

## Effective Practice Techniques

Utah Valley Chapter AGO • Super Saturday Organ Workshop • 26 April 2014  
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### Three stages of skill acquisition

1. Cognitive. (Factual) Use existing knowledge to address a piece of music.
  - Should I use a finger substitution or a finger glissando here?
  - Should I cross over feet on this pedal scale?
  - Where are the entrances of the fugue subject?
2. Associative. (Procedural) Repeat the physical movements (fingers, feet, changing manuals, pulling stops).
  - What most people mean by practice.
  - The repetitions usually increase in speed.
3. Autonomous. (Fluent) Play without conscious attention: autopilot.

(Fitts and Posner 1967)

The associative stage is programming the autopilot.

### Standard practice advice

- **Connection to the skill acquisition stages**

Play through piece only one or two times to find problem areas

- This is working in the cognitive area. If you play through more times, then you are in the associative stage and are programming the autopilot without corrections

If you make a mistake twice, do something to prevent it (mark the accidental, write in fingering or pedaling or counting, etc.)

- This is moving back from the associative stage to the cognitive stage, preventing the autopilot from incorporating the mistake

Mark everything: fingering, pedaling, etc.

- Most of us do not have time to get to autopilot for weekly church meetings: hymns, preludes, postludes. Mark **everything** so you do not have to remember.
- Marking is also useful for when you return to a hymn (or other piece). You can skip cognitive, and go from associative to autonomous more quickly.

Practice everything: walking out, getting on the bench, hitting pistons, etc.

- Get at least to the associative stage of everything.

You will perform exactly as you practice, except worse.

- Get as much as possible into the autopilot for performance, because we need extra cognitive resources for the public performance. If you have to remember a lot of things, then you will not remember some of them when you perform. You must either write them down or get them to autopilot.
- Practice all aspects of performing: introducing pieces, no stopping, etc., so they are all at least in the associative stage

Amateurs practice until they get it right; professionals practice until they can't get it wrong.

- Amateurs get to the associative stage; professionals get to the autonomous stage. This is why it seems like professionals perform effortlessly: Professionals are on autopilot, and can respond to other performers, audience attention, etc.

## Effective practice strategies for learning a piece

“When you want to get good at something, how you spend your time practicing is far more important than the amount of time you spend.” (Foer, 171)

The difference in practicing between beginners, novices, and experts is the number of strategies applied (Lehmann and Jørgensen 2012, 685). Although we are amateurs, we can practice like professionals.

Beginner strategy: Play through

- This is only used if you have been given a hymn to play with 30 seconds notice. Even so, you would probably be better off to take the 30 seconds to examine the hymn and look for trouble spots that you can work out before playing.

Novice strategy: Break it up and slow it down.

- This strategy is frequently suggested by instructors.
  - Break up the piece into smaller sections. Start at the last section and work backwards, or start at the most difficult section.
  - Within each section, practice each hand alone (or even, each voice alone) and feet alone with a metronome. Find a speed (however slow) where there are no mistakes. Then speed up gradually.
  - Then put two units together (hands together, LH and pedal, RH and pedal) with a metronome, starting slower and speeding up.
  - Then put all three units together at a slow speed with a metronome and speed up to performance tempo.
- The metronome keeps you honest, and allows you to see your progress. Each increase in speed keeps you out of the autonomous stage and keeps you in the associative stage.

Expert strategies:

- Study the score
- Practice etudes/exercises that emphasize techniques required for the piece
- Incorporate expressiveness from the beginning (put it into the autopilot programming)
- Record yourself (and write a review)
- Know your weaknesses: What are your most common errors (note accuracy on accidentals, rhythm, voice independence, consistent pulse, etc.)? Fix them early
- Listen to other performances of the piece
- Mental rehearsal (visualization)

“Whatever the approach to practice, the fundamental challenge is to detect and correct ‘errors’”. (Lehmann and Jørgensen 2012, 685)

- Once you are on autopilot, you cannot get better, so you must improve before getting there, or get out of autopilot
- “Deliberate practice” (Ericsson, Krampe, Tesch-Römer 1993) keeps you out of autopilot

## Effective practice sessions

Practicing is most effective when it is deliberate: “goal setting, error detection, and real-time strategizing to make specific improvements” (Woody 2014).

Begin with the end in mind:

- What do you want to accomplish in this session? Specific (keep inner voices independent on Hymn 173) is better than general (I want to play better).
- What do you want to accomplish this week? This month? This year?

What should I practice? Think about what you have done in the past year:

- Hymns
- Preludes and postludes
- Special musical numbers
- Classical repertoire
- Have you ever been asked to substitute or play an extra hymn with no warning? Then you should practice sight-reading.
- Have you ever had to fill time (“We’re not ready to start, keep going for a couple more minutes”)? Then you should practice improvisation (or practice skipping around in a prelude)
- Have you ever been asked to add an interlude at the last moment? Then you should practice making your own preludes/interludes/postludes from the hymnbook.
- (Other skills: transposition, memorization, playing by ear).

Take a few moments at the end to evaluate your practice

- How did you do in your goals?
- What is your goal next practice session?
- How would you change your practice?

You must practice your deliberate practicing until it becomes automatic

- First step: Keep a log of what you do when you practice

Spread out your practice times whenever possible (difficult if organ is at distant church):

- Distributed practice (four half-hour sessions) is better than massed practice (two hours all at once)
- Expert strategy: practice multiple times in one day

Deliberate practicing requires a lot of effort: solitary work focusing on weaknesses (no fun)  
How do you create motivation for practice?

- Give yourself an incentive. (Similar to physical exercise)

## Summary

What does academic research say about effective practice?

- “Learners need to possess a repertory of well-defined practice strategies.
- Learners should approach practice consciously, and it should be planned.
- Learners should develop a list of expressive and technical tasks that they address systematically in each practice session.
- Learners should develop their ability to evaluate and monitor what they do.
- Learners should be as specific as possible when practicing.
- Learners should start to think of practice as a broader concept that does not solely consist of motor practice but includes a multitude of tasks.”

(Lehmann and Jørgensen 2012, pp. 687-688)

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