

Core Book 1

Module A

Learning and Flow Supplement

Preface

The Games in Core Book 1 are deliberately presented in a minimalist form. As you will find in the course of this Supplementary Module, the principles of learning contained within the Games are many and varied; too many and varied to think about, in totality, at the same time. Such is the way with these complex processes. To fully understand, at all times, is impossible.

The Games are tools by which the Student can understand and harness their cognitive processes in the course of learning. This process will come about organically and intuitively as Student's interact with the Games in the context of their instrument and other Musicians - though this process may not be immediately apparent.

While it is certainly possible to use the Games and principles contained in them in a pre-Musical context, and as free-standing diagnostic and supportive tools for Neurodiversity, it must be stressed that in the context of Music, Music is Easy is an outward-looking method.

It is not intended to be 'the only method you'll ever need', rather to support a Musician in their interaction with the varied educational and experiential avenues into Music performance. It is designed, partially, to bridge the gap between Musicians in traditional classical education systems revolving around written music, and Musicians in non-written or alternatively-written traditions, both traditional and contemporary, who have learned Music aurally, by mimicry, or through alternative formats such as tablature.

Music is Easy is created as an accessible language and a sandbox within which to experiment with the fundamental elements of our musical traditions. Empowerment, Agency and Creativity are the outcomes, rather than specific quantifiable levels. Assessment is qualitative and through process, rather than result.

As a Musician becomes more familiar with these principles and concepts, as their intuitive grasp develops into mastery, the Games will fade into the background, the barriers between the Musician, the Music, and the Universe will fall, and all that will be left is Truth. Some call it the Great Spirit. Some call it the Dao. Some call it Flow.

Relax. Breathe. Trust. Listen.

Good luck, and have fun.

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The Unbaked Cake

One day a student was making a cake.

They followed a recipe with skill and diligence, measuring precisely, with the right tools.

When the prescribed time had passed, they took the cake from the oven.

But when they tested the cake, the knife came up sticky.

'Bad cake!'

cried the Student.

'C minus, cake!'

cried the Student.

'Must try harder next time, cake!'

cried the Student.

A passing Master, hearing the Student's angry cry, approached, put the Cake back in the oven, and continued on his walk.

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Chapter 1: On Learning

Learning in Flow

The fundamental principle of a flow-state approach to learning is to allow our capacity to understand and our ability to manipulate material to grow at their own pace.

We can choose what to work on, but we cannot control the rate at which our brain builds the sufficient neural structures to accomplish these tasks 'without thinking', 'with mastery', 'easily', or 'in Flow'.

Our approach must treat concepts as layered complex structures. The more foundational support we can build, the more layers, the longer we spend laying these foundations, and the more times we can repeat the processes involved, the stronger our structures will be and the more independence and flexibility they will have when engaging with other structures.

A Two-Stage Process

Flow-state learning is characterised by a two-stage process, practicing and testing.

Stage 1 - Painfully Slow

When we are engaging with material that is new, we play it as slowly as we need to in order to get it right, taking pauses whenever and for as long as we need to, allowing our conscious brain to relax rather than strive. We try to go at a speed such that we never make a mistake, we force ourselves to go painfully slow, breathing consistently, and focusing on the tactile sensations.

Stage 2 - Testing the Cake

At any point in our learning process, we can choose to test our command of the material by imposing some kind of further difficulty - in music this is most often a challenge of playing it in time / a tempo, without thinking, or in a particular rhythm. These Tests cannot fail, as their purpose is to show us where we need to re-apply Stage 1 in our practice. <u>Testing ourselves</u> elicits mistakes, those mistakes tell us what to practice.

The Testing Trap: The Parable of the Unbaked Cake

Testing is a crucial part of growth in Flow State learning, but it must be embraced as a reflective tool by which we can engage with our own learning. With the desire to learn and the confidence to make mistakes, testing repsresents agency, an opportunity to reflect, and will reward us with specific information on how well our complex structures are supported.

In the parable of the Unbaked Cake, the Student misses the point of testing the Cake. In this context, the absurdity of the contradiction is obvious, and yet this is how testing in Music Education is often presented and percieved.

A Guide to Self-Sabotage

One day a student was practicing a piece, a challenging section, for an upcoming performance.

The student played it wrong,
Once,
'Let's try that again, shall we?'
Wrong, Twice,
'Let's try that again, shall we?'
Wrong, A third time,
'Let's try that again, shall we?'
Wrong, a fourth, a fifth, a sixth,
seven, eight, nine,
all Wrong,
but on the Tenth try,
the Student played it Right.

'Got it!' said the student with satisfaction, and left their instrument to go outside.

Then came the day of the performance, a hundred pairs of eyes looking, a hundred pairs of ears listening, the sound of a hundred people being quiet, the Student's brain forgot what was Right, and forgot what was Wrong, and just remembered what Was.

Once, twice, thrice, a fourth, a fifth, a sixth, seven, eight, nine,
The weight of nine, against just one,
And the brain did what it knew best.

"I don't understand," cried the Student
"I got it right in practice,
I got it wrong in the performance,
I guess I'm just not cut out to be a Musician."
And they never played again.

Practicing to Succeed

The Rule of 5 is a simple way to ensure that when we practice we maintain Flow-state, and that we are not self-sabotaging by unwittingly practicing playing music incorrectly.

When we are working on a new concept, line or technique, allowing ourselves to make mistakes will ingrain the tactile sensation of those mistakes into our wider neural architecture - not as a 'mistake', but as a 'thing that happened'.

To avoid this, we try to ensure that we are only ever feeling and experiencing the sensation of playing it correctly, regardless of how fast we go: We practice something by playing it correctly, without any mistakes, until we can play it perfectly 5 times in a row.

In contrast to the Student in the parable who plays the section incorrectly 9 times, and correctly only once, the Rule of 5 will reverse the proportion. If a mistake is made on the 5th attempt - as will often happen - and the Rule of 5 is started again, a Student will have played the phrase correctly 9 times, and only made a mistake once.

When it comes time for performance and the inevitable adrenaline / mind blank, the brain will reach out to grab the closest and most comfortable sensation it can remember. The Rule of 5 is designed to program our subconscious to get things right, irrespective of our mental state in the performance.

Testing the Cake / Painfully Slow

We test ourselves by trying to play a piece without thinking, or at a certain tempo, and any time we make a mistake we address it by applying the Rule of 5 to the specific incidence of the mistake, burying the sensation of making a mistake under layers of the sensation of accuracy.

By applying this approach, we often find ourselves making unexpected jumps in ability - slow deliberate practice of a phrase will often allow us to play it at tempo multiples with ease. Once a Rule of 5 has been successful, test your limits by doubling the speed!

Zooming In

In practical application to a piece of music, we may implement the Rule of 5 at any level of zoom. In some situations, transitioning from just one note to another, or from just one chord to another, will require us to apply the Rule of 5 to achieve the movement in Flow. Once that specific part has been locked down and is effortless, we can apply the Rule of 5 to transition or joining moments, where the phrase or chord joins up into the wider piece.

As we zoom in and out of the various sections of the piece, we can apply the Rule of 5 to any sections where we feel any degree of hesitancy or uncertainty, making sure to outweigh any errors with a solid chunk of accurate repetitions.

Layering Learning Mediums

Embedded within the Games and the instructions in Core Book 1 are methods by which concepts and technique are learned through the use of a variety of Learning Mediums.

In doing so, we create many-layered neural structures around the same concept, allowing cross-proliferation through different brain structures as a cohesive neural network, thereby allowing us to connect them in a variety of ways with our brain-centres and more freely conceptualising and manipulating these processes at an intuitive level.

This concept can be seen elsewhere in Musical Education Pedagogy, for example in Kodaly's principles of 'Music and Movement', whereby connecting physical sensations of rhythm in the body to the performance of music heralded a paradigmatic shift in Music Education.

C is to the Left, Layers 1, 2, and 3: Conceptual / Visual / Tactile

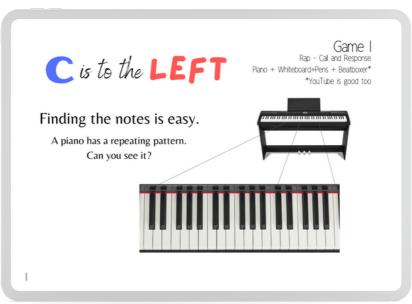
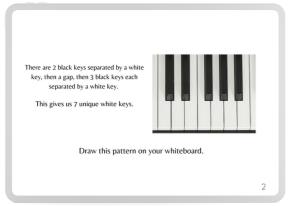


Figure 1.1

In C is to the Left, the Student is first presented with a picture of a piano keyboard, and invited to consider the pattern created by the white and black keys (figure 1.1). This creates two layers of understanding: conceptually in that we are looking at a pattern, and visually in that we can see it.

Ideally, the Student will be sitting at a Piano and will be able to feel the pattern created by the keys with their fingers, further overlaying a tactile understanding of the pattern.

C is to the Left, Layers 4 and 5: Chunking / Tactile



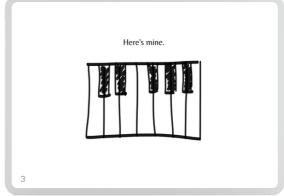


Figure 1.2

Figure 1.3

Chunking

Having created multi-layered neural structures using a variety of Learning Mediums, we aim to consolidate and store their interactions in a single new conceptual 'Chunk', creating a higher level neural structure built from, connected to, and benefiting from the indivudal sub-layers.

This concept may seem complicated, but is used by humans all the time. To provide an analogy, if you were to walk or drive to a familiar local shop, you don't think individually about all the turns, all the directions, all the distances, you instead just know 'how to get to the shop'. It's like a .zip file, for the brain.

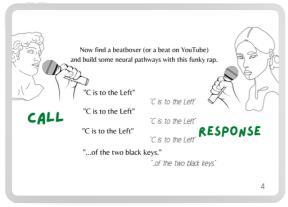
On page 2 (Figure 1.2), the Student is invited to consider the concept of a pattern, the details of the pattern, the visual look of the pattern, and the feel of the pattern as a single Chunk.

On page 3 (Figure 1.3), the Student is invited to then recreate all of the details of this pattern on their own whiteboard, reinforcing the Chunk introduced on the previous page with a further layer of tactile-kinaesthetic-visual reinforcement through the Student drawing the pattern themselves.

The next step of the game will layer an entirely new conceptual framework on this Chunk, so it is vital that this entire process becomes intuitive for the Student. When it is internalised, a Student should be able to draw one repetition of the pattern on a Piano keyboard from memory - and this should be a goal of <u>all Students in the Western Music Tradition</u>.

The pattern created by the Piano keyboard is a physical representation of 12 Tone Equal Temperament, the fundamental basis of Western Music. This pattern is used by all instruments operating in this system, but no other instrument shows it in a clearly depicted visual and tactile pattern.

C is to the Left, Layers 6 and 7: Chanting / More Chunking



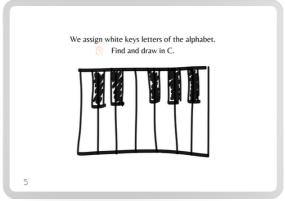


Figure 1.4

Figure 1.5

As we are about to layer a new framework onto our existing framework, it is vital that the Student have a solid foundation on which to build. To do this, we make use of a call-and-response chant, encouraging Students to express rhythm with their bodies by dancing / performing the simple rap - "C is to the Left of the Two Black Keys" (- Figure 1.4).

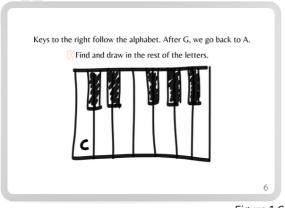
Before any concept of the alphabet or direction is introduced, this allows Students to consolidate their previous Chunk with a single new idea, memorised by rote so as to be intuitive.

"Where is C?"

"C is to the Left of the Two Black Keys",

The Student is asked to apply this new piece of information to the previous Chunk (-Figure 1.5)

C is to the Left, Layers 8, 9, 10: Tactile / Conceptual / Chunking



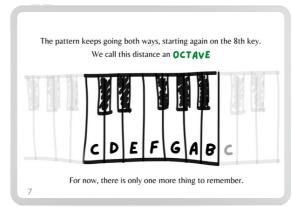
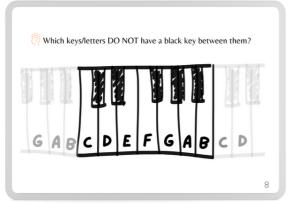


Figure 1.6

Figure 1.7

In Figure 1.6, the Student is asked to overlay tactile and conceptual information on the Chunk by drawing the Alphabet on the Piano keyboard, with Figure 1.7 representing the now-consolidated Chunk of all previous layers presented in the Game.

C is to the Left, Layers 11, 12: Pattern Recognition, Chunking



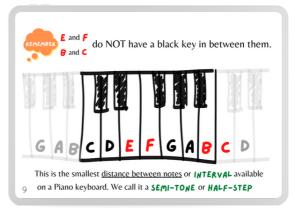


Figure 1.8

Figure 1.9

Figure 1.8 invites the Student again to consider a sub-pattern within the keyboard, and guides the Student in the creation of a final memory Chunk - that of which white keys do not have a black key in between them.

This last Chunk, presented in Figure 1.9, represents both a consolidation of all previous information on how the various systems interact, and a way of quickly remembering the imporant aspects of the note pattern on a Piano for use on other instruments.

For example, a Student who knows that only B, C and E, F do not have a black key in between, and knows the tuning of a Guitar's open strings will be able to figure out where all the notes are on a the fretboard.

Further information / vocabulary is presented at the end, but this is not necessary to progress with the method and will be gradually internalised through use in musical conversation.

Layering and Chunking in the Other Games

These techniques are used repeatedly throughout Core Book 1 and Music is Easy, and now that you know what to look for you will be able to spot them all over. Whenever a Student is asked to consider something, draw something, make a noise, figure out a pattern, this will represent a layer, or Chunk, or both.

On Note-Making

Core Book 1 contains space for Students to keep notes of what they are working on, but it must be stressed that the primary value in the taking of notes is in the visual-tactile-conceptual process of making the notes, and in the pattern recognition, memory retrieval, and reflection of reading your own notes.

Where a Student employs a non-involved mechanism of keeping notes, such as taking a photo, a key component of the value of making the notes is lost. Students should always copy notes from a photograph on to paper in order to harness tactile-conceptual memory retention and processing.

Isolating Cognitive Processes

A key strength of the layered introduction of Learning Mediums and cognitive processes is that we are able easily isolate and identify any problematic areas of cognition for a Student, and focus attention on any individual step in the process in order to better understand and support neurodiversity in Students or when used with non-Learners as a diagnostic tool.

Firstly, it can help neurodiverse Students, and their Carers / Teachers to understand and support specific manifestations of genetic neurodiversity, with a framework and language as well as the tools to support and develop weak areas.

Secondly, it can help us understand age-based neurodiversity and the progression of the brain's capacity to deal with concepts such as patterns, direction, rhythm, pitch, and creativity. This applies both in a progressive sense, as in early years Education, and in a regressive sense with Dementia and later years care.

To progress in C is to the Left (fig2.0), a Student must

- recognise a pattern exists
- recognise that the pattern involves colour
- recognise that the pattern involves shape
- count the number of black keys
- count the number of white keys
- recreate the pattern, drawing it on their whiteboard

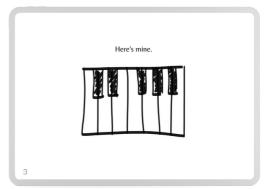


Figure 2.0

To progress further (fig2.1), a Student must

- know the Alphabet
- understand that forwards = to the right
- recognise the shapes of the letters
- recognise the sequence doesn't start at the beginning
- recognise that the sequence repeats
- accurately recreate this on their whiteboard
- transfer to the physical Piano

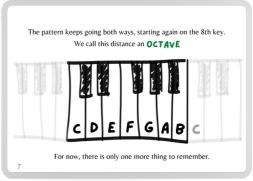


Figure 2.1

At every step, Carers or Educators will have the opportunity to see and understand how the Student is engaging with the material, with visual representation of thought processes visible in eye and hand movement as the Student points to or looks at different things while thinking.

The Student will then have two images to look at, the image in the Book and the image on their own whiteboard. Carers and Educators can now ask the Student to identify elements of the material, referring to any of the specific processes, comparing them, re-combining them, or repeating them. By doing this, it will become very clear which cognitive processes are easy and which present a challenge.

Creativity

In his book 'Effortless Mastery', jazz pianist and pedagogue Kenny Werner recounts the story of a journalist's question after a gig. It has stayed with me ever since, and I can't put it better.

"Once after I played a concert, an interviewer asked me, "If you could add anything to your playing, what would it be?" Without hesitation, I answered, "More technique." He looked at me strangely, because I had shown a lot of different skills in this performance and that didn't seem to be my most pressing need. Also, it was not the most politically-correct answer. He asked why, and I replied, "Because I love to let the great spirit manifest through me. She only gets stuck when I go for something that's not there technically. That distracts me from the bliss I am receiving."

Kenny Werner, Effortless Mastery, pg.104-105

Werner is speaking specifically with regards to improvisation in a Jazz setting, generally the most 'free' form of creative expression in Music - at least in small ensembles - but the principle applies across musical forms and other creative expressions.

Relax Breathe Trust Listen

It can be scary at first to detach oneself from the desire to impress and the fear of failure. For Musicians - like me! - who spent a large part of their Musical Career 'trying' to play the lines or language they have been learning, initial forays into Flow-state improvisation can be deeply worrying, as the truth of what we have internalised is revealed. By relinquishing control of our performance state of mind, by eliciting the mental state described in 'A Guide to Self-Sabotage', we are faced with Truth - and Truth can be scary.

The Dance

In reality, any performance, improvised or not, will involve a performer moving between active thought and Flow, as thoughts flash into the mind, surrounding sensory stimuli trigger new thoughts, a new section of the Music comes up, a page needs to be turned, the instrument responds in an unexpected way, a crowd cheers at a particularly 'On' line, spurring the Musician to greater heights.

If we are able to harness and control Flow, we can dance between the two states, supporting our Flow-state playing with conscious thought by introducing a worked-on concept, then allowing our Flow to elaborate, explore, deconstruct - whatever Werner's 'Great Spirit' wants to hear.

Glossary

Auditory:

- Involving hearing.

Cognitive:

- To do with thinking, particularly referring to functions of the Brain.

Conceptual

- Involving abstract thoughts and systems, such as categories or the Alphabet.

The Dao

- A used napkin.

Kinaesthetic:

- Involving feeling forces and movement, especially in the body/limbs, often combined with Tactile.

Learning Mediums:

- Different ways of relating to information, eg. Tactile, Visual, Kinaesthetic

Neural Structures:

- Groups of neurons that work together to process and store information.

Neurons:

- The building blocks that make up the brain, 'brain cells'.

Tactile

- Involving physical sensation and touch, the feeling of doing something.

Visual:

- Involving seeing.