



Research Article

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Balancing the Arts, Literacy, and STEM in K-12 Curriculum: Joaquin Hernandez Explains a Holistic Approach on the Come Teach it Podcast

Jacob Larsen^{1*}, Michael Berger¹, Joaquin Hernandez² and Stephen E Berger³

¹Touro University Worldwide, USA

²Santa Ana Unified School District, USA

³The Chicago School of Professional Psychology, USA

*Corresponding author: Jacob Larsen, Touro University Worldwide, 10601 Calle Lee #179, Los Alamitos, CA 90720, United States. 714-315-3379.

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Abstract

In this article, seasoned educator and musician Joaquin Hernandez shares profound insights into the principles of holistic education. This conversation centers on the holistic approach to K-12 curriculum, with Hernandez emphasizing the importance of nurturing both intellectual and emotional growth. He underscores the transformative power of music and the arts in fostering emotional intelligence, creativity, and critical thinking among students, highlighting the need for a well-rounded educational experience that embraces literacy, STEM subjects (Science, Technology, Engineering, and Mathematics), and the arts. The dialogue delves into the unique challenges of harmonizing these diverse educational elements, emphasizing that a holistic education produces students who are academically proficient while also being emotionally aware and artistically inclined. Hernandez emphasizes that educators play a pivotal role in developing deep and lasting connections with their students, drawing parallels between these connections and the intricate art of fostering emotional depth through the arts. The arts and humanities, as he argues, serve as bridges across various disciplines, facilitating a deeper comprehension of complex topics while evoking emotions and nurturing authentic connections.

Ultimately, the conversation transcends the field of education, revealing universal principles that resonate across industries such as an emphasis on a holistic approach, the power of emotional connection, arts and humanities as bridges, and the difficulties of balancing diverse elements. It serves as a wellspring of inspiration for educators and professionals who seek to fathom the profound psychology of holistic education, reaffirming the enduring importance of a comprehensive curriculum in the contemporary educational landscape.

Keywords: Music education, Music teaching, Arts integration, STEM curriculum, Arts education, Literacy, Educational curriculum, Arts and humanities, Curriculum development, Teaching strategies, Educational philosophy, Visual and performing arts

Introduction to the Come Teach it Podcast

Come Teach It is a compelling series that delves into the art of teaching across diverse professions. This podcast aims to serve as a beacon of positivity, shedding light on often underappreciated facets of various fields of work, fostering a deeper understanding, and appreciation for the art of teaching. In this episode, we embark on an enlightening journey with Joaquin Hernandez, a seasoned educator specializing in music and arts education. Boasting exten

sive experience in K-12 curriculum development and a deep commitment to fostering students' academic, emotional, and artistic growth, Joaquin unravels the principles behind holistic education. As we delve into his insights, we uncover how the delicate equilibrium of literacy, STEM, and the arts transcends educational boundaries, resonating with educators and professionals across various industries.



Speaker 1: Michael Berger: Welcome to Come Teach It, a show about the rewarding and fulfilling experiences of the teaching life-style. I'm Michael Berger.

Speaker 2: Jacob Larsen: And I'm Jake Larsen. Our guest on this episode of "Come Teach It" is Joaquin Hernandez, born in Michoacán, Mexico, who moved to the United States in 1994 during the seventh grade. He attended Cal State San Bernardino and has been a single-subject credentialed teacher of music for nine years now. And, on campus, at our school, he is the one who works the hardest, and we appreciate him a lot. So, Joaquin, welcome to the show.

Speaker 3: Joaquin Hernandez: Thank you for having me. I'm Joaquin Hernandez, and I'm here to talk about music and education.

Jacob Larsen: There you are. So, if we can just start. I think the best place would be just probably as early as you'd like to go in your own professional arc. How did you get to where you are today?

Joaquin Hernandez: Well, a lot of it had to do with that immigration move coming from Mexico to the States. In Mexico, at that time in the 7th grade, I was taking classes on how to be an electrician and things like that. I kept seeing music on the side, and I wanted to do that, but I was not allowed to do it.

When I came to the States, I was put into choir. I didn't ask for it either.

Michael Berger: How old were you at that point?

Joaquin Hernandez: I was 13 years old or so, and I didn't speak a lick of English. I got put into choir.

Authors' Note: In this article, the educational journey of Joaquin Hernandez serves as a compelling narrative that enriches our understanding of holistic education in American schools. While his placement in a choir class was not officially part of an English Language Learner (ELL) program, it is noteworthy that the class was often populated by ELL students. This somewhat incidental placement offers a unique lens through which to explore the broader implications of a well-rounded education that incorporates arts and humanities. His experience thus illuminates an often-overlooked aspect of settings where ELL students find themselves and the potential for arts to act as an inclusive medium that fosters both intellectual and emotional growth. This observation underscores the article's central argument, advocating for a balanced approach to K-12 curriculum that includes literacy, STEM, and the arts to create a more enriching and holistic educational experience.

Michael Berger: But somebody looked at you and said you could probably sing?

Joaquin Hernandez: No, they said basically all the ELL students, ELL1, they were taking choir that year. It was like the year they took choir. They were like, he's in those classes, throw him into choir, it's a month and a half left, no big deal. But in there, I saw some kids playing bongos and things like that, and I was like, hey, I want to do that. So, interestingly enough, somebody took the leap of faith, saying, okay, this kid's not supposed to be in these classes next

year, but let's see what happens. So, I was told if you start failing in your classes, we're going to pull you out of the band. So, I was like, this is the only thing I got going. I don't really have to talk; I just have to follow directions and figure out what they're saying. The teacher spoke some Spanish, which worked to my advantage because I was required to speak very little English. I was expected to perform all these things, and I was a pretty bright kid, top of my class in Mexico, so coming here to be nothing and to be given this chance, I was like, I'm not going to screw this up. So, music was the saving grace in middle school when everybody was getting into gangs and things like that...

Authors' Note: Joaquin's story offers a personal journey that actually aligns with emerging scholarly research on the role of arts education as an intervention mechanism. His experience of being placed in a choir class largely due to his ELL status and then discovering a passion for percussion serves as an illustrative case. As he recounts, music became his "saving grace" at a time when many of his peers were falling into negative paths like gang involvement. This anecdotal evidence resonates strongly with the recent findings [1] that note the life-altering impact of Creative Youth Development (CYD) programs. Participation in such programs "saved lives," by steering youth away from negative trajectories such as gangs, drug use, crime, and general disinterest in life. The parallel between Joaquin's experiences and research underscores the need for a balanced K-12 curriculum that incorporates arts education alongside STEM and literacy. Such a balanced approach not only enriches the educational experience but also serves as a proactive strategy to intervene in the lives of at-risk youth, placing them on a positive trajectory.

Michael Berger: and you were getting into bongos.

Joaquin Hernandez: I was getting into bongos, man. I had the sticks in the back pocket. So, I got some flak for...

Michael Berger: Wait you would play the bongos with sticks?

Joaquin Hernandez: No, I wouldn't; it was that triggered it. Now I do it in orchestral settings, but it was

Michael Berger: You sure those weren't nunchucks?

Joaquin Hernandez: No, man. Well, it could have doubled for sure, but, I was always like the schoolboy according to the other kids, and I was like, I don't care, man. I'll wear the Polo shirt as long as I'm allowed to play drums.

Jacob Larsen: Was there something about you being uncomfortable speaking English that kind of pushed you away from the choir side of it and attracted you towards the instruments?

Joaquin Hernandez: Nah, no, I think it was mostly a family thing. And I try to talk to my students about this now that I'm a teacher because I'm not sure if it's just a Hispanic culture, but it's all this sort of thing, like, 'men don't sing, and men don't cry, and men don't emote.' I think it came from that, that I shouldn't be singing because that's... It's like a more feminine thing to do. I should be hitting things because that's more manly or whatever.

Joaquin Hernandez: So, even going into the instrumental side, the teacher was like, "Hey, you look like a trumpet player; you should play the trumpet." And I was kind of like, I want to kind of hit things because I'm kind of angry. So, he let me play drums, and it's funny because I talked to people and they said, yeah, you used to always have this scowl on your face, and I still do, I guess, but, I was just like a really angry kid in high school and in middle school, and I just didn't want to talk to people. I just wanted to play drums, hit things, and listen to metal. And hey, I turned out alright, I think.

Jacob Larsen: So, you're in school in the United States, and you're definitely finding yourself really into the music side of schooling. Was there something about music classes that made you feel more at home than other classes?

Authors' Note: Joaquin's experiences illuminate an interesting relationship between language proficiency and a preference for music classes. Initially classified as an English Language Learner (ELL), he was drawn to the drum line and orchestra over vocal music. His commitment to music classes was motivated, in part, by the community and shared responsibilities inherent in these settings, rather than solely by an affinity for music. Recent research [2] supports the notion that music education holds a unique appeal for ELL students. According to their findings, former ELL students were significantly more likely to continue participating in music and orchestra classes during high school compared to their native English-speaking peers. In the case of Joaquin, his preference for instrumental music over choir may have been influenced by cultural perceptions about masculinity, but the responsibility and community in his music classes kept him engaged. In this context, music education served as more than just a creative outlet---it provided a framework for accountability and social belonging, which is particularly crucial for students who may be at risk for disengagement. This adds another layer to the complex motivations that students, particularly those from diverse linguistic backgrounds, may have for persisting in music education.

Joaquin Hernandez: It was more, I think, like the responsibility issue that you were in there and, for example, in high school, I was part of the drum line and it was like 10 of us, so the way our teacher did it, he just sort of, and I kind of do the same way now, it's where the section leaders are responsible and the one that he talks to takes care of this section. So, if you're not being taken care of, you're gonna get in trouble later. It was it was an issue of not letting the drumline down and also not letting the band director down so like I used to ditch a ton, like so much, but I would always come back for the band classes because I didn't want to be the guy that left somebody behind the day before or whatever. So, it was that kind of ability factor of it. In other classes, I didn't have to respond for anybody as long as I passed the test. I knew I was fine. I was pretty good at taking tests. I could smell the BS a mile away and go, "Oh, this is the wrong answer." Or like, "Oh, this one smells like Christmas," you know? Like, I knew those things ahead of time. So, I did well in high school. My parents focused on the wrong things in high school, I think, and they were focusing on my attendance and not my performance. So, I remember clearly that I came sophomore

year with straight A's, and they used to yell at me for being absent like seven times or something, and I was thinking, at that point I thought, "Oh, they value attendance over grades, so I don't have to really worry about grades." So, then I sort of said, as long as I get a C average, I should be fine. I should graduate; I should be. So then, that was my goal. Do a lot of music, and just get C's. And that worked out for me. I was not like the most stellar student, but I knew that I knew my stuff, and I just wanted to be really good at music for whatever reason. It was like the never-ending challenge. And it still is to this point.

Jacob Larsen: It sounds like there's hierarchies, so you establish and support hierarchies and delegate them within your classroom. That's obviously what you experienced as well. How similar is that to, I guess, your traditional sporting team as well? Do you consider yourself a coach?

Joaquin Hernandez: I am more like a facilitator. I always sucked at sports, in a... It's not until recently that I started paying attention to baseball, and I've been doing archery for a few years. But archery is like the lone wolf sport, where it's like you're on your own, your score is your own, and the team doesn't rely on your score.

Michael Berger: Archery, where you're shooting a bow and arrow? Let's talk about that for a second.

Joaquin Hernandez: Sure. I'd love to. How many hours you got?

Michael Berger: Well, how many, it's like 24 arrows in a quiver? Uh. It's a quiver, right?

Joaquin Hernandez: It's a quiver, yeah. Yeah, you can put in like as many as you want.

Michael Berger: And are you shooting at a target?

Joaquin Hernandez: A target, yeah. I never shoot, I don't hunt or anything like that, so I'm shooting at paper or rubber animals.

Michael Berger: Well, this has to be a creative aspect of the same part of the brain that music is.

Authors' Note: Looking at the nuanced relationship between musical activities and other types of focus-intensive or creative endeavors, such as archery and public education settings, helps us to understand the importance of focus and technique in varying domains. Joaquin discusses his experiences in drumline and archery, emphasizing the role of accountability, concentration, and technique. These attributes not only contribute to mastery in specific skills but also could be linked to particular cognitive functions and their underlying biology. In a scholarly context, Dr. Berger's observations resonate with significant research into the biological basis of musicality [3]. Honing's integrated theory of musicality provides a comprehensive framework that combines functional, developmental, phylogenetic, and mechanistic approaches. His work affirms that musicality could be an innate, widely shared capacity for music constrained by our cognitive abilities and biology. This theory can be extended to include focus-intensive activities like archery,

suggesting a shared cognitive infrastructure for these seemingly disparate activities.

Joaquin Hernandez: So, it's actually the whole idea of, like for me, it's the idea that you're following certain rules, certain procedures, and there's a sense of accountability that you have to hit this one thing. You have to keep doing it until you hit the bullseye.

Jacob Larsen: It seems technique intensive.

Joaquin Hernandez: Oh, totally, man. It's like how much pressure you put on a finger, which way is the arrow pointing according to your perspective on your dominant eye, etc. But it's also the whole concentration aspect that you don't get in a public education setting because my brain's bombarded with questions, and I sometimes get sick and tired of hearing my name being thrown around.

Michael Berger: We're asking you if you hear too.

Joaquin Hernandez: Yeah, well, but it's not the same in a classroom trying to get through a lesson, and you get the PA like, "Oh, false alarm," and then like, "Hey, this guy needs to go to the dentist," and like, "Mr. H, what day is it today?" You know, these things. Okay, none of these are related to what I'm trying to teach here, but my students understand the concept that I get tired of all these questions, and they tend to take care of those things. But with archery, it was the whole focusing aspect, and I was able to be in a zen-like zone, like meditation.

Jacob Larsen: And you've recently taken up archery, it sounds like.

Joaquin Hernandez: Yeah, like maybe last four or five years or so.

Jacob Larsen: Is there, I mean, obviously you are a teacher, you're still picking up hobbies, what is it about education that really gets you?

Joaquin Hernandez: I think it's not so much the educational process; it's more like the human connectivity to young people. Because I think about when I was their age... What was it that didn't let me go down the wrong path or turn into a bad hombre or something, you know?

Authors' Note: The significance of teacher-student relationships in educational outcomes cannot be overstated. Studies that employed Latent Growth Mixture Models to track the trajectories of teacher-student relationships over three years have been conducted and the benefits have been measured [4]. The research underscored the importance of these relationships in various dimensions of educational experience, such as emotional engagement, school belonging, and behavioral outcomes, especially among minority students. Notably, the study found that students on a normative-positive relationship trajectory demonstrated better emotional engagement and a stronger sense of school belonging. These attributes serve as key indicators of a favorable educational experience, reinforcing Joaquin's emphasis on human connectivity in the educational process. The study also highlighted the protective function of supportive relationships with teachers. In line with

Joaquin's account, the research suggests that positive relationships act as a buffer against various challenges that students, particularly minority students, may face. The Researcher's applied implications recommend that schools develop specific processes to support at-risk minority adolescents, reinforcing Joaquin's own emphasis on the necessity of providing orchestral opportunities for his students.

Joaquin Hernandez: But it was like I had adults listening. I had adults guiding. I had adults that said, "Hey, like it doesn't matter what the world out there is like. What do you want to do? What do you want to go on? What do you want to hit? What do you want to play? What do you want to..." And there's questions that I was like, "Well, I want to be in an orchestra." And they said, "Let's focus more into what you want to do in an orchestra. Do you want to be a conductor? Do you want to be a librarian?" And I was like, "I want to be in the percussion section." They said, "Okay, great. Let's delve more into what?" And I was like, "I really like to hit bass drums and gongs." And they said, "That's what you gotta do. You gotta focus on being the best bass drum player, the best gong player, the best cymbal player." And I was like, "Oh, that's kind of cool that I get to do those things." And now I do. I'm part of this orchestra, and they wanted me to be their main percussionist. I said, "I'll only do it if I can bring my students along." Basically, "Fire your section, let me take over," which is a bit of a muscle move. But I don't have any need to play in an orchestra, but I do have a need to have an orchestra for my students to play in. So, I sometimes burn bridges just to get things for my students. I mean, only the strong survive, right? So why should I be the nice guy all the time? And I think these kids need somebody to be over there holding a torch for them. And I think it's that aspect of showing...

Michael Berger: Do you show up in those conversations with the quiver and the bow?

Joaquin Hernandez: Yeah, I say, "Hey, what's going on?" No, I'm just kidding. Certainly not. But, um... The actual stuff is more like to put a pause on the educational side and focus on having no thought in my head at all. You know, it's a whole nirvana. You want to be in that. That's it.

Michael Berger: I have a number of questions that get you to the position of being a band director. I know for social science, we have 10 to 13 teachers in the department any given year, depending on the amount of courses. But you're the only band instructor. So, is this a difficult position to get? What makes someone specialized to get the position as well.

Joaquin Hernandez: It's not that it's a difficult position to get. It's a difficult position to make work, because a lot of people land the band director job and they're kind of incompetent. They just sort of... They get ignored, and they go years doing this mediocre job, and people say, "Oh, that's great. You can play 'Louie Louie.'" And it's like, anybody can play "Louie Louie," bro.

Michael Berger: I can't.

Joaquin Hernandez: Well, you can spend a couple days with me.

Jacob Larsen: Right, a couple of days. Get the piccolo out.

Joaquin Hernandez: Yeah, get the oboe out, too. No, but it's like some people are slick and they figure out they can just do this thing every year, collect their paycheck, and be cool. As long as the kids are fine, no big deal. I'm not like that. I get really bored.

We have a lot of great teachers in our district that are not given recognition, but they're doing great things with their kids. It's not always about who's putting the best band on stage. Sometimes it's like, "Hey, this kid's learning a lot of things on the side that have nothing to do with performance, but it has to do with music." Like, at our school, we had a kid composing and a kid studying Baroque counterpoint, which I was like, "That sounds really boring. But if that's what you want to study, let's go, let's deal with it." It was a good refresher for me because nobody talks about Baroque counterpoint unless you're in college, you know?

Authors' Note: Baroque counterpoint refers to a style of composition that was prevalent during the Baroque period (1600-1750). In this technique, multiple independent melodies are played simultaneously in a way that creates a harmonious whole. The rules for how the voices or lines should move relative to each other are strict and based on principles that have been studied and revered for centuries. This topic is generally considered specialized or advanced in music education because it requires a deep understanding of music theory, harmonics, and the intricacies of melodic interaction. Students studying Baroque counterpoint often engage in exercises involving writing or analyzing complex musical pieces, activities that go beyond the typical K-12 music curriculum.

Michael Berger: Or on our show

Joaquin Hernandez: Exactly. Because we're not talking about the Fuchs or whatever. I think it was cool because it wasn't like my ego getting in the way of saying, "You will learn what I teach you." It's sort of like, "Hey, what are you interested in?"

Michael Berger: So, does he get to play that music at the half-time of a show?

Joaquin Hernandez: No, he doesn't. See, that's the thing.

Michael Berger: How do you work that?

Joaquin Hernandez: We don't, simply because that book he was going about is this set of exercises where he gives you a melody on the bass, and you're supposed to fill up the chords. But there are all these rules as to how the notes move from one another. I kind of go, 'Yeah, that's cool, man. Let's see what it sounds like.' But then you hear it, and you go, 'Oh man, that sounds like Palestrina. That sounds like Bach. That sounds like very smooth voice leading that we don't really hammer on like the masters did, and that's why they're so good.' And this kid over here, a junior in high school, is reading this, drawn to it. Yeah, drawn to it. Because he was also very into the mathematical aspect of music and the physics side of music, which at some point, me and the physics teacher were going like, 'I don't know what he's talking about, but I think you would understand that.' And he goes, 'Yeah, I don't understand this part of

it.' And I go, 'Yeah, that's the part where I understand.'

Authors' Note: The interdisciplinary nature of music education is often underscored by its overlaps with subjects like math and physics. For example, the mathematical concept of fractions is vital in understanding musical notations like quarter notes, half notes, and whole notes. Moreover, the concept of patterns and sequences in math has a direct application in understanding rhythms and melodic structures in music. In terms of physics, principles of wave interference can help students understand why certain notes sound harmonious when played together, while others do not. Similarly, the concept of resonance can explain why certain materials and shapes are preferred in the construction of musical instruments, such as the body of a violin or the length of a flute. These instances illustrate how music education can serve as a bridge to understanding complex topics in STEM, thus making a case for a balanced approach in K-12 curriculum. While STEM disciplines are undeniably important, an educational model that leans solely on these subjects offers an incomplete educational experience. Music education serves as a prime example of how interdisciplinary approaches can enrich learning.

Joaquin Hernandez: So, at this point, this kid was trying to teach us a concept that we could not bridge between the two disciplines, you know. And like, who am I to say, 'Hey, you can't be smarter than I am'? It's like, I'm going like, 'Holy crap, this kid's really talented.' Or the other thing that you're not supposed to do is let kids go from instrument to instrument to instrument because they're supposed to become the first trumpet player, the first bassoon player. But I kind of go like, 'Hey, man, as long as you commit a semester to it, I have no problem because you're learning.'

Michael Berger: So how do you go about that? You said your specialty is the drums. Yeah, so there's lots of different instruments. How do you manage all of those instruments?

Joaquin Hernandez: In college, you go through the process of learning a little bit of every family of instruments, so I spent some time playing bassoon, like maybe a couple months, some time playing trumpet, tuba, violin, viola, things like that.

Michael Berger: So, Jake, when I'm hearing this, it sounds to me like a link to like a social science teacher should be able to teach world history, U.S. history.

Jacob Larsen: People like to ask, "What area of history do you focus on?" I get that question all the time, especially as I'm doing my Master's in history, people still think that I'm necessarily focusing on a particular aspect of history, but we really do have to learn a little bit of everything to be able to teach it, especially with world history. I mean, as much as we do learn it. But yeah, it's not necessarily just a specialization.

Michael Berger: But it isn't in the same class. We wouldn't have a social science class where these six are taking world history, these six are taking US history, and these four are playing trumpet, and we gotta put it all together.

Joaquin Hernandez: Maybe you're like in a rural setting or something. Like a schoolhouse.

Michael Berger: So, how do you manage all of that?

Joaquin Hernandez: That's a great question. Nobody ever tells you that, sometimes you come to a program where it's so deficient that you have to teach all those things from scratch. Even to the so-called experts in the room. When I came to that school kids were saying, "we know how to play." And it took maybe about three months of me really assessing their playing that I went, "Ah, they don't know anything at all." They've just been throwing terms that they've heard, and they can produce a sound, and they can play by ear, but when it comes to reading the literacy portion of it, they have no idea. I knew I was in it for the long run, so I spent the first couple years just building up basics on those students. When new people would come in, they would go, "Oh, basics are the expectation." Once the whole culture in that classroom was about basics, then we started sort of putting more other things, behavioral things, procedural things, and it became a question that was, it's always given, it's like, do you want me to take time to go through each one of you and figure out where the error is or do you want to have your leadership take care of it?

Authors' Note: While Joaquin Hernandez did not explicitly use the term "scaffolding," the approach he described in his music education practice reflects this educational methodology. Joaquin initially focused on imparting basic skills and literacy in music to his students before progressing to more advanced topics. This principle of laying a strong foundation before introducing complexities is a universal educational strategy that can apply across various disciplines, from the humanities to the sciences. By emphasizing basic skills first and building upon them, Joaquin was able to create a learning environment where students could understand more complicated musical concepts and techniques over time. This focus on foundational knowledge echoes the broader educational philosophy that students must master fundamental principles in any subject matter before successfully tackling more intricate areas of study.

Joaquin Hernandez: And eventually the kid said, the leadership will take care of it. Or some kids would say, we'll take care of it. Give us five minutes. So that totally shrunk the time that I was like doing one on one with them. So, it, they created a hierarchy. It wasn't me. I just sort of said, there's these options, like which way do you want to go? And they say, well, we don't want to have our hand being held. We want to solve this problem. And I was like, great, solve the problem. Let me know if you need help. So, it's been like that over, I'd say at least six years that I've been there, that this culture has happened. And you'll, what's interesting is when you see a freshman coming in to ask me a question, you'll see an upperclassman saying, "hey, let me answer that question for you. He's kind of busy." And I go, "whoa, great. Thanks. Like, I am busy, but, you know, let me know."

Jacob Larsen: It seems like music is such a unique class on campus. I just wonder, what's your perspective on, you are a cre-

dentialed teacher. Do you feel like you are a teacher just like the rest of us are teachers? Or, I mean, do you look at us as a big group and you're different?

Authors' Note: This discussion illuminates the unique and indispensable role that music education plays in K-12 settings. Unlike many academic subjects that involve teacher-student interactions confined to a single school year, music education often fosters longer-term relationships that span multiple years. This continuity allows educators like Joaquin to witness the transformation of students from "irresponsible adolescents" to intellectually curious young adults. It creates an environment conducive to mentorship, where upperclassmen readily assist younger students in navigating the complexities of the subject and school culture. Also, it points back to research earlier discussed [4].

Joaquin Hernandez: Yes. And also, I consider myself very lucky because I get to keep some students for like four years. Like, you know, maybe if you're like an ASB you get to experience some kids for numerous years, but for me it's like I get them like babies, you know, where they, they're totally like, like irresponsible adolescents and then you see them, you know, bloom into these young people that are intellectual and they're like, hungry for knowledge beyond the classroom, you know

Michael Berger: Hungry for Baroque

Joaquin Hernandez: That's right, man. If it ain't Baroque. Or then some students that want to do more social things. And like, how do they use music or the arts for it? And sometimes it's not even that they're good in my class. I've had a girl say, "hey, no offense, but like, I kind of want to just like go to the art studio and draw" and I sort of thought in my head, "Well, you're not the most stellar flute player and you want to draw. So, better than ditching, right?"

Michael Berger: We hear something similar to that a lot. We hear, "can we just go to the band room and practice?"

Joaquin Hernandez: And my apologies about that, but they do come and practice. I've said that if you're done with your work, you come and practice. I said, "don't waste your time on the phone or something."

And some kids do take that very seriously. Sometimes kids just want to come in and cry, which is really strange, right? You would think they would go to the counselor or something...

Michael Berger: Well, music's emotional.

Joaquin Hernandez: Yeah. And that's the thing, that we tend to suppress like emotions. We tend to separate like, "Oh, please don't be sad. Like, Oh, put on a smile. If I turn that stuff upside down." You know, but when I get the kids in the class and I know I've connected to a good handful of them because they came in like super depressed, super crying. And I say, "Hey, do you enjoy feeling like this" and sometimes they kind of do, sometimes they have this sort of like itch to feel the melancholy or whatever.

Michael Berger: To produce good music.

Joaquin Hernandez: Sometimes I'll say, "have you listened to Sibelius No. 4, that's a tearjerker like if you want to listen to that. Just make sure you're alone, close your room, you know put on your headphones, get a box of Kleenex" and sometimes they'll come back and they say "Hey, that really hit and thank you."

And it's like, wow, because Beethoven says you may not understand music, but music understands you. And that's a big one that a lot of these kids take out of it, that it's not always Taylor Swift or Logic. Sometimes you need something a little bit with more depth that has no lyrics.

Michael Berger: And both Jake and I teach psychology. So, this is very interesting information that they can utilize music in ways in which to help manage their emotion, to help become comfortable with different emotions, and they can get therapy.

Joaquin Hernandez: Absolutely, and there is music therapy that a lot of people don't talk about. Sometimes I tell a kid, "hey, I just want you to stand next to this gong."

Authors' Note: The reflective anecdote about students finding emotional solace through music in the classroom mirrors findings from research on "Music Therapy in Mental Health and Emotional Diversion of Primary and Secondary School Students" [5]. This study underlines music's power to aid in emotional regulation and suggests its inclusion in educational settings can be a form of non-verbal support for students grappling with complex emotions. This resonates with Joaquin's observation that while students may not always articulate their emotional state, they can connect with music in a way that acknowledges and addresses their feelings.

Michael Berger: And I'm going to hit it hard.

Joaquin Hernandez: "I'm going to hit it kind of loud. I don't want you to focus on the sound. I want you to focus on what your body experiences. Because when you're next to a gong, this thing is pushing a ton of air. And it's invisible. And when you're next to this thing, you start feeling all this like, tickly stuff, and it's the sound." And they go, "whoa!" I say, "yeah."

Michael Berger: Now I know where the physics teacher comes in.

Joaquin Hernandez: Yeah, exactly. Or sometimes when we're trying to tune, like I sit on a podium, and it's made out of wood. All these things are traveling through the ground. So, I can tell their out of tune just by feeling with my feet because I feel this sort of like rumbling, right? I'm supposed to feel in this nice hum on my feet. So sometimes I'll tell like, "hey, come like stand right here" and they'll go "Whoa, what's going on?" And so that's the physics aspect of music. Like you're literally feeling the physicality of it all

Michael Berger: So, getting to Jake's question about your relationship with teaching staff and your unique position. Well, what does an ordinary or usual day look like for you?

Joaquin Hernandez: For me? Okay, um, so it always starts like

with chaos because like, you know, the bell rings for kids to come in here, in there. And I'm usually like in the office and I have like the agenda set up by, by, by like the middle of the year. People know that I give them 10 minutes to do whatever they need to do. And that in 10 minutes is what's called a downbeat, where we're going to start playing music. So, in those 10 minutes, people there will like to catch up with each other, they'll come and show me music theory homework that they've done, because it's optional, they can do the homework or not, they can earn points any way they want to. They'll come in to get me to sign papers, or... And at the same time, they should be putting their instrument together, they should be warming up or whatever. So that in ten minutes when I go out there, there's no more business. We're just totally focusing on music, and also at the end there's five minutes for them to break down.

So, what happens from downbeat to the time that we end the rehearsal, it could be that we really focus on what's out there. We're gonna play this march, we're gonna play this tune. Or sometimes what happens is that some kid will say, 'Hey! So and so was talking about this in their class,' and the music aspect came of it. They were talking about symphonies, what's a symphony? So, sometimes we totally derail the class to teach about what a symphony is or how to listen to a symphony. Sometimes we don't play, but the kids kind of go like, 'Hey, it was a cool way to derail the class.' Or sometimes it'll be about social things that happen, like, 'what do you think about the kid that got thrown in jail for threatening the school?' So, sometimes we talk about political things or things that happen in the classroom. Sometimes our principal does things that kids don't like and they say, 'hey, why is he this way? And let's say, 'well, why are you this way?' Let's talk about how we are, because that's his perspective. And obviously, doesn't go with your perspective. So, let's understand each other. Let's try to understand him, even though he doesn't try to understand you. Let's go that route.

Michael Berger: ...and find songs.

Joaquin Hernandez: Yeah, find songs or whatever.

Michael Berger: Do you start early in the day?

Joaquin Hernandez: Yeah, we start zero period at 6:50, but we have till 7:10 to do that, so I'm there usually around 6:30 or so. If I have a lot of stuff to do, 6 o'clock. Sometimes if there's assemblies, we're there 5:30 in the morning. So, I'm usually one of the first ones and one of the last ones to go.

Jacob Larsen: For, I guess it's kind of a two-prong question, when it comes to the arts, one: is there a focus that administrations, or just schools in general, put on particular art subjects above one another? And then, two: How has the recent emphasis on literacy and STEM in education affected art programs?

Authors' Note: Joaquin's teaching philosophy and daily routine reflect research findings on the integration of subject matter in STEM education [6]. This study notes the importance of shifting emphasis from STEM to humanistic considerations in education, which can be seen in Joaquin's approach. In practice, his classroom environment, where students encounter music theory and discuss

sions can range from the technical aspects of music to social issues and personal development, embodies the type of subject integration researchers discuss. This approach, which allows for a broader educational experience, resonates with recent findings that advocate for a more inclusive education system that values the humanities alongside STEM subjects. There is a clear need for a balanced curriculum, rather than prioritizing STEM at the expense of arts and humanities. This highlights the importance of an integrated educational approach that fosters a diverse range of competencies in students. Current research underlines the importance of such an approach in preparing students for the multifaceted demands of the 21st century—a principle that is actively demonstrated in Joaquin's teaching methodology and educational philosophy.

Joaquin Hernandez: Yeah, so administration always puts the most pressure on... and it's not like that at my school, but it tried to be at some point. I was like, 'hey, man, let me do my job and I'll let you do yours,' kind of thing and was like, 'all right, cool.' But the emphasis goes on the performing ensembles. Like, the marching band gets like the most attention because they're out there playing at every game. They're out there in the parades and, to be quite honest, and my students know this, that's my least favorite class.

I did not want to teach marching band and that's like the thing that it's like, 'Oh, he's so good at it.' While I'm going, 'I kind of don't like doing this, but sure.'

Jacob Larsen: So, the public really sees that.

Joaquin Hernandez: The public sees it so that's why it gets the most bang for their buck. I really wanted to teach orchestra and that's the thing that we never got chances to play.

So, sort of diminished. Now I get to teach jazz and that's a little bit more popular. So, we're getting a lot of traction with the jazz band. Then you take, for example, choir. Choir is not always showcased, but there's a lot of great things going on in choir. Just like in the visual arts. I know that teachers at our school that are making it so you can go and do a gallery exhibit, which I think is really neat. We need more of that. Not just like, 'here is for one day,' but like leave it there. We should have a museum space that we're always showcasing student art. Because why not? If we want to sell it and create funds for the program, why not?

Instead of always, like I saw a bunch of art got thrown into a dumpster this weekend and it's because there's no more room for it. And I said, 'why didn't you think of selling it? It's student art and, or give it back to the kids.' Who knows.

Jacob Larsen: Is there an emphasis on, let's say, music compared to dance, compared to painting and drawing, compared to ceramics?

Joaquin Hernandez: What was the original, the beginning of it?

Jacob Larsen: I mean, is there more of an emphasis that administration puts on particular arts above others?

Joaquin Hernandez: Yeah, I think so. Even district wide. Last year we were doing a lot of inventory and we were examining budgets, and instrumental music got a huge 60 percent of the bulk of the funds.

Authors' Note: These observations about the disproportionate emphasis and funding for certain arts programs, particularly instrumental music like marching band over other arts disciplines, echo the concerns highlighted in the American Academy of Arts & Sciences' report "Art for Life's Sake: The Case for Arts Education" [7]. The report recognizes the decline in arts education access, advocating for equitable funding across all arts disciplines. Joaquin's anecdotal evidence of the inequities in funding within his district, where instrumental music receives a significant majority of the budget, underscores the report's call for a diverse set of arts classes and the inclusion of all arts in core educational requirements to foster a more equitable arts education landscape. His insights affirm the report's stance on the necessity for systemic policy changes to ensure all students have equal access to the various forms of arts education, irrespective of the public visibility or perceived prestige of the discipline.

Joaquin Hernandez: And there was a new person coming into that position. So, that's why they were looking at numbers and they were saying, 'Hey man, isn't it crazy that it all goes there?' And they were saying like, 'yeah. And we're saying that we're being equitable? Like how does that work?' You know, because all these people are being neglected and even within the instrumental music, some people were being neglected because this band plays more, so let's give them more money. Which seems to make sense, but then, you never think, 'maybe if we gave the school more money, they would perform more.' So, we're looking at it the wrong way. And also, I always think it's really strange that we value pieces of plastic that are painted gold that say 'number one.' Because that's just somebody's opinion that they were the best one today. And it's like, 'hey, why don't you let the expert tell you that? Sure, you might not be number one, but you're learning a lot of things that at some point are going to take you to the very peak.' It's like, there's some Aristotle quote that says that...I'm not going to tell you the quote, but the gist of it is that you're

Michael Berger: I was hoping you would give it to us in the original Greek.

Joaquin Hernandez: Oh, the original Greek, oh, no man, no, you're kidding. I need some Greek yogurt beforehand. But it says basically like, 'you're not excellent because like you have talent. Excellency is like a product of what you do on a daily basis.' So, I tell the kids at some point people are going to tell you, 'hey, you're really good.' Just don't question it. Keep doing your thing. At some point someone's going to give you an award for it because you're just breathing doing your thing. It's true, it happens like. I think I've taken one audition my entire life. I was appointed. And it's not because I go there going like, 'Hey, I'm the most badass musician here.' They kind of go, 'Hey, you're very competent. Like, do you want to be in charge of things?' And I go, 'Whoa, like you have people waiting in

line.' And they go, 'Yeah, but. You're going to get it done.'

Jacob Larsen: Sounds like there's definitely a lot to balance within the arts department. How have you specifically seen the effects of a push towards literacy and STEM affect your classes?

Authors' Note: The concept of Humanities-Driven STEM (HD-STEM) [8] aligns with broader educational movements like STEAM (Science, Technology, Engineering, Arts, and Mathematics), which aim to incorporate the arts into the traditional STEM framework. STEAM advocates suggest that including artistic perspectives can enhance creativity and innovation within STEM fields. HDSTEM similarly emphasizes the importance of integrating humanities with STEM education to create a more comprehensive learning experience that does not marginalize the arts but leverages their unique contributions. This interdisciplinary approach not only promotes creative problem-solving and innovative thinking but also ensures that the arts maintain a significant role in academic and student development, countering the trend of their undervaluation in an increasingly STEM and literacy-focused curriculum.

Joaquin Hernandez: With literacy, that was easy to stomp out because like people wanted us to be reading articles and doing all these things. And at some point, we had our literacy team come in to say, 'Hey, let's observe how you guys do lessons.' And at that point we had Jessica doing choir and she was super slick about it. I would have never thought about it like this, but she nailed it in one hour. Basically she made the literacy coaches like read choir music and also do a little bit of music theory where the math person was going like, 'Oh, this is just like math.' And then the English person went, 'oh, these weird symbols are like a language.' And at that point we went, 'that's what we've been trying to tell you, that we have our own literacy to take care of. We have no time to be teaching English. And guess what? We're already teaching English because we're speaking. We're trying to connect abstract things to language. And sometimes we even deal with things in German, Italian, all the time that we have to translate.' So, it's interesting to sometimes hear the kids throwing a term that's not an English or a Spanish term, it's like a German term. And you go, 'oh, that's kind of cool, they picked up something from this piece over here or from some article they read because they were interested in what we're playing, not me shoving articles down their throat.' So, the literacy aspect, I think we were able to say, 'We are doing fine, literacy wise.' We haven't been bothered since that lesson. Not that it's cumbersome, but we have things to do, you know. You just have to make time for it. And then for the STEM...

Authors' Note: This connects with current research [9] which underscores the importance of recognizing and implementing "multiple literacies" in education. Just as Joaquin leverages the inherent literacies within music education, recognizing the parallels between musical notation and language, and math, researchers advocate for an inclusive approach that appreciates cultural, linguistic, and modal diversity. This multiliteracies pedagogy aligns with Joaquin's efforts to validate the complex skills and deep learning occurring within the arts, which extend beyond traditional literacy

and STEM and are integral to preparing students for rich civic and cultural engagement.

Jacob Larsen: Do you feel like kids are getting pulled away from your programs and kind of being told to go in more STEM focused areas, and therefore they don't have time for your class?

Joaquin Hernandez: Yeah, and it all comes down from people not knowing what the arts really do because maybe they never did it or they never had an experience, or a quality experience with it. Everybody thinks that we're in there just clapping and singing kumbaya, but that's the least important thing of how it works. When we're in that room, we're figuring out why it is that this song makes you feel happy and why is it that this song just brings you to tears. Then, we try to experiment and then we'll say, 'Oh, like this song has it too. And like, so does Taylor Swift and so does Johann Sebastian Bach.' It's making humongous connections, because we have this huge gap of culture. Sure enough, classical music, being the elitist form that it is, has sort of created this big gap between common people and arts. I think it's our job to say, 'hey, Bach is just like Los Tigres del Norte, it's the same progression. You just have to give it a chance.' Or also say, 'hey, let's realize that this belongs here in the folk pantheon of music and this belongs in the classical pantheon of music.'

So, it's just weird to get people to understand humongous concepts because they just want to feel good and have that instant gratification when they listen to Taylor Swift or Madonna or whatever it is that people listen to.

Authors' Note: In the discourse on the value of arts in education, Joaquin's insights into music as a medium for cross-cultural connections again find empirical support in recent scholarship. A recent study [10] underscores the multifaceted benefits of arts education, which, while not directly linked to improved standardized test scores, significantly enhances students' mental health, self-confidence, and life skills. This research reinforces the idea that arts education, akin to Joaquin's teaching philosophy, plays an essential role in nurturing creativity and intercultural competence, preparing students for a globalized and interconnected world. Through this lens, the arts emerge not merely as a subject within the curriculum but as a vital component of holistic education and personal development, as articulated by Joaquin and observed by Michael Berger.

Michael Berger: So, it sounds like that is a big responsibility that you have, not just in managing a program, but presenting to the public, and then also interacting with some of the pressures from society just about, 'hey, it's a public school, the kids should be doing some reading, writing, and literacy stuff.' But you're putting that all together.

Joaquin Hernandez: All together. Yeah. And it has to be like that. There's no time to be putting it like in labels, because people love to put labels. People love to put things in boxes. And I kind of go, 'Oh, that's cute. Let's get rid of this box.' And like, 'hey, check this out. There's a bunch of things that don't belong to each other.'

Michael Berger: Here's my checklist, right? That kind of oversight is the antithesis of art.

Joaquin Hernandez: Absolutely. Yeah, people are trying to put us in boxes, with the academies and things like that. And I go, 'no, man, like you're going to completely..., well, okay, fine. We'll, take the title. I'll be here in this box, but just watch me grow out of it,' you know? And that's what's been happening at that school that every time they try to put me in like into this square, I end up like being super angry and lashing out, but I get it done. I get the job done. Like I told the kids, 'let me be angry at these people so that I can provide you with a good experience here.'

Michael Berger: You're doing an absolutely amazing job of it, and especially the jazz band now, which is such a unique thing.

Joaquin Hernandez: They're cool, man. I didn't think it was gonna get that out of hand, and they turned out to be really cool.

I was being pulled out the last month to do things at the district. I was being subbed out, like, every day. And I told those kids, 'hey, you have a month, you have a concert, come up with something.' A total leap of faith, you know? And I come back, and I bring my boss, and they're informing the audience as to what they're playing, and why they're playing, and I go, 'look at that, I didn't have to say anything.'

They're just like, 'oh, we're playing this piece, and it was Baroque music, and you should play it on the lute, we're playing a marimba, this is a transcription that we did,' and I'm going like, 'wow, look at this, they don't need me, they just need me to sort of say: here's your problem. You have, you've been given tools, now figure it out.'

Michael Berger: Well, they need you when they're those incorrigible young.

Joaquin Hernandez: Exactly, the freshman year, exactly, totally.

Jacob Larsen: Well, if you like breaking out of boxes, I think jazz is the musical form of breaking out of boxes. So, are kids making deep connections with jazz? Because, we had an assembly this last year. And the jazz band got up there and absolutely destroyed the building. Everyone loved it.

Joaquin Hernandez: I've never even seen people coming to film them, which I thought was really strange. Because normally, the band's playing, then we poke our head out and it's like, everybody's gone.

Michael Berger: I was even tapping my foot.

Joaquin Hernandez: Oh, I thought you were in the mosh pit. I was like, awesome, dude.

Michael Berger: Tapping, my foot was tapping.

Joaquin Hernandez: Yeah, it's contagious. Yeah, and it's cool because I got burned out with jazz when I was in college. I just thought people were kind of flaky and not really taking it seriously.

When I go into something, it's a hundred percent, man. I don't want people goofing off. So, when I left the jazz gigs and whatnot, I was like, 'I don't think I want to teach jazz, you know?' And, the kids were asking over the years, 'hey, can we have a jazz band?' I'd be like, 'show of hands, who wants to be in jazz?' Like, two, three kids? Nope, not this year. And then two years ago, I get 15 of them. 'Ok, I think it's time to bring it back.' It was like falling in love with it completely all over again.

And also, avoiding those bad habits coming to this school. So, the kids have pretty good habits. We came across another teacher that apparently doesn't have the same habits that we have. And I say, 'hey, just point at him whenever you want him to solo.' So, he was just making a mess. And the kids were saying like, 'hey, you need to come. He's messing up.' They were giving me signals. So, I come up there and I go, 'hey, man, you're supposed to cue them every 16 bars.' And the teacher goes, 'oh.' I said, 'yeah, that's how jazz works.' So, I was like, 'oh, I guess not everybody knows how to do this, and my kids know how to do this.'

So, it was a very proud papa moment that I was like, 'oh, we're doing something special here.'

Michael Berger: We sure are, and what a special treat to have you come in and offer up this very different perspective.

Joaquin Hernandez: Absolutely.

Michael Berger: But, something that all schools and all people are familiar with. Thank you for coming in.

Jacob Larsen: It was fantastic talking to you.

Joaquin Hernandez: See you, definitely

Jacob Larsen: Thank you for being here.

Joaquin Hernandez: Anytime.

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None.

Conflict of Interest

None of the authors have a conflict of interest.

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