

Directing Band *WITH* Technology

OR: How I Learned To Stop Stressing and Embrace Automation

James Hargreaves

(This article is Part 1 in a three-part series designed to help music directors utilize technology and automation to its fullest potential—both in how they organize their programs and in how they educate their students. Watch future *Bandmasters Review* magazines for Part 2 and Part 3.)

Technology: Friend or Foe?

Teachers, and especially band directors, have always seemed to exist at the midpoint between accepting and rejecting technology. Some see technology as a friend, wholeheartedly embracing each new innovation that comes our way, even if its use distracts us from teaching. Still others see technology as a foe, lamenting its stranglehold on our lives and openly wishing for a simpler future that will likely never come.

Some of this divide between friend and foe is certainly due to generational factors, as author Douglas Adams points out below:

I've come up with a set of rules that describe our reactions to technologies:

1. Anything that is in the world when you're born is normal and ordinary and is just a natural part of the way the world works.

2. Anything that's invented between when you're 15 and 35 is new and exciting and revolutionary and you can probably get a career in it.

3. Anything invented after you're 35 is against the natural order of things.

—Douglas Adams

Despite the obvious truth in his statement though, it is equally true that the divide cannot be blamed solely on age. Indeed, there are many young band directors, just out of college, who only use their work computer for email, attendance, and grades while an equal number of older teachers with 30+ years of experience are schooling the younger generation on the best ways to use new technology.

How is this possible? What makes some teachers successful at implementing technology in their classroom while others falter? I believe it comes down to three factors that are consistent for all successful teachers:

ONE: they have a “never stop learning” attitude,

TWO: they understand what technology can and cannot do, and

THREE: they know how to adapt its use for their classroom.

Technology as Friend

There are *many* innovative tools available today that have the potential to completely transform how we do our jobs. New websites and apps are developed each year specifically tailored to the needs of music educators and students, including:

- WEBSITES designed to teach, test, and “gamify” music literacy. (*MusicTheory.net*, *ThetaMusic.com*, *4four.io*, *Quizizz.com*, *Noteflight Learn.com*, etc.)

- APPS that train students to play more in tune, in tone, and in time with immediate audio and visual feedback. (*Tonal Energy Tuner*, *inTune*, *Rhythm SR Trainer*, *Metronomics*, etc.)

- and even SOFTWARE programs that will act as a technological practice buddy, using play-along tracks to mimic the feel of playing with a group ...something that came in particularly handy during COVID, but we won't talk about that... (*SmartMusic*, *MusicFirst*, *MusiClock*, *iPracticePro*, *iImprov*, *Acapella*, *Flipgrid*, *Soundtrap*, *Garageband*, etc.)

In addition to all these new tools, take a moment to consider the incredible advances we've seen over the last few years in worldwide connectivity and communication. How much easier is it to share media files today? *YouTube* links, Google Drive file sharing, and *AirDrop* have transformed how we store and transport media. (Does anyone still use CDs or flash drives?)

With the ever-increasing availability of all this technology to more people than ever before, one can't help but be excited for the future of our profession.

We have more resources to help us manage our programs and teach our students than any of us could have dreamed just 10-15 years ago!

And yet ...
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Technology as Foe

On the other hand, there are so many new technology tools being introduced or being mandated for use by school districts it can be difficult keeping up with the pace of change. As soon as we have learned how to use one piece of software, a new one pops up to replace it and we have to start the training all over again. Then, when our students show up to class before we have mastered the new tools, we simply default to teaching without them, which for many of us is exactly how we were taught by our band directors.

For those of us in the older generation, we still remember growing up in a band hall that only had one metronome and an old analog strobe tuner on a cart. No computer projectors, play-along tracks, online theory quizzes, or video lessons. Just an instrument, a music stand, and a band director. That was all we needed to find success when we were in school. Why couldn't that work for our students today?

After all, the next concert, contest, Region audition, or trip is always looming and since new technology can sometimes be uncomfortable and cumbersome to learn, many of us will simply take the easy route and forgo its use altogether. In theory, this works. Aside from PE and Athletics, Band may be one of the only subjects in school where the teachers could get away with using zero technology and still be able to do their jobs. As long as the kids have instruments and sheet music, like we did back in the day, our bands can still find success.

There is value in this approach, certainly, for relying on technology to do all the teaching would only lead to less human connection and group collaboration, no matter how many zoom meetings we attend. If we learned anything from the jump into online learning, it is the fact that **there is no substitute for a live, in-person, physically-present teacher to help a student truly reach their potential.**

If we do give in to the temptation and forgo technology use in our classrooms, I believe we are missing out on tools that could help us be **more efficient with our time and more effective in our teaching.** I believe we are also missing out on the opportunity to demonstrate for our students what smart technology usage looks like.

**Want to learn more?
James Hargreaves
will present "Using
Technology to Improve
Your Band Program"
at the TBA Convention/
Clinic this summer.**

Being a Role Model

We always work hard to model instrumental technique and tone for our students. We model practice and performance habits every day in class. Shouldn't we also model habits with technology that will help our students succeed, both in music and in life?

As the saying goes, **kids today have more computing power in their pocket than the Apollo astronauts had on the Moon.** What if we could harness some of that computing power toward developing the skills of music-making and accelerate the learning process? What time could be saved? How many more students could finally "get it" and thus increase your group's performance potential?

What if we could show our students that their devices could be used for more than just texting, TikTok, YouTube, and gaming?

All we have to do is open our eyes to the possibilities, develop a clear understanding of what our technology tools can and cannot do, and then act on that knowledge towards the goal of improving our classrooms and our teaching. By finding a balance in our technology use, we will be able to make our jobs easier and we will help our students reach new heights of musical excellence.

It just takes a shift of perspective, a little training, and a willingness to try. Sometimes, a little change of routine can be just what we need to become the best versions of ourselves. A bit of innovation and self-evaluation can go a long way.

New is not always bad. It's just new.

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Moving Towards Mastery

In my experience, the secret to mastering any new technology is to approach it in the same way you would when mastering a new instrument.



Keys to Success (for Mastering an Instrument):

1. **EVALUATE** your Equipment: Make sure everything is in good working order and you have all the necessary supplies and equipment for the task. Also, evaluate if this instrument is the right fit for what you are trying to accomplish.

2. **FINGERING CHARTS**: Don't be afraid to spend time learning all your instrument's alternate fingerings/positions, finding its specific tuning tendencies, and discovering all its unique capabilities. (*Read the manual!*)

3. **TRAIN** with a great teacher: Find a great teacher. Better yet, find multiple teachers and learn from all of them. (*Live teachers are better than online, but online can work in a pinch.*)

4. **PRACTICE**: Experiment and practice with the instrument regularly to grow your ability and confidence with its use. Build your skills, trust in the process of consistent practice, and don't give up. Know that you will get it eventually if you just keep practicing!

5. **TROUBLESHOOT**: Accept failure as an expected part of the learning process. Evaluate what went wrong, troubleshoot the problem to find a solution, and try, try again until it works.

Then...continue the cycle and go through the five keys again: Evaluate your equipment but with new, now experienced eyes. Find another fingering chart/manual and learn a new way of doing something. Continue to train, practice, and troubleshoot. In short, foster an attitude in yourself to *Never Stop Learning*.

Applying these Five Keys to Technology and Automation

As the future moves ever onward, it is important that we stay up to date on the latest music education apps, websites, and assessment tools, finding ways to best adapt and incorporate them into our curriculum and teaching routines. The five principles outlined above can certainly be used to help us learn and master these tools.

While most professional development in music technology tends to focus on the curricular and pedagogical side, I feel that it is equally important to explore how technology can be used to help us more efficiently and effectively **manage our programs**.

This is where *Embracing Automation* comes in. With the right tools and knowledge, technology can help us streamline communication systems, speed up data collection/processing, and automate repetitive tasks. I truly believe that if more of us spent a little time improving our skills in the forgotten administrative parts of our jobs, we would experience an overall decrease in stress and an increase in our available time; time that could now be spent planning lessons, picking music, and working with students. How crazy would that be?

So, for now, let's focus on the one area that is the biggest source of frustration for most of us: **Communication**.

As a band director, I think of communication in two ways:

- Targeted / Two-way Communication (aka **Email**)
- Broadcasting / One-way Communication (via a **public website**)

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So how can the “Keys to Success” approach help us master these two extremely important technology tools?

Keys to Success for EMAIL

1. EVALUATE your Equipment: Email is such a core part of our jobs it is imperative we take the time to improve our ability to use it.

- Take a close look at the email system you use and see if it is working for you or against you. While you cannot likely change the email system your school district uses, you can find ways to optimize it.

- Many modern email systems have features that allow you to automatically filter messages, apply labels or categories to help organize your inbox, set up rules for email forwarding or archiving based on the sender or subject, as well as offering many other advanced features.

- In a pinch, you might even consider using a third party app to help you streamline message handling (“*Spark*” is one app example, although *Gmail* and *Outlook* are both getting better each year. Just watch out as some settings available on the desktop version are not always available in the mobile app version.)

2. FINGERING CHARTS: When was the last time you looked at the advanced settings within your email system? Go through all the menus and learn what your system can do! Explore and experiment with the different settings, layouts, rules, and more to optimize your email experience.

3. TRAIN: *YouTube* is a great teacher for email as many other people have likely already found the best use cases for every setting and created video lessons to share with the world.

- Recommended channels: *Jeff Su*, *Flipped Classroom Tutorials*, *Thomas Frank*, *Robby Burns*, and *Frank Buck*, (just to name a few).

- I highly recommend searching the channels above for the words “Inbox Zero” and seeing how it can transform your email life!

4. PRACTICE: Practice with the different settings in your email, giving yourself time to try out each new setup. Experiment and try-try again. As you gain mastery,

challenge yourself with additional settings and usage changes, but only if they improve your time management or flow. *Practice with a goal in mind!*

5. TROUBLESHOOT: Things will rarely work right the first time. When in doubt, go back and adjust settings, watch another tutorial, and keep on practicing!

Keys to Success for WEBSITE MANAGEMENT

1. EVALUATE your Equipment: parents, students, and your community need an easy way to find key information about your program, including the calendar, required forms, and details about upcoming events. Emailed newsletters can often get buried and forgotten so building a public website and training your community to use it regularly is vital to preventing breakdowns in communication. Managing the online public face of your band program can be broken up into three (or four) parts:

- The website itself:

I use Google Sites to create my website as it talks to all of my other G-Suite programs, is easy to update from anywhere, and is generally very user-friendly and easy to make visually appealing.

As fun as they are to use, I would caution you against *WordPress*, *Squarespace*, *Blogspot*, or other website creators because your district’s firewall might block it. Make sure to use something that can be easily accessed by students from your district wifi.

- A web-address shortener (*bit.ly* or *TinyURL* work great for this). This allows you to easily share your website without having to rattle off a long and complicated web address while also allowing you to monitor the traffic coming to your site. *Alternatively, you could simply pay for a domain name.*

- *Remind* - This program is vital for sharing updates to your site quickly and easily with your school community. I type up monthly newsletters and email them out, but everything I mass-email I also post to the website and send via a link through *Remind*. This way, I cover all my bases for communication **Bonus: If you are so inclined, you might also consider a social media presence (*Facebook*,

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Instagram, etc.) as another way to send info. For me, it would always simply point back to the website as the central HUB of communication and information.

2. FINGERING CHARTS: Google Sites, as with all the G-Suite products (Docs, Sheets, Slides, etc...) is chock full of help documents and tutorials. There are also several menus and toolbars that would be worth checking out. Go through each of the buttons on the sidebars to see what they can do!

3. TRAIN: If you don't have someone in your district who is experienced with creating a website and available to help walk you through it, *YouTube* can again work really well here. Search for: "Google Sites" on each of the following recommended *YouTube* Channels: *Teacher's Tech*, *Simpletivity*, *Mr. Vacca*.

4. PRACTICE: Once you have a basic understanding of how to build your site, make sure to view the published version of the site from multiple devices with different accounts to make sure everything works the way you think it should.

5. TROUBLESHOOT: As with all technology, mistakes will happen. Links won't go to the right place, the text won't stay formatted the way you want, and you will forget to share critical documents where the right people can access them. The key is to not give up. Keep battling through the errors and find the solution. When in doubt, know how to ask for help!

There are many more technology tools that are worth looking into and should be explored more deeply. In Parts 2 and 3 of this series, we will discuss each of them in turn, including:

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You can follow him on his blog about Technology, Automation, and Band Directing at <https://bit.ly/automagicbanddirector>

- **Helpful Features** of your device's **Operating System (OS)** that are often overlooked

- Best practices in **Record-Keeping** and **Database Management** software

- **Apps** that can help you **Organize and Save Time**

- PLUS, a deep-dive into a few of the **Music Education Apps** that can help your students learn faster than ever before!

If you take a moment to honestly consider the various tools you use daily, you will start to discover that this Keys To Success approach can truly apply to any technology tool, particularly the ones that are new and unfamiliar. Bottom line, if you invest a little time toward mastering each tech tool, especially if it is one you must use every day as a part of your job, it will save you hours and days in the long run. The closer you are to mastery, the

easier and more enjoyable your job will become!

As time marches on and new tech tools continue to become available, remember to keep the end goals of teaching in mind and not let yourself be swept away on the wave of innovation. For no matter what technological changes come our way, at the end of the day our goals as band directors will always remain the same:

1. Reach and teach the next generation,
2. Connect them with the magical world of music-making, and in so doing,
3. Help create a bright future where there is more music, more meaning, and more life!

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