

Learning Generators: methodologies and usage of technology in teaching and learning a second language excellency

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Abstract

Textbooks act as a tool that generates learning, and if we improved them taking into account the different learning styles and Life Long Learning, we would be creating a real Learning Generator or ultimate learning tool for all the students. Computers provide for a challenge of traditional educational methods so the usage of technology is the future of education. The digital books could be adapted to each student's learning style when dealing with explanations, exercises or homework time to create a Learning Generator.

The purpose of the Learning Generator is to inspire, recognize and support excellence in the publishing houses business. It takes a lead in facilitating learning, providing an independent source of learning levels, and contributing to academic research. Learning Generators seek to elucidate a wealth of issues in all aspects of management education, teaching and learning methodologies. Learning Generators should therefore be of interest to scholars and researchers in management in publishing houses targeting a worldwide leadership. Let's take the study of English as a second language as an example of how publishing houses should create a Learning Generator. In the teaching of foreign languages, could we imagine a learning system where all students learned English in a globalised world at their best?

The scope of my work in Second Language Acquisition includes the bestseller publishing houses in teaching English as a second language (Cambridge, Oxford, Longman, Macmillan and Richmond) and each single exercise in these textbooks will be classified on the basis of two theoretical perspectives; Neurolinguistic Programming, which states that information is processed through the senses and analyses the information input in students, and Honey and Mumford's taxonomy of Learning Styles, which analyses the information processing and its output.

The major findings that emerged after analyzing textbooks were as follows: a) as far as the NLP is concerned, we should congratulate these publishing houses since the data that have been collected found a great numerical equality of exercises that could help the different systems of neurolinguistic representations and b) as far as the Learning Styles are concerned, we should criticise the publishing houses as there is a big number of exercises from a particular Learning Style.

The higher representation of exercises that could help the Reflector Style shows that all the publishing houses, without exception, follow the natural method. The natural method fails because it has an excess of a single Learning Style, which is the one with the smallest representation among the students. New technologies could act as the perfect individualized learning tool, as they could provide different students with the most suitable learning style for each one to achieve excellency. The old books must change into e-books so education will provide each student with this ultimate English Learning Generator. The Learning Generators support a range of activities and publication (print and electronic), which aim to stimulate curiosity, to inspire and develop future generations of students, and to encourage appreciation of the social, economic and cultural value of these areas of study.

Justification and importance

Each one of us tends to develop certain preferences as far as style of general learning. Those tendencies provide our own style of learning. Our learning style would come to be the

general tendency, the most used. No learning style lasts all our life and is unchangeable. Consequently, they can be modified for a better advantage. Students will learn how to improve the different styles that they use, and we can help them.

Of all the theories on learning styles we have, on the one hand, those theories dealing with the information input or Neurolinguistic Programming (NLP) and, on the other hand, the theories about the information processing by Honey and Munford. Our students have an evident preference for certain learning styles, making obsolete the old system centred on the teacher and in order to make learning effective, each student requires of a style of education adapted to his own way of learning. It also has the additional problem that not all the teachers have much knowledge of that variety and do not know the strategies to follow according to the theories of the Learning Styles.

The importance of this investigation is to try to optimise the education and practice of a foreign language, increasing the level of knowledge of all the students using a Learning Generator or common text book for all the students of a specific English level, organizing it previously so that it teaches up to the maximum capacity of each student, considering their learning style and thus eliminating the teaching style of each teacher.

The new technologies used when teaching, such as computers and digital books, do help students to organize their talents. This way, we would be creating the ultimate teaching tool, a Learning Generator or textbook able to optimize their learning process.

Differential learning

It is obvious that the general usage of the very fashionable natural method in the teaching of English as a second language does not give the expected results. Students who finish compulsory education do not end up with a level of English that allows them both good oral and written communication. This research analysing the most widely used text books in the classrooms could discover the reason. Although it may seem excessive, this investigation exceeds expectations since the initial target was only to see which editorial was better in quality, taking into account the diversity of learning styles.

Methodology

In this investigation the methodology of the main publishing houses in English teaching text books has been analysed (by units and as a whole) in order to see what percentage of quantitative representation they have in the different learning styles corresponding to both theories; Neurolinguistic Programming (NLP) and the Learning Styles theories belonging to Honey and Mumford (Activist, Reflectors, Theorist and Pragmatist).

Not only do students have their preferences and their style of learning but also all the teachers have their own style when working, and that style is also seen when we use the different representational systems. Most of us tend to use a system over the others when we teach. In order to identify what our tendencies are, we need to analyze our way of teaching from the point of view of both the NLP and the Learning Styles. Generally, we will find different types of learning styles in all the groups of students. If our teaching style is the same as that of our students, learning will be easier for them than if it is not the same one, and with a book using all the different styles we would be helping all our students. It is obvious that we cannot choose our students and, consequently, the learning styles of our students, but we can choose a teaching method that would suit all our students.

PNL

The Neurolinguistic Programming model, also called visual-auditory-kinaesthetic (VAK), takes into account the neurolinguistic criterion that considers that the input of the

information becomes through the eye, ear and body, from which we have the visual, auditory and kinaesthetic systems. If, for example, after a school trip we asked a group of students to describe some of the places that they had visited, probably all of them would describe different things, because each one would have paid attention to different things. We do not remember everything that happens, but just part of it. Each representational system has its own characteristics and rules of operation. To use a system over the others implies that there are systems that are used less often and, therefore, that different representational systems will have different degrees of development. The most often used one is important for two reasons: firstly, because the more we use a representational system, the more developed it will become and secondly, because the representational systems are not neutral since each one has its own characteristics.

In the classroom context that means that, after having had the same explanation, all the students will not remember the same information. For some students it will be easier to remember the explanations that were written on the blackboard, whereas for others the words of the teacher will be better remembered and, in a third group, we would have students who will remember the assumptions that this class had on them. It is statistically impossible that a teacher has spent exactly the same time explaining the same topic in each one of the different representational systems, though we must try to use a similar number of exercises belonging to different representational systems when we explain something.

Learning Styles

Honey and Mumford laid out the learning styles into four styles, and they stand for the four phases of a cyclical process of learning similar to the learning cycle; activists, theorists, reflectors and pragmatists.

Activist students learn better with activities that demand a challenge, of relative brevity and immediate result. Reflector students learn better observing. They must think before acting. Theorist students love systems and concepts that mean a challenge for them. They will also like the teacher to remind them that the activities done in class are good to reach clear goals. Pragmatist students learn better with useful activities and they match the theory to their immediate necessities when they see the others do something.

Results

The publishing houses that were included in this research were Pearson/Longman, Oxford, Cambridge, Heinemann/Macmillan and Richmond, and as far as the NLP is concerned, we should congratulate the publishing houses. After analysing different publishing houses belonging to the same level, one of the main common attributes that have been found is the great numerical equality of exercises that could help the different systems of neurolinguistic representations. The general neurolinguistic representation in the publishing houses would be; 35% of Visual, 33 % of Auditory and 32 % of Kinaesthetic exercises. The Oxford publishing house turns out to be the one that could help the Visual students more (50 %). Cambridge is second (41.5 %), Pearson is third (38.5 %), whereas Heinemann (24.1 %) and Richmond (20.8 %) include a smaller representation of exercises that could help this group of students. The Visual style is the one that has the greatest representation in three out of five publishing houses, although not by much from the second most frequent used style, the auditory style. The one with the greatest percentage is Heinemann (44.1 %), followed by Richmond (40.8 %) and Cambridge (30.5 %). Those that have a smaller percentage are Oxford (26 %) and Pearson (24.2 %). The Kinaesthetic style is the least used in two out of five publishing houses although not by a remarkable big percentage from the other representational systems, and varies between the

greatest representation of Richmond (38.4 %) and the representations of Pearson (37.3 %), Heinemann (31.8 %), Cambridge (28 %) and Oxford (24 %). This analysis shows that the books of the most sold and used publishing houses in English teaching are close to be Learning Generators. The percentage of visual children is usually very superior to the auditory and kinaesthetic children, for that reason many activities are prepared for these children.

On the contrary, as far as the Learning Styles are concerned, we should criticise the work of the publishing houses. One of the main common characteristics after analysing the same publishing houses is the great representation of exercises that a particular Learning Style has over other Styles. The average representation in percentages of the Learning Styles would be; 18.4 % of Activists, 49.4 % of Reflectors, 17.8 % of Theorists and 14 % of Pragmatists. The Reflector Style, with a representation of 49.4 %, is the Style which all publishing houses help most. This data is common in all the analyzed publishing houses. The Activist Style is second if we consider the average, with an 18.4 % representation, but it has only been the second most recurring Style in three of the five publishing houses. The third most common Style is the Theorist Style, with a 17.8 %, which is also the second most seen Style in three of the five analyzed publishing houses. The Pragmatist Style, with an average of 14 %, has been the least recurrent Style in three of the five publishing houses, and it is, the Style with the smallest representation in general. The Richmond publishing house turns out to be the one that could help the Activist students most (30 %). The Pearson publishing house is second (23 %) and Cambridge and Heinemann are third (17 %), whereas Oxford has the smallest representation of exercises that could help this group of students. The Reflector Style is the one that has the greatest percentage in all the publishing houses, and with a clear advantage in percentage from the second dominant Style. The publishing houses with the highest percentage (56 %) are Oxford, and on the other hand, Heinemann is the one that has the lowest percentage (43 %). As it can be verified, the highest score and the lowest do not distant to a great extent. Heinemann is also the publishing house with the greatest percentage in exercises with Theorist Style (29 %). Oxford is second (22 %). Cambridge (17 %) and Pearson (14 %) are in the following positions and Richmond has the lowest percentage (7 %). The Pragmatist Style is the least recurrent style and varies between Pearson and Heinemann (11 %) and Oxford, Cambridge and Richmond (16 %).

The excessive representation of exercises that could help the Learning Style with less students together with the small representation of exercises that could help the students with other styles clearly show that the text books follow a mistaken tendency. The higher representation of exercises that could help the Reflectors Style verifies that all the publishing houses, without any exception, follow the natural method. The publishing houses do not consider the different Learning Styles of the students, and they are focused on a method that will soon be obsolete because the academic results do not show good results.

After analysing the main deficiencies, some activities were created so as to deal with the failures of the analysed text books (schemes, additional material for the teacher...), and verified if the modifications previously mentioned were effective as far as the attainment of the targets offered by each book, using a control group to which these modifications were not applied. The results were highly encouraging since the students with Learning Styles of smaller representation in text books obtained better results than those that did not do the activities, since they belonged to the control group. This proved that the complementary activities that had been prepared to replace the deficiencies of books, adding exercises and activities that could help students from no-Reflectors Learning Style were positive. To my concern, the academic results of those students with Activist Style are usually much worse than the students with Theorist and

Reflector Style, probably due to the insistence of the publishing houses to help them in text books. We can conclude with clear evidence that the publishing houses do not consider the different Learning Styles at the time of programming their books. On the one hand, they do not seem to consider the percentage of representation of the pupils belonging to each Learning Style. But on the other hand, they seem to consider the spread tendency in the different methods of education of the foreign languages, since they are centred in the natural method, leaving aside, for example, grammar explanations that would help students with Theorist Style. Paradoxically, they do not turn out to be very communicative since they do not include a great variety of communicative exercises, which could help the students from Activist and Pragmatist Style. This must be because the text books are designed considering educative contexts where classes have a large number of students, which makes the accomplishment of these activities difficult. But this investigation has ended up finding the main failure of the tendency in education in second languages; the communicative method fails because it has an excessive use of exercises of a single Style, which is the one used by the smallest number of students (Reflector Style).

After analyzing the learning styles in the text books used to learn English as a second language, changes should be made to improve the quality of books as they only help a small percentage of students. The excessive use of exercises that help the Learning Style with less students and the small representation of exercises which help students with other styles shows that text books follow a mistaken tendency. The higher representation of exercises that could help the Reflector Style shows that all the publishing houses, without exception, follow the natural method. The natural method fails because it has an excess of a single Learning Style, which is the one with the smallest representation among the students (Reflector Style) Text books act as a tool that generates learning, and if we improved it taking into account the different learning styles, we would be working with a real Learning Generator for all the students, without any exception at all, an optimal tool of learning. It seems utopia, but it would be an attainable utopia. If we used a method which could help all our students, we would be creating students who would learn at the maximum of their capacities and all the society could help from that.

Now it is time for the publishing houses to pay greater attention to the theories on Learning Styles than to the educative tendencies, as the communicative and natural methodologies, and pay more attention to the new technologies. Computer education is the future. Textbooks will have to be adapted to help all the students. New technologies could act as the perfect individualized learning tool, as they could provide different students with the most suitable learning style for each one. The digital books could be adapted to each student's learning style when dealing with explanations, exercises or homework time. The old books must change into e-books so education will provide each student with this ultimate English Learning Generator.

Computer education is making an ever-increasing impact on all aspects of cognition, education and training, from primary to tertiary and in the growing distance learning environment. Masters and doctorate degrees in Computer Education are awarded for applications in many fields such as language acquisition. It is clearly the way forward. Computers improve both teaching and student achievement.

Can we imagine a learning system where all the students learned at their best? What degree of knowledge could those students end up reaching?

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