

Deliberate Practice in Second Language Learning: A Concept whose Time has Come

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Abstract

Research in the field of expertise indicates that reaching high levels in any skill is, by and large, the outcome of deliberate practice. Despite being a major element on the path to achieving expertise, this type of practice has been overlooked by second language practitioners and researchers alike. Deliberate practice is in fact a concept that relates a great deal to second language learning; however, it has not yet made its way into second language classrooms. This paper sheds light on this concept and how it relates to expertise, with an emphasis mainly on its major elements and how it can be taken effectively into second language classrooms.

Keywords: deliberate practice, expertise, language learning, skill-acquisition

1. Introduction

The term expertise has existed ever since “the dawn of civilization”, yet it was not until recent times that the nature and development of it was looked into (Bereiter & Scardamalia, 1993, p. 2). A great deal of research has been conducted since the mid-1970s which aimed at investigating expertise in various domains such as music, chess, mathematics and computer programming (Anderson, 2010). Research in this area helped in identifying ways by which problem solving can become more effective through experience (Anderson, 2010). According to Ericsson (2006a), expertise is what distinguishes experts from their novice and less experienced peers, including skills, knowledge and characteristics. Research involving brain imaging indicates that “more efficient mental execution” is reached through more practice (Anderson, 2010). Extensive practice, Anderson (2010) says, can facilitate the development of “the high levels of expertise in novel domains that have supported the evolution of human civilization” (p.281). The study of a second language is no exception. However, as Ericsson (2006b) explains, extensive experience one gains in a certain field does not inevitably lead to expert performance. A major finding of research on expert performance demonstrates that it is the “diligent and persistent application of the basic principles of deliberate practice” rather than innate abilities which play a crucial role in achieving expert levels of performance (Baron & Henry, 2010, p. 63).

Reviewing the literature on expertise demonstrates the significant role practice plays; a much larger role than previously recognized by researchers (Kellogg, 1995). Producing experts who are capable of performing at high levels of proficiency is one aim of education and training. To attain expertise, however, one must indulge in extensive and intensive practice. In Ericsson’s theoretical approach to expertise, deliberate practice is considered the main requirement for the attainment of expert performance. Research evidence points to the significance of deliberate practice as opposed to non-deliberate practice for achievement of high levels of expertise (Kellogg, 1995). In fact, research indicates that “all experiences are not equally helpful and there are qualitative differences between activities loosely referred to as ‘practice’ in their ability to improve performance” (Plant et al., 2005, p. 98). Many studies conducted in the fields of sports, music and chess have found “a consistent relation between performance level and the quality and amount of deliberate practice” (Ericsson, 2002, p. 28). The necessity of engaging in specific, domain-related activities to achieve expertise is, hence, now well-established (Ericsson, 2002).

2. Deliberate Practice

The nature of practice aimed at when following the deliberate practice approach, however, differs from practice in the audio-lingual methods of language teaching which focused on structures, rather than behaviour. Mechanical drills in that era were practised repeatedly and deliberately aiming at the production of certain target features of the language. To develop automatization, which entails changing behaviour, learners must be involved in practising the actual behaviour, rather than de-contextualized structures. In regards to what practice in the area of second language learning entails, DeKeyser (2007) explains that this concept “remains remarkably unexamined from a theoretical point of view” (p. 1). In fact, the issue of practice in the post-audiolingual time has been rarely addressed “head-on” (DeKeyser, 2007, p. 8). In second language acquisition, DeKeyser says, the term practice refers to “specific activities in the second language, engaged in systematically, deliberately, with the goal of developing knowledge of and skills in the second language” (2007, p.8).

2.1 The Deliberate Practice Approach

In the past, scientists used to explain expertise as “an orderly progression from novice to intermediate and to expert” (Ericsson, 2006b, p. 688). The most appropriate approach, however, to determine how individuals excel in a field is by studying those who have achieved mastery levels in their areas (Ericsson, 2002). When investigating masters in a variety of fields, Ericsson (2002) found that these masters emphasized the role of concentration, motivation and willingness to exert the effort in order to improve their performance. Consequently, Ericsson and his colleagues spelled out a theory which defines what is involved in effective practice that leads to expertise.

Ericsson et al. (1993) proposed a theoretical framework that explains expert performance as the end result of being engaged in extended deliberate practice. The aim of deliberate practice, in general, is to help improve some aspects of performance effectively, on the path to achieve expert performance. In order to gain further insight into expert performance, Ericsson et al. (1993) asked a group of musicians to keep regular diaries about their current patterns of practice. The aim was to evaluate the length of time as well as regularity of the various types of activities these musicians engaged in, particularly ones that represent deliberate practice. They also conducted a study that compared a group of young expert pianists with another group of amateur pianists. Based on the data gathered, the researchers found large differences between the two groups in regards to the histories of deliberate practice. The diary data revealed that the current amount of practice was 10 times more for the experts than their amateur peers. They also found that steady improvement of performance occurred when the individuals had the motivation to improve performance, were provided with well-defined tasks and subsequently given feedback on their performance and had opportunities for repeated performance. These practice activities were limited in time and evenly distributed across the whole week.

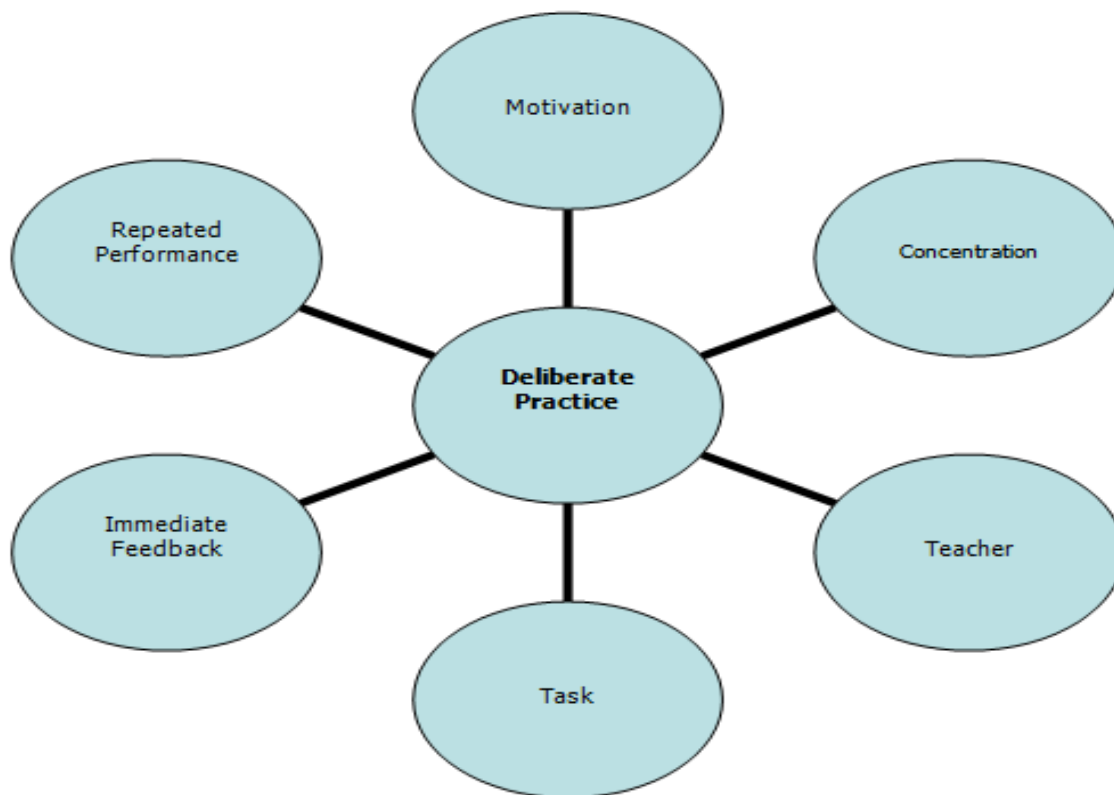
Deliberate practice, a phrase coined by Ericsson et al. (1993), is thus defined as “activities that have been specially designed to improve the current level of performance” (p.367). The central notion of their framework is that “expert performance is the result of an extended process of skill acquisition mediated by large, but not excessive daily amounts of deliberate practice” (Ericsson et al., 1993, p. 389). The definition DeKeyser gives for practice, mentioned previously, apparently does not differ much from the way Ericsson et al. (1993) define the term deliberate practice. Ericsson (2006b) says that when individuals are engaged in deliberate practice, they “concentrate on actively trying to go beyond their current abilities,” which differs greatly from the effects of mere experience (p. 701). “The requirement for concentration,” Ericsson (2006b) argues, “sets deliberate practice apart from both mindless, routine performance and playful engagement” (p. 694). Ericsson et al. (1993) further explain that the state of diffused attention, such as when being in a state of “flow” while immersed in an enjoyable activity, is “almost antithetical to focused attention required by deliberate practice to maximize feedback and information about corrective action” (p.368). Unlike enjoyable play, deliberate practice is “a highly structured activity, the explicit goal of which is to improve performance” (Ericsson et al., 1993, p. 368). In line with the mental demands of learning, “deliberate practice is done in limited periods of intense concentration” (Ericsson, 2002, p. 29). Experts in various fields reported that their ability to maintain the concentration required for deliberate practice was basically what limited their hours of practice (Ericsson, 2002).

The basic assumption behind the framework proposed by Ericsson et al. (1993) is that “the amount of time an individual is engaged in deliberate practice activities is monotonically related to that individual’s acquired performance” (p.368). However, Ericsson et al. (1993) explain that engagement in deliberate practice is an “effortful activity,” which can take place only for a limited amount of time without leading to “exhaustion”, and

hence, it is “not inherently motivating” (p.368). Being engaged in deliberate practice generates no financial rewards, but rather requires costs to cover for access to teachers and training facilities (Ericsson et al., 1993).

Hence, the most cited condition for optimal learning and improvement of performance “concerns the subjects’ motivation to attend to the task and exert effort to improve their performance” (Ericsson et al., 1993, p.367). Monitoring performance and assessing improvement seems critical to sustain motivation. That is why the presence of a tutor is a requirement to set tasks, provide guidance and give adequate feedback to the learner. In deliberate practice, Bransford et al. (2000) state, “a student works under a tutor (human or computer based) to rehearse appropriate practices that enhance performance” (p. 166). Ericsson et al. (1993) explain that with the lack of sufficient feedback, even highly motivated students are unlikely to get efficient learning and improvements in such cases are only minimal. For activities to fall within the domain of deliberate practice, they are supposed to have “a well-defined task with an appropriate level of difficulty for the particular individual, informative feedback, and opportunities for repetition and corrections of errors” (Ericsson, 1996, p. 21). Studies indicate that effective duration of deliberate practice is estimated at around one hour per day. Yet, when an individual embarks on deliberate practice in a certain domain, the amount of initial duration of weekly practice is rather limited; 10-20 minutes per session, especially in the case of children (Ericsson, 1996). The amount of time spent on tasks is significant, not only at the highest levels of performance, but also on the way to mastering school subjects (Anderson, 2010). A study conducted by Anderson and his colleagues which investigated the reasons behind Asian students’ higher achievement in maths found out that they spent twice the amount of time on practising maths. There is surely some role played by talent in expert performance, yet in line with the deliberate practice approach, “evidence indicates that genius is 90% perspiration and 10% inspiration” (Anderson, 2010, p.263). Based on a review of relevant literature, the essential elements for deliberate practice can be summarized in Figure 1.

Figure 1 Elements of Deliberate Practice (source: original)



In light of the skill acquisition theory, Ericsson (2006b) explains why most individuals would develop their performance within months and reach an automatized stage whereas experts would continue to improve their performance for years and decades. When individuals first engage in learning a certain skill, he says, they have to concentrate on what they are doing in order to reduce the error rate; this refers to the cognitive stage.

Then, by gaining more experience, these individuals perform at acceptable levels without having to concentrate as hard as they had to in the first stage and their performance appears smoother and mistakes become increasingly rare; the associative stage. After some time of experience and training, the behaviour of these individuals gradually becomes automated, as they lose the conscious control they started with, and hence the ability to make particular intentional changes is also lost. When a skill reaches an automated stage, Ericsson (2006b) says, “performance reaches a stable plateau, and no further improvements are observed” (p. 687). On the contrary, the performance of experts keeps on improving as a function of more experience that is joined with deliberate practice. Therefore, “the challenge for aspiring expert performance is to avoid the arrested development associated with automaticity and to acquire cognitive skills to support their continued learning and improvement” (Ericsson, 2006b, p.696).

2.2 Deliberate Practice in the Language Classroom

An issue recognised in the literature is whether and how expertise may be taught. However, the common research paradigm mentioned by Johnson (2005) is a good instructional paradigm to be followed in the second language classroom. Johnson suggests a common instructional paradigm for developing expertise. According to him, to develop expertise one has to identify two comparable groups of relative novices. One group, which is the experimental group, is trained using a chosen method to be investigated, while the second group acts as a control. After some time, the two groups are tested to determine whether the experimental group has gained from the training or not. However, a lot of work remains to be done to decide whether and how expertise can actually be taught (Johnson, 2005). Although expert performance in fields like music, chess, and sports can be relatively easy to define, the characteristics of superior performance in second language learners have yet to be clearly defined. Further, the positive influence of deliberate practice in the previously mentioned fields is well-established, yet for some reason people do not seem to accept that what is required for gaining proficiency in most mental functions is similar to that required for acquiring proficiency in physical or motor skills, i.e. deliberate practice. Derry (1990) explains that “as every sports coach knows, the most powerful pedagogical technique for building this expertise is practice: practice is equally essential for developing expertise in cognitive domains . . . becoming an expert at anything means very hard work” (p. 370). However, deliberate practice is not like any other learning task that is given to the students to perform. The students themselves have to be willing to practise and fully engaged in the practice in order for deliberate practice to have a positive effect on their levels of performance. The key word in this approach is *deliberate*, and this is what distinguishes it from other mindless or joyful forms of practice. The students must be fully focused on working to move beyond their current levels of performance. To improve one’s level in a particular skill, practice should revolve around that skill and nothing else.

In the deliberate practice approach, the role of the teacher is that of a facilitator or coach. This entails that the teacher sets the environment for learning to happen, by setting appropriate tasks, being there for students to coach and provide feedback on accomplished tasks, and allowing for repeated exposure to the same or similar tasks. That is fairly the role of the teacher and the rest is left to the student. Hence, in this approach, the focus shifts from the teacher to the learner which makes the classroom more learner-centred. The significance of practice should not be underestimated, as Ericsson (2006b) explains “until most individuals recognize that sustained training and effort is a prerequisite for reaching expert levels of performance, they will continue to misattribute lesser achievement to the lack of natural gifts, and will thus fail to reach their own potential” (p. 701).

However, the notion of deliberate practice should be applied more frequently in higher education contexts, since deliberate practice should be “intense, prolonged, and highly focused efforts to improve current performance” (Baron & Henry, 2010, p. 49), which is something young learners may not be able to attend to. Deliberate practice is also better done in small groups so that teachers can provide students with continuous feedback and tailor the tasks according to their students’ needs. Establishing an L2 resource centre would certainly help in terms of deliberate practice. Students would be coming to the centre at their own will in their free times which thus ensures to some extent the presence of the two most significant elements of deliberate practice: motivation and concentration. The rest is left for the tutor to facilitate the L2 practice by providing the appropriate tasks and giving feedback to the learners. Students should be briefed on how to make best use of their time in the L2 resource centre.

Conclusion

To conclude, it should not be assumed that the deliberate practice approach to language teaching would take us

back in time to the routine drilling activities associated with language laboratories before the 1970s. Deliberate practice, as previously mentioned, sets practice apart from joyful activities and is an antithesis of flow.

The sense of flow is actually witnessed when one is immersed while performing the skill and, thus actually not concentrating. This lack of concentration may not lead to improvement in one's current level of performance. To work on moving beyond the current level, concentration is a major requirement. Motivation, however, is present both in deliberate practice and the sense of flow, yet the latter is intrinsically motivating, whereas the former is not necessarily so. For it to bear fruit, deliberate practice entails a lot of commitment from both sides: the teacher and the learner. The learner is required to exert the effort, motivation, concentration, and time to deliberately practise the second language. The teacher, on the other hand, should commit to setting achievable tasks, providing continuous feedback and allowing for repeated performance on the same or similar tasks.

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