Bonni: [00:00:00] Some people think of tablets in the classroom as a potential source of distraction. In today's Teaching in Higher Ed Podcast Episode 22, Dr Guy Trainin talks about using iPad's in the classroom.

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Bonni: [00:00:25] 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.

Bonni: [00:00:36] 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: [00:00:50] I'm so pleased today to welcome Dr. Guy Trainin, an Associate Professor in Teaching Learning and Teacher Education at the University of Nebraska Lincoln. Guy, welcome so much to Teaching in Higher Ed

Guy: [00:01:05] Hi. Thanks for having me.

Bonni: [00:01:06] Well we were talking a bit about your background and I wanted to make sure I gave a well rounded description of what you've done and some of your research. Tell us a little bit about your role in education and how you have really started to transform what's happening in our classrooms.

Guy: [00:01:25] The place I'd start is I came to graduate school in the United States from Israel about 16 years ago and my interest was really in special education I worked with adolescents with learning disabilities. And that's where my educational career really started. And that's the trajectory of what's going on.

Guy: [00:01:45] But while in graduate school, I got really interested in young children and the way they were learning to read which was a natural extension and I found myself being more and more interested in what happens in mainstream classrooms.

Guy: [00:02:00] About five or six years ago the issue of integrating new technologies into the classroom really came to the fore because we were working with students on campus that were struggling to read.

Guy: [00:02:13] And we were discovering that working on devices was really helping them get these strategies and become more effective readers and writers and we really started thinking about the future of new devices.

Guy: [00:02:26] And for me especially it's the iPad because it's easy to use, it just responds to what you're trying to do very easily. The interface is what makes it I think. And that emerged from there.

Bonni: [00:02:40] So let's look back. Tell me about life in the classroom, for you before the iPad. What do you remember about it?

Guy: [00:02:49] Well as my kids say it's hard to remember a time before the iPad, at least for me.

Bonni: [00:02:54] I bet.

Guy: [00:02:54] But, I've always integrated technology, my technology as an instructor. But it was also whatever students used to have. In my K12 career, there was very little that kids actually brought to the classroom it was very inconsistent and it was very hard to trust

Guy: [00:03:18] In my work in special education we used Kurzweil machines and other things that were incredibly expensive I think those were ten thousand dollars a piece to do a speech-to-text facility or text-to-speech. So these new devices really can do that and a whole hell of a lot more just in a 500 dollar device which is a huge step forward.

Bonni: [00:03:44] I can relate to that difficulty of remembering what life was like before I do that sometimes with my smartphone I think "what did we do before before this?" So let's now fast forward to present day- describe for me a higher ed classroom that has iPad technology that's the most fully integrated into it, some of the best opportunities it has to offer us.

Guy: [00:04:08] And I want to be very careful because I don't want people to misconstrue this. I have all of my students are required to get a tablet device. It's not actually defined as iPad but most of them do.

Guy: [00:04:21] And they bring them to class and they use them in class. However, that doesn't mean that they use them constantly in class. That is, I would argue that about a third of the time they use devices depending on the topic of that day and how well it fits with the device and sometimes they write on paper even, believe it or not.

Guy: [00:04:46] Sometimes we just talk and do discussions, sometimes there's lecture, use videos, we use all kinds of things so it really depends on the specific learning objectives for that person as to how much we use it.

Bonni: [00:05:00] So one thing that people listening should recognize this that they can look a lot different depending on what it is that we're looking at facilitating learning what type of an exercise we're trying to facilitate.

Bonni: [00:05:13] And then also for listeners to know that we're going to start out with a pretty technology intensive classroom description and we're going to go all the way down to if only the professor has the technology and what things they might take advantage of, right?

Guy: [00:05:27] Yes. And so one simple and very important component of using devices in the classroom is adding interactivity into the lesson and that's especially true in larger classrooms where I've got over 25 students sometimes their classes as big as 90 or so.

Guy: [00:05:46] And so in those classes, the device actually is a gateway to share opinions, work in groups in a way that preserves some footprint of what students have done.

Guy: [00:06:00] So for example, I have students work in groups of five or six and they create their own work place where they can draw ideas, add to each other, and interact digitally. And people always say, "Well they can do that orally or they can do that in a written format."

Guy: [00:06:20] And that's true. But, in spite of the research and experience of people that have done this, it shows that when students interact online, whether they're doing a discussion board or using something like Padlet that allows them

to see on the same board and see what everybody else is doing in one place is that students who tend to not participate as much or not participate at all, when they go online they tend to suddenly have a much stronger voice and they're a lot less marginalized.

Guy: [00:06:55] Conversely, people that do really well orally because they have a certain presence or because they're louder than everybody else that happens to, they actually become more subdued because suddenly everybody's got an equal stage.

Guy: [00:07:10] And so it really changes classroom dynamics and it's really adds a very rich discussion that doesn't always happen in the classroom definitely not in a big classroom with 30 plus students where there's no way that everybody can participate in a meaningful way.

Guy: [00:07:27] The second thing is you can use some interactive features that are very much like clickers of five or six years ago where you can have options or you can have an open ended questions that everybody responds to and you collect all of the responses so everybody is responsible for participating. And there's a way to correlate all of that information. Sometimes even in real time.

Bonni: [00:07:51] And are there any particular apps or services that you are really enjoying around the interactive features?

Guy: [00:07:57] I like ExitTicket, which is a great way to collect feedback at the end of class, especially if it's a large class and you don't necessarily have the time to take 15-20 minutes and hear everybody out. It's a way to collect that quickly.

Guy: [00:08:12] I like Socrative. I like to have both open and closed ended responses. They can use any device, so its device agnostic. You can use your computer. You can use an iPad. You can use a smartphone. It can even work with the old not so smart phones. So lots of options. That doesn't distinguish between what students have access to or not.

Bonni: [00:08:34] I've always not gone and looked very heavily at Socrative because I thought that it wouldn't use older, non smart phones so I've been using PollEverywhere and like that in quite a bit. But I'll go definitely check out Socrative again because I didn't know that was an option.

Guy: [00:08:52] It is an option especially on the older version. I'm not sure it's work on version 2.0. And I've used PollEverywhere. I don't have to right now because all my students have devices which makes it a lot easier.

Bonni: [00:09:06] Yeah, you can take advantage of some of these more sophisticated tools. So we've looked a little bit about what is higher ed classroom look like that has iPad technology. One thing that you've described is I might see students grouped in groups of four to five.

Bonni: [00:09:21] They might be creating these collaborative work spaces where they're engaging with each other. I think one real misconception people can have is thinking that it what we would see would be a lot of heads down typing on the keypad or what have you and not engaged with each other.

Bonni: [00:09:37] I saw a great video that I will link to in the show notes of kids that were developing their own presentations on their iPad. And then they would create a video and do some editing. It's just wonderful to see that we can actually help kids and also our higher education students be able to draw them out a little bit and help them express themselves and actually become better presenters. Have you seen that in your experience as well?

Guy: [00:10:07] I'm seeing quite a bit of it. Now, in higher education as well, up until a few years ago. And the students that we were getting in higher education were not ready for this but this is a generation grew up with Youtube and kind of the entry point to everything you've ever wanted to know about anything and they think that way.

Guy: [00:10:25] I think that they think more in this Multimedia approach. So I have a group of students that whenever I give a task in class and each group gets a different task to present to everybody else at the end, they automatically make a video.

Guy: [00:10:43] They make an iMovie video in about six and a half minutes flat and the video itself is four minutes long. So, they're just masters of the new media products in ways that I think for us who grew up in the more text heavy generations are not quite as quick to do.

Bonni: [00:11:06] I had students who recently did a video for a pitch for a business plan they're creating and theirs is the eBowl and of course they did a parody of the Apple commercials

Bonni: [00:11:16] And I'm going to have to link to that in the show notes, too, because it's such a hoot to see so much fun when they use their creativity but also are developing important skills.

Bonni: [00:11:25] So, what does it look like when just the professor has been able to invest? So in my institution, there's no requirement that students would have a tablet like what you're describing but we're certainly still able to leverage a lot. What about the iPad for the professor? What can it do for them?

Guy: [00:11:41] Well, I want to say three things about this. And the first will be to answer your questions and the rest are comments. And the answer to the question is that when Jeff the professor has it, it's a great device to walk around and show students work.

Guy: [00:12:01] So if you're working on something and everybody's engaged and you want to show somebody's work, an iPad is linked to a projector so I can just by using that camera, I can immediately zoom in on somebody's work and show it on the protector very very easily.

Guy: [00:12:18] You could work with an Apple TV or with something else that works wirelessly it's much easier than carrying wires around and it disconnected in key moments.

Guy: [00:12:28] So that's one way to do it. Another way is to have that kind of interactivity without actually in the students having the ability to respond, so they can respond in writing or they can respond in other ways that allows you to know that they have participated and I use it to create videos.

Guy: [00:12:54] And I don't do flips the classroom. Probably talked about this in previous shows. I don't do a classical flipped classroom but I do create videos to support my students. Sometimes it's just after I've read their assignments and I want to give everybody feedback on the most general things that I've seen in most of their assignments.

Guy: [00:13:15] I just record a five minute video and post it on the web site for the class. So they have this more interactive way to get some feedback very quickly, even if the feedback on paper or for me it's digital takes a while longer and it's a different way to communicate with them.

Guy: [00:13:33] And so I use a lot of the deal with our projectors on the device on something, on one of the screencast apps. Or if I just use the regular video, take a video of myself talking to them just so there's another delivery method.

Bonni: [00:13:51] With regard to video on the iPad, are there any apps that you would particularly recommend?

Guy: [00:13:57] Well it really depends on how complex your screen casting abilities are and how confident you feel about it. If you want to explore this, there are more sophisticated ones. And I'm looking through mine right now to really think about the ones that I would recommend.

Guy: [00:14:19] Educreations is probably my favorite one mostly because it is free. Because it allows you to create very quickly and it's a low threshold so if you have never done screencasting, Educreations is where you want to go.

Guy: [00:14:34] There are more sophisticated ones. Explain Everything is one that has a lot more options. Touchcast allows you to actually integrate multiple components into the video you're creating. But Touchcast really requires a relatively new iPad to work well. Otherwise it becomes a challenge.

Bonni: [00:14:57] Let's shift gears a little bit and talk a bit about your experience with students with disabilities and particularly how tablets in the classroom help and hinder students.

Guy: [00:15:10] So, as I said at the beginning, we have a reading center on our campus that we've created and that's actually the first place we started using the iPad and we had at least a solid hunch that this was going to really help motivate them, but also help serve their needs because we could adjust to different apps and different ways of exploring.

Guy: [00:15:37] And it's worked rather well. Some of the things there are always an obstacle for students with disabilities... For example, looking in the dictionary, if you get confused about the order of the letters this is a miserable experience especially with rare long words. You know the polysyllabic monsters we have enabled.

Guy: [00:15:59] And so, being able to just highlight the word and say look it up or use the dictionary app, which is great and free allows you to access very quickly the meaning of the words, what it sounds like. So you'll say it out loud. And the

different context it might appear in and of course the extension to the source and all that, that has been fantastic.

Guy: [00:16:27] The voice to text and text to voice features has been invaluable I think for students with disabilities. And I find, especially with younger students with disabilities, even some ones with older, I get them larger iPads, not the minis, because of eye-motor control. A little bit more screen space allows you to maneuver quite a bit more. So that has been helpful.

Guy: [00:16:54] And the biggest challenge, I think, is the transition from having a device to not having a device. Well the one problem with having devices is if part of your life you don't have access to the device, then everything you've learned to do well and smoothly on the device doesn't transfer well and that can be somewhat frustrating for students who have learned to to really flourish with the device.

Bonni: [00:17:21] What are some other tools that you found to be particularly helpful any apps or services or are ways we can really help facilitate their learning better?

Guy: [00:17:31] There are some basic apps that that I love. But, actually, embedded in the iPad right now are a lot of the best features that are available.

Guy: [00:17:41] I love apps like dictionary.com has a lovely app. And I have a few other like visual thesaurus is a great word learning app that allows everybody including adults to explore and to kind of expand their vocabulary in a more almost tactile way, that's really looking at semantic connections and not just something that is mechanical.

Guy: [00:18:11] But one of the things I love the best, especially working with students with disabilities, is just the fact that when you bring up the keyboard, the virtual keyboard on the iPad. First of all, you can reorganize this in a number of ways. But the best piece is that you can automatically bring up the microphone and you talk and it writes, which bridges all of these complex ideas to end the obstacles for students with disabilities into writing

Guy: [00:18:40] And at least the first draft can just be spoken into the device. And then you edit and you do everything else. And that for me is just magnificent.

Bonni: [00:18:50] I find that not a lot of my students think to do that. And I don't know if you found that too or if you have a theory about why that might be. I myself, I suppose don't leverage not as much as I could too.

Guy: [00:19:05] And I think that has something to do with our value system and what we consider to be "real" writing and "real" reading. Because when you ask students, you ask even middle school students if they do a lot of reading, a lot of them say no. But then you find out that they spend two, three, four hours a day sometimes, unfortunately, but they just spend it online.

Guy: [00:19:28] A good portion of that time they read, they just consider it "reading". And I'm not sure I want to dissuade them from that because they might stop. And I think the same thing happens about writing, for us, for a lot of people, doing oral language that turns into writing sounds like they're not doing the real thing.

Guy: [00:19:50] I mean you've got to sit there with a pencil or with a keyboard and really think about it and hammer things out. That's the old format. So, I think we have these preconceptions of what counts and what doesn't count. And for us who grew up in a different generation, for us, it was always on paper or based on typing it out the other way doesn't count.

Bonni: [00:20:12] I didn't think about this until you said this Guy. But for me, a lot of people talk about "gosh how could you record a podcast? How do you do that then when you have to listen to yourself later?" And for you, recording your videos I'm sure you get that a lot to where "How can you be on camera?"

Bonni: [00:20:27] But once you get used to that, I think it actually helps us as as writers and thinkers to get that first draft. There's an author that I love whose name is Anne Lamott and I'm going to have to curse, I've never cursed on this show, so it's the first time but I want to quote her directly she says "we have to get the shitty first draft."

Bonni: [00:20:47] And I do think as someone who, we've all struggled with writing and sometimes it's just letting your stream of consciousness go and I wonder if the audio can help us with that.

Guy: [00:21:00] Yeah. And there's a fantastic book that I came back to recently and it is Peter Elbows Vernacular Eloquence: What Speech Can Bring to Writing.

Guy: [00:21:10] And he addresses that kind of head on and says you know this is really where it's at. We have for years, really for centuries, privilege the act of writing, the mechanical act of writing over voice because we perceive it to be different.

Guy: [00:21:29] And he talks about the fact that it is, in some ways, very different but in many ways we can get that "shitty draft" out very quickly if we use our voice and then work with it.

Bonni: [00:21:41] I will definitely link to that in the show notes. Thank you so much for telling me about that. I'm so intrigued now. Let's talk a little bit... Another concern that colleagues of mine have had and certainly this should be a concern of all of us- is that if we introduce technology like this into the classroom we're amplifying the haves and haves not affect.

Bonni: [00:22:05] So for people from a lower socioeconomic status, because they may not be able to afford the devices, are we keeping them from educational resources? And you have some important research that you've looked into that might help alleviate some of our concerns.

Guy: [00:22:20] Yeah and as usual, I have three parts to my answer. Two of which I will actually get to.

Guy: [00:22:25] The first one is that when we talk about people living in what you call the western world for lack of a better description. Actually using whatever resources are available around them that are digital is critical because these are the tools of the modern world.

Guy: [00:22:48] And if we're not asking them to use them, that means they're not learning how to use them well. So they will all go on Facebook. We know that there are so many people on Facebook, they must be on it.

Guy: [00:22:59] And they know how to do some things, they know how to consume some video but they don't know how to use it for being productive in a learning environment and in a work environment.

Guy: [00:23:10] And if we don't teach them how to do it, nobody might. I mean, my kids, I teach them even if they don't necessarily get all of that at school and that's definitely true of my older kids and my younger kids are getting some of it at school.

Guy: [00:23:24] But if nobody teaches them, they're going to go into life with all of these other skills that we were able to teach them in higher education, let's say, but they were missing this critical piece that is now expected in most workplaces. You are expected to be well versed in how you work in social media and how you work with these devices so you can be accessible anytime.

Guy: [00:23:46] And that's a different problem and you can not always be happy about it but those are the expectations of the modern workplace and definitely more than learning. So that's the first answer.

Guy: [00:23:56] Second answer is that there's quite strong research, especially in the United States, that shows that people who come from lower incomes and people who come from minorities are starting to show that they actually have more access to mobile devices. They have a lot less access to broadband at home and they have a lot less access to regular computers but they have a lot of access to those mobile technologies.

Guy: [00:24:29] Mostly because they're so basic in our everyday life, it seems, that if you want to stay connected, if you want to be able to find a job, you have to have a connection to the Internet. So you find ways, and the easiest way to do that if your home life isn't sustainable or even if you are homeless, the best way to do that is to have access to a smartphone.

Guy: [00:24:51] So we're seeing a strange situation where people are homeless but they do have some kind of a smartphone or other access. And this is a growing phenomenon.

Bonni: [00:25:01] It's staggering how quickly it's changing too. So thank you for that reminder. And also how we might be able to then help people be able to embrace the cultural and communication methods that people use in the workplace.

Bonni: [00:25:15] That's a really important skill for us to be able to develop in them and then also to recognize that the trend is changing that a lot more of our students are going to be showing up with these smart devices. But as you said, perhaps not well trained to be able to use them yet. Well, what have I not asked you about iPads in the classroom that we should talk about before we get to recommendations?

Guy: [00:25:36] My position is unique and one of the things that we started talking about before and you said some organizations and some people do not

require access to technology in the classroom. One of the reasons we've made it a requirement is because most of my students will end up as teachers in classrooms.

Guy: [00:25:56] And it is crucial for them to be able to communicate with their students with digital devices. Most of the United States, across the United States, 99 percent of schools have broadband connections and there is the expectation of moving teachers to use technology and to use technology with students.

Guy: [00:26:18] Part of the reasoning behind our requirement, is not just for their own learning in my classroom, but it is for their ability to teach in the classrooms they are going to find themselves in in two to four years.

Guy: [00:26:32] For me, it's thinking we're thinking really 20, 30 years forward because we're training those teachers who tend to stay for quite a while as teachers in classrooms and they've got to be ready to teach kids that will grow up in the middle of the 21st century.

Bonni: [00:26:49] I'm so glad that you brought that up and made that distinction on your role. I teach a few times a year in a doctoral program for Educational Leadership and it is... I am sad to say that there's a staggering, it's a small sample size, but a staggering difference in their technical capabilities and their age.

Bonni: [00:27:09] And it's interesting to me because they'll actually write about this and some of their blogs and reflecting upon it, that they know it's a mental block for them and one of the things we've talked about in prior episodes is the fixed mindset versus the growth mindset.

Bonni: [00:27:24] And some of the research that's been done there. And if I believe that technology is not accessible to me, it's too hard, I can't do it, I'm too old, or whatever - that really is going to limit my effectiveness as an educator and it's just such an important responsibility as you said, as we're building up the next generation and trying to meet their needs.

Guy: [00:27:43] In the U.S., the trend we're seeing is that they're all realizing that they have to be there and that they have to be there for two reasons. They have to be there because that's what their students need. And that's what students really require now a days.

Guy: [00:27:57] The second thing is self-protection, if you lose your job or if you want to move anywhere else, one of the first things that administrators tell us, they ask from all of their new teachers is what are your capacities? What do you know about integrating technology? And if you don't have a very good answer to that, you're much less likely to get a job.

Bonni: [00:28:16] So true, so true. Well this is the part of the show where we move on to talk about recommendations. And I know you had done a little thinking about what you might like to recommend to the listeners, do you want to go first or should I go first?

Guy: [00:28:29] Well, I will go first.

Bonni: [00:28:31] OK.

Guy: [00:28:33] One of the most fun things for young kids all the way through the grades and even adults is Mine craft. It's one of the things we're playing with right now. My kids are crazy about it but I've got graduate students working on it. And it's fascinating because this is a virtual world that is not hyper technology.

Guy: [00:28:58] It looks kind of old school but it is so open ended. Kids build and create for each other and watch others do it. And all of these really, really neat things that are fully embedded in 21st century that I enjoy very much.

Guy: [00:29:17] And Mine craft has an EDU component which is really, really fun when we implement it in classrooms and we do that really across the grades.

Bonni: [00:29:29] I'll definitely link to that in the show notes although I wonder is there a great place, is there's a video or something that I could put post for the listeners that would be a great introduction to exactly what Mine craft is?

Guy: [00:29:42] I can send something to you that would help highlight that new things. And it was just bought by Microsoft, so all the users are kind of holding their breath. What will happen next? If you actually if you go in Minecraft.edu. There's a video right there at the front that helps show what kids can do.

Bonni: [00:30:09] Oh I will definitely look that up and I appreciate the recommendation to do so. My recommendation, I was just like Guy was talking about earlier, in preparing for today's show, since we were going to talk about iPads. I thought I'd just go look at the apps that I use more than any other.

Bonni: [00:30:25] I use a newsreader app that is called Newsify, but a lot of these news reader apps just talk to another service that works in the back end to track what what news we've read and unread and the thing that's making them all be so easy to use is called Feedly.

Bonni: [00:30:44] It's a little bit confusing because Feedly is a Web site but it's also an app just like so many of these services. But what Feedly lets us do is when we want to follow what's going on with an organization or a blog or the news, we have the ability today to really really hone in on what's most of interest to us and subscribe to those things.

Bonni: [00:31:06] And so I use feedly to subscribe to everything from my Dad's photographs, he he posts a photo every single day on Flickr. He's a little OCD on that front but it's wonderful to get to share with him and the photographs he's been taking.

Bonni: [00:31:21] And of course, I subscribe to lots of news and what's happening in technology and educational technology in the classroom. But what I'm also using up for now is subscribing to my students blogs.

Bonni: [00:31:32] As I talked about in our last episode, I'm doing so much more having students blog and having a voice to the outside world and then they can collaborate with each other and comment but also have exposure to other experts that aren't necessarily in the class.

Bonni: [00:31:48] And so Feedly just makes that so easy for me to do, to subscribe to them and be able to keep current on when they write because that's one of the things we find with students is they really do expect and deserve more immediate feedback. So, it just makes it really easy for me to keep up with them.

Guy: [00:32:05] And for me if I can plug one more thing.

Bonni: [00:32:08] Please.

Guy: [00:32:10] I've started using Twitter and Twitter chat. It happens almost every afternoon and people from all around the world congregate to different chats on different topics and I find that very empowering way to get professional development in their personal learning that really works.

Bonni: [00:32:32] That is so funny that you brought that up because my first gut sense was to talk about Twitter because it's just amazing, that's actually how I

first came across you and the work that you do. And then it linked me over to your YouTube videos, which I will definitely link to people, should check out Guy's YouTube videos.

Guy: [00:32:59] TechEdge01 is the channel name.

Bonni: [00:33:00] Yes, that is an excellent resource. Twitter is just amazing how we can get connected to these people from all over the world that share such common interests and passions and common things within the educational environment. What are some of the chats that you like?

Guy: [00:33:17] Well I like my local chats. Nebraska Ed chats, #NebEd Chat because it's small enough and I know a few the people that participate on a regular basis are my students, so it's lovely to connect with them. There's the of global and local issues intertwined so that's my favorite one.

Bonni: [00:33:39] Oh wonderful, wonderful. I'm enjoying the #profchat which is probably too big to be manageable but I always describe Twitter as you can just dip your toe in whenever you feel like it but don't feel like you have to keep up with everything for sure.

Guy: [00:33:51] No because you can't. Nobody can ever, opening the firehose and trying to drink.

Bonni: [00:33:57] Well thank you so much for accepting the invitation to be on the show and coming and sharing your expertise with all of the listeners.

Guy: [00:34:04] And thank you for having me.

Bonni: [00:34:07] Thanks once again for listening to Episode 22 of Teaching in Higher Ed with our guest Dr Guy Trainin. And if you want to receive the notes from today's show as well as a weekly Teaching article don't forget to go to teachinginhighered/subscribe and that will also get you the free ed tech essentials guide.

Bonni: [00:34:27] If you haven't yet, I would really appreciate you giving a rating or a review on iTunes or stitcher. What it does is it helps move us up to have others be able to discover the show who have similar interests.

Bonni: [00:34:40] I also love receiving your feedback at Teachinginhighered.com/feedback it's generated some terrific ideas for future guests as well as past guests. Thanks so much for listening.

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