

Research and Analysis on Problems Existing in Singing Activity Gamification of the Mid-class of Kindergarten

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ABSTRACT

Teachers of the mid-class of kindergartens are regarded as the main research object in this paper. Lots of literature related to the research have been looked up in advance, and the documents relevant to the singing activity gamification have been sorted to preliminarily know the current status of the singing activities in the kindergarten. The implementation of singing activity gamification in the mid-class of kindergartens has been sought, and the problems existing in the singing activities of the mid-class of kindergartens have been explored in combination of existing research by means of questionnaire survey. The problems existing in the singing activity gamification of the mid-class are investigated, and the problems are analyzed from four aspects including professional quality of teachers, teaching goal formulation, content selection and activity evaluation in the research to further propose the coping strategies, so as to make conclusion and suggestions for the singing activity gamification.

Keywords: *Mid-class of kindergarten, Singing activities, Gamification*

1. INTRODUCTION

Game is the main form of children's social activities, through which they explore the world around, know the social life and experience the interpersonal relationship. ^[1]

The *Early Learning and Development Guideline at 3-6 Years Old* (in China) indicates that "the infants should cherish the unique value of games and life based on direct experience in games, daily life and study", and "games should be the core for kindergartens, the educational activities should focus on the flexibility, fun and activity, and the education should be integrated in life and games."

As specified in Article 31 of the *Convention on the Rights of the Child* of the United Nations, "children should have equal opportunities for cultural and artistic activities, as well as the time to rest and play." As one of important kindergarten education activities, the singing activities shall be based on games as well.

In the research, the singing activity gamification of the mid-class of kindergartens in Chongqing, China is used as a pointcut. Data is collected from five dimensions, namely interest degree of infants for games, degree of participation in games, behavioral expression in games, innovative performance in games and feedback of infants after games ended to explore the problems existing in the singing

teaching activities of the mid-class of kindergartens in games, to analyze their reasons, and it fundamentally aims at boosting the scientificity of singing activity gamification in the mid-class of kindergartens for their joint development of teachers and infants.

2. RESEARCH METHODS

Nanchuan District, Chongqing is used as the object in the research for questionnaire survey. In order to truly and comprehensively know the singing activity gamification of mid-class, 135 mid-class teachers have been randomly selected from the kindergartens in Nanchuan District in the research. 135 questionnaires have been distributed in total, and 131 of them have been collected. SPSS20.0 is adopted for testing. The coefficient of the questionnaire α is 0.783, which is between 0.7 and 0.8, showing good internal reliability of questionnaire. The efficacy is tested by construct validity that KMO is 0.625 between 0.4 and 0.7, belonging to the moderate correlation. P value of sphericity test is 0.000, less than 0.05. The questionnaire is in good structure. The questionnaire is divided into three parts: basic information of teachers, and information of teachers and infants in the singing activity gamification of the mid-class of kindergartens.

3. RESULTS AND ANALYSIS

The correlation of all dimensions is analyzed by the software SPSS22.0 to verify whether the correlation exists between two dimensions (infants and teachers) in the questionnaire, and the frequency analysis and multiple response analysis are undertaken for the single choice and multiple choice of non-scale questionnaires to verify the percentage of each project.

3.1. Correlation analysis among dimensions

From the results of inspection in four dimensions regarding teachers during the singing activity gamification in kindergartens as shown in Table 1, the significance P among four dimensions is less than 0.05, indicating the significant relationship shown among them. The correlation coefficients R of each dimension are larger than 0, illustrating the positive correlation among dimensions. On the whole, four dimensions of teachers are significantly positive-correlated. It will lay a practice foundation to deeply analyze the research on all aspects of teachers during singing activity gamification in the research.

Table 1 Correlation Analysis among Dimensions of Teachers

		Professional quality	Objective formulation	Content selection	Activity evaluation
Professional quality	Correlation coefficient	1	.195**	.848**	.4018**
	Significance P		.026	.038	.000
Objective formulation	Correlation coefficient		1	.487**	.103**
	Significance P			.000	.042
Content selection	Correlation coefficient			1	.4998**
	Significance P				.023
Activity evaluation	Correlation coefficient				1
	Significance P				

From the results of inspection in four dimensions of infants in the singing activity gamification questionnaire as shown in Table 2, the correlation coefficients R of infants for singing activity gamification in four dimensions, namely "degree of interest", and "participation", "creative performance" and "activity participating evaluation" in singing activities are respectively 0.322, 0.676 and 0.770, larger than 0 in positive correlation. The significance P is 0.000, less than 0.05, showing the significant relationship. The correlation coefficients of "participation", "creative

performance" and "activity evaluation" are respectively 0.458 and 0.341, and P value is 0.000, indicating the significant positive correlation among dimensions. Finally, the correlation coefficient R is 0.736 between two dimensions, namely "creative performance" and "activity rating", which is larger than 0, showing the positive correlation between them. The significance P is 0.000, larger than 0.05, illustrating the significant relationship between them. On the whole, four dimensions of infants are significantly positive-correlated.

Table 2 Correlation Analysis among Dimensions of Infants

		Degree of interest	Participation	Creative performance	Activity evaluation
Degree of interest	Correlation coefficient R	1	.322**	.676**	.770**
	Significance P		.000	.000	.000
Participation	Correlation coefficient R		1	.458**	.341**
	Significance P			.000	.000
Creative performance	Correlation coefficient R			1	.736**
	Significance P				.000
Activity evaluation	Correlation coefficient R				1
	Significance P				

R** > 0, P < 0.05

3.2. Analysis on problems in singing activity gamification of the mid-class of kindergartens

3.2.1. Teachers lack the professional quality to organize singing activities

(1) Teachers have insufficient cognition of singing activity gamification. In the questionnaire survey, only 26.72% of them have selected "Very clear" in the question "How do you know about the singing activity gamification in the mid-class of kindergartens?". In the question "What is your opinion about the importance of organizing singing activities in the form of games", the percentage of teachers regarding "Very important" is 38.93% accounting for the overall number. It indicates that teachers have inadequate cognition for the singing activity gamification, and only a few teachers are very clear about the singing activity gamification and the way to organize the singing activities in the form of games. Most of teachers are aware of the importance of singing activity gamification, but there is still room for further improvement in the cognition of singing activity gamification.

(2) Teachers lack the specialized training for singing activity gamification. In the questionnaire survey "Have you ever participated in special trainings regarding the game-based singing instructional design for infants?", the percentage of teachers selecting "Frequently participate" is only 27.48%, and the teachers occasionally participating account for 56.49%, which is the maximum percentage. The percentages of teachers who have hardly and never participate are 12.21% and 3.82% respectively. In the question "How to improve the ability of game-based singing instruction", the interviewees adopt the empathic learning more from the frequency analysis through multiple response, which accounts for 33.7%, and the percentage of kindergarten-based training is only 19.8%. Teachers have less training opportunities in the specialized singing instructional gamification from it, so that their cognition of the singing activity gamification is only limited to the empathic learning among teachers and the personal musical accomplishment improvement is finite.

(3) Teachers lack an attitude of self-learning. In the questionnaire survey "Do you often read books or materials related to singing activity gamification?", 58.02% of the interviewees have selected "Occasionally", accounting for more than half. Moreover, the teachers frequently reading only account for 28.17%. It is not optimistic for the teachers regarding the active learning about singing activity gamification in their extracurricular life, and they lack the attitude of self-learning.

3.2.2. Insufficient scientificity in formulation of singing activity gamification objectives

In the questionnaire survey "Do you have objectives for

singing activity gamification?", the percentage of teachers selecting "Very clear" is only 22.9%. In "What do you think is the purpose of singing activity gamification?", most of teachers have selected the singing gamification to improve the infants' interest in singing and improve their comprehensive quality, respectively accounting for 31.8% and 38.3%. The survey indicates that most of teachers agree with the singing activity gamification mainly aiming at enabling the infants interested in signing. Interest is the best teacher of infants. The infants aged 4-5 years old have largely improved their curiosity and thirst for knowledge compared with those in the bottom class. Thus, the infant teachers shall capture the key period of infants in this stage to train their interest for all aspects. However, there are many teachers who still tend to cultivating the infants for musical ability and to master the singing skills for the singing activity gamification. The musical ability and mastering skills are inconsistent with the age characteristics of infants in the mid-class, who still in the pre-operation stage and have representative thinking mainly. Teachers are not clear about the singing activity gamification objectives of the mid-class from it.

3.2.3. Unreasonable selection of the contents for singing activity gamification

(1) Contents are selected too dependent on teaching materials. In the question "What are the main sources of music when you organize the singing instructional activities?", the contents selected by teachers for singing activities are mainly from the teaching materials, accounting for 35.1% according to the analysis of survey results. The uniform teaching materials used in the kindergartens are main ways for teachers in content selection. Generally, there are fewer songs in the uniform teaching materials used in kindergartens with larger limitation. From other indicated percentages, the contents selected are relatively unitary and finite.

(2) Contents are selected in insufficient consideration of infants' interest. Regarding material preference, in the question "Will you choose a song according to the interest of infants in the class while selecting contents?", 34.35% of the teachers have still chose to consider them at some point. Blindly organizing the singing activities without sufficient consideration of infants' interest will influence their participation in activities often. From the questionnaire, the infants to cooperate with partners in games and actively interact with teachers account for the highest proportion respectively. Thus, the principle for infants willing to participate in games and actively interact with teachers is their interest in games.

3.2.4. Teachers paying little attention to the activity evaluation

(1) Teachers lack self-evaluation. In the questionnaire survey "Will you evaluate yourself after each activity is

ended?", the result shows that only 28.24% of teachers will self-evaluate after each activity is completed, and 30.53% of them will self-evaluated once in a while. It can be seen that teachers lack self-evaluation after the activity. Teachers often lack self-evaluation after the activity is ended except for some research classes and open classes from the existing practice, and the activities are ended with nothing definite.

(2) Infants's evaluation of activities is lacked. In the questionnaire survey "Do you ask infants to comment on activities after completion?", the result shows that only 17.56% of the teachers will ask the infants to comment their feelings in activities, indicating that teachers always lack the importance of activity evaluation by infants. As an independent individual and main part of kindergarten, infants, particularly those in the mid-class, are able to simply understand and evaluate their experienced activities. Regarding infants, in the dimension of "infants participating in evaluation", the infants are able to evaluate their feelings in the singing activities, such as "like this song very much", "adore this game" and "like playing games with partners", which reflect that infants are capable of simple evaluation on singing activities.

4. CONCLUSION

(1) Teachers shall establish an active learning attitude. Teachers should actively understand and collect the books and materials related to the singing activity gamification, as well as other materials, reserve abundant musical knowledge, and be adept in making up for their own shortcomings. These facilitate them to better know and to analyze the singing activity gamification, and also to deeply understand the infant's interest and demands.^[2]

(2) Teachers shall formulate the objectives of singing activity gamification scientifically. In the cognitive level, the concrete figurative thinking of infants in the mid-class is particularly prominent. Their awareness to understand is mainly based on specific image and presentation of objects. Therefore, when organizing a singing activity, the material objects or pictures related to the song may be selected, and the activity may be organized in the form of game, consistent with the age and cognition of infants in the mid-class, so as to better promote their overall recognition for rhythm, lyrics and characters in the song, to stimulate their interest and willingness to participate in singing activities and to arouse their innovative performance.^[3] In the capability level, the infants in the mid-class are able to sing in natural voice with moderate volume, to improvise to the acquaintance, and to arrange words for songs with bright rhythms.^[4] Before organizing the singing activity gamification, the teachers shall consider the receptivity of infants in the mid-class, and select the songs that are regular, symbolic and rhythmic, so that the infants are able to actively participate in games and to behave the way they like, to stimulate the creative performance of infants, to encourage them to arrange words for songs and dance boldly and to enable the infants to be free and happy in activities. In the emotional level, the teachers shall pay

more attention to the infants' emotional experience in songs when drawing up the objectives. The game-based form will enable infants to join the activities indeed, to experience the feeling of beauty brought by the melody of songs and to boldly express their feelings in the singing activity gamification.^[5]

(3) Teachers shall choose interesting contents. The infants in the mid-class like the symbolic games a lot. They often image themselves as a specific character in games and have a strong interest in distinct and characteristic tempos, sound and rhythms.^[6] The teachers may flexibly and creatively use the songs to highlight the gameplay of activity contents, and the selected contents should be more close to the existing experience and age characteristics of the infants in mid-class.^[7]

(4) Teachers may organize activities in various forms. The infants in the mid-class can actively and proactively select, execute and express the activities interested, with preliminary sense of independence. They like to play with partners. In games, their ability to cooperate will be improved largely as well. Thus, the infants will better understand the feelings of songs, and better grasp the rhythms of song in movement, singing and thinking. Teachers will organize the singing activities by taletelling, and also carry out the singing activities through role play and creation of dance movement. They can invite the infants for solo or singing in a group.^[8]

(5) Teachers shall pay attention to the diversity of singing activity evaluation. Teachers shall improve their self-evaluation. The self-evaluation after activity ended inspects the achievement of activity objectives, and introspects the activity content selection and organizational form selection. The self-evaluation introspection of each activity is able to discover the shortcomings in activities through evaluation to prepare for the next activity defensively, and also to improve the teachers' professional quality constantly.^[9] In the meantime, the evaluation by infants should be noted. The infants in the mid-class are capable of simple evaluation on the things experienced by themselves. Through the participation in the activity evaluation, the infants will preliminarily introspect their activities, so as to constantly adjust their behaviors. In the meantime, it is also conducive to cultivate the infants for transfer ability and to improve experience and stimulate their desire to explore activities again.^[10]

PROJECT FUNDS

This paper is one of the phased achievements of the 2019 key unfunded topic in the "13th Five-year Plan" of educational science in Chongqing, Research on Development of Music Game Curriculum for Preschool Children Based on Picture Books (2019-GX-136). In the meantime, it is the achievement of the university-level research platform of Chongqing

University of Education, "Family Education Research Center for Children Aged 0-6" (2016xjpt03) as well.

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