Evolution of Allcanplay

By Mike Weinberg (aka A.C. Player)

As an 11-year-old in the early 1960s, I had 6 months of piano lessons under my belt and was progressing nicely—at least according to my teacher! 😊 Unfortunately, after a nerve-wracking public recital, I decided I'd rather be outside playing baseball, so I quit taking lessons. 😞

But I loved piano and continued to enjoy making music, mostly self-taught by ear and chords over the years.

In the early 1980s, I heard a friend playing the contemporary (slow) version of Neil Sedaka's "Breaking Up Is Hard To Do." It sounded fantastic, and I really wanted to learn it, so I got the sheet music.

I was doing okay with the first three pages, which were in the key of G (only 1 sharp). But at the bottom of the fourth page, starting with the 32nd measure, the song abruptly switched to the Key of Ab (4 flats!) with multiple notes in each hand and somewhat complex timing:


My progress ground to a halt!

Even after penciling in note names, flat symbols, and timing numbers, it was tough for me to play with enough speed and regularity to gain muscle memory. Frustrated, I figured there had to be an easier way.

KEYBOARD PICTURES

I'd seen Chord Charts with pictures of the keyboard with the chord keys marked, like the following:

So I reasoned, why not do the same for *every* note in a song? I sketched a diagram of a keyboard and marked it with both the left and right hand notes that were played together:
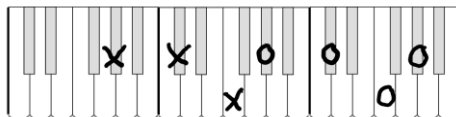

These are the keys of the red-boxed group of notes above.

Initially, I experimented with different shapes for the left and right hands (squares, triangles, etc.) before settling on X's and Circles, like in Tic-Tac-Toe. Later, I began filling in the Circles to make them more visible as Dots.

I sketched another keyboard diagram and penciled in the next group of notes and so on until I had a set of pictures that showed me exactly which keys to press. Now I could focus on coordinating my hands and fingers!

In the beginning, to mirror standard notation, I drew each keyboard diagram in left-to-right order:

Left to Right

Play E   then D   then C
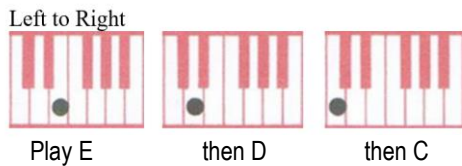
But this was hard to follow, and I quickly found it made more sense to stack keyboards in a column:


Stacked

Play E

then D

then C
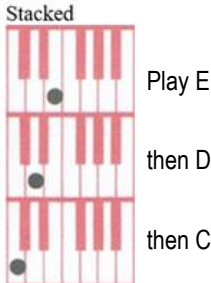
Players accustomed to reading music from left-to-right may find reading down a column disorienting at first, but it makes it much easier to track the relative movement of the keys to be pressed.

Stacked columns also allowed me to use a vertical line to indicate held notes and ties:

My original ties mimicked standard notation by repeating the note symbol at the end of the tie line. But many beginners thought they should play the note again at the end, so I ultimately replaced the second symbol with a short dash.

Play & hold

Hold & let go
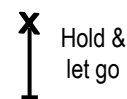
I marked Middle C with a wedge and added lyrics, timing, and chords (and eventually numbered Measure lines).

SHOULD [4 and]

AULD [1 and 2] G

AC- [and]

-QUAIN- [3 and]

-TANCE [4 and]
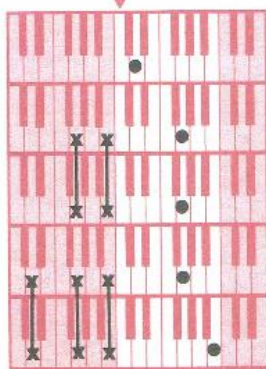
Allcanplay worked so well that I formed a small corporation, called ServNet, with family and friends. Among other ventures, we published a series of music books and materials.

While several thousand books sold over the years, profits never quite exceeded printing and marketing costs, so we didn't expand much beyond our local market.

I learned a bit belatedly that I loved being an innovator but not so much an entrepreneur! 😊

However, I really loved to teach, so while pursuing my "real" career as a college business computer instructor, I taught periodic "Piano Fun" workshops as well as private lessons on the side. To bolster my musical knowledge, I took a couple of piano theory courses at the college where I taught.

In a 20-year period, I happily introduced Allcanplay to well over 1000 students and early on was invited to appear on local TV stations several times to demonstrate the system (see the "Allcanplay on TV!" section).

When I retired in 2005, I posted my piano and other teaching materials (I have a lot of interests!) online at www.maxlearning.net under the pseudonym "Max M. Learning" for anyone to use for free.

From time to time, I tinkered with Allcanplay notation but didn't do much else with it until 2020 when Covid-19 downtime gave me a perfect opportunity to update the materials and promote the system via social media.

TIMING

Most beginners choose to play familiar songs where they already know the timing. However, the time count can be critical in unfamiliar songs or in tricky passages or rhythms.

Standard notation uses differently shaped and shaded note symbols to specify timing. But I'd seen time counts written out next to notes to aid learning, so I decided to do the same for Allcanplay.

Traditionally, each beat is counted with a single digit. For example, [1 2 3 4] for four beats would be four equal ticks on a metronome: tick tick tick tick.
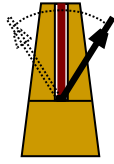
But when half beats occur, the word "and" is inserted, so you must speed up your counting to fit. For example, in the count [1 2 3 and 4], the [and 4] must fit in the same time as the previous [4]. Teachers can demonstrate this by counting out loud and clapping in time, but it can be hard to convey nonverbally in notation.

To partially resolve this issue, I included an "and" with *every* beat. [1 and 2 and 3 and 4 and] for four beats would be eight equal ticks on a metronome: tick tick tick tick tick tick tick tick. Instead of having to speed up for the half beats, players can count steadily and simply hold each note for the required length of time.

To Illustrate the difference using 4/4 time (4 beats per measure; quarter note gets one beat):

1   2   3   and 4
Speed up on half beats

1 and 2 and 3 and 4 and
Count steadily

The Time Signature's bottom number indicates which type of note gets one beat. So, for example, in 6/8 time an eighth note would get a full beat [1 and] and a sixteenth note would get a half beat, either [1] or [and]. Naturally, [1] could be [2], [3], [4], etc. depending on which beat of the measure the note fell on.

While it worked fine for most notes in most songs, using [1 and] for each beat wasn't a perfect solution. For notes shorter than a half beat, I split the [digit] or [and] into parts, for example [1/ /1] (counted "wu un") or [an/ /nd] (counted "an da"). The timing for a triplet (three notes counted in the time of two notes) became [1 an da].

To save space, especially for longer counts, I now use [+] instead of [and].

ARPEGGIO ARROWS

Because it uses stacks of keyboard pictures, Allcanplay is typically not as compact as standard notation. This wasn't a problem for shorter songs that fit on one or two pages. But it became unwieldly for longer songs.

Borrowing from the idea of arpeggio notation, which uses a squiggly line to indicate that a group of notes should be played in sequence one note at a time, I began using horizontal arrows, pointing either right (up the keyboard) or left (down the keyboard), across *equal-length* notes played in sequence:

Dotted half note in right hand is held for 3 beats while left hand notes are played in order.

Tie: Hold *t* for 3 beats

Arrow: Play **L M T** in order for one beat each while holding *t* for 3 beats

Only 1 keyboard diagram is needed instead of 3—and the arrowed keys are easier to see and follow!

With arpeggio arrows, some Allcanplay songs took up *less* room than standard notation! And often the additional space gained allowed me to add pictures, playing tips, and song history on the same page.
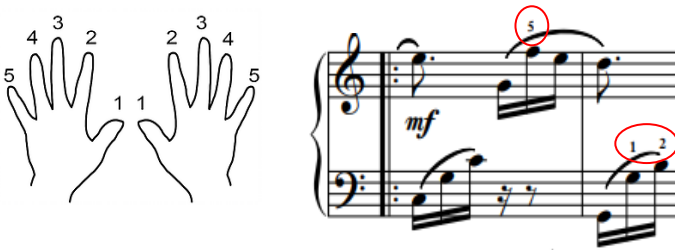
FINGERING

To develop good "muscle memory" (where your hand and fingers can eventually play without you thinking about which keys to press), it's important to use the *same* fingering for each note each time.

In the original Allcanplay music books (see the "Vintage Allcanplay Songs" section), I thought it best *not* to include fingering since hand spans and finger lengths differ, and what worked for one player might not work for another.

But over time, I realized that most notes are fingered the same, so why make players go through the extra trial and error effort to figure out fingering? If a suggested finger seemed awkward, they could simply cross it out and pencil in an alternate finger.

Standard notation, when it includes fingering at all, uses tiny finger *numbers* (1-thumb, 2-pointer, 3-middle, 4-ring, 5-little) to mark some but generally not every note in a song:

Since I was already using numbers for timing, I decided to use finger *letters*, which I also thought would be more intuitive: Thumb, Pointer, Middle, Ring, Little.

I considered using "Index" for that finger, but the letter "I" for Index wasn't as visible as "P" for Pointer. And while it's common to call it a Pinky, "P" was now taken, so I settled on "L" for Little.

For Vintage Songs, I taught students how to determine the optimum fingers and to pencil in corresponding letters above both the X's and Dots (see the "Fingering" lesson):
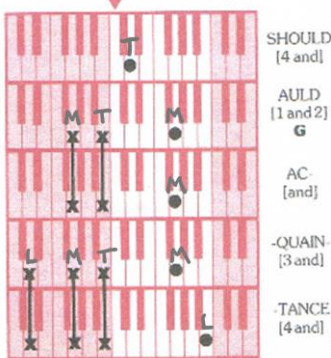

For newly-converted songs, I eliminated the X's and Dots and used just finger letters.
* Left Hand: Large uppercase letters: **L R M P T**
* Right Hand: wRitten lowercase letters: *t p m r l*
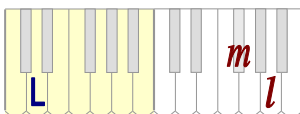
When color printers became more common, I began using dark blue or black letters for the left hand and maroon or red letters for the right hand.

To ensure there was no confusion, I included a hand/finger/letter graphic on each songsheet.
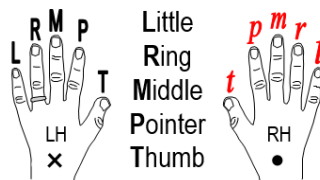
OCTAVE SHADING

Repeating twin and triplet black keys, along with the surrounding white keys, form identical-looking sections called octaves, which can make it confusing to know where on a keyboard you should be playing.
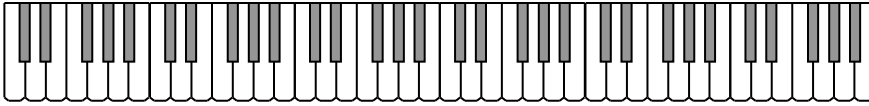
To remedy this, I shaded the octaves on either side of the Middle C octave using a single color (red, blue, or gray), which worked fine for songs that fit in 2 1/2 octaves.


But it wasn't as helpful for songs with a greater note range. For those, I used deepening shades of a single color (gray or yellow) for the octaves on either side of the Middle C octave.

That worked better, but I still found myself playing in the wrong octave on occasion.

Ultimately, I hit upon the idea of using the 7 colors of the rainbow to shade the 7 octaves of a full-sized keyboard. That way, if players knew the order of the rainbow colors (neatly summarized by the acronym Roy G. Biv: red, orange, yellow, green, blue, indigo, violet), they'd automatically know which octave to play in.
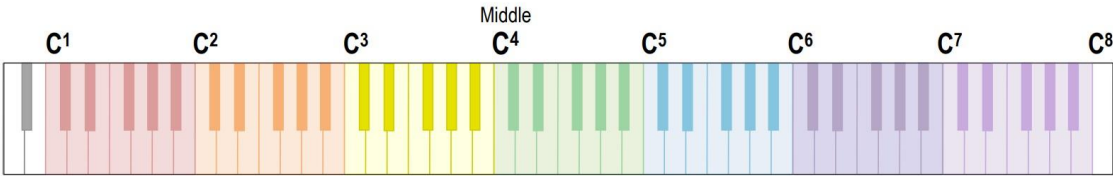
But the real breakthrough came when I "rainbowized" my keyboard by adding corresponding colored strips above each octave. Now I could visually align the octaves between the songsheet and keyboard.

This worked like magic for wide-ranging songs like Fur Elise:

SPACE SAVER

Rainbow octaves also made it possible to display long songs in fewer pages. Each keyboard column only needed to be as wide as the octaves for the notes being played.

Allcanplay Piano!

Clair de Lune
"Moonlight" from Suite Bergamasque

Author: Claude Debussy
Year: 1890
Tempo: Medium, expressive

Keys: D♭, E
Time: 9/8 (1+ = ♪)
Measures: 72

Click to rainbowize your keyboard!

Allcanplay Notation
Match fingers to keys & play!

Little
Ring
Middle
Pointer
Thumb

Tie Hold & let go

Arpeggio Play key by key in arrow direction

M←T   t→l

Pinch to replace one finger with another without looking!

With rainbow octaves, each column need be only as wide as the note range in that section.

Instead of using a 6-octave keyboard diagram throughout a song (only 1 will reasonably fit across a page), rainbow octaves can be split out as needed, saving lots of space.

Here's the page-length comparison for Clair de Lune's whopping 72 measures:
* Original sheet music: 6 pages
* Allcanplay with a 6-octave column: 20 pages
* Allcanplay with multi-size rainbow columns: 7 pages

PAST, PRESENT, & FUTURE

For several years in the 1980s, I was an adjunct member of the local Music Teachers Association. We'd gather in each other's homes and play songs in front of the group, which was quite frightening for me.

With less than a year of lessons in my lifetime, I felt like an imposter among all these professionals. And with lingering trauma from my initially-botched piano recital all those years ago, I had to work hard to overcome performance anxiety (see the "Motivation & Performance Anxiety" lesson).

While I generally felt welcome, a few teachers looked askance at my play-by-picture system and one even remarked to me privately that another teacher thought it was "cheating."

But most teachers were gracious and felt that I was at least getting reluctant students to make music, and some might eventually graduate to formal lessons, which they'd be more than happy to teach!

For me, ultimately, the goal was and is to make beautiful music by whatever means: picture, ear, chords, standard notation. My hope is that in the series of lessons I've posted at www.allcanplaypiano.net, players will find Allcanplay to be a viable aid to achieving piano proficiency by any means.

After nearly 40 years of sporadic development, Allcanplay has matured. Yet, as I promote it via social media, receive feedback from new players, encounter new songs, and gain new insights, it will undoubtedly continue to evolve.

My camera/piano work/play station
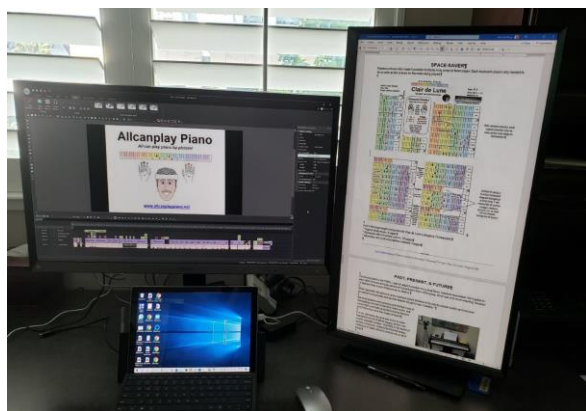
My computer workstation

An obvious limitation to any alternative notation is that relatively few songs have been converted to it. Early on, I tried to convince a few music publishers to sell their song catalog in Allcanplay form, without success.

While it takes considerable time and persistence to accurately convert a standard music song to picture form, you need convert it only once on paper vs. every time in your head.

It may be a long shot, but I've added a "User Contribution" section at the bottom of the Allcanplay Piano webpage, so that anyone who converts one of their favorite songs can share it with the rest of us and be recognized for their efforts (see "Converting Songs to Allcanplay").

I hope you've enjoyed my little trip down memory lane. If you have questions about or suggestions to improve Allcanplay, feel free to email them to me at mike.weinberg1952@gmail.com

Keep on playing!

Mike Weinberg
San Diego, California
August 2020