

# Chapter 11

## Developing Self-regulated Musicians



**Peter Miksza, Gary E. McPherson, Amanda Herceg  
and Kimberly Mieder**

**Abstract** Highlighted within this chapter is a collection of best practices for encouraging student musicians to develop as self-regulated learners. Two model lessons are presented that are emblematic of the kinds of considerations, methods, and techniques that teachers may find useful for classroom applications with a variety of beginning, intermediate, and advanced level performers. A brief discussion of selected aspects of self-regulated learning theory follows the model lessons and this is used as a framework for understanding the processes, skills, and dispositions that are characteristic of self-regulated music learners. We present the primary components of the theory with an eye towards practical applications in the classroom. The chapter concludes with a commentary and analysis of the two model lessons and how these typify approaches to the teaching of musical self-regulation.

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**Table 11.1** Articulation accuracy lesson plan

<b>Teacher:</b> Amanda Herceg, BME, Indiana University; MME, University of Georgia; Indiana Teaching Certification, K-12 General & Instrumental Music		<b>Grade Level(s):</b> Intermediate Instrumental Music (7–10th grade)
<b>School:</b> Tri-North Middle School		<b>Subject:</b> Band
<b>City and State:</b> Bloomington, IN		
<b>Instructional Plan Title:</b> Articulation Accuracy		
<b>National Standards for Arts Education: MUSIC</b>		
Anchor Standard 4: Select, analyze, and interpret artistic work for presentation		
Enduring Understanding: Performers’ interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire		
Essential Question(s): How do performers select repertoire?		
Anchor Standard 5: Develop and refine artistic techniques and work for presentation		
Enduring Understanding: To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria		
Essential Question(s): How do performers interpret musical works? Essential Question(s): How do musicians improve the quality of their performance?		
Anchor Standard 6: Convey meaning through the presentation of artistic work		
Enduring Understanding: Musicians judge performance based on criteria that vary across time, place, and cultures		
Essential Question(s): When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?		
<b>Learning Objectives:</b>		
1. Students will aurally discriminate between articulation styles		
2. Students will demonstrate characteristic tonguing style on a band instrument given written notation		
3. Students will set goals, evaluate and reflect on personal skill development		
4. Students will demonstrate learning through lesson observations, focused practice sessions, and solo performances		
<b>Instructional and Learning Materials Needed:</b>		
Repertoire or etude featuring contrasting articulation styles, instrument for modeling, projector/dry erase board,		
Focused Practice Session paper (see Table 11.2 at the end of the lesson plan)		
Performance evaluation rubric (see Table 11.3 at the end of the lesson plan)		
Video recording technology		
<b>Lesson Duration:</b> 100 min over the span of two class periods		
<b>Teaching and Learning</b>		
<b>Min on this Activity</b>	<b>Targeted Activity</b>	<b>Purpose of Activity</b>
3	<p><b>Orienting Students to Lesson:</b></p> <ul style="list-style-type: none"> <li>• Upon assembling their instruments, students write down the homework posted on the board into their practice journals (see Table 11.1)</li> <li>• Students then begin bell work: “air playing” (blowing through the instrument while fingering) an exercise in the book while focusing on tonguing technique</li> </ul>	<ul style="list-style-type: none"> <li>• Writing down their homework at the start of class ensures students aware of our goal for the day and have their assignments written down</li> <li>• Working independently on the bell drill gets the students ready and focused for the lesson</li> </ul>

(continued)

**Table 11.1** (continued)

<p>10</p>	<p><b>Motivation:</b></p> <ul style="list-style-type: none"> <li>• Capture student interest by making a connection with prior knowledge</li> <li>• Remind students that they have been taught to tongue every note in the music</li> <li>• Informally assess by asking a member of each section to describe their instrument’s tonguing syllable and engage the entire ensemble in a modeling exercise to review</li> <li>• The teacher or a student plays a rhythm on the mouthpiece or entire instrument and the rest of the class echoes back</li> <li>• Rotate through different students as a model</li> <li>• Play a melody two different ways (tongued and slurred) and ask the students to describe the similarities and differences</li> <li>• Explain the difference they hear is a technique called <i>slurring</i></li> <li>• Show students the slurring symbol and explain that from now on it will become part of their everyday playing</li> </ul>	<ul style="list-style-type: none"> <li>• The modeling activity allows for informal assessment of the prerequisite of tonguing all notes before slurring is introduced</li> <li>• Engaging in activities where students work together to discover the learning objectives can enhance intrinsic motivation</li> <li>• Listening and identifying the similarities and differences between two melodies helps students to become aware that not all notes are tongued</li> <li>• A “rote before note” strategy can eliminate visual distractions and help students focus on the sensations necessary for skill development. For example, having students aurally identify and produce a slur between two notes on their instrument before learning what it is called and what it looks like in their music</li> </ul>
<p>10</p>	<p><b>Whole Class Instruction:</b></p> <ul style="list-style-type: none"> <li>• Introduce a simple piece of music that uses slurs and teach new practice strategies</li> <li>• Have students sing the articulation, “Ta-ah” and then sing the articulation while fingering along</li> <li>• Differentiate instruction to meet instrument specific demands, especially for trombone players and percussionists</li> <li>• Have students write a “T” over all of the notes in the music that they will tongue</li> <li>• Ask students if there are other practice strategies that can be used to practice slurring             <ul style="list-style-type: none"> <li>– e.g., repeating small sections, chunking it, and gradually speeding up the tempo</li> </ul> </li> <li>• Conclude the group lesson by rehearsing practice strategies in conjunction with the new strategies</li> </ul>	<ul style="list-style-type: none"> <li>• Rehearse practice strategies to help students develop the skills to aurally detect errors or differences between two similar performances, set attainable goals, apply strategies effectively, and reflect on their progress</li> <li>• The two new practice strategies isolate the physical demands (sing the articulation while fingering along), and the conceptual understanding (write a “T” over tongued notes)</li> <li>• A student’s performance of either exercise will help the teacher better address individual differences</li> </ul>
<p>10</p>	<p><b>Guided Practice/Providing Feedback:</b></p> <ul style="list-style-type: none"> <li>• Students are divided into pairs to prepare for a duet performance on a</li> </ul>	<ul style="list-style-type: none"> <li>• Individual, partner, and small-group practice are valuable because allow students to develop skills in a low-stress environment</li> </ul>

(continued)

**Table 11.1** (continued)

	<p>piece that uses a combination of slurs and tongued notes</p> <ul style="list-style-type: none"> <li>– Considerations: carefully assign groups, giving each member of the group a rehearsing responsibility, hold each student accountable</li> </ul> <ul style="list-style-type: none"> <li>• Following group practice, video record the students’ performance and fill out a rubric with additional open-ended comments <ul style="list-style-type: none"> <li>– Consideration: call playing assessments “solo/duet performances,” because it sounds like a celebration, whereas “playing test” sounds intimidating for some students</li> </ul> </li> <li>• Students review the comments immediately after they perform</li> </ul>	<ul style="list-style-type: none"> <li>• Group practice engages students in interdependent problem-solving scenarios that prepare them for productive chamber music rehearsing</li> </ul>
5	<p><b>Independent Practice:</b></p> <ul style="list-style-type: none"> <li>• Students apply and transfer tonguing and slurring skills.</li> <li>• Monitor independent progress and mastery is monitored through weekly Focused Practice Sessions (see Table 11.2) documentation</li> <li>• Require students to complete one independent practice assignment per week and factored it into their band grade</li> </ul>	<ul style="list-style-type: none"> <li>• Focused Practice Sessions are important, because they help students develop goal setting, effective practice strategies, and reflective tendencies</li> <li>• Students can reflect on the progress made through recordings</li> </ul>
10	<p><b>Evaluation of Learning and Assessments:</b></p> <ul style="list-style-type: none"> <li>• Use classroom observations, guided practice, and independent practice activities as formative assessments</li> <li>• Use in-class solo performances for summative assessments</li> <li>• Use a detailed rubric and written comments to judge mastery on formative and summative assessments (see Table 11.3)</li> <li>• Students receive feedback via a rubric and comments instantly after a solo performance</li> </ul>	<ul style="list-style-type: none"> <li>• Solo performances carry the most weight in summative assessments because students demonstrate their achievement in a single performance with immediate feedback</li> <li>• The immediate feedback and saved video can be used later to form a portfolio of student growth</li> </ul>
2	<p><b>Closing Activities:</b></p> <ul style="list-style-type: none"> <li>• End each lesson by verbally spot-questioning student understanding of the new slurring technique, practice strategies, and homework practice assignments</li> </ul>	<ul style="list-style-type: none"> <li>• The closing activity reminds students what they accomplished in class and what they need to do to continue improving and be prepared for tomorrow’s lesson</li> </ul>

(continued)

**Table 11.1** (continued)

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**Specific Strategies used to Address Exceptional Students and/or Students for whom English is a Second Language:**

- Enrichment activities include having students compose a melody using slurs, be a leader for a modeling activity, or engage in structured improvisation activities that incorporate variety in articulation. See whole class instruction for ENL strategies
  - ENL adaptations include modeling rather than using several descriptive words, asking students to repeat key vocabulary words, and having students point in the music where we are starting and comparing with their neighbor
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## 11.1 Narrative of the Articulation Accuracy Lesson

Tri-North Middle School is a public middle school in the Monroe County Community School Corporation in Bloomington, Indiana. Tri-North Middle School serves 591 students in grades 7–8; 38% of students received free or reduced lunch, and the minority enrollment (22%) is mostly African American and Asian students. A fine art credit is not required for high school enrollment and approximately 22% of the study body participates in band, choir, or orchestra. There are three heterogeneous sections of beginning band and two heterogeneous sections of advanced band (i.e., mixed brass, woodwind, and percussion instrumentalists) with all sections of each band coming together for concerts after a few full band rehearsals. The class size of each band section ranges from 10 to 30, and most classes contain 1 or 2 students with exceptionalities who require an Individualized Education Plan (IEP).

The learning objectives for this lesson were inspired by a common challenge for middle school instrumentalists: independent practice. In my own classroom, I realized that when students practice independently they tend to practice holistically rather than analytically. Such holistic practice is characterized by playing through a piece once from beginning to end before moving on to something new. Students often overlook mistakes and this results in inefficient practice in which errors are repeated without being corrected. Consequently, three learning objectives were chosen as a means of improving the students' practice. These three learning objectives aimed to enable the students: (a) to demonstrate characteristic tonguing style on a band instrument with written notation; (b) to set goals, evaluate, and reflect on their personal skill development; and (c) to demonstrate what they have learned through lesson observations, focused practice sessions, and solo performances (see Table 11.1). These objectives align well with the National Standards for Arts Education anchor standards related to performance outcomes (National Core Arts Standards, n.d.). The lesson duration is one hundred minutes over the span of two class periods, and the lesson materials included an etude featuring contrasting articulation styles, an instrument for modeling, a projector or dry erase board, a Focused Practice Session template (Table 11.2), and video recording technology.

An efficient music classroom learning environment is one where procedures are consistent and well-rehearsed. When students enter the band room, they immediately go to their assigned seat with their instrument, music stand, music, and a pencil. When

**Table 11.2** Practice journal and focused practice session homework templates

## TRI-NORTH BAND PRACTICE JOURNAL

Name \_\_\_\_\_ Period \_\_\_\_

	Friday	Weekend	Monday	Tuesday	Wednesday	Thursday
<b>Homework</b>						
<b>Practice Time</b>						

**FOCUSED PRACTICE SESSION** DATE: \_\_\_\_\_ START TIME \_\_\_\_:\_\_\_\_

**PRACTICE GOAL:** \_\_\_\_\_

	Music that I played	Practice strategies that I used
<b>Warm-Up</b>		
<b>Book Exercises</b>		
<b>Concert Music</b>		
<b>Instrument Care</b>		

**END TIME** \_\_\_\_:\_\_\_\_

**THIS IS WHAT IMPROVED:** \_\_\_\_\_

**THIS IS WHAT I NEED TO KEEP WORKING ON:** \_\_\_\_\_

**PRACTICE STRATEGY IDEAS**

A- COUNT THE RHYTHM	E- USE A METRONOME	I- PLAY 5 TIMES PERFECT
B- SAY THE NOTE NAMES, FINGER ALONG	F- USE A TUNER	J- PLAY WITH ACCOMPANIMENT
C- AIR PLAY	G- START SLOW AND GET FASTER	K- SING YOUR PART
D- REPEAT SMALL SECTIONS	H- CHUNK-IT	L- PLAY THE RHYTHM ON ONE NOTE

the bell rings, students assemble their instrument, write down their homework in their Practice Journal (Table 11.2), and start on the bell work. The agenda for the day, bell work assignment (silently practice notes and rhythms in the etude), and homework assignments (complete a Focused Practice Session template and prepare the etude for a duet performance tomorrow) are projected in the front of the band room.

The targeted activity for the lesson described here is simplified to a novice level. I selected a simplified activity to demonstrate how the concept of slurring notes is introduced; however, these lesson procedures can be transferred to intermediate level articulation skills by reviewing familiar articulations before introducing new articulations or faster tempos.

I begin the lesson by informally assessing the prerequisites of tonguing by asking a member of each section to describe or demonstrate an appropriate tonguing syllable for their instrument (e.g., “Tah, Toh, Tu”). Then, I engage the entire ensemble in a call and response exercise to review good tonguing technique. Using the pitches concert Bb and concert D, I play a four beat melody for the class to immediately echo back on their instrument. I then assess tonguing technique, and address student-specific needs before repeating these activities several times and allowing student volunteers to model the pattern. Next, I play a melody two different ways (tongued and slurred) and ask the students to describe the similarities and differences between the melodies. Students should conclude that while the notes and rhythms are the same, the first melody was tongued and the second melody was not tongued. Then, I explain that the difference they hear is a technique called *slurring*, so I show students the slurring symbol, and explain that slurring will become part of their everyday playing to add variety in melodies. I continue with the call and response exercise with the addition of occasional slurred notes, and address specific student needs. Now that students can aurally identify and produce a slur between two notes on their instrument, I teach them what the slur symbol looks like in the context of the etude. The purpose of this “rote before note” strategy is to eliminate the visual distractions of the musical notation in order to focus on the physical demands required to master this skill.

Once I have reviewed the prerequisites, the students are able to visually and aurally identify the new articulation. It is important to rehearse practice strategies that will help them master the new articulation in the context of the etude with rhythmic variety. Two effective practice strategies for learning slurs in a group setting are to have students sing the articulation, “Tah-ah” and sing the articulation while fingering along. Differentiated instruction is required to meet instrument specific demands, especially for trombone players and percussionists. Trombone players can sing “Tah-dah” and percussionists can count the rhythm while playing on mallets. As a second strategy, I ask students to write the letter “T” over all of the notes in the music that they will tongue, and to identify other practice strategies that can be used to practice slurring such as repeating small sections and gradually increasing the tempo. I conclude the lesson by rehearsing these practice strategies as a group in conjunction with the new articulation strategies.

To close the lesson, I explain that the goal for tomorrow will be to split into pairs to rehearse and perform this etude for the class. For homework, students are expected to complete a Focused Practice Session template (Table 11.2), that requires students to employ several self-regulatory skills: goal setting, identification of effective practice strategies, and reflection.

On the second day of this lesson, students follow the same beginning-of-class procedures as the first day. I have the students play through the etude as a full class, and then ask them to identify areas of the piece that need the most improvement. I then encourage student input on the strategies that would be most effective to maximize improvement and rehearse a few of these with the full class before continuing to the guided practice section of the lesson. Next, I divide the students into pairs to prepare for a duet performance on the etude. Each pair is encouraged to share

Table 11.3 Performance evaluation rubric

Criteria		Ratings				Pts
Pitch Accuracy <a href="#">view longer description</a>	All Correct 3 pts	Mostly Correct 2 pts	Sometimes Correct 1 pts	Needs Improvement 0 pts	3 pts	
	All Correct 3 pts	Mostly Correct 2 pts	Sometimes Correct 1 pts	Needs Improvement 0 pts		
Rhythm Accuracy <a href="#">view longer description</a>	All Correct 3 pts	Mostly Correct 2 pts	Sometimes Correct 1 pts	Needs Improvement 0 pts	3 pts	
Air Support/Embouchure <a href="#">view longer description</a>	Air support and embouchure are appropriate 2 pts	Air support or embouchure is inconsistent or needs improvement. See comments. 1 pts	Air support and embouchure need improvement. 0 pts		2 pts	
	Air support and embouchure are appropriate 2 pts	Air support or embouchure is inconsistent or needs improvement. See comments. 1 pts	Air support and embouchure need improvement. 0 pts			
Articulation <a href="#">view longer description</a>	Tonguing technique is appropriate. Tongued and slurred notes are all accurately performed with clarity. 3 pts	Tonguing technique is appropriate. Tongued and slurred notes are mostly accurate. 2 pts	Tonguing technique is appropriate, but tongued and slurred notes are performed inaccurately. 1 pts	Tongued and slurred notes lack clarity. Tonguing technique needs improvement. 0 pts	3 pts	
	Tonguing technique is appropriate. Tongued and slurred notes are all accurately performed with clarity. 3 pts	Tonguing technique is appropriate. Tongued and slurred notes are mostly accurate. 2 pts	Tonguing technique is appropriate, but tongued and slurred notes are performed inaccurately. 1 pts	Tongued and slurred notes lack clarity. Tonguing technique needs improvement. 0 pts		



practice strategies that they found most useful in their Focused Practice Session homework assignment. Then, the students practice together in pairs for 10 min to prepare the piece using strategies that they have found to be most effective at home. Finally, each pair performs for the class. I then video-record each performance and fill out a rubric with additional open-ended comments so students have access to feedback immediately after their performance (Table 11.3). To maintain student engagement, I ask class members who are observing each pair, to think about one positive and one constructive comment that they can share with their classmates. I randomly call on these students to provide feedback for the performers.

To conclude the lesson, I use verbal spot questioning to confirm student understanding of slurring identification (visual and aural) and performance. For example, “When you see a piece of music, how do you know when to slur? What does it mean to slur? What steps would you take to teach this to a friend?”

A feature of this lesson is that it involves a sequenced approach to introducing the new skill of teaching through modeling, aural identification, physical performance of the skill, and finally visual identification. This allows teachers to quickly assess student comprehension and performance of the new skill before they apply this knowledge within the context of learning an etude. Another strength is the ability for students to engage in guided practice, individual practice, and collaboration with peers in order to develop a deeper understanding of the new concept. Teachers may find it challenging to engage students in independent group work if they are not careful to organize the activity and communicate expectations of student behavior. Given the large class sizes of instrumental ensembles, it is imperative that students have a clear idea of how to collaborate. If not, classroom management issues could result in significant problems. The most important feature of this lesson is that it allows students to transfer the skills, knowledge and understandings gained from the learning activity to any other skill and concept that is taught in a performance based class. It can also help to overcome some of the problems students experience when practicing without their teacher’s guidance. In these situations, it is common for them to practice holistically by running through the etude without thinking analytically or using effective practice strategies. An expected outcome therefore is that students will apply the error detection and practice strategies they acquire as part of the lessons during their own daily practice. Teachers can help to ensure that their student’s practice effectively by moving around the room during these types of group collaboration and asking individual members of the class to identify the sections in the music that they believe need the most improvement. Importantly, they should also encourage students to reflect on the strategies they need to employ in order to ensure they improve.

## **11.2 Narrative of the Practice Strategies for Band Lesson**

This lesson describes a 90-min training class that takes place after school. Students representing grade levels nine through twelve and from all levels of playing ability often participate in the lesson (Table 11.4). The class this lesson was designed for

**Table 11.4** Practice strategies for band lesson plan

<b>Teacher:</b> Kimberly Mieder, High School Band Director, Hillsborough High School, Tampa Florida; University of South Florida Doctoral Candidate in Music Education Research, Educational Psychology and Conducting	<b>Grade Level(s):</b> High School Instrumental Music (9–12th grade)	
<b>School:</b> Hillsborough High School	<b>Subject:</b> Band	
<b>City and State:</b> Tampa, Florida		
<b>Instructional Plan Title:</b> Practice Strategies for Band		
<b>National Standards for Arts Education: MUSIC</b>		
Anchor Standard 4: Select, analyze, and interpret artistic work for presentation Enduring Understanding: Performers’ interest in and knowledge of musical works, understanding of their own technical skill, and the context for a performance influence the selection of repertoire Essential Question(s): How do performers select repertoire?		
Anchor Standard 5: Develop and refine artistic techniques and work for presentation Enduring Understanding: To express their musical ideas, musicians analyze, evaluate, and refine their performance over time through openness to new ideas, persistence, and the application of appropriate criteria Essential Question(s): How do performers interpret musical works? Essential Question(s): How do musicians improve the quality of their performance?		
Anchor Standard 6: Convey meaning through the presentation of artistic work Enduring Understanding: Musicians judge performance based on criteria that vary across time, place, and cultures Essential Question(s): When is a performance judged ready to present? How do context and the manner in which musical work is presented influence audience response?		
<b>Learning Objectives:</b> Students will demonstrate an understanding of processes and strategies that can enhance practice effectiveness and performance achievement		
<b>Instructional and Learning Materials Needed:</b>		
<ul style="list-style-type: none"> <li>• Unison band etude or a particular section of a full band arrangement of your choice that has been transcribed for unison practice</li> <li>• A list of suggested practice strategies (see Table 11.5 at the end of the lesson plan)</li> <li>• A “Rules of the Road” handout (see Table 11.6 at the end of the lesson plan)</li> <li>• A Practice Processes Worksheet that includes guidelines for Cooperative Group Activities (see Table 11.7 at the end of the lesson plan)</li> <li>• Video recording equipment</li> </ul>		
<b>Lesson Duration:</b> 90 min (1 block session or split across two more typical class lengths)		
<b>Teaching and Learning</b>		
<b>Min on this Activity</b>	<b>Targeted Activity</b>	<b>Purpose of Activity</b>
3	<b>Orienting Students to Lesson:</b> <ul style="list-style-type: none"> <li>• Students organize themselves by taking out their instruments, folders, and pencils and being seated by the starting time</li> </ul>	<ul style="list-style-type: none"> <li>• Everyone needs to be ready to begin at the same time</li> </ul>

(continued)

**Table 11.4** (continued)

<p>10</p>	<p><b>Motivation:</b></p> <ul style="list-style-type: none"> <li>• Students will listen to several recordings of advanced pieces including a technically challenging unison etude</li> </ul>	<ul style="list-style-type: none"> <li>• Challenging yet appealing music will motivate students to practice during the lesson</li> </ul>
<p>15</p>	<p><b>Whole Class Instruction:</b></p> <ul style="list-style-type: none"> <li>• Explain the importance of practice</li> <li>• Play the unison etude will take place first with no attempt to correct errors or assess performance quality</li> <li>• Video record the sight reading session of the full band excerpt</li> <li>• A list of practice strategies is provided for reference                             <ul style="list-style-type: none"> <li>– Check list consists of three categories strategies: repetition, element elimination, and make it musical (see Table 11.5)</li> </ul> </li> <li>• Discuss the practice strategies and how apply them to solve musical problems</li> <li>• Question students about other challenges and what strategies they might apply to remedy performance problems</li> </ul>	<ul style="list-style-type: none"> <li>• Sight-reading etude will give the students an opportunity to experience the challenges present</li> <li>• The list offers guidelines for self-monitoring during practice and making adjustments when strategies appear to be ineffective</li> </ul>
<p>20</p>	<p><b>Guided Practice/Providing Feedback:</b></p> <ul style="list-style-type: none"> <li>• Students observe each other as they practice in small groups using the practice strategy checklist                             <ul style="list-style-type: none"> <li>– The students are grouped in pairs of two and asked to practice for 10 min while one student observes and checks off the observed behaviors on the practice strategy checklist (Table 11.6) while the other practices the etude, then they switch roles</li> </ul> </li> <li>• Students conduct small-group verbal mediation exercises using</li> </ul>	<ul style="list-style-type: none"> <li>• Group work provides opportunities for peer collaboration and risk taking</li> <li>• The sharing and modeling will further reinforce the definition and appropriate application of each strategy</li> </ul>

(continued)

**Table 11.4** (continued)

	<p>the Practice Processes Worksheet (Table 11.7)</p> <ul style="list-style-type: none"> <li>– The students think aloud by saying what they are doing and why they are doing it during the practice session</li> <li>– One student will practice while the other interjects with questions pertaining to the purpose, goal, and effectiveness of their peer’s practicing</li> <li>• Teacher leads group discussion where students share and model the practice behaviors that were verbalized using the practice strategy check list as a guide</li> </ul>	
30	<p><b>Independent Practice:</b></p> <ul style="list-style-type: none"> <li>• Students sight read a small section from a challenging yet appealing full band arrangement</li> <li>• Students then practice their respective parts individually for 20 min using the strategies that they have learned thus far</li> </ul>	<ul style="list-style-type: none"> <li>• Giving students an opportunity to apply the practice strategies to a full band work that they are motivated to play provides an opportunity for transfer</li> <li>• Individual practice will allow the instructor to observe students and assess their use of strategies</li> </ul>
10	<p><b>Evaluation of Learning and Assessments:</b></p> <ul style="list-style-type: none"> <li>• A video recording will also be made of the final performance of the etude after the practice session</li> <li>• A random sample of the practice behaviors the students observed among their peers will be compared to the teacher’s observations made during the students’ individual practice sessions</li> </ul>	<ul style="list-style-type: none"> <li>• The recordings can be played as part of the final discussion giving students an opportunity to provide feedback and assessment</li> </ul>
12	<p><b>Closing Activities:</b></p> <ul style="list-style-type: none"> <li>• Students return to the full band setting to perform the work a final time and to listen to recordings</li> <li>• A final group discussion provides opportunities for</li> </ul>	<ul style="list-style-type: none"> <li>• The final performance and discussion after the 20-min break out session of individual practice provides an opportunity for a summative assessment</li> </ul>

(continued)

**Table 11.4** (continued)

	feedback and assessment as well as a review of strategies and adjustments that were most effective • Students are provided with suggestions for future practice sessions	
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**Specific Strategies used to Address Exceptional Students and/or Students for whom English is a Second Language:**

- Students with ESE limitations can be grouped with another student who speaks their language, and can mentor and assist struggling students
- Students of exceptionality can be given additional time to complete the group activities and can also be provided with extra follow-up reiteration by the instructor as well as more advanced band students

typically has 30 brass and woodwind players with about 10 years of experience on their instruments. All students are enrolled in either the intermediate or advanced level band course that meets daily in a public high school in the Southeastern United States. This particular high school is an inner-city urban school that serves a population of approximately 70% traditional students and 30% International Baccalaureate magnet program students. The class represents a diverse population of Caucasian (46.6%), African American (16.6%), Hispanic (30%), and Asian (6.5%) students. The lesson included in this chapter can be helpful for fulfilling the performance standards of the National Standards for Arts Education, particularly those pertaining to analyzing, evaluating, and refining performances.

My lesson begins with a short listening session of both a recording of a unison Etude for band that contained technical and lyrical challenges and the “Folk Song Suite” by Vaughan Williams. The unison etude and the full band arrangement were introduced in the previous week’s classes during which students were given an opportunity to sight-read the music as a group before practicing the works on their own. The students’ initial sight-reading of the Etude is video recorded. At the start of the lesson the students create a second video recording of the unison etude. This is followed by a teacher-led discussion that encourages the students to express their opinions concerning the challenges present in the music. Much of the discussion can focus on the technical challenges posed when attempting to play the etude at an appropriate tempo. I then provide students with a list of suggested practice strategies that I had compiled based on my own research of the most accepted and effective strategies of college music majors and professionals. Using the resulting 22 practice strategies check list (see Table 11.5), I then begin to connect the challenges and concerns students identified with the appropriate practice strategies on the list. While defining each of the 22 practice strategies, I also provide the students with an opportunity to make a connection between knowledge and function by applying each of the strategies to a problem area in the etude. The students are then asked to play through selected parts of the etude using these suggested strategies to

**Table 11.5** Practice strategies checklist

22 Practice Strategies Check List	
1. _____	Repeat a single measure
2. _____	Repeat a section of the music
3. _____	Repeat the entire work from beginning to the end
4. _____	Mark the part (indicate each time they attempt to mark the part)
5. _____	Slowing down a small part or the entire piece
6. _____	Slowing down and then gradually bringing a section or measure back to tempo
7. _____	Skipping directly to musical sections of the etude and just practicing those spots
8. _____	Use of metronome
9. _____	Sizzle or sing the music away from the instrument
10. _____	Sizzle or sing while fingering the instrument
11. _____	Speak the note names as you finger on your instrument
12. _____	Clap and count or just clap
13. _____	Chaining or whole part whole repetition
14. _____	Play it backwards
15. _____	Take out the articulation and practice with one constant articulation instead, then put the correct articulation back in and play the passage or section as originally written
16. _____	Take out the rhythm and just play the notes in a straight beat, then put the correct rhythm back in and play the passage or section as originally written
17. _____	Make up a more difficult rhythm than what is there in a particular section, then put the correct rhythm back in and play the passage or section as written
18. _____	Close your eyes and picture the musical passage in your mind (mental practice), playing the passage in your mind fingering the instrument and using the body movement that is required
19. _____	Make an attempt to demonstrate dynamics throughout the session
20. _____	Make an attempt to create musical phrasing and explore numerous ways to speak a particular musical thought or sequence of measures
21. _____	Examine different articulation, dynamic, and/or tone color for musical expression
22. _____	Taking a short technical passage and playing one note at a time then adding notes one by one gradually increasing tempo until the passage is solid and up to tempo (woodshedding)

experience the problem solving processes as a group. I categorize the 22 practice strategies into three groups for better recollection and understanding; Element Elimination, Repetition, and Make It Musical. This categorical list of the strategies is used alongside an additional document titled the Rules of the Road (see Table 11.6) which provides guidelines for adjusting and self-monitoring whilst practicing.

I use three group activities to scaffold the students' understanding and application of effective practice techniques. The three activities are the (a) Practice Behavior Observation exercise, (b) Verbal Mediation exercise, and (c) the Practice Processes Worksheet/Intermittent Questioning exercise (see Table 11.7). All three of the cooperative group activities are followed by a teacher-led group discussion that included questioning and student demonstrations for assessment.

**Table 11.6** Rules of the road worksheet

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Practice strategies by category and making adjustments

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Take it out of context/element elimination

- Alter the tempo
- Skip directly to a difficult section
- Sizzle and finger the notes while adhering to dynamics and articulation
- Play a passage or entire selection in straight quarter notes while only focusing on pitch and fingering
- Take out the articulation and/or alter the rhythm to increase challenge
- Play it backwards
- Mental practice

Thoughtful repetition

- Repeat one measure, repeat small sections, or repeat from beginning to end
- Use chaining and/or whole part whole repetition strategies
- Use the metronome effectively
  - Know where the pulses fall in each measure
  - Understand what note value receives the beat
  - Set the metronome either to the pulse or a subdivided pulse
- Woodshedding

Make it musical

- Experiment with dynamics, tone color, tempo variation
- Create phrasing by exploring expressive articulation, dynamics, and/or varied tone
- Explore numerous ways to speak a musical sentence or sequence of thoughts

Making adjustments along the way ... “The 5 rules of the road”

1. Always slow things down
2. If you take it out, put it back
3. Don’t go from zero to sixty
  - a. Always proceed gradually
  - b. Slow then gradually faster
  - c. When taking elements out put them back one by one
  - d. When woodshedding, vary the starting spot
4. Use Repetition with thoughtful Intent
5. Use Pauses: “what are you thinking and what you are focusing on”

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For the Practice Behavior Observation exercise, the students are grouped in pairs to work collaboratively for 20 min. For 10 min, one student practices while the other observes and documents practice behaviors using the 22 practice strategies check list. The students then switch roles for another 10 min. A teacher led discussion follows the cooperative activity that gives students an opportunity to discuss and demonstrate the practice strategies that they observe. During this first break out activity, I make myself available for questions and assist as a guide while students work in their respective groups. For example, sometimes I observe a practice behavior and notice that the student observer is not checking it off, so I could then assist in re-centering their focus. The students learn to define and apply the strategies and tend to enjoy these opportunities to demonstrate how they can master the etude by using a particular strategy from the list.

The second activity, “Verbal Mediation,” was designed to provide students with an opportunity to verbalize what they were doing as they practiced. Now that they have a language to use that could help them describe their choices, they can also be

**Table 11.7** Practice processes worksheet**1. Practice behavior observation exercise**

- a. Students work in groups of two
- b. One student practices while the other student checks off the practice behavior he or she observes on the practice strategy check list
- c. A follow-up full-group discussion of the practice behavior observed

**2. Verbal mediation exercise**

- a. Students work in groups of two
- b. Students will take turns verbalizing every practice decision and goal as they practice while their partner observes
- c. Observer will check off practice behaviors on the strategy checklist

**3. Setting goals and making adjustments**

- a. In groups of two, students will set a practice goal and decide on strategies to use
- b. While one student practices, the other student will interject periodically with the following prompts requiring the student to answer before continuing
  1. What are you thinking about as you practice?
  2. What are you focusing on?
  3. Are you using a practice strategy, and if so which one?
  4. Is the strategy you are using working, if not, what should you do now?

asked to think aloud by explaining their intentions and their processes as they practice while the other student checks off what they observe on the practice check list. This is done in groups of two and, again, the students switch roles after 10 min.

The third group activity, the “Intermittent Questioning” exercise, encourages students to work together to define a practice goal related to refining the etude. One student then practices with this goal in mind while the partner student intermittently interjects questions such as: “What are you focused on? Why?”; “What strategy are you using right now? Why?”; and “Is what you are doing right now helping you reach your practice goal?”

After completing all three group activities and the respective follow-up discussion sessions, the students perform the unison etude as a group once more. The performance is video recorded and played alongside the earlier recordings so that the students can assess the performances and evaluate their progress. As a final activity, I play the exemplar recording of the “Folk Song Suite” by Ralph Vaughn-Williams again, remind the students of their desire to learn this new and challenging piece, and we sight read the work again. I then instruct the students to practice individually for 20 min using what they had learned from the group activities and the 22 practice strategies check list. After the 20-min break out practice session, we play the piece again, which provides the students with an opportunity to perform with greater proficiency and ensemble cohesiveness. The students are then engaged in a discussion concerning their goals and the “what”, “when” and “how” of practice strategies that can be used to improve one’s playing. I then ask the students to explain what their individual challenges were with this piece, what practice goal they set for themselves, and what strategies they used to accomplish that goal. The students are also asked to share what they had achieved and how they accomplished this by modeling their practice behavior for the group.



The lesson concludes with a collective commitment to continue to practice using the 22 practice strategies and “Rules of the Road”. I also provide the students with a handout that I designed to assist them in organizing both their individual practice time as well as their small ensemble and instrument sectional rehearsals. The handout provides suggestions for keeping a practice log for themselves and a framework for section leaders to design well-balanced practice sessions with follow-up and accountability procedures for their section members.

My students enjoy working in small groups as the cooperative learning activities provided them with an opportunity to reflect, share ideas, and take risks. It is typically evident in their mastery of the strategies and concepts that this collaborative model helps to stimulate learning in a way that direct- or teacher-led instruction alone does not always achieve. Coordinating small-group practice activities can be challenging for some students since it requires that students be prepared to analyze their own and/or their peers playing and practicing. However, with careful planning and preparation, students will enjoy the change of pace. In addition, navigating the recording technology for immediate listening can be problematic if not prepared carefully ahead of time. The curriculum that this lesson plan is based on provides students with an accessible tool box of practice strategies and processes that help them to problem solve in their practice endeavors both as a group and individually. In this way, it contributes to the advancement of their independent learning abilities.

## **11.3 Self-regulated Learning Theory and Musical Development**

### ***11.3.1 Introduction***

Successful musicians devote large amounts of their time to individual, solitary practice in order to improve their performance abilities (Hallam et al., 2012). As such, acquiring music performance skills necessitates learning how to more effectively and efficiently monitor and control one’s own learning. It is clear that accomplished musicians have at some point acquired a deep understanding of how to motivate and manage their own learning processes (Hallam, 1997; McPherson, 2005). Traditionally, the development of these understandings hinges on individualized instruction from an expert performer and master teacher (Sosniak, 1985). However, music performance instruction in North American schools typically involves large-group instruction in bands, choirs and orchestras where the needs and priorities of the ensemble can often outweigh those of any given individual. Unfortunately, music teachers tend to emphasize instructional objectives that lead to fine ensemble performances but lack sufficient specific emphasis on the development of each individual student’s abilities. For example, it is relatively common within this area of music education to find that although a school music ensemble

may be quite successful, the individuals that make up the ensemble are lacking in independent skill and understanding. As a result, many students in these types of ensembles do not develop the intellectual and musical capacity to guide their own practicing outside of the classroom, which for some can lead to a lack of motivation and/or ultimately attrition from their school program (McPherson, Davidson, & Faulkner, 2012a). Moreover, it is also the case that many of those who continue to learn music until the final years of schooling do not continue performing once they leave school. Part of the reason is that they have not developed sufficient self-regulatory abilities to take charge of their own musical learning independent of their membership of an ensemble (McPherson et al. 2012a).

It is clear that music teachers can benefit from a conceptual model that provides a clear description of the critical processes as well as the dispositions, skills, and intellectual abilities that support individualized learning. We believe therefore that self-regulated learning theory is an intuitively-appealing, evidence-based framework for describing how developing musicians can be empowered to take control of their own learning. In this section of the chapter we will describe how the model lessons documented above can mitigate some of the challenges inherent in school music performance instruction by explicitly and systematically reinforcing principles that are consistent with self-regulated learning theory.

### ***11.3.2 Self-regulation Principles and Music Learning***

The principles of self-regulated learning theory are directly aligned with best practices in music education. Several scholars have provided extensive treatments of the relevance and application of self-regulated learning theory to research and pedagogy in music education (e.g., McPherson, Nielsen, & Renwick, 2012b; McPherson & Zimmerman, 2011; Prichard, 2012; Varela, Abrami, & Uptis, 2016). Zimmerman's (2000) social cognitive theory of self-regulated learning is the most prevalent framework in the music education literature and consequently, it is this framework we apply to the discussion in this chapter. There are two key aspects of Zimmerman's theory that we will focus on as we relate self-regulated learning theory to practical issues of music teaching and learning. The first is the three-phase, cyclical process that can be used to illustrate how self-regulated learning is carried out in the moment, and the second is a developmental trajectory involving four stages that describes the steps along the journey of becoming self-regulated. We refer the reader to DiBenedetto (2018/this volume) for a more in-depth discussion of the various components of self-regulated learning theory.

Self-regulated learning unfolds in real-time as a cyclical process wherein a learner negotiates through three phases: forethought, performance, and self-reflection (Zimmerman, 2000). McPherson and Renwick (2011) have presented a detailed description of some of the context-specific processes that each of these phases can embody in music learning. We provide a summary of some of the primary considerations here.

The forethought phase of the self-regulated learning cycle is characterized by the application of task analysis abilities and the influence of selected self-motivation beliefs. In this phase, the music student chooses goals and develops a strategic plan for achieving those goals. Many music teachers would agree that developing musicians are often unaware or at least unfamiliar with the work associated with this phase. For example, beginning and intermediate musicians typically start their practice without clarifying specific goals and without having a pre-conceived strategy for working through the musical challenges they face (Miksza, Prichard, & Sorbo, 2012). Music teachers can help their students become more thoughtful in the forethought phase of learning in a variety of ways. For example, ensemble directors can ensure that they teach students how to analyze musical works by identifying the challenges that are posed when learning new repertoire and then prioritizing techniques for mastering these challenges through positive habits that increase the efficiency of students' practice. Moreover, it can be insightful for students when their ensemble directors share their own insights and reasons for setting rehearsal goals, developing rehearsal plans, and applying rehearsal techniques.

The forethought phase also incorporates the influence of motivational beliefs from the outset of the learning process. Accordingly, students' efficacy beliefs, interests, achievement orientations, and outcome expectations can play a large role in (i) what they choose to do, (ii) their attitudes towards the learning process, and (iii) their willingness to invest deeply and persist with their learning. Music teachers can influence their students' beliefs by helping them choose moderately challenging goals they can accomplish in a reasonable period of time, delivering careful feedback, and designing assessments that emphasize mastery and progress as opposed to social comparison and competition among peers.

Within the performance phase of the self-regulated learning cycle students engage in self-observation as well as learn how to take control of their approach to solving musical challenges during the act of performing. During this phase, students need to balance their ability to be flexible and adaptive to performance problems as they arise with an emphasis on directing their attention towards their immediate goals and desired level of performance. Self-regulated musicians are able to balance these two tasks and/or toggle back and forth between them without overwhelming their working memory capacity (Duke, Cash, & Allen, 2011). Capable self-regulated music learners will keep the musical product they are striving to achieve at the focus of their activities but are also able to adapt and adjust according to performance errors as they occur. Music teachers can encourage students to practice with an ideal image of the musical product in mind. It would also be beneficial for teachers to encourage their students to use tools to help them develop an awareness of their progress during the act of performing. For example, backing tracks, metronomes, and recording devices can be effective as external reference points and forms of feedback for students when performing on their instrument (or voice).

Self-regulated music students will also direct their own learning in the performance phase by covertly or overtly monitoring their concentration, regulating their emotions, and applying effective learning strategies. Students who demonstrate

self-control during learning have been able to direct themselves towards priority goals and recognize when they are becoming distracted, and when they need to re-direct their attention. They will also be able to manage negative emotions emerging from failures or repeated unsuccessful trials such that they will retain or rebuild enough energy to persist. Self-regulated musicians also have the ability to choose appropriate strategies for mastering challenging tasks (e.g., chunking, slowing, whole-part practice) and are able to apply their strategies thoughtfully. Music teachers can reinforce these strategies, techniques and approaches by encouraging an adaptive attitude towards unsuccessful attempts and explicitly modeling how to apply learning strategies during rehearsals.

McPherson and Renwick (2011) suggest that the self-reflection phase involves four basic processes: self-evaluating, developing attributions for success and failure, an affective response to the learning process, and the degree to which learners are able to adopt an adaptive or defensive stance towards their future learning. Given that musical performance is an aural phenomenon that unfolds over time, opportunities for self-evaluation are abundant. Students will naturally compare their musical progress to peers as well as their models, and teachers can help them do this more efficiently by teaching them to listen for and assess specific musical criteria. Directly related to self-evaluation is the formation of causal attributions. Generally, self-regulating musicians will attribute their learning successes and failures to malleable, effort-based causes rather than fixed abilities or random causes. In so doing, they develop a mindset that allows them to see their successes as a result of their work and their failures as simply a challenge that has yet to be mastered. The nature of the feedback teachers provide their students can help to shape an attributional frame of reference that is more conducive to growth. An ideal outcome of teaching that adopts the self-regulated learning framework is for students to reflect on their learning process and feel proud of the progress they have made at each step of the learning process. In this way, they learn how to master the goals that are set by their teacher and the goals they set themselves. Coaching students to arrange their tasks and routines such that they will have a high probability of successes near the end of a practice session can help to reinforce positive affect towards learning. In general, a self-regulated musician can engage in the self-reflection process and emerge with an adaptive rather than defensive attitude towards learning. A student's reaction to the learning process can greatly impact the next iteration of the self-regulation cycle and whether a student approaches the next forethought phase with an enhanced or diminished sense of self-motivation and willingness to set challenging goals.

It is important for teachers to recognize that self-regulation can be thought of as a context-specific set of processes that can be explicitly taught to students. Schunk and Zimmerman (1997) describe four, hierarchical stages that characterize the changes learners move through as they refine their abilities to self-regulate. These stages are useful signposts for teachers to take into consideration as they reflect upon the level of independence and challenge for which their students may or may not be ready. First is the 'observation' stage in which students are exposed to the skills necessary to be self-regulated. Teachers can expect that students in this stage

would benefit from a wide range of instructional approaches including, but not limited to, direct instruction in self-regulatory skills, modeling from teachers and peers, and opportunities for abundant feedback and encouragement. Opportunities to observe exemplar demonstrations of self-regulatory behaviors and opportunities to receive explicit guidance as they try these out are important for developing musicians.

Once students are able to imitate a competent model, they can be scaffolded to the next stage which self-regulation theorists refer to as ‘emulation’ (McPherson & Zimmerman, 2011). Teachers can aid the development of students in the emulative stage by assigning self-directed self-regulatory tasks like practice assignments that students can complete on their own and by gradually challenging the student to demonstrate more metacognitive involvement such as through goal-setting activities and peer- and/or self-evaluation assignments. The observation and emulation phases each involve a good deal of social guidance via teacher scaffolding.

In contrast to the first two stages described above, the third and fourth stages entail the learner depending progressively more on self-reinforcement and individually-derived goals and standards. The third stage of self-regulation development is referred to as ‘self-control’. Students at this level are able to transfer what they have learned in the observation and emulation stages to similar tasks and learning targets. For example, music students in the self-control stage can be challenged to adopt a process they have learned from a teacher to a new etude or piece of music they have not explicitly studied with the teacher in class. They might not necessarily be able to invent new strategies or develop tools to solve novel problems, but they are typically able to apply the methods and concepts their teacher has taught them in an independent, yet somewhat structured setting. In contrast, students in the self-regulation phase are able to modify their self-regulatory approach and adapt and alter their strategies to fit their idiosyncratic, personal needs. Moreover, self-regulated students have come to predominantly rely upon their own motivational resources as opposed to reinforcement and encouragement from their teacher or significant others.

#### **11.4 Model Lessons: Analysis of the Pedagogical Approaches to Teaching Music**

We will now discuss the two lesson plans included in the first section of this chapter with reference to the cyclical processes and hierarchical stages of self-regulation described above. The lessons from Amanda Herceg are emblematic of best practices for developing self-regulatory skills among beginning and intermediate music performers. Although these lessons are extracted from a middle school setting, the goals and procedures would be suitable for any developing instrumental ensemble at the high school level. Herceg’s lessons emphasize activities that are effective for mitigating the self-regulatory challenges that students in the observation and emulation

stages often face. The lesson from Kimberly Mieder is an exemplar of best practices for developing self-regulatory skills among intermediate and advanced music performers. This lesson is situated in a high school setting and includes teaching strategies that address some of the sophisticated metacognitive challenges that more advanced musicians in the junior or senior grades are typically equipped to deal with. As such, Mieder's lesson emphasizes activities that can help to mitigate challenges commonly encountered during the emulation and self-control stages.

Although these lessons are tailored for students with different levels of self-regulation ability, it is important to recognize that high school music performance courses typically involve students with a wide variety of skill and experience levels. For example, it is common for a school band, choir, or orchestra to include students from each grade level enrolled in the same class (i.e., freshman, sophomore, junior, senior). This reality makes curricular sequencing for school music ensemble instruction extremely challenging and often results in teachers delivering instruction in foundational concepts to their entire group each year in order to achieve a baseline of musical understanding across the students. Most high school music teachers will begin each school year with classes that have relative beginners intermingled with intermediate and advanced students. Consequently, the lessons included in this chapter are relevant to a wide variety of instructional settings at the high school level.

Interestingly, the updated National Standards for Arts Education seem to emphasize learning goals that are consistent with self-regulated learning theory. For example, the music performance standards cited in both model lessons discussed in this chapter stress the development of student agency and autonomy as individuals. The standards require that students are able to self-evaluate to determine their own strengths and weaknesses, analyze their performances for errors, guide the improvement of their performance in practice, and judge the outcomes of their playing. These elements of the standards are aligned particularly well with the cyclical phases of forethought, performance, and self-reflection described by Zimmerman (2000).

### ***11.4.1 Lesson Sample One: Herceg***

Herceg's lessons are explicitly aimed at developing students' skills for "self-regulated independent practice". In describing the learning objectives for her lessons, Herceg specifies long- and short-term goals consistent with reinforcing self-regulated learning. She emphasizes a desire to help students approach their practice in an analytical manner by cultivating skills related to error detection, strategy choice and application, and self-reflection. These elements are supported by a wide range of literature (e.g., Hallam, 2001; Miksza, 2007). The long-term goals are aligned perfectly with the cyclical processes of forethought, performance, and reflection that are emphasized by Zimmerman (2000). Herceg then specifies more detailed short-term goals related to this specific lesson such as mastery of

articulation (e.g., tonguing) styles, independent applications of practice techniques, and mastery of solo performance on specific musical tasks. This set of learning objectives represents her awareness of the kinds of challenges that beginning and intermediate students are typically capable of addressing. The objectives also stress process and product outcomes that indicate her recognition of the importance of teaching students “how” to approach learning as much as “what” to do while learning (McPherson et al. 2012b).

Herceg begins the lesson by modeling an optimal learning environment for the students; one that is focused, organized, and in which procedures and goals are in place. In so doing, she is explicitly socializing her students to arrange their physical and social space in a manner congruent with self-regulated learning (McPherson & Zimmerman, 2011). The next steps in the lesson involve systematic teacher-modeling and demonstration. The imitation activities that are interspersed throughout provide her students with multiple opportunities to internalize the sound of the musical goal. These activities also provide the teacher with a means for sequencing the instruction according to the students’ ability level as well as multiple opportunities to provide feedback. The careful sequencing of call and response exercises helps the students focus their attention on goal production during each trial while also giving them concise enough targets that they can devote some degree of attention to self-evaluation without overwhelming their working memory (Duke et al., 2011; McPherson & Renwick, 2011). Once she is sure the students have reached a criterion level of mastery, Herceg then teaches them two learning strategies that can be applied in home practice. Importantly, these are initially worked through and practiced during her class before the students try out the techniques in their home practice. Finally, the students are given a homework assignment that is intended to reinforce the principles of goal setting and strategy choice and application that were demonstrated in class. This assignment illustrates the kinds of tasks that learners moving from the observation to the emulation stage of self-regulation ability should be challenged to master.

In contrast to the first day’s lesson, Herceg’s plan for the second day of instruction is much more student-directed. For example, it begins with an informal assessment of the students’ understanding of how to identify problem areas in the music and how to apply rehearsal strategies to solve those problems. The students are then put into pairs to work on a piece of music together. The students share ideas for how to practice the music, record each others’ performances, and practice evaluating the performances using an analytic rubric. In addition to capitalizing on the social reinforcement of peers, Herceg’s in-class duo assignment provides the students with an opportunity to work on the independent evaluative skills necessary to move from the emulative to the self-control stages in self-regulated learning. The goal of this second day is for students to begin to grasp how they could transfer the learning processes that are demonstrated in class to other pieces of music they may work on by themselves at home.

### ***11.4.2 Lesson Sample Two: Mieder***

Mieder's lesson stresses the development of metacognitive skill and includes many activities that are designed to help the students become more aware of the relatively covert elements of self-regulated learning (e.g., intentionality, concentration, decision making, motivational disposition) (McPherson & Renwick, 2011). Mieder's general goals are for the students to have opportunities to apply self-regulated learning principles to several musical challenges and to recognize the impact that self-regulated practice can have on performance achievement. In contrast to Herceg's lessons, the content of Mieder's lesson emphasize activities that are more appropriate for students who are ready for more independence and autonomy such as those that might be characterized as being in the self-control stage of self-regulation development (Schunk & Zimmerman, 1997).

The lesson begins by recording the students' early attempts to perform their etude in order to establish a baseline reference level of performance achievement. The students are also given an opportunity to internalize the ideal learning outcome by listening to a professional recording of their repertoire. This activity reflects Mieder's awareness of the value of modeling for developing performance achievement and self-evaluation skill (Hewitt, 2001). The teacher then guides the students through a discussion of how to identify learning challenges and presents a set of practice strategies that are matched to particular types of musical problems the students will encounter. Next, the students demonstrate the practice strategies as a full ensemble. Throughout this introduction, Mieder serves as a guide and facilitator by balancing direct instruction with inquiry-based strategies. These introductory activities also include an emphasis on conditional decision making so that the students understand that knowing "when" and "how" they can apply the practice strategies is just as important as knowing what strategies are generally useful (Miksza, 2015). For example, her "Rules of the Road" exercise is aimed at encouraging students to be more flexible and adaptive to challenges that arise from moment-to-moment during practice.

Mieder's lesson then quickly transitions to a block of peer- and group-based activities for highlighting self-regulated learning principles. These activities reflect important elements of the cyclical process of self-regulated learning (McPherson & Zimmerman, 2011). The "Practice Behavior Observation" exercise is aimed at helping students identify effective task strategies that are representative of the thinking involved in the performance phase. The "Verbal Mediation" and "Intermittent Questioning" exercises stress aspects of goal-setting, intentionality, and self-monitoring that are critical to both the forethought and performance phases. Following these activities, the students are then tasked with recording a performance of their etude a second time and given an opportunity to openly reflect on the progress they have made in addition to identifying the qualities of practice that led to their improvement. This discussion activity is representative of the kind of thoughtful analysis self-regulated learners demonstrate in the self-reflection phase. This evaluative, listening exercise can also serve to reinforce adaptive affective



responses to the learning process by providing evidence that the students' increased performance is a direct result of effort and thoughtful work. As such, the evidence of the students' success can lead to cultivating effort-based attributions, stronger mastery motivation orientations, and increased levels of self-efficacy. Lastly, toward the end of Mieder's lesson, the students were challenged to apply the principles covered thus far to a full piece of music. However, prior to doing so, Mieder had the students apply their self-regulation skills on their own with minimal guidance.

Mieder's lesson is an excellent illustration of methods for encouraging students to engage thoughtfully in their own learning. The challenges presented to the students are exemplary examples of activities that will help students become more autonomous learners.

## 11.5 Recommendations for Future Research

Reflecting on the practical application of self-regulated learning theory to music practice uncovers several avenues for future research. Further research dealing with approaches for assessing music students' self-regulatory abilities is necessary. In particular, there is currently a lack of research that highlights the specific behaviors, metacognitive activities, and dispositions that correspond to each of the three cyclical processes outlined in self-regulated learning theory, forethought, performance, and self-reflection. It is important that measurement methods be developed that yield rich, detailed accounts of how individual's self-regulatory abilities manifest themselves. It is also important that further research be conducted on the manner in which novice musicians can be taught to move through the hierarchical stages of self-regulated learning. Determining what types of pedagogical approaches can help students become more independent in their music practicing would be particularly beneficial for teachers. Moreover, it is important that this research consider both individual-, small- and large-group learning settings. Although, one-to-one music instruction is common, school-based music instruction typically occurs in large-group, ensemble settings. Research that tests the effectiveness of a variety of interventions is critical for the enhancement of future music pedagogy.

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