

**Bonni:** [00:00:00] Pixar doesn't just make great movies. They also have a lot to show us about how to facilitate learning more effectively. Today's guest Josh Eyer and I talk about lessons in teaching from Pixar.

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**Bonni:** [00:00:22] 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:** [00:00:50] It's so great to be welcoming back to the show Dr. Josh Eyer. He's the Director of the Center for Teaching Excellence at Rice University and he also as a former guest on Episode 16 talking about biology the brain and learning. Josh, welcome back to Teaching in Higher Ed.

**Josh:** [00:01:09] Thanks Bonni. It's great to be back.

**Bonni:** [00:01:11] I mentioned to you that we didn't realize our children were so close in age. I have a son who's three and a half and a daughter his one and a half. And you have a daughter who's 3.

**Josh:** [00:01:21] Yeah that was exciting.

**Bonni:** [00:01:22] I was wondering over the summer we had movie nights and there were three of them and I wondered if I was a bad mother because I took our son to see up and cars which he had seen a bunch of times. And I'm forgetting what the last one was.

**Bonni:** [00:01:36] But particularly with Up because that movie just starts so horrifically with just the big loss and I'm not even sure if we should spoiler alert

maybe not give you a big loss in the beginning that I as an adult could not stop weeping the rest of the movie. But my son was completely oblivious to that and he just doesn't seem to get scared by anything that he's seen yet on movies he's sort of not not that scared. So I felt better as a parent afterward that he was not scarred.

**Josh:** [00:02:02] You can't go wrong with Pixar in any case.

**Bonni:** [00:02:05] It did make me think a whole bunch about you as we were going through those three weeks because you actually taught a course on Pixar and I wonder if you would share a little bit about how your course came about and what kinds of things you covered in it.

**Josh:** [00:02:18] I teach several courses in our first year writing intensive seminar program and this this past spring I taught one focused on Pixar and the idea hadn't occurred to me until a few years ago I read a piece by John Negrone called The Pixar Theory which I think I'll talk a little bit about later on although I don't agree with everything in there.

**Josh:** [00:02:40] I think it's a wonderful piece and the one thing it did convince me of was that it would be possible to teach a college course on the films of the Pixar studio. They're all very rich that there are maybe all ripe for multiple days worth of investigation. I would say cars is a great film but the conversation runs shorter than it does Lilli but I'd divide it into units.

**Josh:** [00:03:07] We've looked at the hero's journey through finding Nemo and The Incredibles. We've looked at loss in children's media through Toy Story 3 and up and then we spend a significant amount of time at the end of the semester on WallE unpacking its environmental messages its religious symbolism. And it's that I think really poignant commentary on what life is all about.

**Bonni:** [00:03:31] One of the girls who watches our kids was just mentioning that she's writing her first essay for college she's a brand new freshman in college. Yeah just that fear was reminding me of just the fear that they can have and it's helpful for me to be reminded of just how much pressure they can put on themselves. And she was having a really difficult time and I was thinking that your class must really help break down some of those barriers.

**Josh:** [00:03:54] I do think that there's sometimes this false impression that if a topic is accessible it means it's not intellectually rigorous but I think just the opposite that the more accessible the topic the more of the hard work that you

can do on students writing because they feel more comfortable with the material.

**Bonni:** [00:04:11] Yeah that's great. And there is this plan to be done in the future again.

**Josh:** [00:04:16] I think so. I think I may offer it through that program. We also have a series of college courses here at Rice which are courses that you are actually within the place where the students live so might offer through that program as well.

**Bonni:** [00:04:33] I realize that just talking about your Pixar course is a little bit misleading. Before we get into the outline would you just air a little bit about your professional expertise your discipline. And then a little bit about your role at Rice.

**Josh:** [00:04:45] Sure. I'm the medievalist by training studied all the medieval English medieval English literature and was a tenured faculty member in English at Columbia State University before I came to Rice. What I do here. I direct the relatively new Center for Teaching Excellence and our mission is a broad one. We're here to support and enhance the teaching that happens here on campus.

**Josh:** [00:05:10] So we work with faculty we're grad students. We work with undergrads who do some of the tutoring and their own teaching here on campus. We offer programs and services for them. I also have a faculty appointment and humanities here.

**Bonni:** [00:05:24] I was not aware of the last part of serving undergraduate students and you're the first. I'm sure I'm not the only but the first that I've heard of doing that kind of service. That's wonderful.

**Josh:** [00:05:32] This is actually one of the wonderful things about Rice. One of the many is that students do have the opportunity to teach one credit courses here. They have to go through a syllabus while a seven week long kind of intensive pedagogic training and then they have to get their syllabus approved through their college their college master and they need a faculty sponsor.

**Josh:** [00:05:59] But then they can offer if it's approved they can offer a one credit class and we have everything from physics courses to courses on Harry Potter to how to how to successfully barbecue. So lots of different ranges topics.

**Bonni:** [00:06:14] What a powerful experience.

**Josh:** [00:06:16] They get a lot of it's a wonderful program.

**Bonni:** [00:06:18] This is Episode 65. Sony did things that Josh and I talk about will be available for you to click the links on at [teachinginhighered.com/65](http://teachinginhighered.com/65) including some tweets that we got from people just today I ask the question What's your favorite Pixar movie. We heard from Brian. He likes Toy Story 2 and Shayma I believe like Finding Nemo and The Incredibles. And she even went down to the character of Edna Mode from The Incredibles and I had to go.

**Bonni:** [00:06:50] I couldn't remember who that character was I went back and I looked I was reminded I have to go back and watch that movie again.

**Bonni:** [00:06:57] It's been a long time. And then Sandy Morgan likes Monsters Inc. So we got a little an eclectic mix of favorites. The broad range and is just completely against the rules if I ask you what your favorite is.

**Josh:** [00:07:09] Oh my, that's a tough one.

**Bonni:** [00:07:11] I can't I can't answer it. So you can just push it right back at me.

**Josh:** [00:07:15] You know the most recent one the most recent one Inside Out. I think it's really good. I think that's UP is my favorite. I think that WALL-E is probably their best film.

**Bonni:** [00:07:26] I really liked Inside Out. In fact that was one of my recommendations about a month ago when it came out. We went and saw it that was it. That was my recommendations and you actually brought me to my next point that you and I have at least one cautionary note.

**Bonni:** [00:07:39] Yes we know that Pixar movies are not real or they're not based on anything remotely resembling reality. And there was a hysterical episode of the podcast called Very Bad Wizards and they talked about some authors had criticized in the Inside-Out movie because it didn't accurately express how the brain truly works.

**Bonni:** [00:08:01] And they were just so funny because it's like did finding nemo actually represent how an actual fish in fish tanks work from us. Did they actually

talk in Finding Nemo so they thought there was over an abundance of criticism in the academic world against inside out in sort of a ridiculous way.

**Bonni:** [00:08:18] So you and I are not actually saying that the lessons in teaching are represented by true fact nonfiction tales these are actually fictional characters which they inspire us to think about teaching them differently. And I really enjoyed the episode a very bad wizards where they just got the two of them can be so silly. So I put a link to that in the show notes

**Bonni:** [00:08:38] If anybody wants to go back and listen to them just ridiculously pull apart some of the criticisms of inside out. And we have six lessons that we both collaborated on to say we could draw from Pixar movies and bring into our teaching and the first one is that opportunities to learn from our students are abundant.

**Bonni:** [00:08:59] And you've you've got an example from Finding Nemo and I'm going to just play that clip real quick and then we'll let you share how you connect this clip with opportunities for our students to learn. And this is doory speaking Whale.

**Finding Nemo:** [00:09:17] \*clip from Finding Nemo\*

**Bonni:** [00:09:51] Josh would you share with us how that represents to you opportunities to learn from our students.

**Josh:** [00:09:56] At the conclusion of that clip he of course doesn't believe that she can speak whale at all and that she's making all this up and which fits right into her character arc as having short term memory deficits. What he learns is that she can't speak well and that's what she has just been told was that they need to let go.

**Josh:** [00:10:16] And at that point they're inside a whale literally holding onto the whales tonsils and so it makes realistic sense. That's what the way I would say. So they can go and go up through the blow hole and out. But at that point Marlyn happens to be a crisis point in his own life.

**Josh:** [00:10:33] I remember at the beginning of the film he loses he loses his wife she's killed and then he's so he's over protective of Nimo and that overprotectiveness leads to Nemo actually taking a risk that that leads to him getting captured.

**Josh:** [00:10:50] The fact that dories not only able to translate well but then teaches Marlyn exactly what he needs to hear at that moment. They say it's time to let go. I think represents the opportunities that we all have to learn from our students. I think certainly teaching is often conceived of as this relationship where we are imparting wisdom onto students and I think that certainly the role of being a teacher is about helping our students to learn most effectively. There's no doubt about that.

**Josh:** [00:11:25] I think we only focus on that we miss out on those moments when students can share something with us that opens our eyes to the material in in a way we had never seen before or offers a new perspective or an element a piece of the puzzle that we hadn't considered before.

**Josh:** [00:11:46] And so I think that's a really important aspect of teaching that so it keeps teaching fresh and exciting. And so I think we need to be more open to those moments where we can learn from our students. Certainly some of my own research ideas have come out of class discussions I've been having with students I've I've sort of parlayed those moments into undergraduate research projects where we could write articles and I know many others have done very similar things so I do think that those moments can be some of the most special ones that we have in classrooms and we need to be on the lookout for them.

**Bonni:** [00:12:24] There have been two areas where my students have been teaching me recently and I shared a little bit about this in a recent podcast and also on my blog. And that is that I know I have such a tendency to make assumptions. I shared about making an assumption that a young man would know about a figure in the Black Lives Matter movement.

**Bonni:** [00:12:42] And then I proceeded to not only make that assumption and sort of embarrass myself but then I proceeded to tell him the wrong shared the wrong story about the person and I got my two names mixed up so I'll put a link to that in the show notes in case anyone wants to hear more further about my stupidity.

**Bonni:** [00:12:59] But also I mean the same thing there was a student whose mother had died of cancer last year and then I was making an assumption that it would be the same experience as if that happened to me. But this man that's pretty much all he had known since he was 13 or 14 years old. She had been ill for such a long time. Every day goes by where there's something where I go OK you did it again.

**Bonni:** [00:13:21] You can't make these assumptions. I think the best thing is that I just keep that curious mind of really wanting to learn about their lives and wanting to learn if they are in a painful situation just wanting to listen and not feeling like there's much I could do to fix it other than help them get any help that they need from our counseling center. Things like that.

**Bonni:** [00:13:38] But yeah our students have been teaching us a bunch and then recently I learned a little lesson about sequencing. I'm teaching three sections of the same class and two of them I did the same order and for some reason I still don't know why I did the middle one. I skipped the order of something and I sort of started by giving examples from a particular company instead of staying a little bit more with the it's explanation of definitions and key terms and things like that. And it's amazing how when you don't get your sequencing right by the time they got I had them listen to an interview with the CEO of Whole Foods.

**Bonni:** [00:14:14] And they were supposed to then draw from there about examples of different stakeholders how does whole foods address customers how they address investors and members of the community and that section couldn't give me any examples when the interview was over it was 10 minutes or I'm going.

**Bonni:** [00:14:30] How could you have none. I mean I even wrote some on the book and it was just the power of sequencing in our courses and how important that is to think through. Sure. Definitely. Yeah. Our second lesson is great teaching begins with a boundless passion for our subject and you have an example from Ratatouille.

**Josh:** [00:14:49] Oh yes. That movie is great for all kinds of reasons. What it means to make art with what it means for arts artists and critics to interact but one of the things that I think it inspires about the way we think about teaching for example is just how passionate the rock is for cooking.

**Josh:** [00:15:13] There's a scene early on where he has he has a bit of food. I think it's cheese really really great cheese is trying to give it to his brother another rat obviously who then just gulps it down and and Remy is appalled that he wouldn't stop and smell and savor the beauty of the food before he would do that.

**Josh:** [00:15:33] So he's he spends the film trying desperately to find an outlet for that passion and through cooking through through his ability to translate that

passion into what he's doing. He's able to reshape reshape the cooking environment of the restaurant. It changes the minds of. He changes the minds of many of the people he's working with right.

**Josh:** [00:16:01] Certainly he brings the critic a critic around but I think that the most the biggest example of the teaching that happens there is with Collette who is one of the chefs in the restaurant. She's a little jaded. At first she becomes inspired by the passion that she sees in linguini who is the kind of a puppet for Remy.

**Josh:** [00:16:24] Remy it lives in linguini had a sort of pulling his hair certain ways to make the dishes the way they need to be. So Collette is originally inspired by that passion but once she realizes it's. He teaches through that he conveys not just an expertise but he makes other people want to be better at what they do want to know more about what they do simply because he's so passionate about what he does and subsequently he's so good at it because he puts so much of himself into it.

**Josh:** [00:16:57] And I did it in the classroom. One thing that we know for certain is that something that can bridge the chasm for students between unfamiliarity with material and successfully learning that material is to follow the instructor's passion. If an instructor is passionate about what they do they're deeply invested and particularly excited about it.

**Josh:** [00:17:19] Students will often often come along and be invested in the material as well simply because they want to know what is it about this subject that makes that can make someone excited. What is it about the puzzles that we're going to solve. What is it about the the material itself and the nature of the discipline that that can draw people like that. So I think passion is sometimes an underrated part of what we do as teachers that can be really effective in reaching our students.

**Bonni:** [00:17:51] The next lesson in teaching from Pixar movies is from Finding Nemo. And it is gradually reducing Coaching helps students learn and we're going to start out with a clip from Finding Nemo. And this is the first day of school and we know something about the dad of Nimo and that is that he is pretty darn protective. And here is a quick clip from Finding Nemo the first day of school.

**Finding Nemo:** [00:19:26] \*clip from Finding Nemo.

**Bonni:** [00:19:26] One of the first places that we might go mentally in listening to that clip is the criticism of helicopter parenting. And there have been lots of articles about that and certainly is something that I have witnessed in my teaching.

**Bonni:** [00:19:38] But that's not really where I want to go. At this point I want to start with just that and are teaching. One of the things that I've noticed is we can have one of two extremes neither which is very good we either don't give students much of an opportunity to fail and we have heavily coached heavily guided classes.

**Bonni:** [00:19:56] And there isn't a chance for them to address what it's like to have feelings of ambiguity and address failures small or large. Or we go all the way in the other direction and we say well this is what I've my call. Well this is what it's going to be like in the business world are not going to get a lot of direction.

**Bonni:** [00:20:16] So I'm going to put them in the sink or swim method of teaching and I would say that either direction is not necessarily healthy in our teaching and early on I used to work for a computer training company and we hired an instructional design professor from Utah state his name is David Merrill.

**Bonni:** [00:20:34] He has since retired but is still loving his grandchildren and doing a little bit of consulting the last time that I checked. And I linked in the show notes to one of his articles on Instructional Design and within it he talks about the importance of reducing coaching.

**Bonni:** [00:20:50] So when we're were teaching something part of our instructional design should be well the first time they go through something if it's a skill that they're learning or a series of steps then yes they're going to get heavy coach you know we're walking them through one of the things he emphasizes the importance of multiple representations showing different examples of what it looks like when it's done right or when it's performed right if it's a skill or showing what it looks like when it's not right.

**Bonni:** [00:21:17] And I used to teach applications courses computer applications courses and then I hired and trained other people to teach them. And that was a big thing where if youre just teaching someone Microsoft Excel which I did I'm embarrassed to say for at least a year. My idea was I'm teaching you excel because you're following the steps that I'm telling you to click on and

watch you click on this menu and then click and then I get back to their office and they can't really use it.

**Bonni:** [00:21:41] They had a great class like I scored wonderfully on my teaching evaluations. They always wanted me back to teach but I wasn't actually teaching I was more entertaining and demonstrating the language that Merrill would use demonstrating and what comes after demonstrating is what we're more familiar with where they can actually apply it and integrate it in with their own situation and our instructional design model back then didn't really have as much of that in our business model.

**Bonni:** [00:22:08] And so this idea of when we think about finding nemo that his dad just so much wants to tell him every little thing to do and then of course when he gets out from his familiar environment things don't necessarily go that well for him.

**Josh:** [00:22:23] Can't stress enough how important I think your focus on giving students the opportunity to fail can be. I think that I mean we absolutely know the science on learning that things need those opportunities to fail in the low stakes environment in order to be able to learn something new in order to learn anything really we need to confront the failure of faulty knowledge of faulty mental models and that that's a good enough opportunity to do that.

**Josh:** [00:22:53] Usually when they are the stakes are too high and so the benefits that teens can glean from the failure in high stakes is actually much less because they have so much invested and so much at stake in being able to succeed.

**Josh:** [00:23:10] So we lowered the stakes or even give no stakes just give feedback and begin to be able to utilize those opportunities more effectively to succeed in our course.

**Bonni:** [00:23:22] And reduces that sting of the failure too and they start to go oh I could actually fail and everything wouldn't fall apart.

**Bonni:** [00:23:29] All right this next lesson in teaching is we we talked in our most recent episode about mind that it may maybe it is the second most recent I will link to it in the show notes so people can go back and visit it if they have and it was episode 62. So yeah. It's been a couple episodes with Rebecca Campbell she spoke about mindset and we have a clip from Toy Story and this is the

character Buzz Lightyear as he first arrives and has some ideas about himself and who he is and where he came from.

**Toy Story:** [00:24:06] \*Clip from Toy Story\*

**Bonni:** [00:24:47] He arrives into the scene with such confidence and vigor and later on he is watching television and sees an advertisement for himself as a toy and discovers that he is not who he thought he was. And because we shared on a recent episode about mines that you and I aren't going to cover too much about that idea but I'd encourage people to go back and listen.

**Bonni:** [00:25:08] But I did want to ask you to share about some of your thoughts that you've blogged about and I did link to in the show notes about that it does take a little bit more than mindset that you'd share a little bit about and another aspect we should consider.

**Josh:** [00:25:22] Sure in addition to that moment where he understands that a toy is a classic case of a fixed mindset.

**Josh:** [00:25:29] He believed that he was Buzz Lightyear and that his abilities were kind of fixed within that framework and as soon as he finds out that he wasn't who he thought was he goes to he goes through a period of deep depression. It's only later on in the film that I think he's able to put it together and understand that he can be more than what he thought he was which is the growth mindset there.

**Josh:** [00:25:52] But I do think that you know I'm a huge fan of Carol Dweck's work on mindsets and I think they have done a lot of good not just in the classroom honestly but I know gentling had a recent Chronicle of Higher Ed article showing how effective they could be in higher ed. I think all kinds of places parenting for example that the mind set researches has shown this how to be better parents as well. The kinds of things we should say to our children. So I'm a big fan of research. I do think though that the.

**Josh:** [00:26:25] There's something there's something we could add to the equation and that's the older research of the social psychologist led Vygotsky who I mean he wrote about a lot of things that one of his dominant theories was the zone of proximal development which is that as individuals we have we have a range of how much we can improve before we need help from what Vygotsky called the more knowledgeable other teacher that could be a peer.

**Josh:** [00:26:53] And I think that the one of the things that can sometimes strike people about mindsets is you know we can we can certainly tell students and talk to them about the difference between growth and fixed mindsets. We can talk to them about how about about ways to frame what they're doing within that that kind of context we are taught about and we can say certain things are trigger more of a growth mindset. But there will also be working with students who have experienced failure in their lives. And I do think that sometimes some students simply hearing.

**Josh:** [00:27:32] Growth mindsets are possible and they will help you may not be the end of the story. For them it may not be all they need. And so helping them to understand and to work with this idea of Vygotsky is that we have we have a range I can start here and then we get the point being that we needed someone's help but then I can have a new range right that that just makes it a bit more complex and in that complex the students may find a bit more room to roam in terms of in terms of their learning potential.

**Bonni:** [00:28:09] It reminds me a little bit too. I'm not sure if forgive me if if you've necessarily already done this thinking but I had Peter Newbury on the show from UCSD and he his background is in physics although he works in there teaching and learning center now and he shared about just the importance of having networked maps in our brain.

**Bonni:** [00:28:31] And the retrieval that's possible there and what it's like to think about how an experts mind is mapped and able to quickly if he was giving the example of the which she wish wishes wasn't the case but so many times in early physics let's do an exercise with you have a pulley and you have a card or things like that and how fast is it going to go.

**Bonni:** [00:28:51] That's all I can say about that by a tiny bit but just that the expert goes oh that's that kind of problem and I already know what a whole vast set of resources I could draw from to address a problem like that and I can map it so quickly as the expert versus the novice is going.

**Bonni:** [00:29:09] What kind of problem is this and where. And it's just not that speed or confidence I guess to know and to have that that whole network of information and knowledge mapped in one's brain.

**Josh:** [00:29:20] Right. And to simply say simply talking to students about growth versus fixed mindsets doesn't overcome that initial impulse.

**Josh:** [00:29:29] Right. It can certainly create a context in which students will be successful but understanding our intellectual development. I think in more complex terms I actually think that helps students to be able to wrap their minds around the learning process.

**Bonni:** [00:29:45] I like your appreciation for the complexity and all of that too. All right. Number five our fifth lesson is the pursuit of knowledge can be heightened through curiosity. And I know this is one of your favorite movies and also your favorite example so I'm going to pass that over to you.

**Josh:** [00:29:59] This is absolutely this is Walle and I think one of my students in the course last semester actually said it best. She said curiosity is what makes us human. And I do think the curiosity is one of those one of our most deeply rooted mechanisms by which human beings learn. It is with us when we are babies.

**Josh:** [00:30:24] It's very evident in the evolutionary record of how beneficial that Curiosity has been and how tied it how tied it is to learning especially learning new concepts. And so one of the things that's beautiful about the about the film while the is that he falls in love with this human race because he's curious about them. He has this insatiable pursuit of knowledge and wonder at all things connected to human beings.

**Josh:** [00:30:51] And so you know that probably the example that most people will remember is he has the VHS tape of Hello Dolly! He watches over and over again. It's simply in order to learn about who these people were. That left all this garbage behind he finds this funny paper clips he finds bits of what we think of as trash that he finds his treasures because they teach him something. They give him information to put another piece into the puzzle of who they once were who occupied this planet.

**Josh:** [00:31:24] So it's that curiosity that we need to know that desire to know that I think we really need to be cultivating in our classrooms that yes you know students can memorize material they're good at it. Yes yes we can. We can design courses that integrate that integrate what we know from the research and teaching learning that's even better.

**Josh:** [00:31:46] We can do that. We know how to do that unless we're really tapping into these deeply rooted structures. This natural curiosity that we all have when we are children that somehow gets buried over the next 18 years

unless we tap back into that when we're not necessarily doing all we can to help students attain the level of success that they might otherwise.

**Josh:** [00:32:11] So there are all sorts of ways to do this and in the most basic ways asking questions and reading this really interesting study by developmental psychologist who was looking at the types of questions 2 3 and four year old children ask and they mirror the questioning process that the best classrooms which is first we're asking our basic level questions and then we ask questions that allow that allow our students to apply that information.

**Josh:** [00:32:41] It turns out the two year olds and 3 year olds are doing the exact same thing they asked. They asked coach factfinding questions and then they tried to apply that to their larger larger conceptual framework that they're building so everyone already knows how to do this. In fact that educational process is kind of ingrained in us.

**Josh:** [00:33:01] And so building courses that that looks like that that tap into that I think we're helping our students much more you know constructivism is another way to do this allows allowing students to delve into that curiosity ask the questions themselves build build networks of knowledge for themselves with our guidance.

**Josh:** [00:33:23] I think that's where sometimes where people get put off of constructivism. There's a sort of rumor about constructivism that the teachers out of the picture that's not necessarily true. There are all sorts of models and I think research has shown the most effective those are the ones where the instructor is helping to guide the process at least minimally. So all sorts of ways we can design courses to cultivate that curiosity for students.

**Josh:** [00:33:50] And I think we do a disservice if if we if we ignore that aspect of it.

**Bonni:** [00:33:56] I know this is always an area I can improve I don't think I'll ever go even a class session without thinking I could have done better at this than I. Sometimes my hesitancy I think is when there's such a fine line when you open up this that a student might be wrong. As a recent example I was illustrating how many business ideas don't come from seeking opportunities. They come from trying to solve problems.

**Bonni:** [00:34:19] And when I had found a knife that was specially designed it was like a regular knife but I also had some holes cut out in it that could scrape

off butter because butter is so hard when we take it out of the fridge you try to spread it on bread and it won't spread and tears your bread while you're trying to do that if the if it's still cold.

**Bonni:** [00:34:38] And so I showed this picture of a knife. What are you what problems do you think or what problem do you think this knife solves and students got that answer wrong three or four times in the classes. And I think that's OK. It's just I'm just I'm uncomfortable with it when it initially happens because I don't want students to be wrong.

**Bonni:** [00:34:53] These are mostly freshmen mostly 18 year olds I don't want to embarrass them their first time out of the gate but at the same time they remembered that knife and they remembered that idea that a lot of businesses product ideas get started from problems.

**Bonni:** [00:35:06] And I think I made it OK. And perhaps you may guess the best case scenario is I made it OK to have those small failures in the class and we see it's easy to recover from them how could they possibly know what the knife does. I wouldn't have known either one just seen it for the first time.

**Josh:** [00:35:20] Sure and just the notion of designing designing businesses based there are business ideas based on problems wanting to solve problems. I think I gets right to the heart of what we're talking about. Allow students to delve into those problems and come up with to come up with solutions or pieces of solutions.

**Josh:** [00:35:41] I think that's when that's when we're at our most effective as teachers because that's when students are in an environment that they are able to be drawn on those those mechanisms for learning that are the most natural.

**Bonni:** [00:35:58] Our last lesson in teaching is learning happens everywhere. And you have an example from such a great Pixar movie Up.

**Josh:** [00:36:06] Right again and probably my favorite.

**Josh:** [00:36:08] I do think certainly we're focused on the classroom here but the reality is the learning is a very big idea and it happens everywhere. You know I learn something every day and I'm not in the classroom anymore.

**Josh:** [00:36:21] Lisa as a student I saw it can that some of our best teachers can also be found outside the classroom use up as an example because his most

effective teacher Carle's most effective teaching that this is his wife Ellie not only their lives together but also the material that the books that she leaves for him.

**Josh:** [00:36:44] I think it's very instructive that not in the classroom sense but in the way of living our lives. And I do think that it's important to note that because in college students are going to interact with lots of people who they may not be taking classes from.

**Josh:** [00:37:02] But you know their peers or their advisors or their or their tutors or are there are days we'll have just as much I think to teach them and to contextualize what's happening for them in the classroom. And you know I identify with that. I've been learning a lot myself from this on a personal level.

**Josh:** [00:37:25] My wife has been very sick for the last year and I've learned quite a lot about courage from her. I feel like I learned so much from my own 3 year 3 year old daughter everyday about how to tackle life with a toddler's view.

**Josh:** [00:37:38] So I think I myself have learned quite a bit from from people outside the classroom in ways that help me reframe and rethink the materials that I am learning in a classroom. So I think that's important too.

**Bonni:** [00:37:55] Absolutely and one of the things I'm grateful for communities like the people that listen to this podcast or read your blog or are out there on Twitter connecting with us is just such an amazing thing to think how we can connect using technology and learn so much from each other. It's something I'm really appreciative of.

**Bonni:** [00:38:12] This is this segment in the show when we each give a recommendation. And speaking of your wife's diagnosis and health challenges I thought that I had recommended this before but it turned out I just talked about it on Episode 51. I talked about vulnerability in our teaching and I shared just how you have been so vulnerable both with your students and also with the community of people that learn from you.

**Bonni:** [00:38:36] And I wanted to officially recommend today your essay called The Grief of Pain. It is one of the most beautiful things that I have read in the last year and it was just so touching. And I wept when I read it and I just was so interested in seeing what people's comments were because you just it wasn't just me you just touched so many people that that read that article and it resonated with.

**Bonni:** [00:38:59] And then you also wrote a blog about a little bit about your experience teaching that class with about the Pixar movies the writing intensive class and I thought that was another great thing that just illustrates your desire and ability to learn from your students I'll be linking to that at [teachinginhighered.com/65](http://teachinginhighered.com/65).

**Josh:** [00:39:22] Thank you Bonni I really appreciate that. I wanted to recommend the piece that started my thinking about about teaching Pixar and that was a blog post by John Negroni in July of 2013 called The Pixar Theory. In it he tries to fit all the Pixar films into the same narrative structure of the same universe and he actually just expanded it turned it into a book also called The Pixar Theory came out a few months ago.

**Josh:** [00:39:52] Like I said before I don't agree necessarily with all of that but I really do think it has caused a lot of people - started a lot of people's thinking in really interesting, nuanced ways about these films that really show that the beauty of... for talking about lots of things like teaching mean the list the list goes on. John was good enough to actually Skype into our final exams so some of my students could debate him on his Pixar Theory.

**Bonni:** [00:40:19] Oh what a treat.

**Josh:** [00:40:21] It was and he's a he's a great guy good sport. And so I really I really appreciate his work in this area. So I would recommend that read to pick something to really have fun with these films that have given people so much pleasure.

**Bonni:** [00:40:35] Josh just thank you so much for being on this show again and the continued conversation. I'm I'm gonna look forward to the next time.

**Josh:** [00:40:42] Thank you Bonni. I really appreciate the opportunity to be on here again. Thanks for all you do.

**Bonni:** [00:40:47] Thanks once again to Josh for being on the show. Two times now I'm looking forward to that next conversation. If this is a time when you have yet to subscribe to the weekly update now's the time to do it. That's at [teachinginhighered.com/subscribe](http://teachinginhighered.com/subscribe).

**Bonni:** [00:41:02] What happens when you subscribe as you get the free ed tech essentials guide. With 19 tools to help you use technology to facilitate learning in

your classes and also you get just one email a week with a show notes to each podcast and an article on teaching or productivity.

**Bonni:** [00:41:19] Again that's it [teachinginhighered.com/subscribe](https://teachinginhighered.com/subscribe). I'd also love to have you helping other people discover the show by rating or reviewing it on whatever service it is you listen to the show on whether that's iTunes or stitcher or what have you. Thanks so much for listening. As always I welcome feedback at [teachinginhighered.com/feedback](https://teachinginhighered.com/feedback) and I'll see you on the next episode.

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