

Analysis on Factors Influencing Learning Effect in Classroom Teaching Interaction

Chao Lv^{1, a}

¹Basic Course Department, Beijing Institute of Fashion Technology, Beijing 100029, China

^alcrabbit@163.com

Keywords: Teaching Interaction; Learning Effect; Influence Factors

Abstract: Interaction is an important factor determining the quality of classroom teaching. The teaching interaction has the ultimate goal of improving the learning effect of learners. The definition and characteristics of classroom teaching interaction is introduced firstly in the paper, then the factors affecting learners' learning effect in classroom teaching interaction, and specific measures to improve teaching interaction for the influence factors are finally proposed so as to achieve the fundamental purpose of learning effect optimization.

Overview of Classroom Teaching Interaction

Interactive activities are ubiquitous in classroom teaching.

Definition of Teaching Interaction. Interaction refers to information exchange between senders and receivers from the perspective of communication. The teaching process is full of interaction, and the two-way flow of teaching information between teachers and students is the essence of teaching interaction [1].

Moore, an American scholar, divided teaching interaction behaviors into learner-teaching media interaction, teacher-student interaction and student-student interaction according to interaction objects. The teaching interactive system consists of four elements: teacher, student, learning content and teaching media.

Characteristics of Classroom Teaching Interaction. Learners can make self-evaluation and know their learning effects through classroom teaching interaction. Teaching interaction can further stimulate students' initiative and enthusiasm in learning, improve the efficiency of listening, and achieve two-way or multi-directional flow of information. Its characteristics are mainly reflected in the following aspects:

Harmonious Classroom Atmosphere is a Necessary Guarantee for Effective Interaction. It is necessary to create a harmonious interactive situation in order to realize effective classroom teaching interaction. Emotional harmony, harmonious relationship as well as need and desire for interaction are required between teachers and students as well as among students. To create a harmonious interactive situation, Teachers should communicate with student equally and act as collaborators and assistants in students' learning process [2,3]. Teachers should be passionate about teaching with an affinity for students, who should create an open, free, democratic and diverse classroom atmosphere.

Information Transmission is Asymmetric. Teaching interaction mainly aims at conveying teaching content, but there is also the phenomenon that teaching content and teaching status information (feedback, evaluation and other information) are transmitted simultaneously. The transfer thereof has obvious asymmetry [4, 5]. The teaching content information delivered by teachers to students is much larger than the teaching status information delivered to teachers.

Interaction Forms are Diversified. Although only teachers and students interact with each other in classroom teaching, the interaction forms are diversified, including the interaction between teachers and students, the interaction between students and teachers, and the interaction among students, and various forms of interaction are often used alternately in classroom teaching [6]. Teachers understand students' needs and learning situation, and students understand teachers'

intentions through the active interaction between teachers and students as well as among students, thereby enhancing the understanding of teachers and students.

Teaching Interaction is Stratified. There will be different levels of interaction caused by different levels of attention involvement of interaction subjects in the process of teaching interaction. Some subjects only interact apparently, namely the so-called formal interaction, and learners cannot fully understand the information content and achieve the teaching objectives [7]. The role of interaction can be fully exerted only through deep interaction, the communication between teachers and students can be barrier-free, students can fully understand the knowledge taught by teachers, and teachers can learn the teaching effect from the feedback information.

Analysis on Factors Influencing Learning Effect in Classroom Teaching Interaction

Internal factors are the root causes of the development of things so the most fundamental factor influencing the learning effect in classroom teaching interaction is learners' own personality characteristics. The internal cause is the root of the development of things, meanwhile external factors of things are the conditions for the change and development of things, and the role of external causes is very important under certain conditions. Therefore, we emphasize that learners' personality characteristics are the internal factors affecting the learning effect, meanwhile we must pay attention to the influence of external factors such as interactive environment and interactive content, etc. In short, learners' personality characteristics, interactive environment and interactive content belong to 'internal and external factors affecting the learning effect'. The factors that Influence the learning effect in classroom teaching interaction are shown in Table 1.

Table 1 Factors Influencing Learning Effect in Classroom Teaching Interaction

| | |
|-------------------------|--------------------------|
| Learner personality | Intelligence factors |
| | Non-intellectual factors |
| | Social characteristics |
| Interactive environment | Soft environment |
| | Hard environment |
| Interactive content | Difficulty of content |
| | Organization of contents |
| | Content selection |
| | Content type |

Learner Personality. Learners' own personality characteristics have a great impact on learning as the subject of classroom teaching interaction. Learners' personality characteristics mainly include intelligence factors, non-intelligence factors and social characteristics.

Intelligence Factors. Intelligence factors mainly refer to learners' professional basis, cognitive ability and cognitive structure, etc. Learners' previous professional knowledge base and cognitive development level directly determine whether the teaching interaction activity can proceed smoothly. There is no corresponding knowledge base or insufficient cognitive development level for interactive content, thereby easily affecting learners' enthusiasm for learning, or even making learners to give up interactive activities directly, thereby seriously affecting the learning effect.

Non-intellectual Factors. Non-intellectual factors mainly refer to interest, motivation, emotion, will, personality characteristics, etc. The learning interest and motivation of learners involved in interactive learning are the prerequisites for high-level interaction. Learners' learning motivation is not clear, or the learning motivation is not the correct construction of the meaning of learning content, thereby directly affecting the improvement of teaching interaction quality, and quality of learning effect of learners. Different personality characteristics of learners will affect the learning effect. Cheerful learners like to communicate with teachers and classmates. Introverted learners are not good at expressing their own ideas and opinions, who act as observers in interactive activities.

Social Characteristics. Social characteristics mainly refer to social communication ability, group relationship characteristics, etc. Teaching interaction has the main interaction types of

interaction between teachers and students as well as interaction among students. It is required that the learners should give full play to subjective initiative, social interaction ability to communicate and exchange with teachers and other learners, thereby teachers can find problems in time, and then give targeted guidance, thereby improving the learning efficiency.

Interactive Environment. Interactive environment mainly includes soft environment and hard environment.

Soft Environment. The soft environment refers to the influence factor of humanities jointly constituted by educators and learners. It mainly includes the influence of teachers and students in the interaction as well as the influence of students in interaction. The teacher aspect includes the teacher's concern, participation mode and participation degree. Teachers' guidance and assistance are important factors affecting learners' effective learning, and teachers' guiding ideology, cultural accomplishment, teaching design ability, and control ability of teaching interaction activities are the guarantee for the improvement of teaching interaction quality. The student aspect includes the participation degree of other students and the acceptance degree among students. Learners can discuss the learning content, cooperate with each other, and communicate with each other emotionally so as to make them feel the warmth of the learning team and increase their interest in learning.

Hard Environment. Hard environment refers to the characteristics of interactive media, the use of interactive platform and other environmental factors. The application of multimedia, electronic whiteboard, etc. brings vitality to our classroom. Our teachers collect teaching resources, and design teaching procedures with the help of advanced educational technology such as multimedia, slide, electronic whiteboard, etc., thereby our classroom is more diversified and vivid. Students can also use multimedia to collect a wide range of learning materials, and feed back their own gains and problems timely with the help of electronic whiteboards in class. Therefore, the efficiency of classroom teaching has been greatly improved, and the efficiency of students' independent learning is improved.

Interactive Content. Interactive content mainly refers to the factors influencing the discussion content or topic selected by teachers, including the difficulty of interactive contents, the organization of interactive contents, the selection of interactive contents and the type of interactive content.

Difficulty of Content. The difficulty of the content mainly refers to the difficulty of the topic, the familiarity of the topic, the difficulty of data collection, etc. These factors directly affect learners' interests. For example, if the teacher gives a discussion topic, the learners do not understand or they even have not heard of it, and it is bound to affect learners' confidence, thereby affecting the whole interaction process. Therefore, teachers should master the difficulty of content in the process of teaching interaction, thereby achieving the ultimate goal of the best teaching effect.

Organization of Contents. The organization of contents mainly refers to the nature of the content, the structure of the discussion content and whether the purpose of the discussion is clear or not. The scientific organization of interactive content as well as clear and reasonable teaching objectives will stimulate learners' enthusiasm to participate in the interactive process, thereby increasing learners' interest in learning and improving learning efficiency.

Content Selection. The selection of contents mainly refers to the importance and suitability of discussion content, etc. It is required in the factor that teachers should select the content for teaching interaction, who should not treat all contents as interactive learning content, thereby leading to learning fatigue, affecting learning emotion, and affecting the learning effect.

Content Type. The types of contents can be divided into implicit interactive content and explicit interactive content. Printed materials and computer courseware are typical representatives of implicit interactive content and explicit interactive content respectively. Implicit interaction content and explicit interaction content affect the interaction in different modes. Implicit interactive content, such as printed materials, and they mainly affect the interaction process with learners through the physical characteristics of the materials, content writing modes, organization mode and presentation

mode. Explicit interactive content includes the influence mode of implicit interactive content. More importantly, the interaction process is affected by the control degree of educators on explicit interactive content and the acceptance degree of learners on explicit interactive content.

Measures to Improve the Factors Affecting the Learning Effect in Classroom Teaching Interaction

Strengthening of Learners' Personality Characteristics

Consolidation of Professional Knowledge Foundation. Learners' previous knowledge foundation and the level of cognitive development directly determine whether teaching interaction activities can be carried out smoothly or not. In addition, desired learning effect can not be reached during learning of new interactive content under the precondition that there is no previous knowledge base or the cognitive development level is not enough. Therefore, consolidation of professional knowledge base is of vital importance.

Stimulation of Learning Motivation. Bruner, an American famous psychologist, believes that internal motivation is the real motivation to promote learning, and it is lasting and strong. Therefore, the internal motivation of learners to participate in the interactive process should be stimulated by encouraging, praising and creating a competitive atmosphere in the interactive process, thereby increasing learners' interest in learning.

Active Creation of a Good Interactive Teaching Environment. Good teaching interactive environment includes soft environment and hard environment.

Active Creation of a Good Teaching Interactive Soft Environment. Firstly, teachers should create an equal and cooperative teaching atmosphere for students. They should encourage students to participate in interaction, teachers and students should establish an equal and cooperative partnership. Secondly, teachers should be good at understanding and caring for students. Care and understanding are the basis of the communication between teachers and students, and they are psychological premises of effective interaction. Teachers not only should love their students from the heart, but also should make students feel the love. Teachers should be good at participating in the interaction between teachers and students with students' mentality and behavior, so that they can better understand students, and students can better understand teachers and cooperate with teachers' teaching activities. Finally, teachers should give students free time and space for activities to certain extent. Freedom can better stimulate students' interest in interaction frequently.

Active Creation of a Good Interactive Teaching Hard Environment. Teachers should make full use of modern teaching methods to improve the interactive teaching effect in the course of classroom teaching. First of all, teachers should fully apply modern multimedia teaching means to the teaching process, create a good teaching atmosphere through multimedia teaching means, build a good teaching situation, and increase the communication and exchange between students and teachers. Secondly, modern teaching methods are used in interactive teaching mode for effectively realizing the elastic change of teaching objectives, and timely adjusting the teaching steps and teaching plans according to the performance of students in the teaching process.

Reasonable Selection of Interactive Content. Teachers should play the role of communicator and promoter in classroom teaching interaction, and the regulating and guiding role should be exerted in the design and selection of interactive content.

Design of Interactive Themes. Teachers should put forward specific discussion themes according to the learning progress, key and difficult problems, and guide students to carry out effective discussion. Teachers should also grasp the direction of discussion at any time, guide learners to follow the topic for discussion, and reduce interactive noise. Meanwhile, teachers should grasp the opportunity and mode of questioning. Quality should be emphasized rather than quantity in classroom questioning, students can "jump and touch" in classroom questioning, and we should pay attention to the creation of appropriate problem situation.

Timely Guidance of Learners. Teachers should give targeted guidance to learners in teaching interaction and help them solve difficulties in time so that they can learn effectively.

Summary

The subject of classroom teaching interaction is learners, and all interactive activities are carried out to improve learners' learning efficiency. The factors affecting the learners' learning effect in classroom teaching interaction are analyzed in the paper, and some measures to improve these influence factors are proposed. How to achieve effective interaction in classroom teaching interaction and promote learners to complete learning objectives is worth our further thinking.

References

- [1] J.S.Daniel, C.Marquis, Interaction and independence: Getting the mixture right. Vol.14(1979), p.29-44.
- [2] L.L.Zhao, Journal of Jiangxi Agricultural University. Vol.6-4(2007), p.188-191.
- [3] F.F.Lv, Journal of Xi 'an International Studies University. Vol.14-1(2006), p.75-78.
- [4] D.M.Nie, Journal of Mathematics Education. Vol.20-6(2011), p.40-43.
- [5] D.M.Nie, X.D.Tang, Journal of Hengyang Normal University. Vol.33-3(2012), p.156-159.
- [6] D.X.Ye, Y.F.Xia, Modern Educational Technology. Vol.21-8(2011), p.42-50.
- [7] S.Y.Du, Course Education Research. Vol.42 (2017), p.206-207.