

# Professional Development of Novice Music Teachers based on R-G-O Teaching Decision-Making Theory

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**Abstract:** According to the theory of Schoenfeld's teaching decision-making model, teaching decision-making is jointly decided by the resources, objectives, orientation of teachers. This theory is applied in the context of the music classroom. The goal of this study is to investigate how novice music teachers use the teaching decision-making theory. Therefore, this study conducted a case study of a first-grade novice music teacher in a public middle school and a private middle school. A semi-structured interview and video observation of classroom teaching were conducted to collect and analyze the interactive decision-making processes of two novice music teachers. By comparing the teaching process, the results show that the two novice music teachers have different teaching decisions, and the private school teachers lack emphasis on teaching decision theory. Finally, proposes four strategies to promote the professional development of novice music teachers.

**Keywords:** Teaching Decision-Making; Teacher Professional Development; Novice Music Teacher; R-G-O Theoretical Model.

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## 1. Introduction

Music teachers are thoughtful and active educators who can solve problems in complex situations. In the whole teaching practice, according to the teaching objectives, music teachers should constantly formulate, select, and implement action plans, which can also be said to be a process of continuous decision-making on factors affecting students' learning possibilities [1]. The realization of correct teaching decisions is the fundamental demand of music teachers' own professional development as well as the basic requirement of society for the teaching profession [7]. Music teachers fully understand the connotation and process of teaching decision-making, which will promote teachers' self-reflection and promote the improvement of their teaching level. In view of this, this paper takes Schoenfeld's [7] R-G-O teacher decision model as the theoretical basis to explore effective ways to promote music teacher professional development.

## 2. Literature Review

Decision-making is a common activity that involves transforming the objective and subjective worlds to achieve optimal objectives and action plans based on an understanding of development laws and conditions [5]. In teaching, decision-making involves using professional knowledge and teaching experience to create effective plans that address students' learning needs and meet teaching goals. This process occurs in three stages: before teaching (planning), during teaching (interaction), and after teaching (reflection) [3]. The core stage is teacher-student interaction, which influences planning and reflection decisions [5]. According to Shavelson [6], decision-making is fundamental to teaching, regardless of teachers' awareness. Key factors affecting decision-making include teaching skills, student reactions, and teacher adaptability [5].

Farrell [4] defines novice teachers as those with less than three years of experience, who face more challenges and variability in their teaching [3]. Schoenfeld's instructional

decision model theory suggests that teachers' decisions are influenced by their resources, goals, and orientation, which interact dynamically rather than in isolation [6]. Teachers often make "immediate decisions" every 2–6 minutes during teaching [6], highlighting the importance of understanding the rules and patterns behind their decision-making processes.

### 2.1. Resources

It refers to the knowledge, skills, materials, and support of the surrounding environment that teachers possess. It is obvious that knowledge and skills play an important role in teachers' professional activities. Knowledge specifically includes subject-specific teaching knowledge (PCK) and general educational knowledge, etc. These knowledges are typically acquired in an "academic" manner through various forms of teaching research and training, and they are constantly expanded and improved in classroom practice. Material resources, including multimedia equipment, experimental equipment, and the computer network, also have an important impact on teacher behavior. Obviously, teachers who have the freedom to allocate multiple resources have more choices in their teaching decisions than those who lack resources.

### 2.2. Goals

The goal is the result that the teacher wants to achieve in teaching. Teachers can construct these expected outcomes consciously and unconsciously, or they can form them unconsciously. The goal has the function of guiding the direction of decisions at a high level and guiding the reintegration of resources in a specific situation. Once a goal is established, the teacher will select the appropriate resources to accomplish the goal. Goals can usually be decomposed into several sub-goals. Teachers' classroom teaching can be understood as the integration of multiple sub-goals at different levels under the guidance of a general goal.

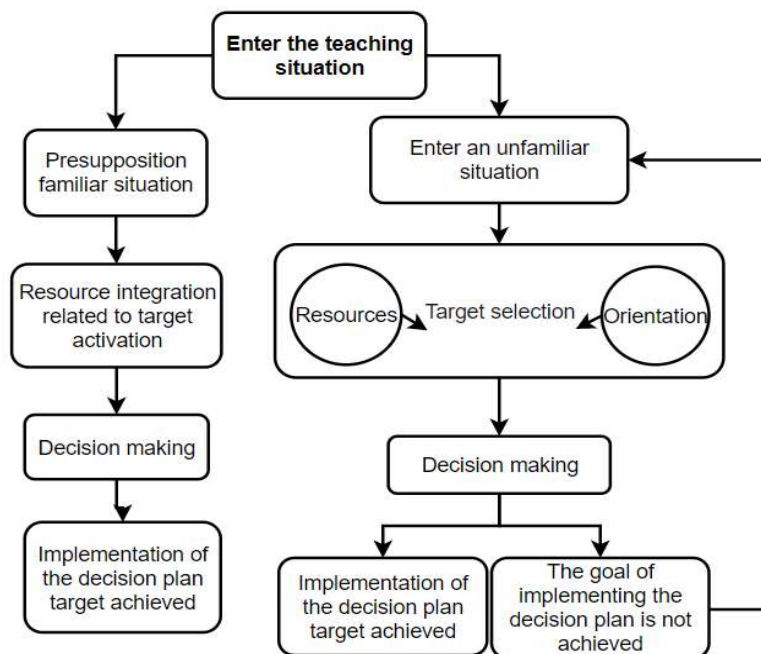
### 2.3. Orientation

Orientation is a term for a standard that teachers know they

have to meet in order to reach their goals as teachers. It contains many aspects such as belief, value, preference, and interest, among which belief is a key factor. A belief is an idea that a person firmly believes in their heart and uses to control their own actions based on their personality tendencies. Teachers' beliefs play an important role in teaching decisions.

Different teaching views on teaching content will lead to many differences in teaching decisions and specific teaching behaviors.

## 2.4. General Process of Teachers' Teaching Decision-Making



**Figure 1.** A general process model of teachers' teaching decision-making Adapted from Wu, 2012 teachers and novice teachers.

In Figure 1, when a teacher is teaching in the classroom, he already has specific resources, goals, and orientations related to teaching activities. If the teaching situation is consistent with the teacher's presupposition, then the teacher's decision is to implement the teaching presupposition decision, and its action can be considered automatic generation. If there are abnormalities in the interaction between teachers and students and the teaching situation differs from expectations, the teacher will have to choose the target again. According to the existing orientation and resources, teachers will prioritize various goals, then make a decision corresponding to the preferred goal and mobilize relevant resources to implement the decision. If the execution is smooth and the preferred goal is achieved, then the next goal is moved on; if the implementation does not go well, the teacher will re-decide on the new problem and adjust the action plan to achieve the goal.

Each thing a teacher does to teach can be seen as a set of preferred sub-goals based on the teacher's orientation (beliefs). Once a goal is given priority, resources are automatically mobilized to reach it. Through the above analysis, the teaching decision-making process of teachers can be summarized into a process (Figure 1).

## 3. Research Purpose

As a result, the goal of this paper is to investigate the use of R-G-O teaching decision model theory in the interactive classroom decision-making of junior high school novice music teachers. It provides a direction for the decision-making level and professional development of pre-service

## 4. Method

Our research is a case study that focuses on how two novice music teachers teach using qualitative methods like interviews and observations. The teachers voluntarily agreed to participate in the program. The teachers were aware of the nature of the study. None of them received any financial reward or were forced to participate in the project against their will. To protect the anonymity of teachers, the names of participants in this article are pseudonyms. The teacher has signed the informed consent.

## 5. Research Sample

To obtain more convenient data, convenient sampling for purposeful sampling was adopted in this study [2]. Two novice junior middle school music teachers, M from Yantai public middle school and N from Yantai private middle school, their background information is basically the same. All of them have a bachelor's degree, teaching experience of 2 years, are teaching students in their first year of middle school, and all of them have passed the teacher entrance examination.

## 6. Research Process

In this study, video observation and a semi-structured interview were conducted on two novice music teachers, M and N, in the same music lesson, "Husband and Wife Taking Home."

**Table 1.** Shows the classroom teaching process of two novice music teachers.

Teaching situation	Stage	Public Junior High School M Teachers: The purpose of this lesson is to learn Huang Mei opera singing and related knowledge	Private junior high school N teachers: The purpose of this lesson is to learn Huang Mei opera singing and related knowledge
Get into unfamiliar situations	Teaching introduction	Play several opera videos of different Huang Mei operas. Question: What are the characteristics of these melodies?	Play the video "Husband and wife return home." Question: Which work of Huang Mei Opera is this?
Make decisions based on R-G-O, make decisions	Teaching and learning unfold interactively	<ol style="list-style-type: none"> <li>1. Student answer: The common point is the mood and performance characteristics of opera.</li> <li>3. Teachers and students learn the relevant knowledge of "Huang Mei Opera" together. Teachers group students and ask, what are the other characteristics?</li> <li>4. Students appreciate it again, analyze the difference between the pronunciation of dialects in the melody and lyrics and Mandarin, and summarize the linguistic characteristics of Huang Mei Opera.</li> <li>5. Use the piano and let students sing the melody by sight</li> <li>6. Sing the song in sections to complete the interpretation of the song.</li> <li>7. Depending on the student's learning, it is decided to repeat the singing several times.</li> <li>8. Teachers and students jointly analyzed how to better sing the taste of yellow plum "husband and wife return home" and sang along with the accompaniment.</li> </ol>	<ol style="list-style-type: none"> <li>1The student answered: "Husband and wife return home."</li> <li>2. Play it again, the teacher asks, what kind of drama is this? The student replied: Huang Mei opera. Teachers teach about Huang Mei Opera. And decided to let students take notes.</li> <li>3. The teacher decides to let the students follow the video to learn to sing Huang Mei opera until the concert. Where students are confused, teachers ignore it.</li> <li>4. Students are barely able to sing opera.</li> </ol>
Strive to achieve goals	End of teaching	<ol style="list-style-type: none"> <li>1. Practice the means of expression of opera with students do.</li> <li>2. Practice with students the means of expression of opera – reading.</li> <li>3. The teacher decides to collectively summarize the artistic characteristics of Huang Mei opera and achieve the goal.</li> </ol>	<ol style="list-style-type: none"> <li>1. The teacher requires a concert of Huang Mei opera to review the knowledge points. Achieve your goals.</li> </ol>

After entering the same unfamiliar teaching situation, they taught according to the pre-designed curriculum plan. Through the comparison of the teaching process of the above two teachers, the teachers have different teaching decisions in teaching design, which reflects the differences in the professional knowledge of the two teachers. N teachers in private schools adopt the traditional "macro" teaching method, which focuses on teachers and professors. Play the video of the opera, tell the students about Huang Mei Opera, ask the students to answer which work. In the whole process of teaching interaction, the teacher's purpose is to let students understand some knowledge of Huang Mei Opera and learn to sing. Although I was taught some knowledge about Huang Mei Opera, it was very simple. I did not learn the music score and singing carefully and deeply, and there was no real interaction.

When interviewing teacher N, the author asked why not give students some challenges and let them overcome the difficulty in understanding concepts by themselves. Teacher N said, "These students can't, that will only confuse them. For those good students, you can do this, but they can't, and asking them to memorize the knowledge points and adapt to the exam is the most timesaving and effort-saving choice. The new music teacher's personal knowledge of the abilities of the students in his class and his belief in the educational style he has led to his actual teaching decisions. He did not timely deal with the problems that the students were dealing with and did not help the students according to the available resources (piano, audio, teacher's answers), just to complete the

teaching of this lesson. It can be seen from the above that teaching decision is the process of teaching goal selection based on teachers' beliefs, values, and preferences. In this process, teachers' resources, goals, and orientation are intertwined. The orientation of teachers leads them to establish certain goals, and the adequacy of resources determines whether the goals can be successfully achieved. N The fact that the music teacher still chooses to teach according to the original plan despite the availability of multimedia, textbooks, piano, and other resources shows that there is a problem in his orientation. His values deviated from the direction of a qualified teacher, and his teaching was not student-centered but about getting things done.

However, public M teachers begin this lesson with a "micro," playing several different Huang Mei operas to pique students' interest and get them thinking about the melody characteristics. Constantly ask and explain the knowledge and characteristics of Huang Mei Opera and teach students singing music and opera in different stages according to their learning situation in class. Decide to learn singing several times according to the situation. Finally, lead the students to expand their learning of opera movement and lead the group to summarize the focus of this lesson. When interviewing teacher M, she thought: "Teaching is a two-way interactive process between teachers and students." Music learning is a complex and varied variant; neurotic information is not a single entity and should include auditory, visual, motor, and sensory input from all directions. And if there is no good environment to encourage learners' active participation and

mindful experiences in that "learning process," the result of "learning" can be imagined. As a result, in the early stages of song learning, I used problem-based teaching, allowing students to listen to and feel songs with questions before expressing their own opinions. The teacher only played a leading role. In the section on singing beautiful songs, to let students find out the method of singing beautiful songs through their own feelings, I adopted the method of group discussion, letting students find out the method through collision, and then I led the students to experience, compared the methods of each group, and finally concluded. It doesn't matter if the students' methods are not the best or even wrong. "Learning itself is a process of exploration."

## 7. Result

Through the analysis of the above cases, the teaching of M teachers in public junior middle school can be seen from the small to the big. From "micro" to "macro", it shows that M teachers understand the professional knowledge and can use micro means to promote students' understanding of music and drama, and help students learn music knowledge from the shallow to the deep. In terms of teaching effect, Teacher M can promote students' understanding of the artistic characteristics of Huang Mei Opera and help them form a correct view of learning. Music teachers in different schools differ in their teaching decisions due to their own professional knowledge of music. Therefore, to improve the teaching decision-making level of music teachers, various methods can be adopted to improve teachers' understanding of music subject itself and music subject learning characteristics. N Music teachers in private schools are not organized, and they only serve to complete teaching tasks in the teaching process, which may be related to their lack of systematic training on music lessons and the school's neglect of music courses.

## 8. Conclusion

In interactive music teaching activities, there will be "contingencies" that are different from the general situation and not in line with predictions. Many music teachers believe that interference and errors affect the achievement of the predetermined goal of classroom teaching. Timely adjustment of teaching decision-making strategies and "contingencies" can also become resources to develop students' scientific

literacy. The synergistic development of goal, orientation, and resources is a slow process. Music teachers' beliefs are gradually built up through experience and are often formed unconsciously. Therefore, belief change is often slow and gradual. Even if the beliefs of music teachers have changed, their teaching decisions do not necessarily keep pace with those beliefs because it takes time to develop resources to support those goals. At the same time, for novice music teachers, the rigorous and scientific teaching goal itself is the crystallization of a system of resources and value orientation. The difficulties encountered by novice music teachers in teaching decision-making should be investigated and re-practiced in teaching practices from the three aspects of goal, orientation, and resources, to continuously enrich personal practical knowledge. thus, promoting the effectiveness of music teaching and personal professional development.

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