Drop and Roll, rock and roll Gravity and Momentum play our arm weight Rocking, swirling, circling, LH clockwise, RH counterclockwise Piano key is only 3 x 1" Piano string only 1mm wide

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Playing the piano is a pleasure. It should feel good, and natural, (never hurt, never feel bad). Teach families that any discomfort or tension should be noticed and reported right away. Misuse can be replaced with ease.

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Open the piano so students can **see** the thin width of a piano **string**, and see the small size of the soft **hammer** which bounces off the string. They'll realize that the key, string, and hammer are very small compared with the pianist's body and hand.

Because the whole piano is big, students often subconsciously feel that they have to attack the piano to play it. We teachers have to change that impression. The structure of the piano is big, but the important fact to study is that **the key is small**, as is the hammer, and the string is thin.

We can let students see and think about the source of our sound – a thin string vibrating. Show them that we are working with such very small parts - the key, and its string, with a small soft hammer between them, moved by the key to bounce off the string. Since we are much bigger than they are, we can relax and work with gravity and momentum (we don't have to tense up for a struggle with a huge instrument).

To produce naturally ringing resonant tone, "good sound", "good tone"," singing tone", we can merely gently drop and bounce off the key; we let our arm weight fall, we let our arm-wrist-hand-finger bounce off the key.

Or we can merely **gently drop** and **roll into** the key. We let our weight fall into and roll forward on the key. Fingers extended, we drop and roll onto the fleshy finger pad. We are dropping the weight of the whole apparatus of upper arm-elbow-forearm-wrist-hand-finger with the fleshy finger pad as the contact area to the key. When our body is aligned, free arm motion can transfer the weight of the arm to the string (via the hand, finger, key and hammer) to produce good tone through "drop and bounce" and "drop and roll".

(We need not attack the piano, we need not hit the key, bang, crash, nor strike, poke, push, pull, dig, or slap; we need not tense ourselves, brace ourselves, or force anything). Instead, just drop. We drop to bounce up or we drop to roll forward. We can bounce up from our drop (staccato) or stay IN the key to let momentum roll our finger and arm forward (legato). As we roll forward on the surface of the finger, the finger, which started more extended, as it landed on its fleshy pad, ends up in a more standing position toward its tip (we don't drop directly onto the tip). This is rolling on the finger's surface anchored to one spot on the key (not sliding, not scratching).

We can **use our fingers** naturally in the same ways they move in ordinary activities connected with the arm when we reach to turn a doorknob ("rocking")("rotation"), and when we reach to pick up a tissue with our thumb and fingers ("take hold"). **Fingers gently extend**, and, with gravity, arm weight gently drops into the **soft finger pad** as it makes contact with key, while momentum has the arm flow forward toward the piano as the **finger rolls on its surface** toward its tip (not sliding, not scratching) to point of **balance**, balancing the hand-wrist-arm over the finger.

The finger can look "curved" at the end of its drop and roll, but it doesn't start that way. We are not holding our fingers in a set position; we are reaching with them to fall and land in one spot

while letting momentum change their position as they bounce or roll. The finger may roll back out again to the more extended position with the arm following it out toward the body, then roll back in toward the piano again. The right finger-hand-arm will make counterclockwise circles. The left will make clockwise circles.

As the finger rolls forward, in toward the piano, the arm follows, moving forward. The arm moves in and up, following the fingers, sometimes in and up, out and down, in alignment. Arm goes up as the finger rolls toward its tip from the more extended (flatter) shape.

The important notes in a phrase deserve the "drop". Other notes flowing out of the important note are part of its roll. They're played as the arm moves in with the rolling "dropped-on" finger. Few notes are "important" singing power tones in a phrase. Most notes flow out of one important note to the next important one.

To take a song example everyone knows, in "London Bridge is falling down", only "Lon" is the important "dropped on" note, and the rest of the notes in that sentence/phrase can be played as part of the first note's roll. Like playing many notes in one bow on a stringed instrument. Or you could have another drop note on "fall". Then you'll have two important notes. At a slower tempo you may have more "drop and roll" notes.

To learn this drop and roll technique, you can first drop on every note, like a separate bow for each note on a stringed instrument. For more flowing musical line, sing the musical line to find the most important musical power notes, the ones that give energy out of which the following notes flow, or into which the preceding notes flow. Drop only on those notes. Roll through the others.

The biggest hand knuckles are engaged (not collapsed). These biggest knuckles are a team with the wrist. The wrist is straight with these knuckles and with the arm. Each set of finger-hand knuckles is engaged in weight balancing and transferring.

Thumb moves toward the finger rolling on key. **Thumb is part** of **the hand unit**. Fingers-hand-wrist-arm in alignment move forward together as a unit.

Wrist stays straight on top and sides (still flexible). (Wrist should not drop down from the hand. Wrist should not push up away from the arm). When the finger is bearing arm weight, the biggest knuckles should be higher than the lower knuckles, engaged with the hand and arm.

Wrist stays flexible while it stays level, like a cork on water. **Wrist is a straight bridge** which transmits weight from arm to hand. (Wrist can't transmit the weight if wrist drops down or pushes up, leaving the weight stuck in the wrist, leaving hand and fingers left on their own to make sound without benefit of arm weight, fending for themselves, forcing fingers to push or poke to get sound). The straight wrist transmits arm weight through the hand through three sets of knuckles to the fingerpad and fingertip, which transfer arm weight into the key as the key is depressed, which moves the hammer to bounce off the string.

When thumb is the player of the key, the other fingers together can be part of the hand unit to balance the thumb, like a mitten. Gravity and momentum move the weight of our arm-wrist-hand-finger into and forward on the key which, when depressed, moves the hammer to bounce off the string, which is set into motion to vibrate and set the air in motion for ringing tone.

Good alignment yields good tone because it allows the arm weight to be transferred into the key by simply dropping into the key. (We don't need "strong fingers", nor do we need "curved fingers".) What we need are relaxed shoulders. We can have relaxed shoulders when our feet support our back.

And we need **free elbows which can move**, as the other end of the "tennis racket", the finger hand wrist arm to elbow unit. Imagine a tennis racket. Imagine our finger hand wrist arm elbow as a unit like a tennis racket.

On the keys, when we rotate the right hand unit to the left, all as a unit, the fingers point toward the left, and the elbow, as the other end of the unit, moves right. Try it and see how it works. When we rotate the unit to the right, the elbow moves to the left. When we move back and forth on the keys, rotating left to right to left to right, it's like rocking. Drop and roll, rock and roll.

We rock and roll from key to key; we roll and rock on the key. When shoulder is free and allows the arm to move in, out, and around, and the elbow is free to follow the lead of the hand, we find that the right hand-arm-elbow unit makes counterclockwise circles. Try it and see. And the left hand unit makes clockwise circles. Circling, swirling.

Then our arm weight can be free to be aligned and transferred into the key. It's easy to work with gravity and momentum when shoulders and elbows are free, when the body is easily aligned: arm-wrist-hand-finger aligned, with the wrist knowing its important connecting function (and not collapsing or pushing). We reach, drop, and roll for singing tone. We drop, roll, rock, and roll.

Piano **technique should always feel good**, and feel natural. Thus, we produce natural ringing sound from each string. (If it feels bad, it might not sound good.)

Pianists NEED to make a pre-lesson student home visit to see if the piano and bench are good and in the right place, and advise how to get a good instrument. Explain the superiority of studying at a good grand piano from the start, for its tone and touch. "If you want your child to eat salad, you give the most attractive, colorful, beautiful, fresh ingredients; to be drawn to practice, children need to be entranced by the instrument's richly beautiful resonance, its tone quality, with wide dynamic range, and its sensitive, quality touch."

Children are naturally drawn to beauty, and are sensitive to subtle differences. Let them work with subtleties of beauty of tone from the beginning, so they'll develop sensitive playing, and versatility. They'll naturally be inspired to BE at such an instrument, and will be inspired AT the instrument. They'll be working as artists from the start. Give instruments with beautiful resonance of sound, with wonderful, even touch with the right feeling of resistance, with the grand piano's feeling of the escapement, "the bump", which gives an action which is not too stiff, and not too loose, but "just right" for good control of the speed of the key.

(It's not logical to give children an inferior instrument to start with to see if they're interested in music, a common erroneous idea. Children will be interested in making music at a wonderful instrument, which has beautiful sound and feel. Why would anyone be interested in spending study time on poor instrument?)

Children should be given the BEST food, and the BEST instruments.

The piano first of all needs to have a lovely, captivating sound with **lasting, rich resonance**. This **lasting sound is what our feelings ride along on**. It's the **voice** of the instrument which captures our feelings and our attention. Its voice **becomes our own** voice. The piano needs to be able to produce singing tone, "living tone". Plus, the piano needs to be capable of sensitive and varied expression with that basic tone.

The children need to be able to produce the same quality ringing tone and coax the **same sensitivity** out of their **home pianos** as their **lesson pianos**. If the home piano requires pounding to get sound, children will become stiff and tense trying to play it. They'll develop harmful habits. If the home piano can produce only three different amounts of sound on a single note, children won't be able to create expressive musical lines. Their musicianship potential will be limited. If a family's piano has poor tone, dull tone, low resonance, dead tone, and/or poor

range of tone, or poor action, now is the time, BEFORE LESSONS BEGIN, to advise how to get a good tone instrument with perfect even action. This allows children to be "relaxed", so they can develop a natural technique. This is the path to good tone and musical playing.

Give them an instrument which has 10 to 20 levels of lovely sound, and encourage families to experiment creatively to learn to use the instrument artistically. Even the best teaching cannot give children good playing and listening habits if the piano at home doesn't allow artistic choices at a high level. Ability grows at home, and habits are formed at home seven days a week. **ONLY A HEALTHY HOME INSTRUMENT CAN FOSTER A HEALTHY MUSICIAN!**

If parents live apart, **each home** needs a good piano for children's daily practice, and each home needs home visits from the teacher. And of course, parents need to establish a regular piano tuning and maintenance schedule for their instruments.

Once families have a **good piano**, you need to supervise **where they put it**. This makes a difference. A home visit again will let you see the piano moved to an inviting spot conducive to frequent practice, with space for the bench to be placed correctly on a uniformly flat surface, far enough from the keyboard for an adult's well-balanced sitting-playing.

Pianists need to teach parents and **children how to check their seating so they can sit** at the right height **at** their **home** piano. We're at the right height when the keyboard in UNDER our hands, with forearms parallel to the floor. To check, sit with legs straight down from the kneesvertical, with heels down and feet flat, straight back, relaxed shoulders, hands at sides. Then raise forearms to be parallel with the floor. Turn palms down. The keyboard should be UNDER the fingers, with arms, wrist and hands still horizontal, in a straight line. If the keyboard is higher than that, we raise the seat.

The seat needs to be flat, firm, and solid. We can pile up carpet samples to achieve the right seat height. (Not pillows which are too soft, not solid or firm or flat). The bottom of the elbow should be about level with the top of the keys. The forearm is parallel to the floor, and above the keys, with extended fingers-hand-wrist-arm in alignment.

For deciding the distance of the piano bench from the piano, teach "Knees under keys", "Arms can reach in".

For deciding on height of bench: "First your SEAT, then your feet."

After first checking and correcting the seat height, then check the feet. **Feet flat, legs vertical straight down.** Pianists' feet should reach the floor and be flat, with heels down. Pianists should be able to stand up. If feet don't reach the floor, make a higher "floor" surface. A wide footstool wider than the width of our hips or a pile of carpet samples can create a flat, firm, solid floor to support the feet for the back to be straight.

Hands on hips, measure the width of hips. **Knees, heels and toes, same distance apart**. Foot support—either footstool or carpet samples wider than that.

The backs of the heels are down flat. They are vertically under the back of the knees. "Back of heels under back of knees". "Heels down." Below the knee, the legs are vertical. Feet are parallel to each other, with toes, heels and knees same distance apart as hips and shoulders. "Hips, knees, feet: same distance apart." Feet placed thus balance the back vertically. (If feet are wrong, the back falls down).

You may need a separate pile of carpet samples under each foot so the feet can be far enough apart. "Back of heels under back of knees", "Heels under knees".

Push heels into floor to feel lower back's alignment. If the **lower parts of the legs are vertical** over **flat feet**, then the **back can stay vertical**. This frees the shoulders-arms-elbows-hands-fingers to move naturally, and to freely drop weight into the keys for natural good tone production.

(If the feet and back are unstable, there's a feeling of needing to "hold on" or "hang on for dear life" to the piano, from the insecurity of poor seating. This leads to tension, poor technique and poor tone). **Vertical lower legs-vertical back-free arms-balanced hands**. Arm weight can transfer to keys. Feet, back, arms-wrist-hand-fingers are all aligned, in balance. Shoulders feel free, dropped, movable around their circle.

When sitting is good, stretch up: "**Be a tree**". Keeping heels down and feet flat, slowly breathe in, opening the chest and shoulders, and reach up with hands toward the sky to stretch the spine up, straight up. "Be a tree; be a tall tree". Wait. Then slowly breathe out and slowly bring arms down to the sides, keeping open the chest and shoulders, letting shoulders drop. Breathe in slowly while arms go up; breathe out slowly coming down.

This attention to breathing helps clear the attention. This attention to sitting needs to be toward to ALL sitting - at home as well as at lesson, in any chair in any place. Good body use needs to be practiced always (not just in music practice). Let's build only good habits. Adjust seat and feet at the dinner table; scrutinize all seating, including at school desks. ESPECIALLY at the computer, check seat and feet! Especially at the computer watch how you use your neck, back, shoulders, arms, wrists, hands and fingers. Use free, healthy rotation of arm-hand-finger (don't use wrist rests!). Computer keyboard should have the same body use as a piano keyboard; we have the same body!

As children grow, piano teachers need to check again and again on kids' lesson and home seating. Even though parents are taught how to do the seating, teachers still need to check. Until you go see for yourself, you never know what random factors can distort the setup! Perhaps a photo or a video could replace a home visit if necessary. Sometimes the seating is difficult for small children because they're so short. In order for their arms and hands to be over the keys, they need to sit so high that their knees jam into the bottom of the keyboard. We adjust somehow to make them comfortable and still sit well.

Sometimes instead of sitting, children can **stand** to play if, when they stand, with released shoulders, their elbows are about the level of the key tops. At one point in their lives, they're the right height to stand at the piano. Let them have this pleasure.

Let them stand on carpet squares to be high enough, if necessary, a stack under each foot. When children stand at the piano, their feet, legs and back are in proper alignment. Then, when they sit again, they can remember and reproduce the alignment. This standing practice gives comfortable body balance over flat feet with free arms.

Show them **how** to stand at the piano, **with forearms parallel to the floor**, and above the keys, with bottom of the elbow level with the top of the keys. The wrists, hands, and fingers are always **over** the keyboard (not hanging down and off). The wrist is a straight connecting bridge between hand arm. When children grow too tall to have arms level when standing, they'll have to return to sitting practice.

Sometimes adults with very long arms have such low elbows that, to have the keyboard under their hands and the bottom of their elbow level with the key tops, they have to sit so high that their legs jam into the piano, just like the little kids. What to do? Raise the whole piano: put casters under each piano leg.

At every sitting, always take time and effort to adjust the bench height at the piano, and then be sure of a flat "floor". Children can grow overnight. Their arms can get longer from the shoulder to the elbow. We have to check the seating everyday so their arms are level over the keys. Our

sitting right can sound good!	allow us to	play free	y and easily	y in comfort.	Play piano f	orever, fee	good, and	