Piano Learning Center

The Piano Revealed

Lesson Plan by Nanette Baltz, Tega Cay, SC

PURPOSE: To train the student in the basic parts and functions of the piano mechanisms and acoustics while preparing for a robust recital performance, and have fun doing it!

DISCUSSION: The student challenged with music to be memorized and performed for an audience must exercise concentration. They should be prepared to adapt to a different instrument, setting and distractions. These skills are honed when they play on the studio instrument in different states of disassembly, changing the appearance and sound weekly. This controlled journey reveals the workings of the piano for learning and discussion.

PROCESS: Remove the following parts in order of timeline until recital date. If you don’t feel comfortable dismantling the piano without causing damage, ask your piano technician to show you how to disassemble the parts of your piano as listed below. You can also use a piano that is not used for regular instruction or practice.

6 weeks – Keyslip – This starts the process allowing students to see the felts under the keys. An explanation of tenuto, staccato, legato and dynamic pressure into the key bed, key composition, cross section and quality of components for resonance is engaged. Note that not all pianos, such as some Baldwin verticals, have easily removable keyslips. The majority of time for this lesson is reserved for work on their selected music.

5 Weeks – Knee Board (Lower Panel) – Now the students are able to see the harp (plate) and soundboard, feel the vibrations, experiment with tones, view string crossing, follow the pedal rods and witness their function. Discussion includes the history of the harp and how the industrial revolution made pianos affordable and more accessible to aspiring artists.

4 Weeks - Top Board (Lid) – While changing the soundscape further, this also allows display of the hammer rest rail and its motion relative to the pedals, string gauge, number and length, the capo, tuning pins, the felts used, their natural origin, etc. For recognition and independent study the “Question of the Month” contest asks a student to draw and label the piano and its parts. (See the “Name the Parts” worksheet in the Piano Learning Center at www.ptg.org.) Token prizes are awarded for the first responses posted.

3 Weeks - Top Front Panel (Upper Panel) – This big step is exciting and discloses most of the action in the students’ direct visual field with enhanced dynamics. By this time their songs are being executed in full. For fun the student plays glissandos and chromatics, sees the sequence of hammers vs. keys and discovers the beautiful effectiveness of the design.
2 Weeks - Fall Board – This change removes the music rack reminding the students to demonstrate and expand their memorization progress. Now the action is completely revealed challenging focus during execution of their piece. This milestone is exciting and completes the disclosure of the entire key-to-string interaction. It signifies final preparation for the performance to come that week. A large portion of this lesson is spent perfecting the solo with mental discipline in the midst of movement and sound.

Final Week
If possible, invite your technician to come and remove the piano action. Give each student a opportunity to hold and feel it. Throughout this final week each student performs for their peers and families during lesson transitions.

SUMMARY: This process is simple to execute with no additional materials necessary. Students from beginner to advanced benefit from building their knowledge of the instrument commensurate with their experience. The learning environment is kept interactive to allow each student a unique experience that is also informative. Learning to focus solely on the music allows the students to handle a different instrument’s character. It minimizes impact of audience disruptions. This creative approach provides an element of fun to the sometimes stressful process of preparing for that special live performance.

Additional Resources
Books
“Piano,” By David Crombie, amazon.com

Web Resources
“Name the Piano Parts” worksheet and other activities in the Piano Learning Center at www.ptg.org
Piano Technicians Guild, www.ptg.org, History of Pianos
http://www.newoctave.com/quiz/gaction.html
http://www.funtrivia.com/trivia-quiz/Music/Piano-the-Instrument-339762.html
Interesting Vertical Piano Facts

- Vertical pianos get their name from the fact that the frame and strings run up-and-down, or vertically. Vertical pianos may also be called upright pianos.
- Vertical pianos are measured by their height from the floor to the top of the piano. The shortest piano is called a spinet, then comes a console, a studio, and then a full-size or professional upright.
- The first vertical pianos to be manufactured were arranged like a grand piano, set on its end.
- All vertical pianos have two pedals: a soft (una corda) pedal and a sustaining (damper) pedal. But some also have a third pedal called a practice pedal that mutes the sound volume by about 50%.
- Vertical pianos get their name from the fact that the frame and strings run up-and-down, or vertically. Vertical pianos may also be called upright pianos.

Visit www.ptg.org and click on Learning Center, or call the Piano Technicians Guild at (913) 432-9975 to find more learning resources for teachers, students, and parents.

Grab your piano and click on Vertical Piano Diagram.
Label the parts on these vertical piano diagrams.
GRAND PIANO DIAGRAM

Visit www.ptg.org and click on Learning Center, or call the Piano Technicians Guild at (913) 432-9975 to find more learning resources for teachers, students, and parents.

Interesting Grand Piano Facts

- A typical grand piano may have over 10,000 parts.
- A grand piano action is faster than a vertical action because of the repetition lever. If you press a note again when the key is only half way down instead of waiting for it to come all the way up like you would on a vertical piano.
- Grand pianos can range in length from 5½ ft. to over 9 ft. long.
- Small items such as pencils, paper clips, and coins can cause very annoying sounds or get wedged in the action. Extra care must be taken to keep small parts from falling inside.
- Grand pianos can range in length from 5½ ft. to over 9 ft. long.

Label the parts on these grand piano diagrams.

Student name: ____________________________