

Research Series

How long does it take to learn a language? Insights from research on language learning.

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#### **Executive summary**

How long does it take to learn a language? Research has shown that language is a non-linear process and that a combination of individual and contextual factors determines the learning journey and affects the time each individual needs to make progress. Although there is no unanimous consent as to how many hours are needed to gain increasing language proficiency, attempts have been made to produce learning time estimates - to help educators, institutions, and ministries set realistic and attainable learning goals as well as compare different programs.

In the sections below we first mention several important factors that impact the time it takes to learn a language, e.g. motivation and starting proficiency level. Then, we present available estimates of learning time and, in light of existing research evidence, make a recommendation of how many hours are approximately needed for an average learner to grow in proficiency on the Global Scale of English (De Jong & Benigno, 2017) and the CEFR (Council of Europe, 2001). Such a recommendation should be taken by the reader as a basic guide and adjusted to reflect the specific characteristics of the learning/teaching context.

## Learning as a non-linear process. Which variables to account for?

Language learning is non-linear, i.e. dynamic, not uniorm or entirely predictable (Larsen-Freeman, 1997. A U-shaped learning curve, where perormance initially improves, then deteriorates, and eventually recovers is documented in both first language research (Lightbown, 1983 and second language research (Bowerman, 1982. The U-shaped curve is observed in cases where practice does not lead to improvement in performance as the result o restructuring processes (McLaughlin, 1990. The learning journey o each individual is unique, because learning does not proceed at a regular and continuous pace but rather goes through peaks and valleys, improvement and backsliding. According to the typical learning curve, peaks generally come at the start and at the end o the learning process, whereas, in between, learners tend to "get stuck" in what is referred to as a "learning plateau" (Gass and Selinker, 2001. This means that although score gains are expected as a result of learning over time, some learners may experience static phases or even temporary regression due to a number of actors, such as lack o exposure, loss o motivation, etc.

Chapters 3, 4 and 5 of the CEFR describe progress in language proficiency using both a quantitative (how many tasks an individual can perform) and a qualitative (how well an individual can perform these tasks) dimension. Chapter 6 points out that learners may have uneven profiles and achieve partial competencies (Council of Europe, 2001, p. 133). Different components of language ability develop at different rates and follow different trajectories, e.g. some learners may be stronger in some activities, e.g. listening rather than speaking; or develop some competencies more quickly, e.g. phonetics earlier than syntax. According to the action-oriented approach outlined in the CEFR (Council of Europe, 2001, p.8), learning is dependent on a number of variables related to the individual and to their learning experience. Since the second half of the last century, research has extensively discussed the importance of individual differences (such as motivation and learning strategies) and contextual differences (such as exposure to language input and teaching methodologies), particularly in the area of second language acquisition (Carrol, 1963; Gardner, 1985; Skehan, 1989; Spolsky, 1989; Ellis, 1994). Different theoretical models have been produced to describe the way individual features interact with external features. These models, often produced within different areas of research such as psychology, linguistics, and sociology, differ slightly in the constructs they propose (Ellis, 1994) and have not provided a comprehensive and definitive explanation of the extent to which the different variables combine to produce a given outcome. As an example, Spolsky (1989, p. 28) presents a non-hierarchical model in which social context, attitude, motivation, age, personality, capabilities, previous knowledge, and learning opportunities interact determining both the linguistic and non-linguistic learner outcomes. In what follows, we refer to some important factors affecting a learner's journey, and therefore, learning time, without claiming that this list is comprehensive.

**Proficiency level.** The CEFR is one of the most widely accepted frameworks of reference to describe language proficiency and its progress. The framework divides language proficiency into six main levels from A1 to C2, often erroneously interpreted as all being of equal width. However, the logit scale underlying the CEFR scale reveals that its levels are not equidistant - with A2, B1, and B2 being about twice as wide as the A1 level. At the other end of the framework, C2 has an undetermined width. The implication of this observation is that learners will take much longer to move from A2 to B1, than to move from A1 to A2. In fact, at a more advanced stage of language proficiency, learners are required to carry out a wider range of more challenging tasks and activities. The time a learner needs to improve will depend on their starting proficiency level.

**Motivation.** Students who are driven by an internal desire to learn the language (integrative motivation) are generally more successful than students who have more practical reasons to learn the language (instrumental motivation), e.g. getting a certificate to gain access to an institution (Gardner, 1985). Recent studies (Dörnyei and Skehan, 2005, cited by Ellis and Larsen-Freeman, 2006) on the relationship between motivation and language achievement have demonstrated that motivation correlates only marginally with achievement - due to the fact that language learning is a very complex construct to which many different dimensions contribute. For this reason, it is argued that an adequate model of students' motivation should include the time factor in order to understand how motivation changes under the various internal and external influences that individuals are exposed to.

**Aptitude.** This individual feature can be associated with other learner cognitive features such as intelligence. Carroll and Sapon (1959) developed the *Modern Language Aptitude Test* (MLAT), a test which measures individuals' aptitude for learning a foreign language. They identified four components of the construct of aptitude: (a) phonetic coding ability, (b) grammatical sensitivity, (c) rote learning ability for foreign language materials and (d) inductive learning ability. The underlying theory claims that someone with a higher aptitude will take less time to achieve a given learning goal under optimal learning conditions (Carrol, 1971; 2012).

*Learning strategies.* Strategies are used by students, implicitly and explicitly, when approaching a task and can inhibit or facilitate the learning process. They vary depending on the learner proficiency level, motivation, and learning style. Green and Oxford (1995) classified strategies into six main types: metacognitive, e.g. self-monitoring; affective, e.g. anxiety reduction; social, e.g. asking questions; memory, e.g. grouping; cognitive, e.g. summarizing; compensation, e.g. guessing meanings. It is important that teachers help their students understand their own learning and develop appropriate strategies.

**Learning context.** The context in which the language is learnt plays a crucial role in determining the success of the learning experience. It is intuitively easy to understand that learning in an immersion context (as is typical of second language learning) yields more opportunities to be exposed to the language, speeding up the learning process. Inversely, research has shown that language learning via instruction often does not provide enough exposure to achieve fluency in the target language. In an instructional context, the choice of the teaching method is decisive to help students improve as quickly as possible. A number of studies have investigated the effect of instructional methods on language learning, although considerable controversy still exists about how instruction can best facilitate language learning (Ellis, 2006).

**Age.** If second language acquisition research has demonstrated that early language learning leads to better proficiency in the long run (Singleton, 1989, p.137), similar findings have not been found in foreign language contexts. That said, it has been shown that adult learners do have an advantage in carrying out tasks which are cognitively more demanding, e.g. tasks involving metacognitive skills.

# Learning time estimates: how long does it take to make progress?

How long does it take to learn a language? This is one of the most troublesome questions for most practitioners. In view of what has been discussed in the previous section, it is easy to understand that too many variables come into play to provide a onesize-fits-all answer. Below we present the learning time estimates produced by the US Defense Language Institute Foreign Language Center, the National Centre on Immigrant Integration Policy, the Council o Europe, and Pearson.

Defense Language Institute Foreign Language Center. An estimate of learning time was produced by the Defense Language Institute Foreign Language Center (DLIFLC). The DLIFLC, located in California, has the mission to "provide culturally based foreign language education, training, evaluation and sustainment to enhance the security of the nation" http://www.dliflc.edu/about/mission-vision/ The Institute categorizes languages into four levels of difficulty for speakers of English as a first language – a great deal of research (Ellis, 2006) having provided evidence of the phenomenon of L1 interference, which plays a major role on L2 acquisition). General proficiency (corresponding to level 3 of the Interagency Language Roundtable (ILR) Skill Level Descriptions; http://www.govtilr.org/) is achieved in 26, 35, 48, 64, and 88 weeks in categories I, II, III, IV, and V languages respectively. Category I includes languages closely related to English; category 2 languages similar to English; category 3 languages with linguistic and/or cultural differences from English; category IV languages with significant linguistic and/or cultural differences from English; and category V languages which are exceptionally difficult for native English speakers. Each week corresponds to about 30 hours of instruction, accounting for a total of 780, 1050, 1440, 1920, and 2200 to reach what is B2+ on the CEFR. The efficiency of the teaching method at the Institute is probably due to the schools' teaching methodologies, including problem-solving approaches to course materials and immersions (Berbeco, 2001). It should also be added that the DLIFLC makes use of highly sophisticated teaching technology, weekly training programs and even isolation immersion programs of up to 5 days http://liberalarts. utexas.edu/tlc/ files/proficiencyconference/presentations/ DLI/1.pdf Finally, it must be noted that the motivation of the learners is high, since their language learning achievements are rewarded by raising their salary. Since the DLIFLC estimate applies to the specific context of the army and was produced for language learners whose first language is English, it should be taken with great caution.

National Centre on Immigrant Integration Policy. A similar estimate has been provided by McHugh, Gelatt, & Fix (2007) for the National Centre on Immigrant Integration Policy. In their report, they provide census-based estimates on the number of hours of instruction needed by more than 12 million adult immigrants in the USA (lawful permanent residents or unauthorized immigrants) to pass the naturalization exam or to "achieve the English skills necessary for civic integration [...] and, in the case of youth age 17 to 24, the English skills necessary for postsecondary study" (p.3). According to the report, an average of 110 yearly hours of instruction for six years (for a total of 660 hours on average) are needed to bring learners to a level of English proficiency needed to pass the naturalization test (for those aged 25 and older) or to begin postsecondary education (for youths aged 17 to 24). The study cites a previous study conducted in 2000 by the Massachusetts Institute for a New Commonwealth, according to which between 85 and 150 hours are needed for adults without disabilities to move up one level of English proficiency under the National Reporting System range (see <a href="http://www.cal.org/caelanetwork/pdfs/">http://www.cal.org/caelanetwork/pdfs/</a> NRSFunctioningLevelTable.pdf for further information about the National Reporting System).

**Council of Europe.** The work carried out by the Council of Europe to create a unit-credit, transparent, and coherent system to scale language proficiency in Europe started as far back as the 1970's with the publication of the Threshold Level (1974; 1998), the Waystage Level (1979; 1998), and the Vantage level (2001). These very detailed documents specified the functions, specific notions, and general notions learners would be expected to be able to perform at a given proficiency level. In the Threshold Specifications (1998) the authors state that "there is some evidence that, with adequate guidance, absolute beginners need an average of 375 learning hours - including independent work" (p.9) to achieve this level, which will later be made to correspond to the B1 level on the CEFR scale. And with reference to the Waystage level, they assume that the learning load of this level will be "about half of that required for Threshold Level 1990. For beginning learners who are unable or unwilling to commit themselves right from the start to the expenditure of time and energy required for the higher objective, Waystage 1990 may be an acceptable alternative" (p.9). A short while after the publication of the Threshold, Waystage, and Vantage Specifications, the Council of Europe made the revised draft of the unpublished Breakthrough Specifications publicly available https://www.coe.int/t/dg4/ linguistic/Source/FinalBreakthrough%20specification 6Nov01. <u>rtf</u> On page 11 of this document we read that "The diversity of the target groups [...] makes it difficult to assess the length of study required to reach Breakthrough. Adult learners with extensive previous language learning experience will do so much more quickly than immigrants from a peasant background with, perhaps, no previous schooling. As a rough

approximation, the learning load may be estimated at, say, some 80-100 hours of tuition. It will in any case be clear from the specification itself that there will be considerable variation in what a language learner who has reached this target will in fact be capable of doing with what he or she has learnt."

**Pearson.** As part of the Global Scale of English (henceforth: GSE) research project, Pearson has carried out some initial investigation into the relationship between learning time and proficiency development. The GSE is a linear transformation of the logit scale underlying the descriptors developed by North (2000) to describe the proficiency levels of the CEFR. The scale, ranging from 10 to 90, was first used as the reporting scale for the Pearson Test of English Academic (Pearson, 2010a) and validated by aligning it to other international proficiency scales such as IELTS and TOEFL (De Jong, 2009; (De Jong & Benigno, 2017; De Jong & Zheng, **2016; Pearson, 2010a).** A study carried out using the Versant English test (Pearson, 2010b) provides evidence of significant gains in performance between the pre- and post-tests during a three-week immersion programme. Following this study, Pearson is currently working to collect additional student data to help address the question of how long it takes to learn a language - in order to acquire a greater amount of evidence across a variety of instructional contexts, e.g. young and adult learners, different proficiency levels, etc. Table 1 provides an estimate produced by adapting the DLIFLC estimate in the light of experience with learners at our English schools. An important difference is made between slow learners and fast learners. Fast learners learn in an ideal scenario. They take benefit from a number of individual or context-related traits, for example they are highly motivated and their first language is not too distant from English. **The estimate** provided for fast learners claims that learners will take about 760 hours to enter the B2 CEFR level (at 59 on the **GSE scale).** This estimate is in line with those provided by the DLIFLC guidelines for category I as well as with those produced by the National Centre on Immigrant Integration Policy and the Council of Europe. Note that these are active learning hours, i.e., time explicitly devoted to learning the language, through instruction and exercises.

TABLE 1

Pearson's estimate of number of hours per increasing proficiency

CEFR		GSE		Hours per level		Total cumulative		Hours required 3 pt GSE-gain	
Start	Finish	Start	Finish	Fast	Slow	Fast	Slow	Fast	Slow
<a1< td=""><td>A1</td><td>10</td><td>22</td><td>95</td><td>480</td><td>95</td><td>480</td><td>24</td><td>120</td></a1<>	A1	10	22	95	480	95	480	24	120
A1	A2	22	30	95	290	190	770	36	109
A2	B1	30	43	190	616	380	1386	44	142
B1	B2	43	59	380	1109	760	2495	71	208
B2	C1	59	76	760	1996	1520	4491	134	352

\*Actual hours will depend on individual factors such as L1, motivation, intensity of study, etc.

## Conclusion

How long it takes to learn a language is not an easy question to answer. It is important that practitioners understand the complexity of factors which affect learning time in order to design their teaching activity to meet the specific needs of the learner and the learning context. There are no shortcuts in learning a new language but realistic objectives can be achieved by making sure learners achieve the minimum required learning hours estimated at each level. Thereore, we would like to make the following recommendations concerning the setting of learning goals in relation to time.

- Keep in mind that the time it takes to achieve proficiency gains depends on both learner-related and external factors
- Some features affecting learning time are more difficult to predict than others, for example individual learning habits. However, stakeholders play an important role in creating optimal conditions for learning, for instance by making informed decisions about teaching materials, pedagogical approaches, assessment resources, feedback, etc.
- Before setting learning goals in relation to time, it is important to reflect on the type of learner and their opportunities of exposure to the target language, the curriculum requirements set by a specific country, the alignment between teaching materials and expected outcomes, and more generally, any predictable variable which may have an impact on the learning results
- Institutions should maximize the opportunities for active learning. For example, learners should be helped to develop critical-thinking, engage in task-based activities, reflect on their own attitudes and motivations, and ideally, spend some personal time learning outside the classroom in more informal settings
- Finally, it is important that stakeholders involved in setting goals have an understanding of the complexity of factors affecting the speed of learning and are committed to setting realistic goals.

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