A Study on Inquiry-Based Teaching Model for Deaf Students

Ye Li

Educational Technology Department. Capital Normal University

Capital Normal University, CNU

Beijing, China

Liyer_110@163.com

JiaCheng xu

Special Education Collage. Beijing Union University

Beijing Union University, BUU

Beijing, China

xujiacheng123@263.net

Abstract—**In ordinary schools, it is very hot to study the inquiry-based teaching model in class and after class. However, in the special education it is almost in a blank. As many studies have suggested that the deaf students in many respects are the same as the normal students. And so many successful examples on the inquiry-based teaching for normal students also can be good experiences for it to be used for deaf students. So in this article the author will first introduce the main characteristics and the basic model of the inquiry-based teaching for normal students. And then introduce the learning characteristics of the deaf students. At last, the author will combine the characteristics of deaf students to make an inquiry-based teaching model which for deaf students specially.**

Keywords—inquiry-based teaching; teaching model; deaf students; Integration of Information Technology and Course

I. INTRODUCTION

In the middle of the 1990, the concept of Integration of Information Technology and Course was proposed in the world. Before, almost all of the countries in the world used computer courses to achieve the objectives of the Information and Technology course. As in China, the Integration of Information Technology and Course has many different versions. In this article the author will not introduce the specific concept any more. Based on the situation of Integration of Information Technology and Course there are many teaching models, in this article the author will use the categories the professor He Ke kang gave. He pointed out [1] " In class teaching model mainly contains Delivery-Accept teaching model and Inquiry-Based teaching model; before and after class teaching model mainly contains Just-in-Time teaching model, Web Quest teaching model and Research-Based learning model". In this article, the author will mainly introduce the characteristic and basic model of the Inquiry-Based teaching model. And will combine it with the learning characteristic of the deaf students to make an Inquiry-Based teaching model which for deaf students specially.

II. THE INQUIRY-BASED TEACHING MODEL

A. The Characteristic of the Inquiry-Based Teaching Model

In the Inquiry-Based teaching model, the students depend on the instruction of the teacher to study independently, explore and cooperate. After have been taught by this model, the students will achieve the cognitive objectives and emotional goals which the course required [2]. And the mainly important characteristic of this model is that it emphasizes teaching and learning at the same time. So it is also the right reason that this article chooses it.

B. The Basic Model of the Inquiry-Based Teaching Model for Normal Students

As professor He Ke kang said: Inquiry-Based teaching was proposed based on the reform of Teacher-centered and Books-centered teaching model. It does not only emphasize teaching but also emphasize learning. As figure 1 (this figure is get from professor He Ke kang [2]) shows that in the Inquiry-Based teaching model, the students study one or more important knowledge points which are chose from the course. And during the study process the teacher will propose the question at the right time, and then give instruction at the right time and right place. At last the teacher also have to summarize the knowledge to improve the students' Cognitive and affective.

As in the figure1 there are three lines, one is "students' activities", the other one is "teaching process" or studying process, the last one is "teachers' activities". The three lines are seems independent, however, they are interact with each other essentially. The teaching process can be divided into five parts: create situation----stimulate thinking----independent inquiry----collaborative exchange----summarize to improve. In these five parts the teacher only instructs and takes part in the process, he or she does not only teach. And the teacher in the process is the friend, classmate and partner of the students. The students in the process have to complete the task by themselves from inquiring or collaborate with others. No matter which method they use, the result will be that they get the course or curriculum goals.
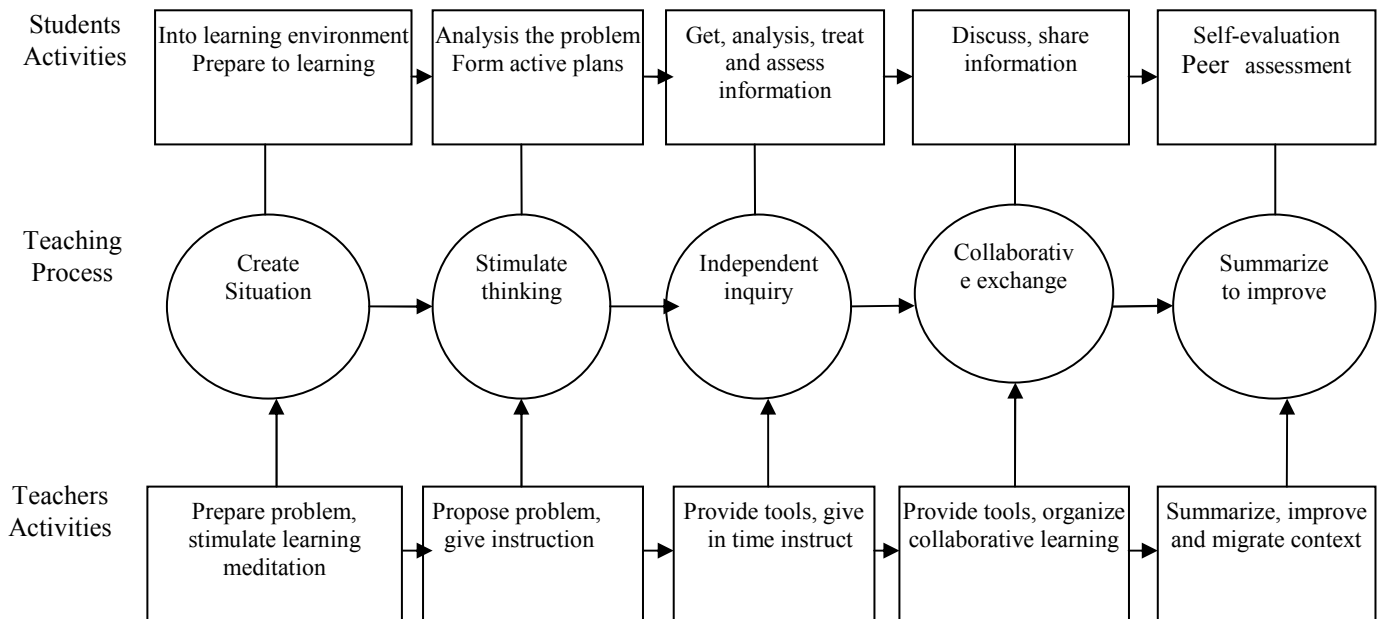
Students Activities	Into learning environment Prepare to learning	Analysis the problem Form active plans	Get, analysis, treat and assess information	Discuss, share information	Self-evaluation Peer assessment
Teaching Process	Create Situation	Stimulate thinking	Independent inquiry	Collaborative exchange	Summarize to improve
Teachers Activities	Prepare problem, stimulate learning meditation	Propose problem, give instruction	Provide tools, give in time instruct	Provide tools, organize collaborative learning	Summarize, improve and migrate context

Figure1 the picture of the Inquiry-Based teaching model

III. THE LEARNING CHARACTERISTIC OF DEAF STUDENTS

There are many differences between deaf students and usual students, and may be all the differences will affect the study effect. However, the most important factors are learning characteristic and psychological characteristics that will mostly result in the differences. In this article the author will introduce the deaf students' learning characteristic and psychological characteristics as following:

A. Deaf Students' Learning Characteristic

1) Visual fatigue faster than usual students[3]

For deaf students usually through eyes to watch teacher's sign language and also have to read the text and at the same time have to watch the big screen and so on. So their eyes are easy to get tired. Think about this characteristic our teachers should pay much attention to teach the deaf students. In the usual teaching model, teachers teach more while students learn by themselves less. Then they will feel eye tired more easily.

2) Most deaf students have lower language skills

As in the schools the author surveyed, found that about 70% of the deaf students have lower language skills and the deaf students are in a lower grade than the same aged students. However, many deaf students seems want to speak although they have lower language skills. Then, in the teaching process teachers should encourage them to speak more, and then their language skills may be improved.

B. Deaf Students' Psychological Characteristics

1) Have rich imagination[4]

As Wei De ling said in his article that the deaf students have rich imagination, however, because of deaf they can get limited information, so their imagination is piecemeal, and their cogitation is jumping. So in the inquiry-based teaching process teachers should according to the deaf students' imagination and cogitation to teach.

2) Have no confidence

Because of deaf, most of the deaf students have no confidence, many of them are afraid to speak in front of the people by their method. So as time long, their language skill will become weak more and more. Psychological health is an important factor in a student's ability to perform well academically and adjust socially [5]. Teachers in the teaching process should first to improve the deaf students' confidence.

IV. THE INQUIRY-BASED TEACHING MODEL FOR DEAF STUDENTS

According to the characteristic of the inquiry-based teaching model and deaf students' learning characteristic and psychological characteristic the author make an inquiry-based teaching model for deaf students specially. As figure 2 showing. Hope it will help the special education for deaf students very well. In this model the author divides the teaching process into three parts. The first part is using right method to make deaf students "into situation and begins to think", the second part is "inquiry by themselves", and the third part is "cooperate and improve themselves". However, in every part teacher will give timely guidance.
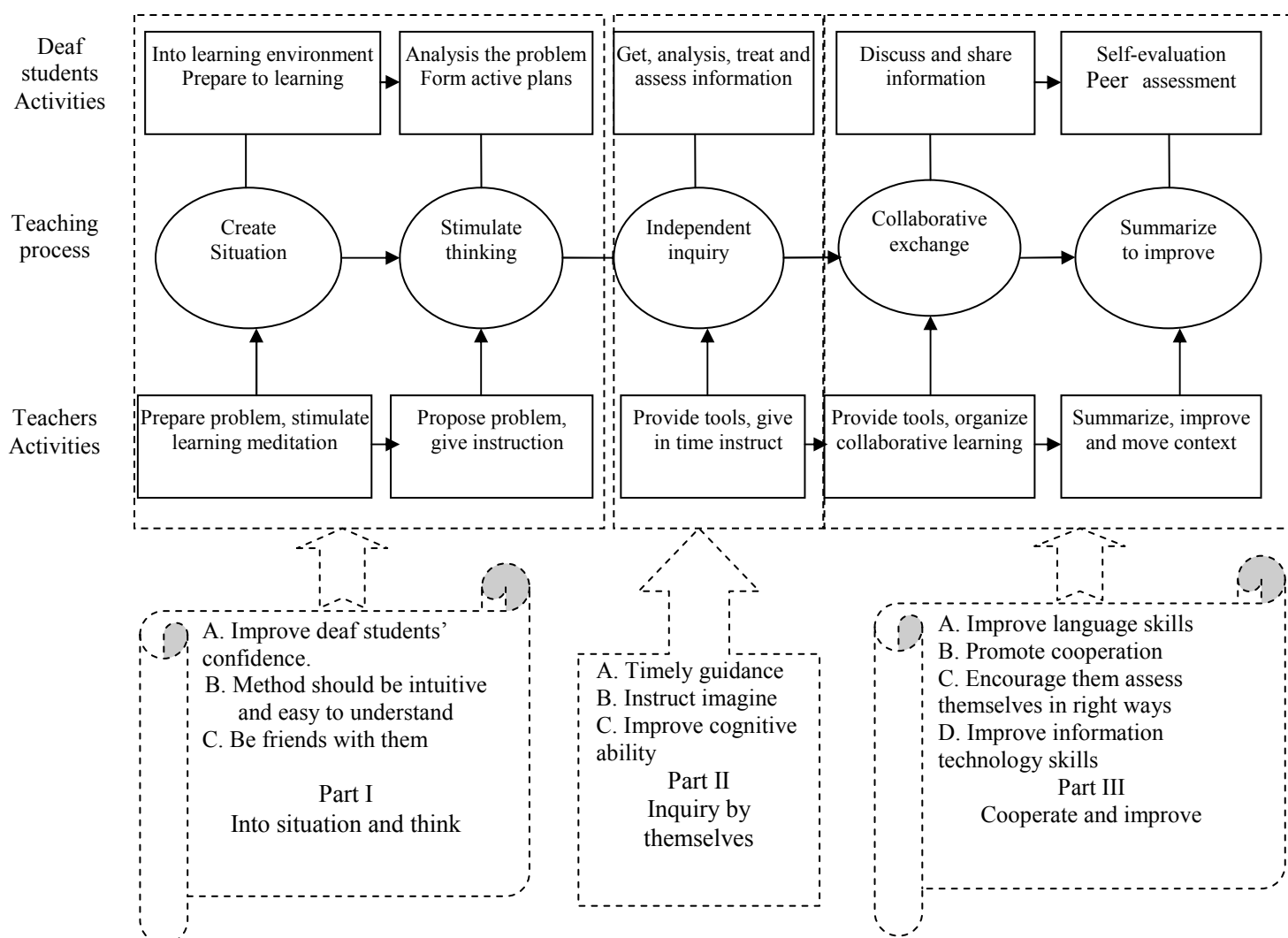
Figure2 the picture of the Inquiry-Based teaching model especially for deaf students

A. Part I into situation and think

In this part, the deaf students' main activity is the same as the usual students; however, in this part teachers should pay much more attention to improve deaf students' confidence. As the deaf students usually think in imagines, so teachers should use intuitive method to stimulate them to take part in the activity and begin to think initiatively. What's more, because of deaf students are easy to get visual fatigue so the information should be easy to understand and do not need to watch very long time.

As deaf students often feel lonely and helpless, so in every part teachers should be friends of them. In the harmonious situation, students may act well.

B. Part II Inquiry by themselves

Part II is the cone of this teaching model, for most deaf students have rich imagination while cogitation is jumping, so in this part teachers should concern the deaf students' situation in time and give guidance timely. However deaf students are different from the usual students, teacher should instruct in the right way, do not let them feel inferiority.

C. Part III Cooperate and improve

This part is the final aim of teaching. For deaf students the teaching aims not only the same as the usual students but also have to improve their language skills, imagination and cogitation. In this part teachers will promote cooperation in right time. Encourage them to speak and communicate with in group partners or out group partners to improve their language skills. And in this teaching model there is a process in which deaf students will make self-evaluation and peer assessment in and out of the collaborative group. For as the author inquiries in the deaf schools that many deaf students can't assess themselves appropriately, so in this part teachers will give timely guidance. And the most important thing in this part is after encouraging deaf students to summarize the context the teacher will summarize and improve the content. Then he also will move it to other aspects.

V. CONCLUSIONS

This inquiry-Based teaching model has been used for several years in ordinary schools. Especially depend on the Integration of Information Technology and Course. And this teaching model is considered to be a good method to play teachers' leading role and students' main role at the same time. And we believe that the model for deaf students specially will also be good to help deaf students to study well. A research showed that [6]: about 50%of deaf students like web learning, and most deaf students search information and study on the internet. So it will be a situation to carry out inquiry-based teaching model in deaf schools.

REFERENCES

[1] He Ke kang, Wu Juan. "The first academic paper of teaching models research series about integrating information technology into curriculum". Modem Educational Technology, 2008,in press. pp.5-8.

[2] He Ke kang,Wu Juan. "The third acadamic paper of teaching models research series about integratio information technology into curriculum". Modem Educational Technology, 2008, in press. pp. 5-10.

[3] Zhou Ying. "Visual situation and Teaching Deaf Students". Journal of Nantong University(Education Sciences Edition), 2008, in press. pp. 36-39.

[4] Wei De ling. "Grasp the psychological of deaf students to improve education quality". Modern Special Education, 2003, in press. pp. 27

[5] FukaMauchi Fumihiko. "Deaf Students' Psychological Characteristics and Support System". IEIC Technical Report (Institute of Electronics, Information and Communication Engineers), 2002, in press. pp. 47-52

[6] Guo Lihong. "Depend on deaf students' learning characteristic to study the strategies on information technology and course ". Capital Normal University, 2008, in press. pp. 1-68