**21st Century Teaching & Learning in the Music Classroom**

Any discussion about technology in the first quarter of the 21st century must begin with the position and belief that guides how we utilize technology in our learning spaces and with our students. As I begin my tenure as Technology Representative, a majority of what I share with our state, other NAfME organizations and partnerships will proceed from this idea. As you may have sensed, there is a deluge of 'technology' available, at any time and on any device. What I experience at both state and national conferences at which I have presented is a sense that educators are craving the "why", the rationale behind implementing the latest tech into their classrooms. How does Technology help my students understand, value and appreciate music in a more profound way? Let's try and dig a little deeper into that notion.

Today's students are 21st century learners, while many of us were trained in teaching theories of a previous age. You might be asking yourself at this point, "did we really shift 'ages' in education?" Yeah, we kind of did, doing so in the blink of an eye. Today's students "will be a knowledge producer, drawing together a range of available knowledge resources – instead of a knowledge consumer, fed just one source, the old textbook. They will work effectively in pairs or groups on collaborative knowledge projects, creating knowledge to be shared with peers. They will continue to learn beyond the classroom, using the social media to learn anywhere and anytime – a phenomenon called 'ubiquitous learning'."[1]

Here's a little exercise: reflect on this image and the branches of 21st century pedagogies:
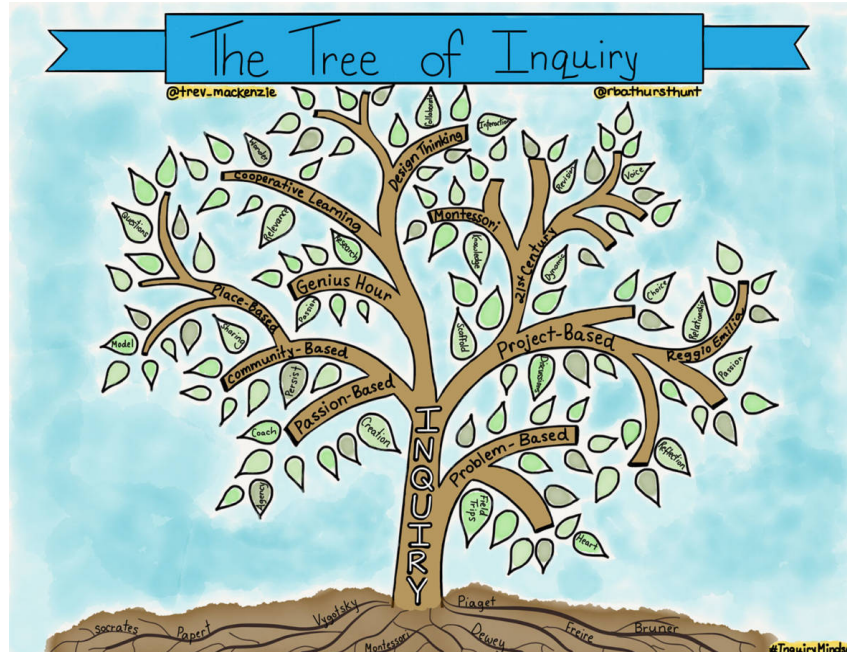
How might these ideas intersect with the core tenets of Music Education? Some of my favorite experiences as a music teacher came from providing the opportunity for students to explore possibilities in the language that is unique to music. As music teachers in this educational landscape, have we asked ourselves: can we create spaces so that our students can direct their own learning experiences in the language of music?

Here are a few more ideas to think about:

- Can a student learn about the correlation between emotional response and dynamics from mixing and mastering a project in Garageband?

- Can the music student learn about tempo, formal design, phrasing and sequences from composing and/or arranging a piece in Noteflight?

- Is not the a cappella phenomenon directly correlated with the "the design thinking method"? This process calls on students to "identify a challenge, gather information, generate potential solutions, refine ideas, and test solutions."[2]

The good news is that we are completely able to provide this environment so our music students can plan, make and discover what a personalized musical experience means for themselves! As outlined from the scenarios above, in the musical classroom "the role of the student is transformed from a passive consumer of facts and content into an active contributor to the learning experience and the exploration of problems, ideas and solutions. It is in this experience that understanding is constructed and rich learning occurs. Voice and choice are at the heart of these settings as the learner helps create the learning conditions and learning outcomes with the teacher."[3]

For several years now I have made the sincerest case to be on Twitter. It's a tagline I use at every conference I present at and every colleague I urge to get on ASAP. Why? In order to fully integrate a pedagogy in this digital age, we must find a way to curate resources from the overwhelming deluge of existing information across the world so that we are equipped to facilitate these experiences with and for our students. Professional Development doesn't have to happen 1x a year at a state and/or regional conference; ideas and ingenuity can arrive at any time! You can even follow a hashtag! There are music teachers who are actively integrating 21st Century Learning Skills into their music curriculum for their 21st century students. Twitter is

one way to find, connect, communicate and learn from these sporadic geographically located

educators.

Here are excellent resources to check out how music students can plan, make and discover what

a personalized musical experience means in the musical learning space:

http://edublog.soundtrap.com
https://notes.noteflight.com
https://midnightmusic.com.au
http://gillianmariemusic.com
http://chadzullinger.com

Am happy to continue the conversation with you in a variety of formats: Skype, Google

Hangout, Twitter, even a phone call! Please feel free to reach out, or perhaps we can meet at

your state conference this coming year; my 2018-19 presentation schedule, as well as other ideas

and resources can be found at chadzullinger.com. Thank you for the opportunity to share my

thoughts around Music Education, Learning and Technology.

[1] Kalantzis, Mary, and Bill Cope. "The Teacher as Designer: Pedagogy in the New Media Age." *E-Learning and Digital Media*, vol. 7, no. 3, 2010, pp. 200–222., doi:10.2304/elea.2010.7.3.200.

[2] Schwartz, Katrina. "What Does 'Design Thinking' Look Like in School?" *Mind/Shift*, KQED, 25 June 2013, www.kqed.org/mindshift/27348/what-does-design-thinking-look-like-in-school.

[3] MacKenzie, Trevor. "Four Inquiry Qualities At The Heart of Student-Centered Teaching." *Mind/Shift*, KQED, 19 July 2018, www.kqed.org/mindshift/51580/four-inquiry-qualities-at-the-heart-of-student-centered-teaching.

Biography

Chad Zullinger is the Assistant Principal for Learning and Innovation at St. John the Baptist School in El Cerrito, CA. He earned his M.M. in Choral Conducting from the University of Delaware and a B.M. in Composition at San Francisco State University.

Throughout his career, Mr. Zullinger has worked to create spaces so that students can plan, make and direct their own learning experiences in the language of music. He has been invited to present on Educational Technology at both statewide and national Music Education conferences. Just recently Mr. Zullinger presented "Designing a Music Curriculum with Technology", sponsored by Noteflight, at the California All-State Music Education Conference, San Jose California in February of 2018. Beginning in the fall 2018 Mr. Zullinger will begin his 2 year term as Music Technology Representative on the California Music Educators Association Board.