

Turning Piano Students into "Block" Heads: A Schematic Approach to Technique

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Abstract

A practical, "hands on" workshop on the creative use of "blocking" (sometimes called "chunking") and visual schematics in learning pentascales, scales (including chromatic scales), arpeggios, and cadences. Also discover the easiest-to-hardest sequence for scales and arpeggios.

IMPORTANT:

Handouts given to workshop attendees can be found online as free pdf downloads:
www.pianofestival.org/prizes/prizeoriginal.htm#techres.

MAJOR AND MINOR SCALES

Do we all know what "blocking" (sometimes called "chunking") is? How many of you use it in your teaching? How many of you have taught the 1st Bach Prelude in C [WTC I]? I do not let students play this prelude note-for-note until they can play the entire piece as block chords [demonstration on piano; each measure played as chords]. I find this is useful on so many levels (e.g., analysis, memorization, interpretation).

Many of you are probably wondering why I use only letters and finger numbers on the blocking handout, rather than notes on a staff. I teach several sections of class piano. They're music and theater majors and minors with vastly different degrees of musical background. Not everyone reads both clefs fluently. These students must complete an extensive checklist of skills very quickly, in four semesters. While they are struggling with reading – and I do, of course, help them with that – they need to move quickly through the checklist. Letters and numbers, are, course, easier than staff reading. So the blocking schematics allow everyone to jump right into the checklist requirements.

The first page (from http://www.pianofestival.org/files/Houle_blocking_cadences_etc.pdf) is a conceptual page – it simply illustrates the starting points of every major and harmonic minor scale in each hand:

R.H.:

C						
G						
D						
A						
E						
B						
Am						
Em						
Bm					Ab	
Dm					F#m	
Gm		Eb	F		C#m	Bb
Cm	Db	Ebm	Fm	Gb	Abm	Bbm
↓	↓	↓	↓	↓	↓	↓
1 2 3 1 2 3 4 1 2 3 1(4) 2 3 4 1(5)						

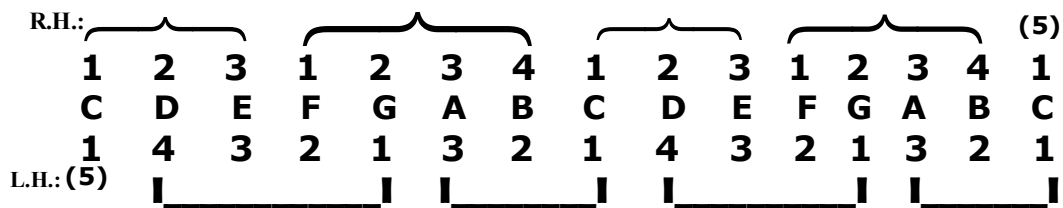
L.H.:

C						
G						
D						
A						
E						
F						
Am					Bb	
Em					Eb	
Dm					Ab	
Gm					Db	
Cm	Gb			B	C#m	
Fm	F#m	Bbm	Bm	Abm	Ebm	
↓	↓	↓	↓	↓	↓	
1(5) 4 3 2 1(4) 3 2 1 4 3 2 1 3 2 1						

This illustrates that scale fingerings are not complicated. Every scale uses the same pattern – 1-2-3, 1-2-3-4 (I think of 5 – and sometimes 4 – as "substitute" fingers, so I put them in parentheses). If students have trouble with the substitute fingerings, they can use "1" (the thumb) to start with (so that the 1-2-3, 1-2-3-4 pattern is not altered).

Pages 2 through 7 of the handout are relatively easy, since they deal with blocking scales hands separately. Every scale can be blocked using the alternating 1-2-3, 1-2-3-4 pattern. For example:

C major scale (1's on C; 3's on E & A – circle these):



When you get to the top (right hand) you can, of course, add the 5th (substitute) finger to that block.

The real challenge is parallel motion, where this blocking does not work because the blocks don't align. I feel extremely sorry for my students in class piano in my first year of my current teaching position. At that time, I was still teaching scales in the order of the circle of fifths – not knowing that, in fact, C major in parallel motion is perhaps the hardest key of all! It has no black keys, no "landmarks" to help. So a different approach was needed; it was borne of desperation. I worked it out (see parallel motion blockings, starting at p. 8) blissfully ignorant of Martha Baker Jordan, an incredibly deserving recipient of NCKP's lifetime achievement award, who laid out the same basic approach for parallel motion scale blocking (albeit without all the graphics) on page 111 of her "Practical Piano Pedagogy" (Warner Bros. Publications, 2003). Perhaps it's just as well that I worked it out independently, for it led me to devise my own layout, apply it to arpeggios as well, work out a sequencing, etc.

The footnote on p. 8 of the blocking handout is important, for it outlines what I think is the easiest-to-hardest sequence for major scales:

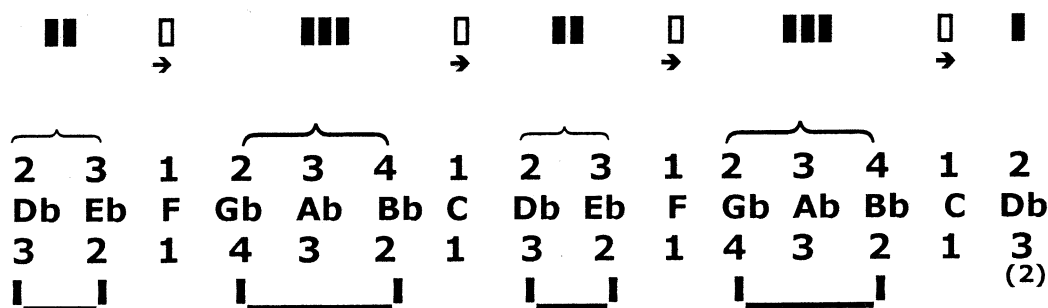
Db, B, F#, F, Eb, Ab, Bb, E, A, D, G & C.

I owe a debt of gratitude to Chopin for pointing the way. He was writing a method book before he died. You'll find the sketch of it in Jean-Jacques Eigeldinger's book, "Chopin: Pianist and Teacher as Seen by his Pupils."¹ Chopin felt B Major is the easiest scale to play – a brilliant insight, since B Major best fits the hand. I think D-flat major is a shade easier to start with, since it involves the least number of substitute fingerings.

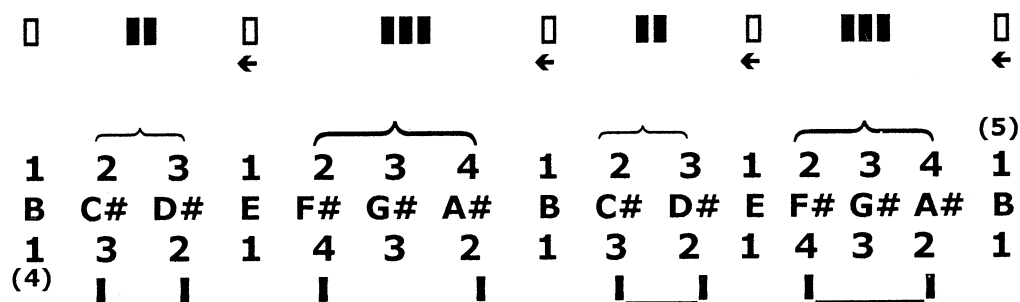
Compare D-flat major with B major:

¹ Jean-Jacques Eigeldinger, Chopin: Pianist and Teacher as Seen by His Pupils, ed. Roy Howat, translated by Naomi Shohet with Krysia Osostowicz and Roy Howat (United Kingdom: Cambridge University Press, 1986; first paperback edition, 1988; eleventh printing, 2002), 190-197.

Db major scale (upper whites →'s - ■■; 1 on F; ■■■; 1 on C):



B major scale (lower whites ←'s - 1 on B; ■■; 1 on E; ■■■)

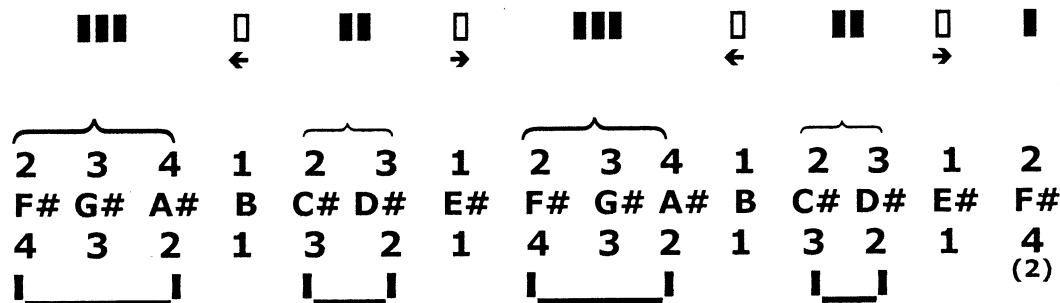


The keys using all 5 black notes come first in the sequence. Fingers 2 and 3 always go on E-flat/D-flat; 2, 3, and 4 always go on G-flat/A-flat/B-flat, and thumbs go on the white keys (except when using substitute fingers). Playing hands together is not much harder than hands separately (which saves precious class time). Most students can master the D-flat major scale on the very first day of class – quite a morale booster!

See the little arrows above the notes played by the thumbs? In D-flat, the arrows indicate that you always play the *upper* (rather than lower) white keys (or, to put it another way, the white keys *to the right* – F rather than E, for instance). [Students play, saying out loud, "two blacks, lower white, three blacks, lower white," etc.] The very top black key I call the "orphan" note, best played with the 2nd finger of each hand [students demonstrate]. In B major, thumbs always play the lower white keys. For the next key in the sequence, F-sharp major, one white key is the lower one (B), and the other white key is the upper one (E-sharp).

The arrows in the schematic reflect this white key "hugging":

F# major scale (□'s hug ■■■'s - ■■■; 1 on B; ■■; 1 on E#):



Always have students call out the blocks as they play – either say "2-3-4, thumbs, 2-3, thumbs..." or say "three blacks, white, two blacks, white..." When practicing F-sharp major, a student once said to me, "The whites always hug the three blacks," which is another way of seeing the alternating upper white/lower white pattern. I love the way this was put! So, you'll notice that in the schematic (above), you see this:

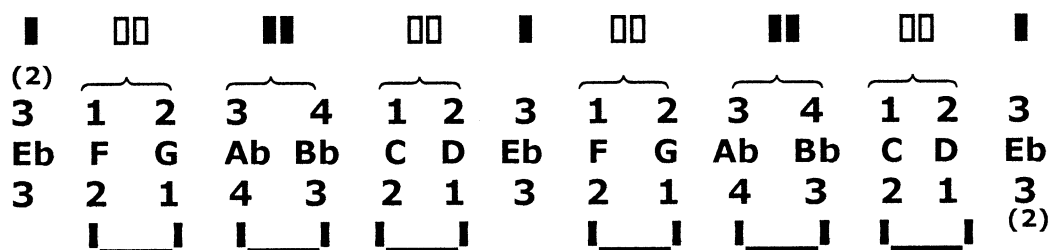
□'s hug ■■■'s

...which means the white keys "hug" (i.e., are only a half step away from) the three black keys. [Students demonstrate, saying out loud: "three blacks, lower white, two blacks, upper white..."]

When students make the transition from blocking to playing "the real deal" – that is, playing scales by step, *not* as blocks – they must continue to *think* in blocks. This is crucial, for when they stop thinking in blocks, they often stumble as a result. You have to remind students of this often. One thing you can do is have them play scales unblocked ("real deal") but call out the blocks anyway, as they're playing. This is a huge conceptual step toward getting them to *read and think* of music by configurations rather than none-by-note. If students cannot get beyond "processing" notes one at a time, they will always find it unnecessarily difficult to sight read and memorize music.

I'm going to jump ahead to E-flat major, p. 10. Now we are getting to keys where there's a bit of jumping from certain blocks to the next block (e.g., getting from 3 on E-flat to the 1-2 block in the right hand ascending):

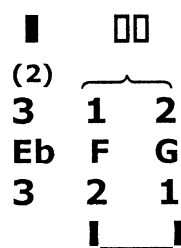
Eb major scale (3's on Eb; 1-2 □□ block; 3-4 ■■ block; 1-2 □□ block):



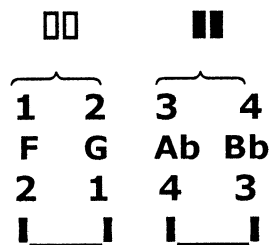
[Students demonstrate, saying out loud: "3's on E-flat, 1-2 on two whites, 3-4 on two blacks, 1-2 on two whites," etc.]

Inevitably, somebody will "invert" the fingers of one hand – e.g., on the first "two whites" block, F's will get played with the thumbs in both hands and G's will be played with second fingers in both hands. There's a certain physical logic and symmetry to that, but, of course, you'll need to catch this and gently remind students not to "invert."

One thing that's a bit difficult to explain – but is very helpful to students – is this: At any given point in the blocking, one hand is always poised for the next block ("sitting pretty," as I say), and the other hand needs to jump or pivot. For example, after we play 3's on E-flat, the left hand is "placed" for the next white-white block, but the right hand must jump to get to the same white-white block:



For the next block, it reverses – i.e., the right hand is poised for the next block (black-black), but the left hand must pivot to get there:



And so on, always alternating in terms of which hand is "sitting pretty" for the next thing. It's really useful to remind students often of this, for E-flat major and in any other keys where this happens. Otherwise they wind up flopping their fingers all over the place ("fishing for food," I call it) [laughter], which guarantees that at least one hand will always get needlessly disoriented at every point in the blocking process [demonstration].

As you look over your easiest-to-hardest sequence, notice that the very last (most difficult) keys are the ones we so often start with. Of course, remember that we're talking about hands together, parallel motion. If you're doing contrary motion hands together, it's another story; we can do 1-2-3, 1-2-3-4 blocking (both hands) for C, G, D, A and E major.

Let's jump to page 11, the minor keys. Again, the sequencing footnote is important to underline:

Fm, Bm, Ebm, Bbm, F#m, C#m, Abm, Gm, Dm, Cm, Am & Em.

This sequencing is, again, somewhat subjective.

Note that F major and F minor have the same basic blocking pattern:

F major scale (1's on F; 2-3-4 ███ block; 1's on C; 2-3 ██ block):

█	███	█	██	█	███	█	██	█
1	2 3 4	1	2 3	1	2 3 4	1	2 3	(4) 1
F	G A Bb	C	D E	F	G A Bb	C	D E	F
1	4 3 2	1	3 2	1	4 3 2	1	3 2	1
(5)	┌────────┐		┌──┐		┌────────┐		┌──┐	

F minor scale (1's on F; 2-3-4 ███ block; 1's on C; 2-3 ███ block):

█	███	█	██	█	███	█	██	█
1	2 3 4	1	2 3	1	2 3 4	1	2 3	(4) 1
F	G Ab Bb	C	Db E	F	G Ab Bb	C	Db E	F
1	4 3 2	1	3 2	1	4 3 2	1	3 2	1
(5)	┌────────┐		┌──┐		┌────────┐		┌──┐	

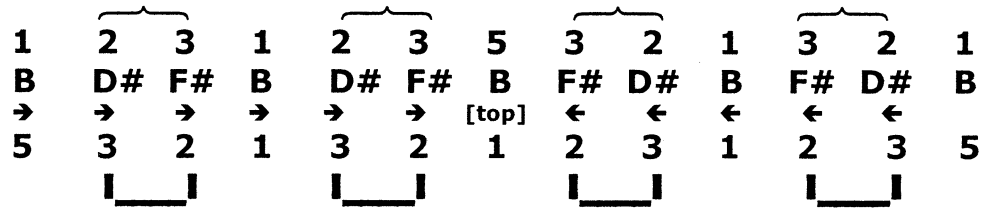
The only real difference is that in F minor, we flat the 3rd and 6th scale degrees. The same goes for all other white major keys and their parallel harmonic minors. With black keys, only A-flat major and A-flat minor work have the same blocking, however.

ARPEGGIOS

Let's move along to arpeggios (pp. 14 to 16). Carl Czerny used to call arpeggios "harmonios." I love that word – sounds like a great breakfast cereal. But seriously, you'd be amazed how just a little bit of blocking on the arpeggios is very helpful, for it's the blocked notes that usually get messed up otherwise. With the arpeggios I made it easier in the handout by simply listing them in order of difficulty (rather than in the circle of 5th order, as I had done with scales).

B Major is easiest. Thumbs go on B (or, if they can, it's better if students can start with 5 in the left hand; also use 5 in the right hand at the top), followed by 2's and 3's on D-sharp and F-sharp (as a block), thumbs on B, two blacks, etc. – two 8ves ascending and descending, as follows:

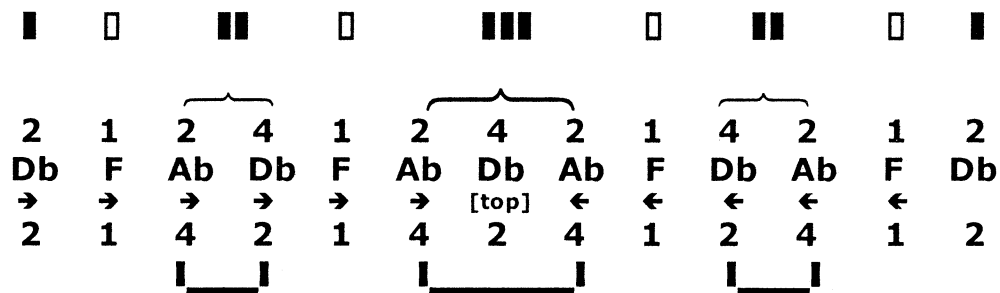
B major arpeggio (2-3 block on middle two blacks; □ ■■):



Arrows indicate the direction – ascending and descending. Brackets, of course, are blocks. If possible, have students play as legato as possible even while blocking. When they jump, they're more likely to lose their way. Bear in mind that this kind of arpeggio should not be played 100% legato when played fast ("real deal," unblocked) because thumb pivots force one to change the angle of the hand – which, in turn, makes speed virtually impossible. Many pedagogues (e.g., Fred Karpoff and Nelita True) make the same point.

Please note that on the handout, I did not write out every key. Since E-flat major and A-flat major "feel" the same as D-flat major (that is, they have the same black/white and fingering schematic, using exactly the same blocking pattern), I leave it to students to figure out how to play E-flat and A-flat arpeggios. If students have worked out D-flat major [demonstration: 2's on blacks, thumbs on white key, 2-4 on blacks, thumbs on white, etc:]

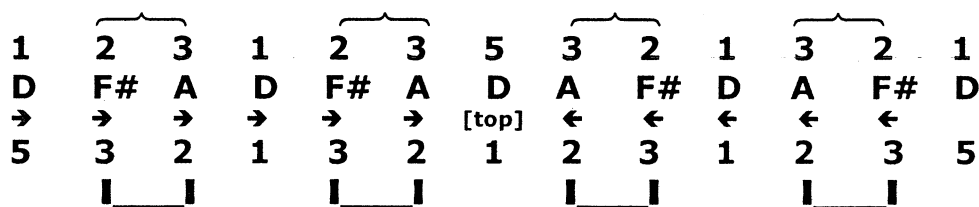
*Db major arpeggio (2-4 block on ■■'s):



* Same blocking & fingerings for keys EbM & AbM.

...then it's just a matter of shifting the hand when playing E-flat and A-flat major. The same kind of thing applies to the next group of keys – D, A, and E major:

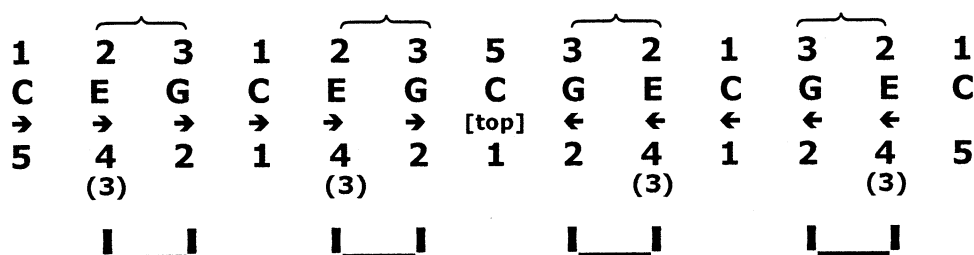
****D major arpeggio (2-3 block on middle two; □ ■ □):**



*** Same blocking & fingerings for keys of EM & AM.*

Similarly for C, F, and G major:

***C major arpeggio (block middle two; all □'s):**

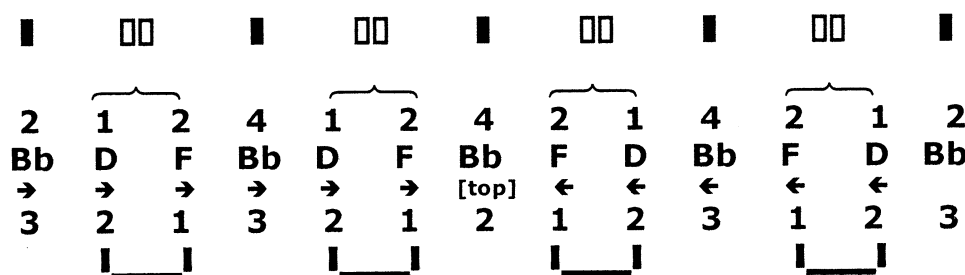


**Same blocking & fingerings for keys of FM & GM.*

Every technique book I've seen suggests 5-4-2-1 for the left hand. However, I find that 5-3-2-1 works better for me when I'm playing very low on the piano; if the hand is relaxed with elbows close to the body, the fingers point more to the left, which lines up the 3rd finger better than the 4th. When I play higher up, that changes – the 4th finger lines up better than the 3rd. So if I'm doing several octaves, my fingering varies: 5-3-2-1, 3-2-1, 4-2-1, 4-2-1, etc. Speed also plays a role; if I'm going fast, I may want to keep one fingering so as to preserve better the angle of the hand. When I point these things out to students, many of them see that the same things apply to them – they, too, come to like 5-3-2-1, 3-2-1, 4-2-1, 4-2-1, for example. But students' hands are not cookie-cutter molds. For some, 4 works better all the time; for others, 3 works better all the time. It's amazing to me that no technique book of which I am aware seems to account for this variability.

I put B-flat major dead last because of the varying fingerings for B-flats. Blocking the white keys is, therefore, a real help, for at least the two whites will always be confidently "placed":

Bb major arpeggio (Bb always 3 in L.H., 2 or 4 in R.H.; middle 1-2 □□ block):

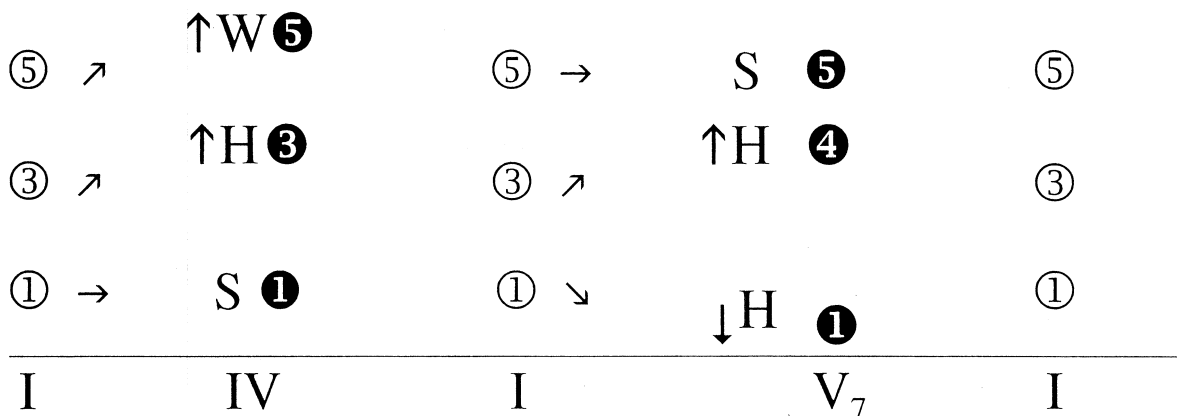


Minor arpeggios are also written in easiest-to-hardest sequence. There's nothing really new in terms of how they work with respect to blocking.

CADENCES

How many of you use this book – "[Intermediate Musicianship, Book Two, by Palmer, Manus, and Lethco, Alfred Publishing Co.](#)"² It's a wonderful book for class piano, for it happens to dovetails with most of what I require for students to pass piano proficiencies. If students can simply read and play cadences from the Alfred book (pp. 11-41), all fine and well. If they have trouble, however, the handout may help. Check out page 18: W stands for whole step, H for half step, S means same, arrows indicate up or down, and numbers are fingerings:

Major cadences: Right Hand – standard Alfred book fingerings; may be better for persons with smaller hands (?)



Some students prefer this alternate fingering for the tonic triad:

² Willard A. Palmer, Morton Manus, and Amanda Vick Lethco, Alfred's Basic Piano Library: Intermediate Musicianship, Book Two (Van Nuys, CA: Alfred Publishing Co., 1988), 11-25 and 27-43.

Major cadences: Right Hand -- alternate fingerings (different from Alfred book)				
④ ↗	↑W ⑤	④ →	S ④	④
② ↗	↑H ③	② ↗	↑H ③	②
① →	S ①	① ↘	↓H ①	①
I	IV	I	V ₇	I

The left hand fingering, however, should always be as follows:

Major cadences: Left Hand -- standard fingerings				
① ↗	↑W ①	① →	S ①	①
③ ↗	↑H ②	③ ↗	↑H ②	③
⑤ →	S ⑤	⑤ ↘	↓H ⑤	⑤
I	IV	I	V ₇	I

There are no directional arrows from IV to I, or from V₇ to I, for the simple reason that students usually have no trouble getting back to "home base" (the tonic). The advantage of this schematic approach is that students can play cadence patterns in every major key without even turning a page. The same thing works for minor keys, of course:

Minor cadences: Right Hand – standard Alfred book fingerings; may be better for persons with smaller hands (?)

⑤ ↗	↑H ⑤	⑤ →	S ⑤	⑤
③ ↗	↑W ③	③ ↗	↑W ④	③
① →	S ①	① ↘	↓H ①	①
I	IV	I	V ₇	I

Minor cadences: Left Hand -- standard fingerings

① ↗	↑H ①	① →	S ①	①
③ ↗	↑W ②	③ ↗	↑W ②	③
⑤ →	S ⑤	⑤ ↘	↓H ⑤	⑤
I	IV	I	V ₇	I

Again, 1-2-4 on the tonic triads (right hand) may work better, especially for students with larger hands.

CHOIR WARM-UP DRILL

All class piano students learn this drill:



Continue pattern in every major key...

We have a lot of music education majors for whom this will come in handy. On page 22 of the handout you'll find a schematic way of looking at this:

Schematic of "Choir warm-up" drill for Class Piano

	Pentascle	Triad	up ½ step
C:			
D^b:			
D:			
etc....			

Again, this is helpful especially for students struggling with reading or if they cannot figure it out by ear or rote. Say out loud as you play: "white, white, white, white, white, white, white, white, white (C pentascale). All whites (C major triad). Up a half step – black-white-black (D-flat triad). Black, black, white, black, black, black white, black black (D-flat pentascale). Black-white-black (D-flat triad). Up a half step – (opposite) white, black white (D triad). And so forth..." [Students demonstrate.] Why do you think the little arrows are there (in the schematic)? They indicate upper whites (or, the white key to the right – F rather than E in D-flat major, for example). That's where students are likely to mess up (e.g., they'll play D-flat minor rather than major) if you don't get that across with the arrows.

If there are extra handouts when we're done, please feel free to take one or two extras. And do check out p. 111 of Martha Baker Jordan's excellent text.³ It's a one-page synopsis of what we did with scale blocking. So much of teaching is looking at the same things in different ways.

CHROMATIC SCALES

A great way to teach chromatic scales is to start with thumbs on middle D and play the chromatic scale contrary motion, 3 octaves, with this fingering:

³ Martha Baker Jordan, *Practical Piano Pedagogy* (Miami, Florida: Warner Bros. Publications, 2003, 2004), 111.

CHROMATIC SCALE, 3 8VES, HANDS TOGETHER CONTRARY MOTION, STARTING ON MIDDLE D THUMBS

- Black keys are in bold.
- **IMPORTANT:** Block the scale first, saying the blocks out loud ("small, 3, big, 3," etc.).

Say out loud: "small three big three small three big three"

Right hand up:	$\overbrace{D \text{ D\#}}$ $\overbrace{E \ F \ \text{F\#}}$ $\overbrace{G \ \text{G\#} \ A \ \text{A\#}}$ $\overbrace{B \ C \ \text{C\#}}$ $\overbrace{D \ \text{D\#}}$ $\overbrace{E \ F \ \text{F\#}}$ $\overbrace{G \ \text{G\#} \ A \ \text{A\#}}$ $\overbrace{B \ C \ \text{C\#}}$
	1 3 1 2 3 1 2 3 4 1 2 3 1 3 1 2 3 1 2 3 4 1 2 3 , etc. – 3 8ves
Left hand down:	D Db C B Bb A Ab G Gb F E Eb D Db C B Bb A Ab G Gb F E Eb

Come back in (right hand descending, left hand ascending) using the same fingering pattern.

Notice that by starting on middle D, the hands are a perfect mirror image – same fingerings, with white keys and black keys happening at the same time. Block this scale first – say out loud "small, three, big, three," each word in sync with its block. [Demonstration at piano.] Notice that every other block is a 1-2-3 block, alternating with a small (1-3) and a big (1-2-3-4) block.

[Audience member asks why 1-2-3-4 is used rather than 1-3-1-3.] Yes, most of my transfer students come in using 1-3-1-3, which is O.K. at slower speeds. But if I play that segment of the scale as fast as possible [demonstration], I can't possibly go as fast using 1-3-1-3.

Advanced students will eventually need to learn the chromatic minor third scale. This scale shows up in classical repertory – e.g., Chopin penciled it into his "Nocturne in E-flat, Op. 9, No. 2," as a variant for measure 24. You can also hear it in the bridge of "Honey Pie," a Beatles tune. [Demonstration of both examples at piano.]

Chopin has his own fingering for this scale, which you'll find in the better editions of his "Etude in G-sharp minor, Op. 25, No. 6," where this scale is prominently featured. The fingering in your handout is a bit better, however. As with the regular chromatic scale, the chromatic minor 3rd scale is best played starting with thumbs on middle D – again, hands together contrary motion, 3 octaves:

CHROMATIC MINOR 3RDS SCALE*, 3 8VES, HANDS TOGETHER CONTRARY MOTION, STARTING ON MIDDLE D THUMBS

- Encircled fingerings are black keys.
- Right hand starts on middle D (1) and F (5).
- Left hand starts on middle D (1) and B (5).

Fingerings going out (contrary motion - right hand goes up while left hand goes down):

5	③	4	③	4	③	4	5	③	4	③	4
1	②	2	1	②	1	②	1	②	2	1	2.... repeat 3x (3 octaves)
		_				_				_	
	slide on 2's					slide on 2's					

Fingerings coming back in (right hand goes down while left hand goes up):

5	4	③	5	④	5	4	③	4	③	5	④
1	②	2	1	②	1	②	1	②	2	1	②.... repeat 3x (3 octaves)
		_				_				_	
	slide on 2's					slide on 2's					

*Chopin penciled this scale into his "Nocturne in E-flat, Op. 9, No. 2," as a variant for measure 24.

Hear Houle's rendition of this nocturne with variants at <http://www.pianofestival.org/files/ArthurHouleChopin.mp3>.

Again, the hands are a perfect mirror image of each other. This fingering involves sliding the 2nd finger. (Chopin had not thought of sliding in this way.) Notice that the chromatic minor third scale fingerings are different going out vs. coming back in; this is different from the regular chromatic scale, which uses the same fingering both directions.

So remember – when you teach either of these chromatic scales, start on middle D's; it's the best way to do it. And with the simpler, regular chromatic scale, block it first, calling out the blocks.

I'm out of time, right? Thank you very much, everybody. [Questions and demonstrations at the piano continue afterward, in particular with regard to the chromatic minor third scale.]