

# The Self-regulation in Effective Piano Practice: Considering the Role of Teachers

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**Abstract:** This paper examines the significance of effective practice in piano learning, particularly the vital role of self-regulation in practice. The quality of practice rather than the quantity is more important for improving musical skills, and self-regulation significantly enhances learning efficiency and performance. The article highlights the crucial role of teachers in fostering students' self-regulation abilities, including helping them set goals, select effective strategies, conduct self-evaluations, and motivate their learning. By effectively setting goals, choosing strategies (such as slow practice and part-whole practice), conducting self-evaluations, and paying attention to students' emotions and interests, piano teachers can help students become independent learners and improve practice efficiency. Future research can further explore how students can better engage in self-regulation to enhance the effectiveness of piano practice.

**Keywords:** Self-regulation abilities; Independent learners; Practice efficiency

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## 1. Introduction

Practicing is essential in learning an instrument. It is not only an art but also a science. It is necessary and beneficial for students to understand and utilize the way of practice. However, do students know how to practice piano, and is their practice helpful? The author finds that the most able students may not practice more than less able students, which means having more practice does not mean success; the key element is that students should know methods for efficient practice.

A large amount of the literature shows the importance of effective practice. Self-regulation is an inevitable part of effective practice when learning an instrument because self-regulation can motivate students' piano practice and lead students to achieve progress<sup>[1,2]</sup>. McPherson *et al.* (2019) find that self-regulated learning strategies can increase students' learning efficiency and improve their performance<sup>[3]</sup>. Self-regulated learners will help students increase the efficiency of piano practice.

This paper mainly focuses on self-regulation in effective practice. Some students and piano teachers may lack awareness of self-regulation, so this essay will discuss its importance. After that, piano teachers play a

crucial role in piano practice, so they will discuss core elements that teachers can adopt to help students become self-regulated learners, which benefits their piano practice.

## **2. The importance of self-regulated practice in learning piano**

When students practice an instrument, the quantity and quality of practice are always referred to. Some students assume that the quantity of practice is more crucial. However, increasing practice time may not mean musical improvement. Oare (2012) supports that performance can be improved because of effective practice, even though students spend less time <sup>[4]</sup>. The following elucidates the rationale for the necessity of self-regulated practice.

### **2.1. Achievement and self-efficacy**

Self-regulated practice is related to learning achievement. The role of students in self-regulated learning is to be active learners instead of passive recipients. The reason is that self-regulated learners can metacognitively, motivationally, and behaviorally participate in their learning process <sup>[5]</sup>, and they can use metacognitive and cognitive strategies, which are linked to positive learning outcomes. Savina (2021) also supports that there is a positive relationship between self-regulation and academic achievement <sup>[6]</sup>. Consequently, effective self-regulated practice can bring positive achievement.

A higher sense of achievement leads to self-efficacy, which makes students believe that they can complete a task or achieve a goal. Students will have more intrinsic motivation to learn, and they may feel that practice is interesting. Intrinsic motivation can enable students to actively think about problems in their learning and explore ways to solve them, which helps them overcome challenges. Townsend (2012) finds that when students practice an instrument, if they feel more enjoyable and have the freedom to find solutions to address challenges, they can engage more in their practice, which will attain favorable outcomes <sup>[7]</sup>. They will have a sense of achievement and self-efficacy may be increased.

### **2.2. Ability**

In addition to the achievement and self-efficacy, students' ability to address practical problems, goal setting, planning, self-recording, evaluation, and reflection can be cultivated through effective self-regulated practice. In self-regulated piano learning, the role of teachers has transformed into that of facilitators and navigators in the learning process, and students are viewed as active explorers of knowledge. In this process, students need to set goals, schedule their learning plan, evaluate their learning process, and adjust learning methods by themselves with teachers' guidance. Students learn not only knowledge but also the ability to think and address problems. It is vital for students' career development. Pelikan *et al.* (2021) state that self-regulated learning can foster students' planning, time management, and metacognitive strategies, which help students learn successfully <sup>[8]</sup>. Zhang *et al.* (2024) also support the idea that mental and metacognitive strategies can be developed by using self-regulated learning (SRL) <sup>[9]</sup>.

## **3. The role of teachers in self-regulated practice**

Only telling students to practice for enough time is not sufficient. One of the responsibilities of the piano teacher is to guide and help students practice an instrument. There are three main phases of self-regulation: forethought, volitional, and self-reflection <sup>[10]</sup>. Each stage consists of its sub-stages. This essay will emphasize the role of

piano teachers in goal setting, strategy selection, self-evaluation, and motivation to help students practice piano effectively.

### **3.1. Goal setting**

One of the significant components of forethought is goal setting, so the ability to set suitable goals is a substantial part of practicing piano. Effective practice needs goals to guide because if students lack direction, they may not concentrate on their practice, and practice may become a waste of time and effort. Oare (2012) shows that students use time ineffectively sometimes, which influences their learning outcomes because students tend to set vague goals <sup>[11]</sup>. Setting goals can increase attention, which is related to the quality of practice. Having seen this, the piano teacher should help students set a clear goal to help them practice an instrument effectively. Short-term goals and long-term goals should also be considered when practicing because short-term goals may not help students persist in learning an instrument through a difficult period. Long-term goals include passing an examination, preparing a performance, or learning some different style pieces. Short-term goals include overcoming a technical difficulty and learning a technical skill. In a lesson, the piano teacher can discuss with students what they want to achieve this week or even every day, based on their ability, for example, practicing a piece or a scale, or overcoming the difficulty of dynamics. At the same time, piano teachers should take care of the goal that students have adequate time and ability to accomplish because if students cannot achieve their goal, they may feel frustrated, which may influence their self-efficacy.

However, the piano teacher can help students set short-term or long-term goals, but they cannot attend to students' daily practice, so students should know how to set a goal in each day's practice by themselves. That is why self-regulation is vital in piano practice. Having seen this, the piano teacher can help find and think about their problems first and guide students in planning their daily practice. For example, if a student finds that he has issues with the rhythm or dynamics of a piece, after the lesson, when he practices, he can set goals to address the problem of rhythm in this practice time, and he needs to improve the dynamics of the piece next practice time. The premise is that before leaving lessons, the piano teacher should make sure that students know the content, purpose, and methods to practice clearly.

According to the above section, being goal-oriented is vital to helping students become self-regulated learners and improve their practice efficiency. Therefore, students should know how to set goals independently with the piano teacher's guidance.

### **3.2. Strategy selection**

If students can address problems that they face in their practice, the first thing they need to do is to understand what appropriate strategies they can use to solve different problems <sup>[12]</sup>. Consequently, not only do piano teachers need to help students set suitable goals, but they also need to teach students specific strategies to practice piano. Some specific strategies that teachers can consider to introduce students to practicing piano effectively.

#### **3.2.1. Slow practice**

Slow practice is perceived as a valuable way to learn an instrument. Piano practice should be slow because students have enough time to listen and think about their performance, and they can read scores deliberately. This view can be seen in Allingham *et al.*, who state that slow practice is beneficial to learning <sup>[13]</sup>. Having seen this, piano teachers can teach students that if they can use slow practice to overcome complex parts, they need to practice pieces slowly when they read scores first. Additionally, piano teachers should teach students when

they need to practice piano slowly and when students need to adjust the tempo. The reason why students need to master tempo manipulation is that they may elicit negative emotions, neglect music expression, or get stuck in slow playing. Consequently, piano teachers need to emphasize slow practice and guide students to adjust their tempo according to their learning progress.

### **3.2.2. Part-whole practice**

Part-whole practice plays a key role in the practice of an instrument. The core idea of this method is to break down complex learning content into several parts and then gradually integrate these parts to achieve the effect of mastering the whole. Part-whole practice means that students can divide the whole piece into different parts to practice, particularly for the long piece, and then combine different parts to practice until they have mastered the entire piece. This strategy can help students practice effectively because it simplifies the complex piece, and the learning process becomes well-organized and systematic. Picking out difficult passages and practicing repetitively instead of practicing the whole piece without stopping is more effective <sup>[14]</sup>. Consequently, piano teachers can guide students to use part-by-part practice, phrase-by-phrase practice, and chunking practice. Students can find their difficulties through these practices, and piano teachers can help them number the difficulties in order of difficulty and address them one by one. This strategy can be transformed to solve the same problems in students learning new pieces.

The most important thing is that piano teachers need to teach students to link practice strategies to specific problems and help students choose the correct practice tool. In a lesson, the piano teacher should demonstrate and model a particular approach to help students practice piano after lessons. For example, when a student has difficulty with rhythm, the piano teacher can teach the pupil how to use a metronome or tap the rhythm before playing. When students face the same problem in daily practice or the future, they can be aware that they can use these methods to address it.

### **3.3. Self-evaluation**

Self-evaluation is an integral part of self-reflection. It can help students reflect, so teachers need to give students opportunities to evaluate their performance, find their problems by themselves, and try solutions to address those problems.

Firstly, the piano teacher should help them build their confidence to evaluate their performance, for example, by giving specific praise. The ‘sandwich’ can be used in the way of praise: praise-improve-praise <sup>[15]</sup>. This encouragement can increase students’ self-efficacy, which plays a crucial role in self-regulated learning. When students have enough confidence, they may express their views and dare to try different solutions to address problems.

In addition, piano teachers can use questioning and asking to help students identify their performance in order to cultivate their self-evaluation, particularly the Socratic questions. For example, after students play in lessons, the piano teacher can ask students, “How do you feel about your playing? Was it good? What methods do you think can overcome this problem?” Through those questions, the instrumental teacher can enable students to consider their performance and think about some ways to address problems, which can develop students’ ability to assess their playing step-by-step.

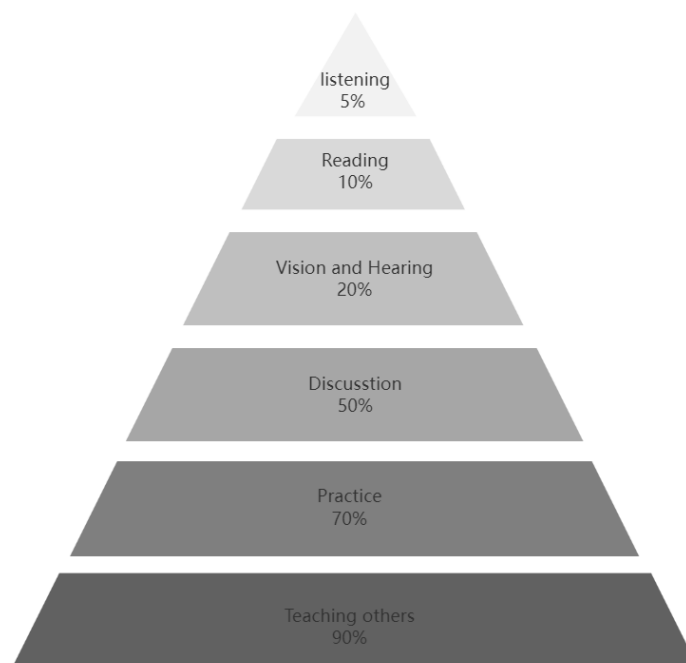
There are some questions based on Socratic questions that piano teachers can use to help students self-regulated practice (**Table 1**). Students may develop their thinking framework through these types of questions.



**Table 1.** Questions can be used in piano classes

Types of questions	Function	Examples
Interpretive questions	Helping students understand from which aspects they can judge their grasp and understanding of the knowledge points, thereby evaluating their learning.	·How do you determine the key and mode of this piece? ·Why did you choose this harmony in this bar? ·How did you determine the structure of this piece ?
Analytical questions	Motivate students to self-assess their learning outcomes and cultivate their critical thinking skills.	·How do you think your analysis just now was ? ·What do you think was the most challenging part for you ? ·What do you think caused the mistake just now ?
Metacognitive questions	Encouraging students to reflect on their own learning process, analyze their practice and the process of achieving their goals, thereby fostering metacognition.	·How did you practice this piece ? ·How did you overcome this difficulty ? ·How will you practice next ?
Implicative questions	Prompt students to engage in broader thinking, connect with cutting-edge knowledge points, and build a framework of thought.	·What influenced the arrangement of this piece ? ·Which concept from last class can be applied in this lesson ? ·Why do we need to do this exercise ?

Another method that can be considered to evaluate learning outcomes is by students. This method is based on ‘Output drives input.’ Based on research data on learning methods and retention rates (**Figure 1**), ‘Teaching others’ is identified as the most effective learning strategy. This strategy is essentially a process of deep learning: students understand and organize knowledge points, construct their logical knowledge system, and ultimately can clearly express this knowledge in their own words. In this process, not only is students’ ability to deeply process and handle information cultivated, but their communication skills are also enhanced, thereby facilitating the internalization of knowledge. Having seen this, students can evaluate their practice efficiency through teaching others, particularly their peers. In this process, students can be aware there deficiency, which helps them set their next goals.



**Figure 1.** Learning methods and learning content retention rate <sup>[16]</sup>.

### **3.4. Motivation**

When students practice an instrument, their challenge is to get involved in practice and make practice enjoyable, which influences their quality of practice. Oare (2012) states that one of the three primary factors that influence students' motivation when practicing is what music to practice, so the choice of music is important <sup>[4]</sup>. Students who always practice repertoire chosen by their teacher look like students practicing this repertoire to satisfy their teachers instead of themselves, which influences their motivation. If students can select repertoires that they are interested in, they can spend more time and get more engaged in practice.

Having seen this, in the lesson, piano teachers should communicate with students about what they want to practice and what music they are interested in; they can choose practice pieces by themselves to intrigue their internal interest.

In addition, at the beginning of practice, students can choose a piece or exercise that they enjoy playing, which can give them energy and motivate them to continue practicing positively, so they feel more confident.

### **3.5. Communication**

Students' emotions are also important in self-regulation. They may experience academic stress, which can lead to a loss of emotional control. The responsibility of piano teachers is to communicate and interact more with students and to pay attention to their emotional changes at all times. For example, piano teachers can engage in more communication with students, covering both academic issues and difficulties encountered in daily life. Secondly, teachers can pay more attention to students' emotional states in the classroom, which can be assessed through students' verbal and non-verbal communication. Non-verbal communication includes facial expression, body movement, and gestures. Piano teachers can focus on these aspects while teaching. If students feel overwhelmed by academic pressure, piano teachers can first consider whether goals are exceeding the students' current abilities. When helping students set goals, teachers can refer to the psychological state hierarchy diagram. Psychologists divide people's psychological states when facing various situations into three levels: the comfort zone, the growth zone, and the panic zone. This means that when piano teachers assist students in setting goals, they can choose goals that are slightly above the students' current capabilities, based on the students' actual situations. Additionally, there are some strategies that piano teachers can consider to help students manage their emotions: taking deep breaths when students feel nervous, feeling every part of the body, visualizing pleasant scenes, and engaging in some exercises.

## **4. Suggestions for future research**

A large amount of literature talks about the importance of self-regulation in learning. Self-regulation is student-centered, and teachers are supporters and guides, so students play a crucial role in successful piano practice. Effective practice can enable them to develop musical skills, memorize music and prepare for musical performances. This essay discusses what piano teachers do to help students become self-regulated, but students need to know how they get involved in self-regulation and what they need to do. Consequently, future research can focus on these aspects to increase students' practice efficiency.

## **5. Conclusion**

This paper emphasizes the importance of practicing effectively first and focuses on the effects of students'

learning achievement, self-efficacy and abilities. Self-regulated practice develops students' abilities to set goals, identify and solve problems, evaluate themselves, and adjust their learning processes; provides students with a sense of achievement; increases their self-efficacy; and intrigues their intrinsic learning motivation. After that, the role of piano teachers is discussed. Four aspects that can be considered to help students get involved in self-regulated practice: goal setting, strategy selection, self-evaluation, and motivation. In addition, this essay makes some suggestions for future research on how students can be more involved in self-regulation and what practical strategies piano students can consider. This issue should be explored further to help students practice piano more effectively.

## Disclosure statement

The author declares no conflict of interest.

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