A Study on the Effects of Digital Dementia on English Vocabulary Class in Primary School

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ABSTRACT. Vocabulary is the cornerstone of English, so the effective accumulation of vocabulary is very important to learn English well. This also shows that the primary school English vocabulary teaching is particularly important. However, in the current primary school English vocabulary teaching, some students are still hindered in their learning. This is due to the rapid development of science and technology, such as the phenomenon of digital dementia children, primary school English teaching has had a great impact. So studying the classroom implications of digital dementia in children is particularly important.

KEYWORDS: digital dementia, primary school, vocabulary class

1. Introduction

With the rapid development of information technology and the comprehensive popularization of electronic products, people's life has undergone drastic changes. Smart products such as mobile phones and computers have been fully integrated into modern people's life. As a result, "digital native" children are exposed to far more electronic intelligence than ever before. In the age of intelligence, learning apps are widely used to learn to punch in and search for problems. Computers are misused to make inappropriate friends, which leads to children's excessive addiction to virtual cyberspace and improper storage of information, which leads to children no longer paying attention to unfinished tasks. The gradual substitution of keystrokes for handwritten words by students and other phenomena suggest that digitization is taking a bad toll on children. Digital media is harmful to infants' learning and intellectual development [1]. In August of 2014, Germany's top brain scientists and doctors, a Harvard professor Manfred Spitz's (Manfred Spitzer) has published the digital dementia: how to kill the brain power of modern digital society", this is the first book written by leading scholars in the history of books on digital cognitive harm to humans, is also a worldwide bestseller. Through a large number of vivid cases in his book, he clearly pointed out that what is more terrible than Senile dementia is digital dementia, which will affect people's cognition throughout their lives.
Based on this background, it is not difficult to find that teachers have also begun to widely use smart clients such as mobile phones and computers to help teaching. Specifically, students' online homework clocking includes written oral English, using parents to post homework instead of students writing it in their books, and using the Internet to preview courses. For primary school students, they are currently in a critical period to develop learning habits, and also in an important stage for learning languages. In primary school, vocabulary is one of the main English courses, and vocabulary is the cornerstone of English, so the effective accumulation of vocabulary is crucial for learning English well. This also shows that the primary school English vocabulary teaching is particularly important. However, in the current primary school English vocabulary teaching, some students are still hindered in their learning. This is not only because of the differences in personal development, but also because of the rapid development of science and technology has brought some impact on students' learning. However, due to the advent of the digital age, they will rely on mobile phones and computers to solve their learning problems instead of their own active thinking, which will have a significant negative impact on students' subsequent learning. Therefore, teachers should pay attention to these behaviors and adjust them effectively so that students can make proper use of electronic products to help their study.

At present, there are many domestic and foreign researches on the influence of the development of information technology on the classroom, among which there are many researches on the English classroom in primary school. But most of them are about the impact on teaching as a whole or how individual digital media can be better used in teaching. Therefore, this study intends to fill in some gaps, aiming to find out what habits of "digital native generation" affect life, learning and social interaction, and how we can effectively improve the teaching efficiency of primary school vocabulary class based on this phenomenon. This article will be carried out from the following aspects: the current research on the phenomenon of digital dementia in children and its impact on the English classroom in primary schools and enlightenment.

2. Digital Dementia Phenomena

2.1 Definition

2.1.1 Digital natives

The term was introduced by Mark Prinsky, an American educator and publisher, who used it along with the concept of digital immigration in two articles 10 years ago. The term refers to a generation born after 1980, in which computers and the Internet were taken for granted as part of the environment in which they grew up, such as water, electricity and later television. In 2010, this generation was between the ages of 20 and 30. For this reason, people refer to the Generation spanning thousands of years, or the Generation born between 1965 and 1980 as X Generation,
Y Generation (born after 1980), or Net Generation. The concept of digital Native comes from the name of a Native Speaker, which means that people learn and master their mother tongue in a different way from a foreign language. People think and dream in their mother tongue and accept the world view that comes with it completely uncritically. People themselves are part of the culture of their mother tongue -- they belong to it, and they will never get rid of their local accent (when speaking and thinking according to its meaning). Because everyone grows up in a language community, everyone has a mother tongue. Digital natives refer to the growth of digital natives in the digital world of modern information technology [1]. So the subjects of this study were children known as "digital natives."

2.1.2 Digital dementia

First of all, dementia is a mental decline, the degree of dementia depends on the cognitive level before the mental decline, it's like walking down from a high place, if we stand higher than others, then we will be in a very high position for a period of time after walking down. But if the original position is not high, it is easy to find that the height is falling. Digital dementia refers to the influence on learning style, thinking style, memory level and life experience in the digital age, because the excessive use of digital media makes it difficult for children's brain development to reach its due level, thus their cognitive level is lower than the normal level.

In terms of learning, digital programs will replace mental work, so knowledge is not deeply processed by the brain, so it is difficult to produce memory traces in the brain, so that nothing can be truly understood. In social life, there are also social processing areas in the brain. Blindly indulging in the social software dating mode will lead to less communication in real life, and then the area of social processing areas in the brain will be reduced. In this way, the social ability in real life will be reduced. In terms of physical health, it is clear that too much screen time can put a child's vision at serious risk. In addition, people who are avid users of digital media tend to be more irritable, less patient, and more nervous, all of which can be harmful.

Digital dementia is not about people who don't use digital media. On the contrary, it's about people who use too much digital media and have lower brain development than normal.

2.2 Concrete phenomena

2.2.1 Learning styles of children have been changed

The results showed that half of the children occasionally wanted to use mobile apps to finish their homework, and 20% of the children often used mobile apps to finish their homework. In addition, when faced with difficult problems, more than half of the children chose to consult their parents, and the majority of the remaining subjects chose to solve the problems through apps. Obviously, only a small number of students chose to solve the problems by themselves. Before the study, children
who were expected to use apps to solve difficult problems accounted for a large proportion, but the results of the study were somewhat different from the expected results. Later, it was found that children were more likely to ask their parents for help when they encountered problems in homework because most of their parents had bachelor's degrees or above and most of them did not have to work overtime at home after work. Nevertheless, it is clear that children tend to resort to problemsolving rather than thinking for themselves. In addition, many students choose to use apps to help them complete their homework. This also shows that for children, the awareness and behavior that tend to use apps to complete homework has spread among them.

2.2.2 There are differences in children's memory level

For children who frequently had homework to do online, as many as 60.2 percent remembered only a little after such homework was completed, while only 42.5 percent of children who occasionally had homework to do online remembered only a little. At the same time, we also found that children who remembered most of the content were more likely to do their homework occasionally on the wire than those who did it regularly. The above data and results show the same pattern: children who had a lot of wired homework to do were more likely to remember only a little bit of it, compared to children who had an occasional wired homework to do, who were more likely to remember most of it. And the proportion of basic memory is also occasionally higher than the percentage of wired jobs often have. We were able to analyze that children who frequently had to do online homework were more likely to copy and paste, and that they remembered most of the content much less when they finished the homework than children who only occasionally did online homework. This shows that because they often have this kind of homework, they gradually lose the freshness and enthusiasm for it, so their learning attitude to finish this kind of homework is far less than that of occasional children. The more inattentive or perfunctory the assignment, the more superficial the processing of the facts, the fewer neurons in the brain are activated, and, as a consequence, the less you learn. The above analysis also shows that the majority of children who are quickly forgotten after completing online homework are children who often do online homework. Thus, it can be concluded that inappropriate frequency of online work will reduce the depth of children's processing. Based on the existing literature at home and abroad and the scientific definition of digital dementia in children, the direct abuse of online work will deepen the superficial processing degree of children, thus increasing the frequency of their digital dementia phenomenon.

2.2.3 Children’s social skills have been changed

In his book, Professor Spitzer also notes that in girls aged eight to 12, there is an inverse relationship between digital and real social circles: girls who have many online friends have fewer in real life. Friends on social media have become a barrier to making friends in real life. Based on this, this research in this area of research in
children at this stage, but abroad with Roy page at Stanford university, led by the scientific group through the study concluded that using digital social media, the real interaction will decrease, it will decrease the volume of children's social brain regions, and its social ability will decline.

3. Positive impacts

3.1 More interesting

Based on our analysis of the specific manifestations of digital dementia, it is not difficult to find that students are very willing to complete the online homework. Therefore, compared with all the offline word copying assignments, teachers can appropriately add online clocking tasks. For example, you can copy each word twice less and punch in online pronunciation training. Because English listening, speaking, reading and writing are inseparable, although only to learn words, but also need to keep practicing pronunciation and spelling.

3.2 More timely

Due to the timeliness of the Internet, teachers can supervise whether students finish their homework on time, which can effectively prevent students from copying homework at school every day and making up homework on the last day of holidays. This prevents students from neglecting to copy words neatly as they make up for their homework. Because the task of copying words is not only to deepen students' memory, but also to help students develop a good habit of writing carefully.

4. Negative impacts

4.1 Low self-control

Many researches have found that children are in low self-control level. Which means that they can't control themselves well, especially when they are faced to electronic products. They look forward to play mobile phones or computers. So even though they know they are doing their homework, they still spent time in playing games, chatting with friends, watching videos and so on. Due to the limited development of primary school students, they temporarily do not have strong enough self-discipline to control their behavior, so when punching in on the mobile phone, they will "wander off" for other activities, such as playing games, watching videos, chatting and so on.

4.2 Parents’ unwillingness

It is known to us that because most students have to use their parents' mobile
phones to punch in, and this task requires their parents' time and energy. Everyone has their own business, which is not difficult for us to find out. So when students’ parents finish their social work, and they still have a lot of work about their children’s homework. They may be a little angry and anxious. After daily work, they want to have a good rest instead of more work. Then the possibility that some parents are unwilling to cooperate cannot be ruled out, which will also be detrimental to the communication between parents and teachers.

5. Implications

5.1 Check again

The homework assigned by the teacher must be checked again before class. There are many teachers who ask students to clock in online and the task ends. But for primary school students, first of all, they are not strong self-control is likely to be perfunctory completion of the clocking task, but not really to remember. Secondly, checking homework before class can help students recall the knowledge of last class, which plays a good role in consolidation.

5.2 Need spelling

As for vocabulary learning, it is not enough for students to know how to pronounce, how to read, which also important is that they must know master how to spell a word. Only do it in this way, can they master word better. It means that when they finish their homework, they should write down the words, read the words without any mistakes, and they need to spell smoothly, too. The online pronunciation punch-in task should not be performed only in the pronunciation punch-in training. At the same time, we should strengthen students’ spelling ability.

Vocabulary is the foundation of English. A good primary vocabulary learner can not only read but also spell vocabulary correctly. Therefore, the variety of online assignments should be increased, so that students do not just have boring pronunciation training.

5.3 Communicative practice

Vocabulary is the foundation of English, so learning vocabulary well is a preparation for communicative activities. The goal of learning English is to have excellent comprehensive language skills, so it is important for students to practice their vocabulary in sentences. Suitable English learning apps can be found for students, so that students can apply vocabulary in a timely manner, so as to deepen their understanding and memory.
6. Conclusion

After investigation, we found that children’s digital dementia can be divided into the following categories. First of all, digital products make children's cognitive styles incline to surface processing. The first dimension of the questionnaire analysis shows that children now choose to use the problem-solving APP to complete the homework when facing homework, and when they encounter a problem, they choose to seek help from the outside world instead of solving the problem through their own thinking and exploration.

Secondly, too much online homework will reduce children's memory level. According to the analysis of the second dimension of the questionnaire, it can be clearly found that children not only differ in attitudes towards online and offline tasks, but also in their memory. The children surveyed reflected that the memory of the words and short texts used for WeChat check-in was not as good as their memory after copying.

Third, the use of social software will affect children's true social skills. From the analysis of dimension 3 of the questionnaire, it is known that children with their own independent social accounts will spend time to consolidate their friendship with netizens, so that in real life they spend less time making friends than children without independent social accounts. Professor Spitzer mentioned in "Digital Dementia" that digital social networks will make our children lonely and unhappy.

In contrast to these phenomena in the teaching of English vocabulary classes in primary schools, we have also proposed several strategies. From the diversity of homework to the degree of cooperation of the parents, these should be adjusted accordingly.

References