How Long Does it Take to Learn a Second Language?

Applying the “10,000-Hour Rule” as a Model for Fluency

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How Long Does it Take to Learn a Second Language?: Applying the “10,000-Hour Rule” as a Model for Fluency

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Published by Onate Press
Calgary, Canada

http://www.onatepress.com

Cover photo: http://www.sxc.hu
Image ID: 1373852
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Abstract

This study applies the model of expertise developed by Ericsson et al (2007) to second and foreign language learning. Ericsson et al posits that in order to achieve expertise (as they define it) requires 10,000 or longer of “intense training”. Applying this model to language learning, equating an expert level of competence with fluency, various scenarios are explored.

Introduction

“How long does it really take to learn another language?” This question is often asked by language learners. They want to know how long it will take the to master the language they are studying. The short answer is, it depends.

Most language teachers will tell students, “what you put in, is what you get out” of language studies. Companies that sell language learning products or software may claim that their method or materials will guarantee fluency in a certain period of time. Usually, that time frame just happens to correspond to their particular program. Language experts tend to be skeptical of claims that a certain method can guarantee fluency in a short period of time - and with good reason.

The reality is that language acquisition is a complex process that involves communication, grammar, structure, comprehension and language production along with reading, writing, speaking and listening, just to name a few of the simpler aspects of language learning.
Language Competence, Expertise and Fluency

There are many ways to define "fluency" (Chambers, 1997; Johnston, 1996 and Kormos, 2004). What is clear is that fluency goes beyond coping and even beyond having conversational ability in a language. In his book, Outliers, author Malcolm Gladwell highlights a study originally conducted by Ericsson et al. (2007), published in the Harvard Business Review.

In the original study, Ericsson et al outline 3 criteria that must be met in order for expertise to have been achieved, according to their model:

1) expertise “must lead to performance that is consistently superior to that of the expert’s peers”.

2) “Real expertise produces concrete results”.

3) “True expertise can be replicated and measured in the lab” (Ericsson et al., 2007)

Ericsson et al note that point out that “many people are naive about how long it takes to become an expert”, emphasizing that “it takes time to become an expert” and that a minimum of 10,000 hours “of intense training” is typical. Gladwell essentially popularized the work of Ericsson et al. and as a result, their model has become known as the “10,000 hours to become an expert rule”.

People will shake their heads when they hear that. No one wants to believe it really requires that much work.

John Archibald and a team of researchers at the University of Calgary conducted a study in 2007 that examined a number of questions relating to second language learning. The found that students who learn other subjects in a foreign language are likely to gain fluency and competence faster. The method, known as content-based
language teaching (CBLT), involves teaching subject matter content such as math, geography and other subjects in a foreign language.

"Students in time-intensive content-based language teaching (CBLT) programs, such as French immersion, are typically able to master complex content material effectively, despite less than native-like proficiency in the language of instruction. In programs where students have limited second-language proficiency and less time is devoted to second-language learning, the concrete and highly-contextualized content." (Archibald et al, 2007)

Their work also found that the age at which a person begins to learn a language matters. Children who grow up learning more than one language at home essentially have two mother tongues (Archibald et al., 2007 and Swain, 1972). For those who do not have the privilege of learning more than one language from a young age at home, there are other factors.
The age of the learner

Language learning follows different patterns depending on when you start. Citing a study conducted by Birdsong (1999), Archibald and his team found that: "If second-language acquisition begins at age 5, it follows a different pattern than when second-language acquisition begins at age 25 or at age 15." (Archibald et al., 2007, p. 3).

Notice that the researchers are careful not to judge if one's ability to learn a language becomes better or worse at a certain age. It simply follows a different mental and cognitive pattern.

Immersion

It also makes a difference if one is learning a minority language or a majority language (Archibald et al, 2007; Cummins and Swain, 1986). For example, if you live in an English-speaking country and you are learning Italian, you are learning a minority language. But if you are an Italian living in England who is learning English, you are learning the language spoken by the majority. If you're submersed in a language, the learning process is different because you're being exposed to the language more for more hours per day, on a consistent basis.
Language learning in school

A key finding of the research by the University of Calgary team found that students who take foreign language classes at school are unless to receive sufficient exposure to the language to gain deep fluency.

"Learning a second language for 95 hours per year for six years will not lead to functional bilingualism and fluency in the second language. Expectations must be realistic." (Archibald et al., 2007, p. 3)
Language learning in terms of hours: Applying the "10,000-hour rule"

Though the Archibald et al do not state how they arrived at the number of 95 hours per year, this number could be derived through deduction:

\[
4 \text{ hours per week of language classes} \times 12 \text{ weeks per semester} \\
\times 2 \text{ semesters per school year} \\
= 96 \text{ hours per year.}
\]

If a student begins learning a language in grade six and continues on through to high school completion in grade 12, that constitutes 6 years of language learning.

\[
96 \text{ hours per year for 6 years} = 576 \text{ hours of language instruction}
\]

When Archibald et al, state that “95 hours per year for six years will not lead to functional bilingualism and fluency in the second language”, this appears to be congruent, at least to some extent, with Ericsson et al., who emphasize that developing expertise requires a great investment of time.
Scenarios of time invested in language learning in one year

Archibald et al present one scenario for language learning of school age children over one year. There are other scenarios that can be constructed for learners at different stages of life and in different learning contexts. Here are some possible scenarios of language learning over a one-year period:

Table 1: Scenarios of time invested in language learning over one year

<table>
<thead>
<tr>
<th>Scenario #1</th>
<th>One year of language learning in school</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>= 4 hours per week x 12 weeks x 2</td>
</tr>
<tr>
<td></td>
<td>semesters</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Scenario #2</td>
<td>One 2-hour adult education course</td>
</tr>
<tr>
<td></td>
<td>over 8 weeks</td>
</tr>
<tr>
<td>Scenario #3</td>
<td>1 year of consistent, dedicated self-</td>
</tr>
<tr>
<td></td>
<td>study (or homework) at 1 hour per day</td>
</tr>
<tr>
<td>Scenario #4</td>
<td>1 year of total immersion in the new</td>
</tr>
<tr>
<td></td>
<td>language (Assuming that in a 24-hour</td>
</tr>
<tr>
<td></td>
<td>day, we allow 8 hours for sleeping per</td>
</tr>
<tr>
<td></td>
<td>day) = 16 hours per day x 365 days</td>
</tr>
</tbody>
</table>

These scenarios offer a generalized and simplified picture of what is a complex process. Nevertheless, they demonstrate possible learning situations of second or foreign language students. A variety of other scenarios are also possible.
If we apply “the 10,000-hour rule” as a model of fluency, using the same scenarios and a process of deductive reasoning and extrapolation, this is how long it would take to achieve "expert ability" in a foreign language:

**Table 2: Time to fluency, according to 10,00 hour model of “expertise”**

<table>
<thead>
<tr>
<th>Scenario #1</th>
<th>Foreign language studies at school</th>
<th>96 hours of classes per year</th>
<th>104 years to achieve fluency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scenario #2</strong></td>
<td>Adult education classes</td>
<td>416 courses of 24 hours per course.</td>
<td>If you did 2 courses per year, fluency would be achieved in 208 years.</td>
</tr>
<tr>
<td><strong>Scenario #3</strong></td>
<td>Dedicated self-study (Autodidactic)</td>
<td>An hour a day, every single day of the year = 365 hours per year</td>
<td>approximately 27 years to fluency</td>
</tr>
<tr>
<td><strong>Scenario #4</strong></td>
<td>Total immersion</td>
<td>5840 hours per year (excluding 8 hours per day for sleeping)</td>
<td>approximately 2 years to fluency</td>
</tr>
</tbody>
</table>

Hence the myth that immersion is the “best way” to learn a language, may be explained by the simple fact that the student is in an intense learning environment for significantly more hours, than the student who takes a weekly adult education class.
Conclusions

Let us be clear. This model may well be critiqued as an overly simplified, or reductionist approach to examining questions of fluency and foreign language competence. At the beginning of this article, it was pointed out that language acquisition is a complex activity. This particular method of contemplating how long it becomes fluent, does not take into account individual differences or abilities, and nor does it address the effectiveness of different language teaching methods. It is simply one way to answer the question, "How long does it take to learn a new language?"

Some argue that immersion is the "best" way to learn a language. Others argue that there is no one "best" way. It may not be about the methods used, but simply the amount of hours spent learning. Learning can be done in formal, non-formal and informal contexts (Eaton, 2010). Language learning does not always take place in the classroom. Trained teachers can offer strategies and guidance that the self-directed learner may not have.

The bottom line is that mastering a foreign language takes time, dedication and hard work, regardless of whether it is done in a classroom or in an immersion setting. However, the benefits of learning how to speak a second language are certainly worth the effort.

The challenges of learning another language are immense. Yet millions have achieved some degree of fluency in at least one other language. Those who achieve true fluency do so because they put in dedicated, consistent effort over a long period of time. Claiming otherwise is tantamount to fraud.
The answer for most people, in practical terms of every day life, may well like in some combination of formal or non-formal classes, self-study, practice with others in informal contexts and immersion experiences through travel or living abroad.

This model presents a strong case for language learners to adopt self-regulated and independent approaches to learning (Zimmerman, 2002) that will increase the number of hours they spend studying, practicing and using the language they want to learn.

Instead of asking "How long does it take to become fluent in another language?"

perhaps a better question is:

"How do I get my 10,000 hours of study and practice to become fluent in a new language?"
References


About the author

Education since 1994 - University of Calgary, Mount Royal University, Idaho State University (ISU - Workforce Training) and Chinook Learning (Calgary Board of Education).

PhD in Educational Leadership from the University of Calgary.

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