it. It is thus obvious that short-term memory helps recognition while long-term memory helps understanding and retention. On the basis of these two aspects, the levels of activities can be described."

## 2.Speaking

Speaking is turning thoughts into words. It's more than just saying things; it's about expressing ideas and feelings. Confidence and adaptability are key. As we dive into improving spoken language, get ready to become a better communicator. Now, let's go through practical steps to boost your speaking skills, making you a more confident and effective communicator.

Step 1: At early stages, there is a frequent use of language **drills** that include mere repetition of single sounds, words, and sentences in a very stereotypic way in order to develop good pronunciation and mastery of language structure.

Step 2: In addition, a lot of oral **substitution** drills will provide the learner with a repertoire of lexicon and sentence structure. It is recommended not to use any support of written texts if the learner is to become confident in oral manipulation. This remains an ideal matter because, in learning a foreign language, the final achievement will always be that of a foreign speaker.

Step 3: At advanced stages, there is a focus on the **selection** of appropriate language for an appropriate context. At this level, learners should develop a lot of activities where they have to get the meaning across by manipulating the elements of language properly, expressing their intention in a socially acceptable way (not merely repeating what they hear, like at early levels).

## 3.Reading

Reading opens the door to knowledge and culture. It's not just about understanding words but also about interpreting and analyzing text. This skill expands your vocabulary and lets you appreciate the cultural aspects of a language. Let's step into the world of reading proficiency and discover the joy of understanding written words. Let's break down steps to improve your reading skills and enjoy a deeper connection with the language.

1. **Decoding**: This linguistic ability includes the following levels:

- decoding grapho-phonic information of the sound-symbol relationship;

- decoding syntactic information derived from structure as expressed in word order, prefixes, suffixes, question/statement, noun/verb, tenses, sentences, or parts of sentences...

- decoding semantic information from the content of words;

- decoding socio-cultural information from the connotations specific to a given culture.

2. **Anticipation**: It is the ability to predict what will probably follow while holding in one's immediate memory elements of what precedes. This cognitive ability combines general background knowledge with the intellectual ability of anticipation, prediction, and problem-solving. The reader usually draws from what he already knows, as already established experience, to set probabilities of new experience and acquiring new things. Furthermore, the reader holds in short-term memory instant facts and language elements which help him set the ground for possible hypothetical solutions, results, denouement or conclusions about what he is reading.

## 4.Writing

Writing is putting thoughts on paper. It's not just about grammar; it's about expressing yourself clearly. It's a powerful tool for communication. As we start improving writing skills, get ready to transform your ideas into well-written words. Let's now go through practical steps to sharpen your writing skills and express your thoughts more effectively.

Step 1: The main activity is **copying**, which is the exact reproduction of the letters according to a model. It is an introduction to the alphabetic system of the language.

Step 2: The main activity is **rewriting** the words, and the sentences already copied without reference to the original copy or to the learner's copy. The learner practices memorization exercises of the code.

Step 3: Here, the activities are about **reproduction with minor adaptations**. For example:

Activity 1: Substitution, where the learner is required to substitute (replace) certain words by others maintaining the same structure as the model; substitution can be of the tense, gender, number, etc...

Activity 2: Transformation from one sentence type to another;

- From the active to the passive voice and vice versa;

- From positive to negative form and vice versa;

- From statement to question and vice versa;

- From direct to indirect speech and vice versa.

Step 4: **Reproduction with major adaptations** (modification) where the learner relies much less on the model and tries to add up his knowledge of the language conventions to combine and produce more or less complex forms. For example:

Activity 1: Expansion of a sentence (made longer) with the addition of words;

Activity 2: Integration of two or more sentences together, linked with a junction or a relative pronoun to make a longer sentence;

Activity 3: Reduction of two sentences to only one sentence, with the omission of certain words. This is also called embedding whereby the information is packed in one sentence instead of two.

Step 5: **Guided writing** where the learner is required to write a paragraph following an outline, or specific questions, paraphrase, or summarize a text.

In this activity, the framework is given but there is some freedom in the selection of words and structures.

Step 6: **Free writing** of composition/essay where the learner is free to use his own words and structures for the expression of a personal message.

# Integration

Integration in language learning means combining different language skills during activities to make the learning process more effective and enjoyable. Instead of practicing each skill in isolation, integration involves blending them together. For example, you might listen to a conversation (listening) and then discuss it with a partner (speaking), or read a passage (reading) and summarize it in writing (writing). These integrated activities mimic real-life language use, helping you become more proficient across multiple skills simultaneously.

Flexibility in Learning: Contrary to mathematical rigidity, language learning is fluid. While the traditional sequence is valuable, you're not confined to it. Feel free to address your weaknesses first or integrate multiple skills simultaneously. We'll explore how to seamlessly merge reading with speaking or writing with listening, making your learning experience more dynamic.

Input and Output: Understanding the distinction between input (reading and listening) and output (speaking and writing) is pivotal. While integrating reading and listening is relatively straightforward, producing language requires a different set of skills. We'll discuss strategies to balance these activities.

If we examine the information stated above, we will see that there are some features of similarities and differences between listening and reading on one hand, and between speaking and writing on the other hand.

In listening and reading, the first stages and levels are about identification and recognition of the code; in listening, the learner identifies and recognizes the phonic code from which he would, in further stages and levels, interpret and understand meaning from a sender (a speaker). In reading, the learner uses almost the same stages as for identifying and recognizing the graphic code of the language from which he would later on develop the ability to interpret the message of the writer and set probabilities of further development in the line of thought.

At the next stages and levels, the learner develops in both language skills the ability to focus on important elements of the message and ignore redundancy. He would, at advanced stages, develop the ability to understand the purpose of the speaker/writer, select what type of elements suit his own purpose, and interpret the speech or the text according to context. However, we can notice that the main difference between listening and reading is in the nature of the code-channel itself. In listening, the phonic code is instant, fast, sometimes non-formal - colloquial, slang, dialect, etc... - and difficult to remember. In reading, the graphic code is more everlasting, slow, and almost always formal. If the learner wants to re-read, he always gets the possibility of coming back to the code, while if he wants to re-listen, he does not have the same possibility as the flow of speech and the rate of information coming in do not allow enough time for stopping and reviewing what has been listened to.

In speaking and writing, the similarities are about the learners' abilities to handle and manipulate the code appropriately to express a message, an intention. There is, at first, an assembling of the message and, then, an encoding of the message into language. At advanced stages, the learner would select the level of discourse and the most appropriate, accurate way of addressing the message according to social, cultural, and personal context. The main differences between these two language skills are about the code itself and time of delivery. In speech, the code is phonic, instant, and informal, to some extent. In writing, the code is graphic, time-consuming, and formal.

All the study skills are combinations of language skills in terms of input processing and output production. (check table 1)

# Authentic materials

Embracing Culture: Language and culture are inseparable. Authentic materials, rooted in the language's cultural context, provide a rich learning experience. We'll explore the importance of using authentic materials, from literature to everyday conversations, to enhance your understanding of both language and culture.

Language and culture share an inseparable bond, forming the bedrock of our learning. Authentic materials, deeply embedded in the cultural context of a language, serve as invaluable assets in our pursuit of language proficiency. Authentic materials encompass a diverse range, including literature, newspaper articles, podcasts, and everyday conversations among native speakers. These materials carry the nuances, idioms, and cultural references inherent in the language, providing a holistic understanding beyond grammar rules and vocabulary. For instance, delving into a classic piece of literature not only sharpens language skills but also unveils cultural insights and historical perspectives unique to that language community. Similarly, engaging in everyday conversations through videos or interviews allows learners to grasp colloquial expressions and regional variations. By incorporating authentic materials into our learning experience, we transcend mere language acquisition; we immerse ourselves in the vibrancy of culture, fostering a deeper connection with the language we aim to master.

Authentic materials for language learning include literature, newspaper articles, magazines, podcasts, movies, TV shows, music lyrics, blogs, social media content, interviews, speeches, cookbooks, advertisements, public signs, online forums, and video blogs (vlogs). These materials, created by native speakers for real-life communication, offer diverse linguistic expressions and cultural insights.

# Language and Culture

Learning a language isn't just about words; it's also about discovering how culture is part of the language. Here's why we can't separate them.

1. Clear Communication: Understanding the politeness levels in English, like using "please" and "thank you," ensures our communication is respectful and aligns with cultural norms.

2. Expressing Well: Recognizing the influence of British literature on English, such as the works of Shakespeare, helps us appreciate and use expressive language effectively.

3. Being Respectful: Being aware of cultural nuances in English-speaking countries, like

acknowledging personal space in conversations, ensures respectful communication.

4. Fun Learning: Watching English sitcoms or movies not only enhances language skills but also introduces colloquial expressions and cultural references, making learning enjoyable.

5. Stronger Connections: Knowing about English-speaking countries' diverse traditions and customs allows for meaningful conversations beyond language proficiency.

6. Real-Life Use: Understanding regional accents and variations in English, like British English versus American English, prepares us for authentic communication in different English-speaking environments.

7. Global Skills: Learning English for international business includes understanding the influence of English in global communication, making it a crucial skill for global collaboration.

8. Better Understanding: Learning about the history of English, including the influence of other languages on its vocabulary, improves our comprehension of words and their origins.

9. Keeping Identity: For individuals from countries where English is an official language, using English while retaining native cultural expressions ensures a unique identity.

10. Learning Enrichment: Exploring English literature classics like Jane Austen's works not only improves language skills but also provides insights into the cultural and societal norms of the time.

|  |
| --- |
| language skills integration Study skills outcome |
| Listening and Speaking: -Listen and repeat |
| -Listen and transform, modify |
| -Listen and answer questions |
| -Listen and comment, argue |
| -Listen and paraphrase, summarise, etc... |
| -Discussions: class, groups |
|  |
| Listening and Writing: -Dictation; |
| -Note-taking; |
| -Filling in a diagram, chart, etc... |
|  |
| Reading and Speaking: -Reading aloud |
| -Reading, speaking and acting: |
| -Reading and answering questions orally |
|  |
| Reading and Writing: -Reading and filling in the blanks |
| -Reading and answering questions |
| -Paraphrasing, summarising |
| -Reading and filling in a diagram, a chart… |
| -Reading and filling a table, a map… |
|  |
| Listening and Reading: -Audio books, song lyrics analysis |
| -Storytelling, Roleplay with scripts |
|  |
| Speaking and Writing: -Interview, Writing then discussing |

Table 1