

Bonni: [00:00:00] Welcome to Teaching in Higher Ed. Episode 10 - 21st century skills.

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Bonni: [00:00:17] Welcome to this episode of Teaching in Higher Ed. This is the space where we explore the art and science of being more effective at facilitating learning. We also share ways to increase our personal productivity approaches so we can have more peace in our lives and be even more present for our students.

Bonni: [00:00:42] Thanks for joining us today. I have a special guest on with me today Jeff Hittenberger. Jeff welcome so much to Teaching in Higher Ed.

Jeff: [00:00:51] Thanks Bonni.

Bonni: [00:00:52] And Jeff I'm so glad that you're able to join us today because as I mentioned to you before we started recording you have one of the most unique perspectives I have ever met of someone in the field of education.

Bonni: [00:01:05] So let me I'll I'll just list off a couple of the bullet points. More than 30 years in education you have a Ph.D. in education policy from USC.

Bonni: [00:01:15] And when I think about your background I sort of grouped it into five areas it was hard to group down. But that's what I did.

Bonni: [00:01:23] You've got experience in the educational system internationally speaking and we'll talk a little bit more about that in just a moment. You have both taught and worked in leadership capacities in K through 12.

Bonni: [00:01:38] You have two children both of which are products of our school systems. You have taught and also lead in higher education and then currently

you are the chief academic officer for the Orange County Department of Education through all these things I'm glad I got it all right.

Bonni: [00:01:59] And I just think about the different lenses that you're able to view education as a parent as a teacher as a leader in formal leadership roles. I mean it's just it's you really do have I think a picture that appreciates the complexities that are involved in any educational system and you you had a little bit to tell us today just from one one experience in Haiti of something that you really learned a lot from. Can you share that story with us.

Jeff: [00:02:30] Be happy to Bonni. It's been a really interesting life I have to say I feel very very fortunate to have had the experiences that I've had. And and we all are able to draw on the experiences of a unique life experiences to enrich the ways we teach really formative experience for me was growing up in Haiti in the Caribbean.

Jeff: [00:02:54] Your listeners will probably remember the earthquake that took place there a couple of years ago. And if you've heard much about Haiti you know it's a country that that has struggled with a variety of challenges over the years.

Jeff: [00:03:10] Sometimes when I tell people I grew up there they wonder whether that must have been a really bad experience. But in fact the contrary was true. I would say I learned so much from my Haitian friends and the things that I learned from them really have been formative throughout my life including my life as an educator. Just to give you one example of what I learned from my Haitian friends when Haitians greet each other.

Jeff: [00:03:37] They used the term "Sak pase" which means what's up basically. But a very common response probably the most common response that Haitians give each other to that question is n'ap boule and n'ap boule means literally - I'm on fire. It is. It's a statement of being alive in the face of difficulty. It's I'm here I am at work.

Jeff: [00:04:05] This is my time. I'm not dead yet. I am I'm on the move. I'm on fire. And from my Haitian friends I learned that regardless of what kind of adversity you're facing as long as you're alive.

Jeff: [00:04:20] You have something to do you have something to say. That kind of resilience shaped me and I am forever grateful for it. And it's it's been a tremendous asset for me as an educator to have that as part of my history.

Bonni: [00:04:34] Well and knowing you for as many years as I have it's certainly something that I feel you carry in your heart with you as well. I have seen you lead through extremely turbulent times and now that I recall this expression - you live that. You are on fire. And - you're not dead yet.

Jeff: [00:04:55] Right. Yeah.

Bonni: [00:04:58] As we think through all the... I suppose some people really dread the getting getting older. We've got I've got people on Facebook right now is saying something about a high school reunion which - sorry high school friends that will never listen to this - I have no desire to ever go to a high school reunion. (laughter)

Bonni: [00:05:15] But it's what I see so many people that are clinging to the youth and I love that I've had examples in my life that there are so many great things that come with getting older and that is one of those things I'm I'm still here. This is good. And my loved ones are here and life is good.

Bonni: [00:05:30] So thank you for that perspective. Now today we're looking at 21st Century Skills One of the things I thought was important to have you introduced into this dialogue was was thinking through. I didn't want to invite you here today to talk about the controversy that that in some cases or the opinions that are out there about the Common Core and specifically the the part of that that's the 21st century skills.

Bonni: [00:05:56] There's a lot of that out there. And I think that that while I do think when we talk about policy issues having these debates can be healthy. I have not necessarily seen the healthiest of debates around this issue.

Bonni: [00:06:08] But where I want us to take it today is under the perspective of collaboration what do we have to learn from each other and specifically of course since people listening to this podcast are in teaching roles in higher ed What do we need to learn from what's happening in the K through 12.

Bonni: [00:06:29] So tell us a little bit about these 21st century skills introduce them to us and then we can talk a little bit deeper about each one or money.

Jeff: [00:06:38] I think you put your finger on one of the challenges that we face in American education and that is that there's often a disconnect between K12 education on the one hand and higher education on the other.

Jeff: [00:06:50] Typically those education systems work in separate domains - or have different institutional structures different governance structures and oftentimes the communication that one might anticipate happening between K12 side and higher ed side doesn't happen which which can lead to misunderstanding and to real real gaps in students' education.

Jeff: [00:07:16] So what we need and what I think is really helpful is to have a set of priorities and expectations that are consistent between K12 and higher ed and I think that 21st century skills is one way of talking about what we have in common.

Jeff: [00:07:38] What has been the case for a long time is that there's a sense that students exiting American education and moving into the workforce are lacking some some some of the kinds of competencies that employers look for in terms of advancing the work and the mission of their organizations.

Jeff: [00:08:00] And so beginning part of the last decade around 2002 a group came together called the Partnership for 21st century skills that was made up of education institutions nonprofits as well as business organizations to say what are those competencies are those skills that would enable a young person to thrive both in their education and in the workforce as well as their lives in the 21st century. And that conversation came to be called the 21st century skills conversation.

Jeff: [00:08:36] There were over the next few years a number of national studies of employers that basically asked employers to weigh in on the question of what are you looking for when you look for employees that you're wanting to contribute to the mission of your organization and out of those surveys came a model that highlighted really for competency areas that are referred to as before season.

Jeff: [00:09:07] The first one of those is critical thinking and problem solving that sort of thing. The second one is creativity and innovation. The second C the third one is communication no matter what you're doing to be an effective communicator both verbally and in writing a good listener.

Jeff: [00:09:24] That whole collection of skills and then the fourth one collaboration one that we sometimes have ignored in education but when you get into the work world and the world of adulthood collaboration is the

standard way that we function in the world and in our careers. So those four C's are the basis for the model that we're discussing today.

Bonni: [00:09:54] And when we think about our educational system a lot of it was designed 50 years ago to prepare people for work in an agrarian economy.

Bonni: [00:10:04] And today we're getting to we hope preparing for more of an information economy. And I think we all know we're headed more toward an innovation economy and how do we adapt to that and be good be good stewards of our of our parents that are in our state and our students and helping them really prepared to succeed in today's world and beyond.

Jeff: [00:10:28] Exactly and there's the old saying about a person who got A's in school and then and then failed at life. And you know that kind of speaks to the lack of alignment sometimes between what we're doing in schooling and what is actually required of people when they reach adulthood.

Jeff: [00:10:46] So it's possible to do really well on standardized tests and to have you know content knowledge in a variety of areas but then go from there into the work world and frankly the world of life in the world of citizenship and not be able to function in a productive way.

Jeff: [00:11:05] So this broader understanding of what we're after in education I think has the effect of clarifying what it is we're trying to accomplish with students both in K12 and higher education.

Bonni: [00:11:19] I love it too how your perspective helps it focus on the more positive and collaborative aspects. I did mention I get so frustrated sometimes by the debate it's an ill informed debate often and it's a lot of pointing the finger at who else's fault it is.

Bonni: [00:11:35] And so we're really good in higher ed saying well what do you do back in K through 12 to give us this but then we send them out into the workforce and no doubt the workforce is pointing their fingers back at us going really this is this is what you what have you been doing to prepare them to be good know employees out there in today's workforce so one you had talked a little bit about your experience.

Bonni: [00:11:58] I think a positive partnership example with PIMCO where you talked to us a little bit about that. So I think that's a good healthy thing to look at

what's possible when we get over the unhealthy aspects of the debate and we start to partner.

Jeff: [00:12:10] Well that's it. Bonni you hit it on the head in terms of the blame game because what happens when we're not satisfied with the outcomes of education is who it's easy to fall into kind of a blame the system or blame the other level or blame the school or blame the other political party or.... And that kind of fragmentation really isn't constructive in terms of getting us together where we want to go as a nation as a community. There are wonderful examples all around us of people who are collaborating across sectors and and doing constructive things along the lines of the 21st century skills for our students.

Jeff: [00:13:00] Let me just interject here that we've added a fifth C in many communities in many organized educational organizations. We've added a fifth C to the four that I mentioned earlier in this. This is character that is you can be good at a whole bunch of things and do really well in school.

Jeff: [00:13:17] But if you don't have character - a foundation in the long run - things are not going to go well for you or for the society or community to which you're contributing. So let me give you an example of a way in which business and education are collaborating to to cultivate these five Cs.

Jeff: [00:13:39] I was at this very morning I was at a meeting at the headquarters of an investment firm called PIMCO. PIMCO is one of the biggest investment firms in the country it's got two million two trillion dollars in assets under management. It's headquartered in Newport Beach California that has 700 plus investment professionals working for it.

Jeff: [00:14:03] And this morning they gathered a group of interns from some of the finest universities in MBA programs in the country. There were about 30 of these interns in the room who were coming to work for PIMCO for the summer as a part of their pursuit of careers and investment. The interesting thing is what they were doing there this morning was receiving orientation to go out to one of our local high schools in what is a low income neighborhood with many students whose backgrounds are those of of immigrant students English learners.

Jeff: [00:14:41] And these interns from PIMCO were being oriented to go out and do workshops and do one on one coaching with students at this high school and it was really interesting to me that this this huge investment firm was making a statement right up front to their interns about what really matters.

Jeff: [00:15:04] If you're going to have a long term success in business in a field like investment you need to be a certain kind of person with a certain set of commitments not only to your own wealth but to the community in which you live.

Jeff: [00:15:21] And so I was able to be a part of the orientation to this group that was then going out to the high school to spend the day with these high school students.

Jeff: [00:15:30] And I thought it was just a beautiful example of what can be accomplished when collaboration takes place around a common vision of the kind of community we want to be.

Bonni: [00:15:43] There are so many. This one story we could do the whole episode just on that one story because there are so many aspects of it that I think are so healthy in education.

Bonni: [00:15:51] A lot of times when we teach we have these artificial barriers why is a class in many institutions 15 weeks? What if it only needed to be 12 or what if it should have actually been 50 weeks or why are these arbitrary time based models for education?

Bonni: [00:16:07] And then they end. And are we very good about revisiting that in future classes and building upon that knowledge so this is this is helping them integrate what it is they're learning by teaching others and so it's just what a wonderful model.

Bonni: [00:16:22] I wanted to make a quick note that that many of our listeners will be familiar with the Carnegie hour. That's measuring most of our educational institutions on the number of hours that students are either sitting in a classroom or sitting in front of a computer and that it's going to be interesting to see in the coming years if we're able to evolve to something a little bit more meaningful than time based.

Bonni: [00:16:49] I'm not saying that time we should completely do away with because there is I think development that happens over the four years of a typical college degree.

Bonni: [00:16:59] But can we start to morph a little bit to include competencies and Lipscomb is a university - the first one - that their degrees are now based on

competencies and I'll be linking to that in the show notes as well as the other resources that Jeff is mentioning.

Bonni: [00:17:14] But I love this idea of the PIMCO partnership and what that can mean to our community.

Jeff: [00:17:21] It's a great point Bonni and the the distinction you've drawn is between a system that historically has been based sort of on inputs or structures and the way you earn a degree is by being able to check off the number of hours you sat in a class and check off the number of courses you've taken.

Jeff: [00:17:41] And I think there's an opportunity to move toward a system that is more outcome oriented and the 21st century skills actually provide some real opportunities in that area. If I could give you one example I was able to have a meeting with a number of professors at a university in Minnesota not too long ago and as we talked about the 21st century skills they they highlighted critical thinking and they all agreed. While critical thinking is really important and our students don't seem to be doing very well with it.

Jeff: [00:18:22] But then when we then when we ask we'll what do you mean by critical thinking. There were many different definitions and people struggled to kind of come up with a common understanding across the whole group. It was an interdisciplinary group people in different departments had different ways of thinking about critical thinking.

Jeff: [00:18:43] So what that group of faculty did was to form a work group on critical thinking that was cross disciplinary where they could come together and say, "Well is there a common set of understanding that we can come to regarding critical thinking that then we can put in a rubric or in some other way re integrate into the way we approach critical thinking in our disciplines in our classroom so that over the four years that we're working with these undergraduate students we can see their development in the area of critical thinking and see real growth take place that we commonly understand and and desire."

Jeff: [00:19:31] So I think it was a neat example of taking one of these 21st century skills and and integrating it into the actual work of teaching at a university.

Bonni: [00:19:44] That is such a good example as you said I think I realize that I can often become a victim of the system in which I work.

Bonni: [00:19:52] And so I'm talking about the Carnegie hour and how what a bad system it by itself is. And yet the other day we had academic advising for some of our incoming freshmen.

Bonni: [00:20:03] I met this young man and I'm going through the checklist and wanted to make sure he's getting in the right classes for his freshman year and he says you know, "I really want to take a theater class too so how can I do that?"

Bonni: [00:20:14] And I thought well that I could relate to that because as someone in college it was not my major theater wasn't but I I enjoyed being in a couple of shows and so that part I get.

Bonni: [00:20:25] OK well let's figure out what that would look like. And so he ran down the hall to find out if his intro to acting the right thing and then it comes back and says well I want to take I took the AP Calculus test and passed it with a 5.

Bonni: [00:20:39] So I wanted to intermediate calculus 2 and I said oh well you don't have to do that. And so he stopped me and said I want to.

Bonni: [00:20:49] And I went, "Oh you want to even though you don't have to..."

Bonni: [00:20:55] And I thought oh that's just terrible that I have you know we can... Until, fortunately, I was awakened by a student who was teaching me just as much as I'm teaching him probably more so love to branch out of that which reminds me and then I guess of the next the next component which is creativity as we start thinking about building our students creativity skills they have much to teach us as well. So I was thinking also the other day was I'm writing this chapter for a book.

Bonni: [00:21:26] And I was talking I was thinking about not really being a big fan of those smart boards. You know I feel like we should just have dumb board. I don't think we need these.

Bonni: [00:21:36] And I saw this article about them teaching physics. Seen the smart board and the movement and how our brains can learn so much better when we're actually having movement and seeing the physics concepts come to life.

Bonni: [00:21:51] They're on the board and I thought, "Ah. Amazing what you can do when you start to build that competency of creativity."

Jeff: [00:21:58] Love that example. You know one that comes to mind from my recent experience was I was at a graduation for students who are incarcerated in juvenile hall here locally. This is a couple months ago and a young man one of one of the young men who was incarcerated there was the speaker.

Jeff: [00:22:18] And what he talked about was the way in which his introduction to the Arts opened up the world to him. So he's on the inside of a locked down facility but part of the curriculum there is art and he had struggled with all kinds of things boys could draw and you know maybe do a little tagging.

Jeff: [00:22:39] But here he had an opportunity really in a fresh way an environment where he's clean and sober to really hone his artistic abilities. And he described in his speech the way that had transformed his life. We actually asked him to do a painting for the superintendent's office here.

Jeff: [00:22:59] And he did a painting of Victor Hugo and a quote from Hugo is when you open a school door you close a prison door. And we now have that on the wall here in our office.

Jeff: [00:23:15] And but it's an example of the way creativity is not just an add on. It's got this incredible transformative power for students. And that is I mean throughout their education and beyond into into life and career and it's an integral part of who we are as humans.

Jeff: [00:23:33] And if that isn't allowed expression part of us dries up you know. And so though it might not always fit into the Carnegie units finding ways in which we tap into the passions of our students especially in this era of creativity innovation I think is really powerful.

Bonni: [00:23:51] Yeah and just one quick note before we move on to communication I think about this whole maker movement because it isn't only about art although art is so important and it isn't only about music and theater.

Bonni: [00:24:03] But when we think about just how even the innovation of 3D printers is changing things for the business world we no longer have to go through as much effort to do a prototype of an idea we have we can actually print it right there in a classroom.

Bonni: [00:24:21] I mean we're in a partnership with a business and then it isn't about necessarily always teaching students through apps but teaching them how to make apps and letting them get to express and develop their creativity through developing important technology too. I don't know if you've ever seen the TED talk.

Bonni: [00:24:36] I'll put a link to it in the show notes but the TED Talk of the young man who I believe was 11 and won an app contest and his first app was instead of Justin Bieber. It was a man it was called... It was... A it was a whack a mole type game for Justin Bieber.... (laughing) So I put a link to that but just how amazing it is when we can as you said tap into our students.

Bonni: [00:24:59] So let's talk a little bit about communication.

Bonni: [00:25:01] And one of the things that popped out to me and this competency was not only the importance of reading and writing which of course is so important and the Spoken communication but also being able to choose the right tool and just how important that's becoming for 21st century skills.

Jeff: [00:25:20] Well you know I think in this era of communication it dovetails with the other the other foresees in some of the things we've already talked about and that is to what degree can we tap into the passions of our students and engage them in deep level interests not only that they come with but that are also inherent in a lot of the things that we teach so that they can.

Jeff: [00:25:49] Let me give you an example mass in the United States is generally seen to be something boring math phobia a huge issue in the United States. And if you look at the way we tend to teach math especially in the earlier grades we tend to teach it as you know sort of a set of facts rather than understanding the magic if you will but the incredible beauty underlying the way in which numbers work.

Jeff: [00:26:21] And there's an excellent article in The New York Times just came out in the last few days called Why Americans stink at math which is an interesting title but they compare the way we do math in the early grades with the way math is done in Japan in the early grades and if you walk into a math class in Japan in early in the early years they are debating the ways in which the numbers work.

Jeff: [00:26:47] They're playing with the numbers. They are becoming. They are fine. They are learning that numbers and math are fun interesting exciting magical and and becoming engaged by it at a level that we don't tend to engage our students where we're trying to take the long march through the math textbook.

Jeff: [00:27:08] So and then one of the things that the students in Japan are doing is they're talking about their ideas about math. It's a communication thing. We tend to think of communication as something we do in English class.

Jeff: [00:27:20] But the reality is across the curriculum if you're if you're approaching these things in a way that tap into students ideas and passions communication becomes something that's being cultivated across all of their classes.

Jeff: [00:27:34] And and if we're listening and if we're giving them those forms in which to communicate the things they care about they're going to become better communicators and that's going to serve them while their whole lives.

Bonni: [00:27:46] That is the perfect segue into collaboration. And one of the things that stands out in collaboration is how the increase in technological capabilities is changing what's possible with collaboration.

Bonni: [00:28:00] And I I think it's just amazing that we can have guest speakers from around the world to join us and we can collaborate with learners from all different places and be teaching those good collaboration skills.

Bonni: [00:28:15] Yet at the same time I personally have found it important to sometimes set the technology aside and just help students rediscover how to be fully present with another person because sometimes that's a detriment to their communication and collaboration skills where they they want to solve conflicts and resolve things that come up when we collaborate using the technology when we have to sometimes say no we've got to also be able to do this face to face.

Jeff: [00:28:43] Well Bonni you are one of the most effective users of technology in higher education that I have ever worked with. I'm really glad your listeners are connected with you because over time I know in this show that's one of the areas you will really be working on and bringing out and the topics you discuss is how do we use technology in a powerful and effective way to not just set of kind of cool devices.

Jeff: [00:29:15] But as a means by which we cultivate 21st century skills in our students because technology's got to be a part of that. It's just you know such is such an incredibly important part of what's happening in business and in industry and in whatever field you go into.

Jeff: [00:29:33] And also in terms of how we connect to each other and the people across the country around the world and you do that really really well. And I've always appreciated that.

Bonni: [00:29:43] Thank you. Well we definitely don't want to leave this fifth C out character. I am so glad that it's there because as someone as someone who has certainly struggled sometimes with that aspect of being an educator I'm so glad it's there.

Bonni: [00:29:58] And I'm actually going to just transition us a little bit into the recommendations only because my recommendation has to do with this fifth C of character and that is listeners will remember we do this section of the show where we make recommendations and mine is on a wonderful book that I'm almost finished reading called Cheating Lessons from James Lang.

Bonni: [00:30:21] And what I like about it is he has written that it's grounded in research but it's a very conversationally written book and it's almost like he could read my mind of what it was like to catch the first person plagiarizing.

Bonni: [00:30:33] And it wasn't that many more years ago where a student is just Sydney and I can't figure out his what he's doing under his desk and he's on his cell phone and his cell phone browser going through the multiple choice tests questions from from the textbook and that was just such an odd odd sort of thing.

Bonni: [00:30:54] And I so I struggle with it and it's like he's talking to me he's my little counsellor there as I read through the book and what I love about it is that it's helping me realise that if we help address the issue of academic integrity that that we can actually also become better educators.

Bonni: [00:31:12] And so I'm inspired by that book I'll be putting a link to it in the show notes but I don't want to move off of character without giving you a chance to say something about it and then you can give your recommendation too.

Jeff: [00:31:22] It sounds like a great book and great resource and it's a very it's a real world issue for students at all age levels and that is academic integrity.

Jeff: [00:31:35] I mean you can beat the system now with technology in ways that you couldn't before. So how deep and intrinsic is your commitment to to character and integrity. I have as you know by now I have a daughter who is a college student.

Jeff: [00:31:50] And when we thought about colleges and as we've at her college experience as parents. My wife and I care more about who she becomes from a character standpoint than anything else about her college experience. We we love her major.

Jeff: [00:32:05] We want her to master the content. We want her to be professionally prepared. We care about the quality of instruction she's receiving. But more than anything the question that we want her to be able to answer coming out of colleges who am I.

Jeff: [00:32:21] What am I committed to. What am I going to contribute to my world. And so I think this character in a lot of ways is the core Corsi and everything else is dependent on it.

Bonni: [00:32:33] Love it. And what what is your recommendation for the listeners.

Jeff: [00:32:37] You know I've got a couple of recommendations one for people who just want to explore the 4 Cs more and learn a little bit more about what this conversation about 21st century skills. There is a book by that title and it's written by Bernie Trilling and Charles Fadel. It's a very good introduction to the whole conversation about 21st century skills.

Jeff: [00:32:59] And then a deeper dive and one that takes you into the research that looks at how these skills correlate with success in education both K12 and higher education. There's a book called Education for Life and Work published by the National Research Council. And I would highly recommend both of those.

Bonni: [00:33:20] Thank you so much Jeff for being here on the podcast. It was great having this conversation. I feel like we could have talked a lot longer but I sort of think it's good to leave our listeners wanting more for anyone who would like to make a comment on today's episode.

Bonni: [00:33:34] Please go to teachinginhighered.com/10 as in the tenth episode. And I know Jeff would love to hear your comments too and I'll make sure and pass them over to him and if you have questions for him or for me please feel free to engage. That way we would love to hear how you think higher ed can be benefiting from these 21st century skills.

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