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The Comparative Analysis of Micro-reading and Traditional Reading Based On Schema Theory

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***Abstract*—**Micro-reading is a new way of reading depended on short messages of mobile phones, network articles and short literary forms, which impacts greatly on traditional way of reading. The effect of "micro-reading" is deeper especially for those growing middle school students and college students. Aiming at the problem with the development of college students' micro-reading and based on the influence of schema theory on the research of cognition of reading, this paper is to analyze the comparison between micro-reading and traditional reading and explore reading strategies in micro-era based on the negative and positive effect which schema theory has on micro-reading.

***Keywords*—**Schema theory, comparative analysis, micro-reading, traditional reading.

I. Introduction

READING has a long history for the Chinese nation and has always kept and maintained a fine tradition. In China, respecting knowledge and loving books is a habit people have formed for thousands of years and reading always occupies an important position in peoples' hearts. In recent years, however, people have to face an undeniable fact: with the upgrading of the technology of internet, such micro products as micro-blog, Wechat, micro-novel and micro-movie have taken us into a complete new "micro-era". In this new era, our traditional way of reading has received unprecedented challenges.

The tenth national reading survey was released in April 2013 showing that the contacting rate of online reading and mobile reading for those nationals aged from 18 to 70 has increased in 2012. The increasing of online reading shows not only the updating of the carrier of reading but also the change of the way of reading which is brought by the change of carrier content hidden in such carrier revolution. Among them, such forms of micro-blog, Wechat and micro-novel have a great impact on the traditional way of reading. With less time, people choose "micro-reading". Being infatuated with "micro-reading", people don't have time to lose themselves in a book. This is the biggest paradox many people face when they make a reading choice. Considering the problem of micro-reading for today's college students, it is necessary to analyze the difference between micro-reading and traditional reading and explore reading strategies beneficial for them in the micro-era.

II. Schema Theory

According to Piaget, cognitive structure can be shown by schema. Piaget defined a schema as "a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning" [1]. Schema has the nature of wholeness and it can be developed at the same time. In the process of the interaction between man and environment, equilibration together with environment is achieved by assimilation and accommodation which leads to the change of individual's interior schema. Learning is a dynamic process. The learning process is to realize assimilation and accommodation with the interaction with the external environment by leaning and gradually construct the interior schema about the external world knowledge, hence leading to the transformation and development of their own cognitive structure [1].

Assimilation is to put the environmental factors into the cognitive structure so as to realize the supplement of the amount of the cognitive structure; Accommodation is the qualitative change of cognitive structure and the adjustment of cognitive structure in order to accept new environmental information. When new cognitive conflict appears, assimilation and accommodation come to the solution of cognitive conflict and realize new balance so as to promote the development of cognition. Schema is a method that people use the existing knowledge structure to remember new material. According to schema theory, the knowledge stored in people's brain is made up of each unit and each unit is schema. Modern schema theory is a theory of knowledge storage and application. The existing schema is a knowledge structure with ongoing roles. When meeting new things, they can be understood only by connecting these new things with the existing schema [2].

III. The Comparison between Micro-reading and Traditional Reading

In general, both micro-reading and traditional reading have their advantages and disadvantages. They are illustrated as follows.

A. The Advantage and Disadvantage of Traditional Reading Compared with Micro-reading

The carrier of the traditional reading mainly includes books, newspapers and magazines published by printing technology which have classic culture precipitation for thousands of years. Edison said, "Books are the legacies genius left to the world, from generation to generation, especially gifts for those who have not yet born." Shakespeare once said, "Books are the President of human knowledge and the nourishment of the world." We can see segments of the whole effects and benefits of traditional reading for the great men. In accordance with the

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basic nature and meaning of reading, this way of reading especially pay attention to system and integrity. Under such systemic and integrity requirements the result of the traditional reading is to make people solidly grasp what they have read, so-called "When a book is read a hundred times, its meanings will naturally become clear".

At the same time, the form of single text and picture provides the reader with a larger platform for imagination and inspires the reader's imagination and creativity. Through traditional way of reading, readers can not only get book knowledge but have a profound effect on their soul and the outlook on life because of the participation of their own thinking and imagination. Undoubtedly, the traditional way of reading is particularly suited for readers to read classic books which assemble the essence of human social thought. Also because it has a long history and cultural background, editing and publishing of books has a strict examination and approval system, the contents of the book can largely enrich and moisten the reader's mind [3].

Despite the above advantages of traditional reading, with the advent of the era of information, various defects are shown compared with micro-reading, for example, slow updating of traditional reading knowledge, limited covering of contents, without vivid sound and image, without all-around reading enjoyment for readers, inconvenience to carry, etc. While for eBook readers like mobile phones, they have large capacity, wide content, audio and video materials and readers can read anytime and anywhere. So the advantage of micro-reading is highlighted, which quickly win a majority of readers, especially the young people's favorite.

B. The Advantage and Disadvantage of Micro-reading Compared with Traditional Reading

Micro-reading makes people get rid of a lot of "junk time" in their lives. Micro-reading can make use of the waiting time at any place, any time. Personal reading space is created easily only by a small device such as mobile phones. The message transmitted by micro-reading fits to the need of fast pace of modern life. The short and quickness of text create a comfortable micro-reading atmosphere. Also it changes the boring single form of books and has the advantage of massive outpouring of words and photographs, fast information transmission, large quantities of content, everything new and fresh for people, which will greatly improve readers' reading interest and learning efficiency[4].

At the same time, the disadvantage of micro-reading is highlighted slowly in the process of being widely accepted by people. First of all, like the radio and television, it has brought the huge impact on reading which requires imagination. Secondly, compared with traditional classical reading, readers choose the quick jumping scanning in face of the powerful information bombing, confined to the pursuit of entertainment, functionalism and utilitarianism of reading, as a result, they abandon the most important part of reading: thinking. In addition, garbage text is everywhere with the good and bad network literature intermingled on the internet because of the lack of necessary supervision and management. Franklin once mentioned, "Reading is easy while thinking is difficult. Being lack of either of them is all useless." It can be seen the disadvantage of micro-reading. Once trash culture is spread by micro-reading, it will undoubtedly poison the mind of teenagers who lack of necessary ability of discrimination [5].

IV. The Effect of Schema Theory on Micro-reading

According to assimilation and accommodation of schema theory, the effect of the readers' present traditional reading schema on micro-reading can be divided into two aspects: positive effect and negative effect.

A. The Negative Effect of Schema Theory on Micro-reading

The existing reading scheme is established according to the reading form of paper books. First of all, it is difficult for the schema of the carrier form to comply with micro-reading. As a main form of carrier of knowledge, paper has nearly four thousand years of history, thus readers have formed many related habits because of the form of paper carrier in traditional reading. Long-established reading schema of paper books is broken and updated by a new form of carrier, which can produce a feeling of anxiety. Secondly, the schema of the singleness of reading content is difficult to be embedded in micro-reading. With single paper reading and single form of content, readers can easily grasp the main points of the reading content by traditional reading. While with such kinds of contents as video, animation, text, images, games, etc. and the good and bad being intermingled, readers have increased choices to make which lead to the difficulty of grasping reading direction by micro-reading. The single schema of content of traditional reading is difficult to adapt to the complexity of micro-reading.

B. The Positive Effect of Schema Theory on Micro-reading

The positive effect of the existing schema based on traditional reading on micro-reading is mainly manifested on reading methods. Reading methods have formed a mature system in traditional reading. In famous American philosopher and educator Mortimer Adler's book how to read a book, reading methods are discussed systematically. Reading can be divided into these four parts: elementary reading, inspectional reading, syntopical reading and theme reading [6]. People are familiar with these mature reading methods and general readers can skillfully use most of them in traditional reading, thus these methods have become a powerful weapon for readers to learn knowledge. Micro-reading is also an important means of knowledge acquisition for readers in micro-era. Through assimilation and accommodation and readers' own reasoning, readers of traditional reading can apply traditional reading methods to micro-reading. The transformation of the process has a positive effect on micro-reading and promotes the development of micro-reading so as to make readers form good micro-reading habits.

V. Effective Reading Strategies in Micro-era

The process from traditional reading to micro-reading may be regarded as a process of analogy migration. The form and

method of mature traditional reading will have a profound effect on reading. Micro-reading is not isolated, a kind of reading form from zero. By inheriting the fine schema of traditional reading, micro-reading will continue to innovate and develop by applying the correct schema and training methods.

A. Finding Solution from Themselves as the Subject of Micro-reading for Teenagers

Micro-reading resources are the integration of information resources of chart, text, sound and picture. With too many things to see, when they read pieces of information teenagers can't wait to seek the next piece of information which interests them. As a result, they don't have time to think leading to the dropping of micro-reading quality. Micro-reading with high quality should not pursuit speed standard, but require readers to reflect on the information resource in the reading process and take the essence and discard the drags by the analysis and evaluation of their own knowledge and the information resource they have read. Meaningful micro-reading should emphasize the depth integration and innovation of information resources, form readers' own viewpoint and cognition in the practice of micro-reading and guide practice by the use of these viewpoints and cognition.

B. Educators' Appropriate Regulation

Educators make timely forecast, stimulation and guidance, providing young people with more excellent micro-reading platform and micro-reading resources in order to meet different needs of students, combining micro-reading with traditional reading reasonably and effectively with the aim of creating a comprehensive teaching strategy.

C. Strengthening Guidance of Micro-reading from Library

Because of the richness and diversity of network resources, the organization of network resources needs favorable schema as a guide. The current relatively better organized network resources are such online encyclopedia as Wikipedia, baidu encyclopedia, Google which can bring good reading effect. Library should organize some librarians with high level who can integrate the network resource, recommend some valuable network resources according to the needs of young people and make positive and active guidance for young peoples' micro-reading.

VI. Conclusion

Compared with traditional reading, micro-reading is faster, more intuitive, abundant and immediately. But micro-reading can't be independent of the traditional reading. Famous traditional reading model is three-step reading-The first step is accumulating reading; the second step is comprehending reading; the third step is evaluating reading. This model reflects the gradual improving process of students' reading ability. Reading needs accumulation. Only by accumulation in the normal reading, can lay foundation for micro-reading and achieve a better result of micro-reading. While traditional reading also relies on the advantage of micro-reading. Thus young people's reading level can be improved. Therefore, the author thinks that reading itself does not change its nature because of the way of reading. Therefore, micro-reading and traditional reading are not contradiction, but supplement each other.

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