

Transcript: Episode 100

The A&P Professor Podcast

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Introduction

Kevin Patton (00:00:00):

The journalist and educator Jeff Jarvis once wrote, “In the real world, the tests are all open book.”

Aileen (00:00:10):

Welcome to The A&P Professor, a few minutes to focus on teaching Human Anatomy & Physiology with a veteran educator and teaching mentor, your host, Kevin Patton.

Kevin Patton (00:00:23):

It's the 100th episode. And I discuss more about my wacky open online testing scheme, plus a new entry of an old book in our book club.

100th Episode

Kevin Patton (00:00:42):

Well, it's time to pop the cork on your iced tea and help us celebrate the 100th episode of The A&P Professor podcast. Officially, it's the 100th episode. I can't believe we've gotten this far, but you know what? In reality, and if you check whatever device you listen to this on, it may list this as being the 140th episode or 139th episode. And so really, they're even more snippets of sound out there related to this podcast than a 100. It's just that, well, it's the way they're numbered. So the official numbering brings us to a 100. So now is as good a time as any to celebrate that.

Kevin Patton (00:01:29):

The reason why the number is higher on podcast catchers and places like that is that they also count those preview episodes that I was doing for a while that came out right before the actual episode. And some of the episodes were numbered differently because they were considered to be bonus episodes because they didn't really fit into the regular schedule of a release that I was trying to follow at the time.

Kevin Patton (00:01:56):

So, yeah, it's a 100, officially the 100th episode that we're celebrating. I'm actually very happy about that because most podcasts do something that podcasters call podfading. Long before you get to a 100 episodes, usually somewhere around episode 10 is where most podcasts start to podfade. And I can understand why I've gotten this far because it's hard. I mean, you can imagine any project that you do, where you have a deadline every week or every couple of weeks, and you have to produce some solid content and not just wing it, after a while, that takes a toll and that's not always easy to sustain. Sometimes it's not hard to sustain when you're on a roll, but other times, they're competing things that horn in there, or you just get a little tired of it for a while and so on. So I'm really proud of the fact that I jumped over those hurdles. Okay. I climbed sweating and crying over those hurdles sometimes, but I made it over it. So I hope you're joining with me to celebrate that accomplishment.

Kevin Patton (00:03:13):

Another thing that's coming up pretty soon here too, that I'm certainly going to celebrate. And that is when we get to a 100,000 downloads of the sound files, and each episode is a different audio file. And so we're approaching a 100,000 downloads, which is a significant achievement as well. And so I'm looking forward to that. That'll probably end up being in a couple of months. Now while I was thinking about this being the 100th episode, I was thinking back to, I don't know what was about eight months ago when I was recording the first episode of our fourth year of this podcast, I did something that's just kind of weird, which I know it's every episode I do, and several things that are kind of weird, but this was one of the weirder things. And that is, I made some predictions for the coming year. Since it was the start of a new year, I was going to make some predictions for the coming year. And I remembered a

prediction that I want to revisit. It's from episode 86, it was an episode called What a Year! And this was one of my predictions.

Kevin Patton (00:04:25):

First off, I think this pandemic is going to continue through the next academic year. I think a lot of experts are saying that. So that's not me. I'm just repeating what I'm hearing from people I trust. And there might be another pandemic that overlaps that or follows up on that. For example, avian influenza virus, the H5N1 virus, and might cause a pandemic that's on the horizon and could be anything else too, even Ebola or something like that. And maybe there'll be a new virus or some other kind of pathogen pop up along the way. One never knows. So we're not going to be doing any post-pandemic teaching this coming year I think. We're still going to be doing pandemic teaching.

Kevin Patton (00:05:14):

So yeah, I think I kind of nailed that one. We're not at the end of the year. At the end of the year, when we have our next beginning of the year episode, I'm going to go back and revisit all those predictions I made and see whether I was anywhere close. But boy, this one, as you know, I hit this one right on the head. And all my other predictions are just like this one I just made, and that is doesn't require any special talent or secret powers to make this kind of prediction because they're kind of obvious. I mean, anybody who's paying attention could have made that same prediction. So I'm not claiming anything wonderful. I just think it's an interesting observation that I made then. And now here it is later. And yeah, well, here we are.

Kevin Patton (00:06:03):

Now, before I end this segment celebrating the 100th episode, I just can't move forward without thanking you for your support. Some of you have been with me since episode one. And there might even be one or two people out there who have listened to every episode since episode one. Wouldn't that be something? Then I won't be the only one to have done if there is somebody like that, if there is somebody like that, call me in, and talk to us about that into the podcast hotline, I'll give you that number at the end of the episode. But if you're late listening to this episode, it might be your first episode, you might've listened to a number of it episodes, it doesn't matter, you're supporting this podcast when you do it. And by doing that, you're supporting teaching of Human Anatomy & Physiology. And I appreciate that.

Kevin Patton (00:07:01):

So I not only appreciate what you're doing for me to support my project here, but I'm doing this project for that larger community of us faculty who are teaching human anatomy and/or physiology. And it's not just the listening that is supportive. It's all those many other kinds of contributions that you make to this podcast. For example, for those of you that do call in or write in with questions or comments or

points of debate about things that I discussed in this episode, that is a kind of support as well. Or when you tell your friends about an episode that struck you in some way, or when you generate conversations and share posts in Twitter or Facebook or any of the other social media out there where The A&P Professor exists. When you give me feedback on what you like and what you think might need be improving, that's a kind of support too, that's helping me. And by helping me, you're helping everyone in the A&P teaching community.

Kevin Patton (00:08:12):

Or for those of you, and there haven't been very many, but I'm always open to this, so please consider this to be a nudge. If you want to join me in a conversation in an episode, where I can interview you about a paper or book or project, or just some idea that you came up with or something you recently learned or a book you read or whatever, then come on, or it could be just a conversation about some topic like, hey, I'd like to talk about this topic, and just come on and we'll talk about it. Maybe you can bring a friend or two and we can have kind of a panel discussion. And it doesn't have to be like a panel discussion like you see at a conference or a workshop where everybody has prepared their material and they're sort of giving a mini-lecture on it and answering questions as an expert, no, no, I mean, we could do that. That'd be a cool episode. So do not do that.

Kevin Patton (00:09:07):

But what I really had in mind when I brought this up is let's just have a conversation like we all met for happy hour and this topic came up and we decided to talk about it. So yeah, you can do that anytime you want. So those are all ways that you have supported this podcast in the past. And I am very, very grateful. And they're all ways that you can continue to support this podcast. And I'm grateful if you're just even considering doing that.

Book Club

Kevin Patton (00:09:40):

A book that I mentioned in the previous episode, that is episode 99, has just been added to The A&P Professor Book Club. So as usual, I'm popping into my favorite imaginary bookstore to pull it off the shelf and have a seat in that comfy chair over in the tea nook and tell you about it. The book is called *What the Best College Teachers Do*. And it's written by Ken Bain. This book has been one of the most influential books about teaching that I've ever read. Even though I first read it about a decade and a half ago, it's still with me in so many ways. That's why it came to mind when I was recording the last episode.

Kevin Patton (00:10:30):

And if you've been teaching less than 15 years, you may not have even heard about what is now considered a classic that's still full of valuable lessons for us right now. It was one of the first books I ever read about teaching. I wasn't assigned to read in a course. None of the books I'd been assigned in my education courses seemed all that compelling or useful when I'd read them. So I not only was not looking for a book about teaching, I was actively avoiding reading books about teaching. I don't remember what made me pick this up and want to read it for the first time, but wow, I'm glad I did. Not only did I learn a lot from it, it also so opened me up to read other books about teaching, which I still do all these many years later.

Kevin Patton (00:11:33):

Whenever I've tried my hand at something, something new for me, whether it's, I don't know, zoo husbandry or a lion taming or Tai Chi or photography or podcasting or teaching, I always want to know who the top people are in that field. I want to know what makes them so good, what their secrets are. Not that I aspire to be an icon like they are, but because I want to use that knowledge to do my best.

Kevin Patton (00:12:07):

Well, that's what the author Ken Bain did. He checked out the most well-respected college teachers to see what secrets and tips he could find. It took him 15 years and an in-depth study of each of almost a 100 college teachers in a wide variety of fields and different universities and colleges. I think he expected to find some universal thread among all the top teachers, but he didn't. Well, not exactly. What he did find was a lot of common themes and mindsets applied in a variety of different. I can't go into all of them here, but I can tell you that they all resonated deeply with me. Some of them found me saying, "Oh yes, of course." And others made me realize that I was already on a path leading me in that direction.

Kevin Patton (00:13:12):

It turns out according to Bain, that it's not what teachers do. It's what they understand. Lesson plans and lecture notes matter far less than a special way that teachers comprehend the subject and value human learning. That is the best teachers know their subjects inside now, but they also know how to engage and challenge students. Most of all, according to Bain, they believe two things fervently. One is that teaching matters. And the other thing is, is that students can learn. Now, if you're going to read a book about teaching, please read this one. Sure. It's a few years, okay, it's more than a few years old, but the lessons in it are timeless. You can find out more about this book at theAPprofessor.org/bookclub, where you can also claim your digital credential after reading it.

Sponsored by AAA

Kevin Patton (00:14:23):

A searchable transcript and a captioned audiogram of this episode are funded by AAA, the American Association for Anatomy. I recently joined a discussion group of podcasters, interested in new and emerging strategies and technologies. And one recent and lively thread is centered on the importance of transcripts for podcasts. Not many podcasts provide transcripts or captions, and those that are available are often not very accurate, but it's important. Of course, it's important for accessibility, those with profound hearing loss can't access the content without transcripts or captions. Now I myself have moderate hearing loss and it helps me too.

Kevin Patton (00:15:19):

And even those with no hearing loss can benefit, but it also gives you a way to search for and find the topics in past episodes that you want to call back and revisit and listen to again, or maybe to recommend to a colleague when it comes up in a conversation or maybe something going on in your department or course and you want to go back to it. And accurate transcripts and captions, they cost a lot of money. Our friends at AAA pay that for us. Maybe a quick note of thanks to them at anatomy.org or at one of their social media accounts is a good idea to say, yeah, thanks.

But, But, But...

Kevin Patton (00:16:08):

I have kind of a love–hate relationship with Twitter. I love the ability to connect with colleagues all over the world and have asynchronous discussions about serious professional things and also about silly or trivial things. That's what I love. But what I sometimes hate is that it's a short form platform. Sometimes a response that requires a longer, more thoughtful or more structured answer just can't be whittled down to a few dozen characters in a single tweet or even in a few dozen tweets. So when some questions and what-ifs and brainstorming and observations and thinking out loud about the topics of the previous episode, that is episode 99, about my wacky strategies for testing in my courses, I found it difficult to respond to some of the comments and questions. None of which I may have understood because they were shortened and because, well, I'm just not all that good at understanding how diverse threads are meant to come together. And I often miss some important element of a thread that was stated on a parallel thread or in a response to a response to a response inside a single thread. But that's okay.

Kevin Patton (00:17:47):

I have a podcast. So when I feel like I need to clarify or expand or explain or shrug my shoulders, because I don't have a response to something I've run across in the Twitterverse or anywhere really, there's always the next episode of my podcast where I can do that. And you know I do like to give long answers to short questions. I like to give long answers when a short answer will do just fine. That's what I'm all about. And by the way, you can do that too. Remember in the line episode, episode 99, that's what my friend Jerry Anzalone did. He sent in some audio questions that became the set of topics that I discussed in the last episode. And so here we are. Right now, I'm going to do that. I'm going to go back and clarify and expand on some of the ideas that first came up in episode 99 and were asked about or commented on or questioned on Twitter and other places that where I saw responses.

Kevin Patton (00:18:57):

And to be honest with you, I'm also going to put in here some clarifications based on the long history I've had with doing things the way that I do them in the kinds of responses and reactions and so on I've had from both students and colleagues over the years. So you may want to relisten to episode 99 first. If you're fuzzy on what we talked about or if you missed that episode, not a bad idea to go back and listen to it. But if you're not going to do that, or if you have listened to it and just need a quick recap, here it is.

Kevin Patton (00:19:34):

Quick recap of what I talked about. I talked about giving tests more frequently than we typically do. I talked about making most of our tests. Online tests. I talked about making our online tests open book, open everything, open, open, open tests. I talked about allowing multiple attempts at each online test. In my regular A&P course, I mentioned that I allow three attempts on every online test with the highest score going into the final course grade. And I also have a pre-A&P refresher course. And there students have unlimited attempts, but they can't move ahead to the next module until they get a B or better. So sometimes they have to keep doing multiple attempts, occasionally quite a few attempts. Usually not that many, but sometimes a lot of attempts before they get that B or better and can move on in the course and eventually pass it.

Kevin Patton (00:20:38):

I also mentioned that all tests have randomized question sets. That is all the online tests have randomized question sets. But what that means is that every attempt is different than nearly any other attempt. And I'm going to come back to that later in this episode and talk a little bit more about that process. And in the last episode, I also talked about the fact that all of my tests are cumulative. That is all tests cover everything covered thus far in the course. Now it's not equally weighted. I mean, I have a small amount that covers previous topics. And then what I do is most of the test items are on the topics for that module that is being tested.

Kevin Patton (00:21:28):

Another thing that I talked about is that I give a pre-test before we start each new module. It's an online pretest and it is not cumulative. It's just on the topics of that upcoming module. The students haven't started studying yet. That's why we call it a pre-test. And it only allows one attempt. And it is scored by the learning management system. So the students can see their corrected responses, but it doesn't affect the final course grade. They can't access the resource modules until they complete the pre-test. So they're motivated to do it because they can't move on in the course unless they do it. But no matter what score they get, how many mistakes they make on, it doesn't matter. It doesn't affect their grade, which is exactly the way I want it.

Kevin Patton (00:22:20):

Now, episode 99 gives the rationale for all of the strategies I just mentioned. I'm just recapping what I talked about. And as I said, in episode 99, my wacky strategies are my wacky strategies. Not meaning that I invented any of them, but that which strategies I use and exactly how I use them are based on my own artistic applications of learning science. I talked about that, teaching is both an art and a science. So we can take scientifically discovered principles about learning and apply them artfully. So that's all I'm saying is here's how I do my art. And that doesn't mean that anybody else in the world should do their art the same way I do my art. Each course turns out a little different and I'm always tweaking the strategies I use just like an artist whose maybe their medium is painting rather than my medium, which is teaching, maybe they'll have a certain style of painting and then they do another painting. And it's clearly the same style, but it's not the same painting. They've made some tweaks, things are a little bit different. And then it evolves over time.

Kevin Patton (00:23:39):

I have a good friend who's a really good abstract artist. And I've known him for decades, and I really enjoy his art. So I'm always looking at his art. And it has evolved considerably over the years, just always making tweaks in the way he does things. And even in the techniques that he used and accomplishing each painting that you wouldn't necessarily know about just looking at the painting, but would only understand if you talk to them or visit with him in his studio, which I've done a number of times. I'm simply sharing my art, my techniques of doing art to see if anything resonates with you. If you don't like my strategies, I won't be surprised and I won't be offended. I didn't like most of them the first few times I encountered them too.

Kevin Patton (00:24:35):

Actually talking about my friend who does abstract art, his name is Brian Smith. If you ever have the opportunity to look at his paintings, and you like abstract art, you might enjoy them, or they may not be your cup of tea. Maybe you're an abstract artist and you look at them and say, "No way, that is not the direction I want to go." Or maybe you say, "You know what? That's not the direction I want to go, but this thing he does, I kind of liked that. I might try that in my paintings and see if it works." That's what

I'm doing here with this teaching art is I'm just saying, here's how I do it. And maybe there's something there that'll help you. And maybe it'll help you by confirming that you don't want to do it that way, like, no, I didn't think I wanted to do that now. I'm sure I will never want to do that.

Kevin Patton (00:25:23):

But you know what? I had that kind of reaction to a lot of these things that I do when I first encountered them. I didn't just say, oh yeah, good idea. And start doing it. For many of these things, I resisted, because there are things to resist. I mean, there are things that are off-putting about the way I do things and that we really need to mull over and think about. And sometimes we need to just try them to see if they work, and either confirm that they don't work in the kind of course I do, or maybe be like, wow, that is surprising. That works much better than I thought it worked. I didn't even think it was going to work. So that's why I'm doing this. And maybe you'll grow fond of some of them, maybe you won't. I'm just here to share what I do and why I do it.

Kevin Patton (00:26:11):

And before I get started on that next part of the conversation, see what I'm doing here, this would never fit into it, even a thread of tweet is so long, you're like, "Get to your point, Kevin." Okay, I will in just a second. But before I do that, I want to emphasize something that my friend, Ann Raddant, brought up in one of those Twitter threads I was trying to sort out. And she alluded to the importance of transparency, that is making sure that the students are read into our plans and our rationale.

Kevin Patton (00:26:43):

So if you're going to play around with any of this stuff, don't just do it, get your students to buy into that. And as I said in a episode not all that long ago, get your colleagues to buy into it too. Or if they're not going to buy into it, at least explain to your students and your colleagues what you're going to do and why you're going to do it before you do it, before they start experiencing it or hearing about it, because it's all just going to go way smoother if you do that. These aren't meant to be mysteries. This isn't a magic or illusion act that we're putting on you. We want to bring people behind stage and show them how all the tricks work and show them how the things that we're going to try and do will magically help them learn, or maybe not so magically, maybe just straightforwardly, help them learn.

Kevin Patton (00:27:38):

So some of the schemes of randomized the open book, open resource, multiple attempts, cumulative testing that I described, they're just weird, at least when they're compared to what most students are used to and therefore what most students expect. So yeah, it's going to take some work and some time, and frankly, some initial experience of students actually doing some of my tests after which further explanations are more meaningful to them. And I'll circle back to some practical examples of what I mean by this later in our discussion in this episode. So if you didn't quite get that, that you have to do it

more than once, you have to explain things and be transparent more than once, you'll understand hopefully when we get to it a little bit later.

Kevin Patton (00:28:27):

Now in a minute, I'll be back with the first of a handful of attempts to be transparent with you about my approach to testing by explaining it further. Before we take our brain break, I want to remind you that some of what I'll be discussing is touched on in my book, *Pandemic Teaching: A Survival Guide for College Faculty*. Just go to theAPprofessor.org/pandemicteaching to get your free copy.

Sponsored by HAPI

Kevin Patton (00:29:00):

You probably realize that it actually costs money to pay for the servers, the distribution network, the programmers, and all the other support staff needed to distribute this podcast to wherever you're listening right now. That cost is underwritten by the Master of Science in Human Anatomy & Physiology Instruction, the HAPI degree. I'm on the faculty of this program at Northeast College of Health Sciences. So I know the incredible value it is for A&P faculty. I normally mention the value of the HAPI degree to those of us out there teaching in college and university classrooms and labs. But if you're in a position of hiring A&P faculty, maybe you should check us out too. You'll find those with an MS HAPI degree have a lot of training in all aspects of contemporary teaching practice and a thorough review of all the concepts of human A&P and how to teach them effectively. We even have a course in how to be a valuable colleague and collaborator within your department. Check out this online graduate program at northeastcollege.edu/hapi, that's H-A-P-I, or click the link in the show notes or episode page.

An Open Test for All Seasons

Kevin Patton (00:30:33):

One set of questions or comments that I've gotten both recently and over the years has to do with the kinds of courses that my wacky scheme of open online randomized tests would fit with, would work in, because we know that there are differences between beginning level undergraduate courses, advanced level undergraduate courses, graduate courses, and even graduate courses that are in more intensive health career programs and so on. And embedded in that is the idea that a lot of courses have board exams, professional licensing exams, that the students have to sit for at some point, maybe at multiple points throughout their learning program. And those certainly are not open. And you can't usually take multiple attempts, not in the way that I do in my course of those board exams.

Kevin Patton (00:31:36):

So if they have these board exams or if it's a graduate level program, is my scheme going to work? And I don't have the answer to that. Only you have the answer to that. And you may have the answer to that just intuitively based on knowing your course so well and maybe having experimented with different kinds of things, or you would know that because you are willing to do some experiments and see if it's going to work.

Kevin Patton (00:32:06):

But I do have some ideas that I want to throw out there. And I have only used the schemes that I've talked about in beginning level undergraduate courses, both at community college, that's where I've done most of it, but also at university. But again, it was a beginning level course. And in both places, pretty much all my students had to sit for a board exam, a professional board exam for their license, whether it was for nursing or some other health profession, they were facing that. And of course, not all board exams are created equally. So there's some differences there. But again, that's something for you to answer that I just don't have an answer for.

Kevin Patton (00:32:55):

So yeah, I think most of us face the board exam part of it. And I'll circle back to that in a bit. And speaking... Okay, maybe I won't circle back to it, maybe I'll talk about it right now. I think board exams kind of take on a power that I'm not so sure they deserve. And that can be taken, and I'm meaning in more than one way, not all of which we can get into in this episode, because it's already starting to get a little bit too long, isn't it? But the point is, is that is the board exam really? I don't know. I mean, I don't know that we need to worship it as much as we do. But we can't ignore it either. I mean, it's a big powerful thing. So I mean, it's a dilemma we're in and we're right to think about it, we're right to be concerned about whether our students are going to be prepared or not be prepared for that, that overly powerful board exam.

Kevin Patton (00:33:54):

But I also think that sometimes we make a lot of assumptions about what it takes to succeed on a board exam. And I don't know, one of the first things that comes to mind when I think about that is that I think that online tests, frequent online tests, especially those where you can take multiple attempts, they help reduce test anxiety on the actual board exams when they come up later on. That is if you have open, multi-try, low anxiety testing as an online part of your course, students get used to that and they're, if they've come in with test anxiety, and who doesn't have some level of test anxiety, they're coming in with various levels of testing anxiety. And by doing these online open, low anxiety tests that I'm talking about, over time, I think that helps reduce their test anxiety, they start to learn some test taking skills, they start to be more comfortable in the testing environment. And not only that, and this is still true.

Kevin Patton (00:35:05):

I mean, I saw this decade and a half ago when I first started doing this. But I still see this today, when they do board exams, they're usually, it's done on a computer, it's a computerized exam. Maybe it is connected to the internet. So technically, it's an online exam and it's not open, but it's online. And that context in itself can be nerve-wracking to students.

Kevin Patton (00:35:32):

I've had a number of students over the years come to me and say, "Well, I was just so nervous. I was usually confident in tests, I was very well-prepared, but it just threw me off having to do it this way, but then once I started doing this, once I started having all these online tests." That part didn't bother them at all. They were just so used to doing computerized tests and getting their questions delivered that way and having so much test taking experience that they came back and said, "Well, you know what? I wasn't as nervous as some of my friends were." But these friends didn't take me for A&P, because they either went to my school where they took one of the other instructors who didn't use this technique. And so I think that by doing this, I was giving my students an edge when it came to their nursing board exams, their NCLEX exams.

Kevin Patton (00:36:30):

So the question, though, comes up, because board exams are not open, do open exams in the A&P course really help prepare students for board exams? And I think that's a fair question. I mean, I think that's a great question. We need to ask ourselves that. And I don't know that I have a definitive answer to that, because all I have is my anecdotal experience, but it's a lot of experience with a lot of students in more than one course at more than one institution. But even so, it's not really been thoroughly vetted by a statistician and all that. And I didn't really have my control group. Everybody was in the same experimental group and so on. I guess my control group theoretically, could be all the students I taught before I started using it techniques.

Kevin Patton (00:37:25):

But okay, that set aside, my answer is yeah, I think so. I think open exams, open online exams, the way I do it, I think that they do help prepare students for board exams because my students have done well on their board exams that were closed, that's why I think that, that's all I got. I mean, that's the only actual fact information that I have, but just my personal experience with my own students.

Kevin Patton (00:37:57):

But you know what? I recently heard a discussion on a podcast that I try to listen to it as much as I can. And that is Teaching in Higher Ed. It's a podcast that's hosted by Bonni Stachowiak. And in this episode, they were talking, her and her guest were talking about how we're often hesitant to try emerging radical

ideas and teaching because of our reluctance to endanger student performance on board exams. Now in this episode, they weren't talking about my scheme here. They were talking about this thing called ungrading, which we'll be talking about in future episodes. And if you'd like to come on the podcast and talk about it, because I don't know that much about upgrading, but I think it's fascinating. And oh my gosh, I just started going down another rabbit hole. Let's come back here.

Kevin Patton (00:38:50):

Bonni Stachowiak was talking to Susan Blum, who's an expert on ungrading. And Bonni brought up this idea that, boy, we do, we hesitate to embrace any new radical idea, right? I mean, that's just the way the human brain works and the way. I think the best way that we can do things is to question new ideas. I mean, we're scientists, that's our job is to question things, right? So we question those new ideas.

Kevin Patton (00:39:17):

But one of those questions that comes early in that questioning process usually is, but what about the board exams? Is this really going to prepare my students for board exams? And that's as it should be. And a point she made about that question is a good one. She said sort of, I'm kind of paraphrasing and trying to remember exactly what she said, but she said something to the effect that our job is to do what we can to help students learn what they need to learn. That's what we're doing. And once they've learned it, then they take the board exam. And if they've learned well, they will do well on the board exam. All other things being equal, they will do well on the board exam, no matter how they learned it, no matter how we got them there, as long as we get them there.

Kevin Patton (00:40:07):

So the exact techniques of teaching and learning aren't as important as the outcomes of teaching and learning. So for meeting our outcomes, our learning outcomes or I should say, if our students are meeting their learning outcomes, then yeah, they'll be prepared for the board exam. But if they're not meeting their learning outcomes, then they won't be prepared for the board exam. That's those are the thoughts I have when I think about, is this helping my students prepare for the board exam or not?

Kevin Patton (00:40:40):

Now another question that that arises, and sometimes it's kind of related to the board exam thing is test integrity. If this is open book, open resource, open everything, you can ask your buddy if you want what they think, or you can call up your physician. And I don't know, where you have a pretty good relationship with your health professional for them to take a time out of their very, very busy day to help you figure out your A&P tests. But if you had access to a health professional, go ahead and consult with them and see what they think about that many case study or whatever. And then it's up to you to answer it.

Kevin Patton (00:41:21):

So test integrity, yeah, that's an ever-present issue. So it's a question we must always ask. In my open online tests, the only way to cheat is to have someone else take your exam. And I have had two cases over the years that I know of where a student attempted it. And yes, it's certainly possible that there were others, maybe quite a number of others. I doubt it. I think I probably would have heard about it at some point, we know how those grapevines work, don't we? But I don't know, maybe there are some more out there, maybe a significant number more that are out there. But the two cases I know of both involved test takers who were brought in to take the test for the actual student. And those test takers coming in, they did a way worse than the student was already performing on the test when they were taking them. And that was already pretty bad. So to go from literally from bad to worse by having someone else take your test shows that that's a strategy that if tried, probably isn't going to continue.

Kevin Patton (00:42:35):

Now, I also know that it's getting easier and easier, especially, boy, with pandemic teaching and learning, it's getting way easier now to hire a company or an independent contractor to take your tests for you. Now, a lot of these companies are being set up there for like one time online exams or for that is one attempt, I should say, of each test or there for papers or maybe active learning assignments, like case studies or something like that, where they're going to work it out for you or fill in answers on a worksheet or something like that or a lab report even, they're going to do that for you. So I know that it's becoming easier and easier. And it's a big issue. That's a topic for another episode.

Kevin Patton (00:43:24):

But the question I have related to what we're talking about right here is if you hired such a company, will they really take that many attempts? If you're taking nine online tests, you get three attempts at each 27 online tests, plus nine pre-tests, which maybe you wouldn't pay for somebody to take those because the points don't really count for anything, they don't go into your course points for your final exam grade, but still, I mean, that's, boy, that's, you're really going to rack up a big bill with that company if you really hire them to take all those attempts. And they probably will need to take more than just the first attempt because they need to be, I mean, really, really competent in A&P to be able to do that because these tests are designed to be taken open. So it's not a matter of just looking stuff up. And I'm going to come back to that again as well. But that's, oh man, that's maybe easier said than done.

Kevin Patton (00:44:26):

There are things I can look for to see if people are doing that. And I might every once in a while take a look at where students are taking these tests and think, oh, this is an unexpected location. This is happening in Venezuela, or it's happening in Tibet, or it's happening in... And yeah, okay, I do occasionally have students that do their online tests while they're on vacation or on a business trip or

visiting family or whatever, yeah, okay that, but it is something that would pique my interest and I would investigate a little bit and might ask, "Well, boy, what's the weather like in Tibet these days?" Like, "What? What are you talking about?" And it would lead me to believe that maybe it's not them taking their test. So there are methods. And I wouldn't necessarily have to check that every time, but just randomly checking, it would probably lead me to cases of people trying to get someone else to take their tests for them. And again, I'm not so sure that they're going to get the results they want to get because they're not going to perform very well.

Kevin Patton (00:45:35):

And that also applies to screen capturing test items and trying to reconstruct my test bank by taking screenshots. And let's say you get the whole class to do that. You're all in on this. And boy, that would be a feat to get all the class coordinated to do something like that. We know that that kind of management, that level of coordination is difficult under the best of circumstances. When it's all aboveboard, it's hard to get that to happen. But let's say theoretically, that we can get all the students to screen capture every test item, and someone's going to volunteer and type those all into the test bank that is growing and growing because everybody's doing this and everybody's getting these different attempts that they're taking over and over, well, if you only have one version of your test, yeah, okay, that's an issue. And I'm not sure that that would end the experiment for me, and I'll tell you why in a second, but I think that my case is far different than that because of that randomization piece.

Kevin Patton (00:46:49):

So I mentioned that the numbers are huge. And I'm going to talk about the actual numbers right now. And just taking a theoretical case, which would have far less variation in it than what I actually use in my tests. But just for the sake of discussion, let's say that all of my items are five item or five choice multiple choice questions. I do use those kinds of questions somewhat in my tests, but that's not the only kind of question that I use. So that makes it not the real case, but it's easy to calculate when they're all the same kind of question. So if I have a five item multi choice item, if I do randomization and put five of these five choice multi choice items in a question set.

Kevin Patton (00:47:44):

So I have five questions, each question has five choices, A, B, C, D, and E. And so that's for the first test item. The learning management system is going to choose one of those five items. And that's going to be that student's item number one on that attempt. Next time they take an attempt, there'll be any one of those five. It might be the same one that got before, it might be a different one. Odds are it's going to be a different one. There's a four to five chance it'll be a different one, right?

Kevin Patton (00:48:11):

Just looking at each individual item, I can set my learning management system to mix up the A, B, C, D, and E. And if I do that, they're actually 120 different combinations if you put them in different orders. So it's not just five different combinations because there are actually 120 different combinations they could be. So that's 120 different questions they could get, even if I didn't use a randomized test set, if I just had that one item. But then I put them in a question pool of five, and now I have five times 120 possibilities. So now I'm up to 600 different possible versions of item one.

Kevin Patton (00:48:51):

Now let's say that I have a 30 item test, where I've set up five multiple choice questions that have mixed up choices in each of those 30 items. Now, when I start, the math gets pretty complicated at this point. There are online calculators that help with this. So I plugged it in one of those online calculators. And what I came out with is there's something in the neighborhood. I mean, it actually gave me all the digits here. And I'm not going to do that. But it gave me something that came out to be 1.05 times 10 to the 83rd power. Holy smoke. I mean, that's like way beyond like a mole or something. I mean, that's crazy, isn't it? I mean, not one, one times 10 to the 83rd power, different variations of that test. So what are the odds that they're really going to be able to reconstruct that? If they're a 100% efficient as a group reconstructing it, they're still not going to get it. They're going to have to spend decades, maybe centuries taking that test.

Kevin Patton (00:50:04):

So you have all these different items with all these multiple versions, and you know what? I've gone back and looked at the data. And it turns out that every year, there are always some items that just never got pulled out of the test bank. They didn't appear on any of the attempts by any of my students. And sometimes it'll go for years without that item ever being pulled out. So there's another strike against trying to reconstruct it. So now you know why I'm so big on this randomization. You don't need that much stuff in your test bank to make really unique items come up again and again and again. And not only that, I'm always reviewing my test bank. Every year, I review my test bank for each module and I add a couple of items, I might pull out a couple items, I'd rewrite some of the items. So if you're doing a decade-long attempt to try and reconstruct my test bank, good luck, because while you're putting it together, I'm changing it. So yeah, that's tough.

Kevin Patton (00:51:24):

You know what? If they did try to make a big file with all of my test items, good luck to them. It would be far, far easier just to figure out the answer to the items. I mean, that is the path of least resistance is to just go ahead and do what I want you to do and use your recommended resource, that is use your textbook, use your notes and try and find them in the file. Now you can use Google or anything unless you want, and you're going to find that Google and places that really aren't going to help you. They're going to take you down all kinds of rabbit holes. But if you use your book and your notes, you're more likely to get to the answer that you need to get to in my test.

Kevin Patton (00:52:06):

Let's say that they did have access to a file of most or all of my test items, and that's where they found their answer, well, okay, they still find the correct answer, right? And by doing that, by finding the correct answer, in that process of doing that, they've learned something. And if they do that again the next time, they're likely to remember that correct answer. And that's what I want. I want them to be able to retrieve that out of their memory and be able to do that. So that's okay.

Kevin Patton (00:52:40):

I remember as an undergraduate before, I mean, computers were things that fill the room, they weren't sitting on desktops. So they weren't really part of my existence as an undergraduate student myself. But I had some classes where we could go into literal file cabinets in the professor's office during their office hours and look at their old tests. There were some of our professors that let us do that. And we could go through and spend as much time as he or she had in her office hours, poring over their old tests. And they felt like that was a good way to learn. And I tried it. And it is a good way to learn. It's not the only way to learn, maybe not even the best way to learn, but it's a good way to learn.

Kevin Patton (00:53:25):

Now, another question that often comes up about these open tests is, is open testing effective? Does that really help learn? Is the way I did it in my undergraduate classes with the file cabinets or that students are doing in their open test is, using open tests and using any resource you want, is that effective? Well, I've looked around and I can't find anything in the literature at least, except for like a one-off here or there, but there's nothing that suggests that open tests are not as effective as regular closed tests. And there's all of my many years of doing open resource, open book testing that suggests that it is highly effective, because remember, I'm using open online tests for learning and not entirely for measuring what's already been learned by some other means. In other words, most of us do test, we're trying to measure what has been learned by attending lectures, doing active learning activities, reviewing notes, having study groups. So you've all these different ways of learning and that at the end of all of that, now you're assessing to see, have they learned anything? And if so, how much have they learned?

Kevin Patton (00:54:50):

Well, okay, I'm doing a little bit of that when I do my online tests, these open tests, but mainly what I'm doing is providing them a learning opportunity, providing them a way to do that retrieval practice, providing them a way to practice solving problems and applying things in a complex way. So I'm not doing what we typically do in a test. Now you might ask, yeah, but what about looking stuff up? Students don't want to look up stuff if they don't have to look up stuff. So they are motivated to try and remember it. And that's where we learn most things, isn't it? I mean, don't we try something? And it

doesn't work right. And so we'd look up how to do that. I mean, I do that all the time in teaching because the tools I use are always changing.

Kevin Patton (00:55:45):

So I used to be able to do that in Zoom, but Zoom got updated. Now I can't do that anymore. So now I have to go look it up. I have to go find a YouTube video that shows me how to do it, or I'm going to be using the software that I've never used before or I've never used it that way. So, yep, I need to go to YouTube or go to a workshop or call up somebody, call up, walk down the hall to somebody else in my department or call up the IT people or the teaching center people and have them help me do things, have them send me some information, have them walk me through the steps and so on. And then I take my notes and write it down. And I try it and doesn't work and I try and doesn't work. And then I call them back and figure out what I did wrong.

Kevin Patton (00:56:31):

And then finally, after I've done it a few times, it's like built in, it's just part of who I am. I know it well. I've looked it up. Yeah, I've looked it up and I had to look it up again when I couldn't remember it, but I finally did remember it. So am I going to just keep looking it up every time? Well, no, only if I forget, then I'm going to look it up again. And if that happens, good for me, because that's just going to strengthen it in my memory and make it even less likely that next time, I'm going to have to look anything up because it's going to be more likely that I'll remember it.

Kevin Patton (00:57:05):

And also remember that the test items that I'm talking about are not all simple identifications or definitions or single facts that can be looked up by someone without any knowledge of the subject. So I do have some items that are simple facts, like that simple identification of facts, but I also have a lot of applications items, such as many case studies and putting structures or physiological events in order or interpreting never-seen-before illustrations or photographs or micrographs or medical images, all kinds of applications, things that may benefit from looking things up, but the precise answer itself won't be anywhere they look. They have to use what they find to piece together their own answer.

Kevin Patton (00:57:59):

And remember from episode 99, that this is all about retrieval practice. And as I explained then, we're not just retrieving isolated facts, although we do need a lot of that. We're also retrieving memories of how we've solved problems in the past and memories of connections between facts and concepts. That is how those concepts connect together with each other. And we're retrieving skills and how things are applied or interpreted or evaluated. And so it's not really retrieval isolated and alone, it's retrieval and application practice, which is probably what we should be calling it, right? Retrieval and application

practice. But I guess that's not as snappy a name. And nobody ever asks you or me when they're naming stuff. Am I right? I'm going to be back with more in just a second.

Sponsored by HAPS

Kevin Patton (00:58:59):

Marketing support for this podcast is provided by HAPS, the Human Anatomy and Physiology Society, whose ongoing mission is promoting excellence in the teaching of Human Anatomy & Physiology. I often talk about the virtual town hall meetings that HAPS has offered over the last year or so. And coming up is a series of town halls on weight stigma. Now, you may recall that back in episode 93 of this podcast, which was a Journal Club episode hosted by Krista Rompolski, we talked about the role of the anatomy lab in the development of weight bias among future health professionals. But that's just a tiny piece of an increasingly important topic that we as anatomy and physiology educators need to know about and a topic that very few of us really understand well. So you can be sure I'm going to be there for those town hall meetings. I'm usually there for any of them I can get to because I just get so much out of them. You want to know more about these and other town hall meetings and regional conferences coming up, go visit HAPS at theAPprofessor.org/haps. That's H-A-P-S.

Test Feedback

Kevin Patton (01:00:27):

Okay. I warned you at the beginning of this conversation, this isn't a Twitter answer. This is a long answer. So if you're thinking this is, oh, man, this is getting so long, that's on you, I warned you. Okay. So picking up the conversation here, you may recall from episode 99, that in my two semester A&P course, I either give seven or nine open online tests. In A&P one, I give seven. In A&P two, I give nine. And that doesn't count the pre-tests of course. And that also doesn't count, I do a test zero, which I've talked about in previous episodes, which is a recap of either the prerequisite courses if it's A&P one, or it's a recap of A&P one if we're starting an A&P two. So they have test zero through seven in A&P one, test zero through nine in A&P two. You probably already know that because you listen to the previous episode.

Kevin Patton (01:01:31):

But also remember that I give a closed, comprehensive, traditional, in-class midterm exam and final exam. That's a little different than in my pre-A&P refresher course, which is a whole different kind of course than you and I are usually talking about. But in that refresher course, the final exam is open and online, just like all the other 10 module tests that they take. And you know what? After teaching that for over a decade, I'm thinking that doing an open exam might also work for a regular A&P course. I just

have never tried it. So I can't say for sure, but based on that other experience in a whole different kind of course, I'm thinking it might be worth trying.

Kevin Patton (01:02:23):

And I also want to bring in some other experience that I didn't mention last time, and that is a physiology course that I taught at a major university while I was also working at the community college teaching combined A&P, I was doing the physiology half of a sequence that they did at the university where they took a semester of anatomy, then a semester of physiology. And it was all in a big lecture hall. So I had the same number of students in that course in one section as I had in five sections of teaching at the community college. But well, we know that there are differences in those kinds of institutions.

Kevin Patton (01:03:04):

And when I first walked into that, it was meant to be just a one semester fill in until they found somebody else, a gig. And I ended up staying there, teaching a class for 19 years. But when I first started it, they handed me what they had from what had been done in the past. And they had a schedule that showed that that students only got two tests all semester, they got a midterm exam and a final exam. That's it. Period. That's the only assessment, assignments or anything that they had other than some stuff in the lab. And I'm talking about the lecture section here.

Kevin Patton (01:03:40):

So that's what I did at first. But over time when I started having some experience with these other tests, I went ahead and added two open online tests before the midterm and two open online tests before the final. And so now they had a total of four tests, plus the midterm and final exam. And you know what? The students performed on their midterm and final better than they had been before. Now, maybe I was a better teacher later on than I was early on. Maybe that's it. Maybe I was getting better students. Maybe the sunspots were different. We moved rooms, we moved to a different room because the course was getting too big. So we had to find a different space. Maybe that had something to do. I don't know, there's all kinds of possibilities. But I'm kind of thinking the extra online open testing helped them.

Kevin Patton (01:04:34):

So I think my students, I mean, I'm just saying, I think my students learned more from four open tests and two closed exams than when I had only two closed exams and that was it. And again, the results of my exams support that notion. And I suspect that, at least they didn't do any worse on their board exams when they eventually got to their board exams. I think the ones that had the open tests in addition to their closed exams, I bet they did okay on their board tests. I didn't get any kind of feedback that they were doing worse. My point is that there's a way to dip one's toes into the water to see if

open, online randomized testing will work in a course, just add a couple to what you're already doing and see if there's any effects, see what the reactions of the students are, see what your reactions to it are, see how it goes.

Kevin Patton (01:05:31):

Now, another question that I get is, can students retake the in-class tests? That is the midterm and the final, those are closed, can they retake them? No. That's not my usual practice. Now, if someone comes to me and says, "Look, I had a seizure in the middle of this exam and I didn't do as well." I let them take it over again. I'm probably not, well, I'm certainly not going to give them the same version of the exam, but yeah, or even if they come to me and say, "I was feeling sick or here's what was going on in my life. And it really impacted me and I didn't do as well." Yeah, I'm probably going to let them retake the exam, but it's not a regular thing. It's not like, okay, you all have three attempts at the midterm or you all have three attempts at the final, that, nope, I don't do that. So there's the answer to that question.

Kevin Patton (01:06:21):

Another question I get is, what kind of feedback is there after the first attempt? The way I have it set up now, and I'm not sure this is the best way. I'm just telling you the way I do it. There are some other ways that I've thought of that take more time than I have to do it. So I haven't tried it. But what I do is I set it up so that all of their incorrect answers are marked as being incorrect. Even if it's partially incorrect, it'll show them which parts are incorrect. And that's it. I don't give them the correct answer. There's a lot to be said for giving them the correct answer right away. But I don't do that.

Kevin Patton (01:07:01):

What I want the students to do is find the correct answer. And if they're not certain of it after doing some research and maybe even consulting with other people, they can always come to me and say, "Look, here's what I think the right answer might be, but I'm not at all confident. Can you help me with this?" And I'll help them walk through it and make sure that they don't leave me without knowing what the correct answer is on that, that thing that was marked wrong, because I want them studying the right thing for the next test, but I also want them to do a little work to get to that point. I feel like that is a learning step as well. And there are good cases to be made for giving them the answer, but I just don't do it that way. And I don't give them any other kind of feedback either, like, oh, here's why this one is wrong. And then let them go forward, because to program that into all my test items just takes more time and effort than I have. So I've not done that yet.

Kevin Patton (01:08:03):

Included in that feedback is the possibility of one-on-one consultation, or a lot of times, I find what happens is several students will have the same kind of question, they're wrestling with the same kind of thing, or they each have their two things from the last attempt they took. And so they'll come in as a

group, often a study group will come in. And so I'll go from student to student within the study group. And by listening to the problems the other students have, those sometimes actually be able to work out the right answer without even piping in at all. But even if it is something that I help them walk through, then they're all learning from that. So even if they got it correct, maybe they're seeing a different aspect of it by seeing how it plays out as we do that kind of personal feedback.

Kevin Patton (01:08:51):

Another thing that I want to bring up that I've been asked about before is, and this has come up in previous episodes of this podcast. I do have a test item review process. So when they're done taking the test, I don't want them to just shoot from the hip and try and analyze what went wrong. I want them to do some debriefing. I had a whole episode segment a while back, and I'll put a link in the show notes at the episode page about that, but I called the test debriefing.

Kevin Patton (01:09:26):

And so I have a form that students fill out and they take each wrong item and they write down, well, what topic or concept was being tested here? And then they have a bunch of possibilities, did I get this wrong because I misread the question? Is it because I misread a choice that was given? Is it because I misspelled something? Is it because I didn't study that concept? Is it because I just never really felt confident or fully understood that concept? Is it because I didn't know that concept was even being covered in this course? There are all kinds of common possibilities and they put a check mark. And then there's a little space for notes at the end of that line. So it's kind of like, it's a table. And so they fill out that table. When they get to the end of their analysis of that test, then they look and see, is there a pattern? Am I always misreading questions or frequently misreading questions? That's something I can do something about. Just being aware of that is going to be helpful to me. And so I can identify patterns there.

Kevin Patton (01:10:32):

Or if it turns out that in this big question on the skeleton, all of my messing up had to do with, I don't know, endochondral ossification. Everything else I got good, but oh man, that I need to go back and look at that because that's what messed me up on this test. That is something I need to review. So it could be a whole conceptual area that is the problem. So I'll have a link to a copy of that in the show notes of the episode page as well.

Kevin Patton (01:11:05):

Another thing I do that is along the lines of feedback is I do test item challenges. They're available. Let's put it that way. So if a student, and we know that this happen sometimes, they're not wrong. It's me that's wrong. At least in their minds, that's what's going on. Like, I know this is the right answer. This is

what it says in the book. And this looks kind of like it's in the book. So therefore, my answer must be right. And so, okay, that I make mistakes, that happen.

Kevin Patton (01:11:36):

So what you can do is do a test item challenge. Now, what is that? That's where you, in written form, tell me which test, which attempt, which item number and why your answer is better than my answer or the answer that was scored in your test attempt. Don't have to be a long legal brief, but I do tell them, argue with me as if you're an attorney before a judge and make your case and cite your evidence. Tell me, don't say in the book it says, tell me where in the book and exactly what it says, give me the quote. A lot of times when they do that and they're writing this out, they start to realize their mistake and think, oh no, my wrong answer really is wrong. He was right all along, or the test, answer key was right all along. That's a learning process.

Kevin Patton (01:12:33):

But even if it actually reaches me, and they don't often get that far, but when they do that, then that gives an opportunity for me to say, "Wow, that is a bad question. You totally misinterpreted that, but that's on me because it's worded badly." And so that's one of those tweaks I'm going to make, I'm going to go in and change that in the test bank, because that's a bad question. Or it could be that I misprogrammed the answer key. And maybe it is a multiple choice and it's supposed to be A, and it's really B is the right answer. And so I need to fix that as a mistake or maybe it was some kind of typo or something. And so yeah, I'm going to go in there and do that. So that test item challenge is another learning process that they can do, another way of doing feedback.

Kevin Patton (01:13:17):

Now, circling back to transparency and having to do that in layers. Remember I said that you have to explain things, but then you have to go back and explain them again. You can't just do it once at the beginning. Well, students have to get used to this wacky scheme and they're going to stumble and they're going to mumble, they're going to grumble a little bit at least at first, because this is going to be new to them probably. I mean, even if they've done open tests before, even if they've done open online tests before, probably the way you're doing it is going to be somewhat unique to you and your course.

Kevin Patton (01:13:50):

And I know I've run into that a lot, where students just aren't used to doing things that way. And so I can explain up front, here's what I'm doing, it's different. Here's how it works. Expect to be uncomfortable at first. And here's why I'm doing it. Here's the learning theory behind it. And then I let them go off. And then they run into all this friction. And once they start running into friction, then I come back to them and say, "Okay, you're getting some discomfort here, right? Well, remember I said, this is going to be different. Remember I said, you're going to experience friction. And remember, here's why we're doing

it. And here's why some of that friction, at least is good kind of friction, it means you're learning something, it means you're being challenged, it means that you're doing enough practice." That being transparent repeatedly is an important part of being transparent, I think. One of the pain points I've found has to do with the functionality of the learning management system itself and online tests in general. And really these are functions or characteristics of automatic grading.

Kevin Patton (01:14:57):

Even in this day and age, many students seem to be encountering some of these issues for the first time, even if they've been doing online testing or online activities since grade school, and some of them have. So examples of what I mean are things like, well, answers, especially fill in answers. They have to be spelled correctly and they have to be grammatically correct in context, that is plural, if that's what the context calls for, or singular, if that's what the context calls for in order to fit the rest of that item. And if it doesn't fit, it's not going to be programmed into the answer key. I'm not programming in typos, I'm not programming in things that are grammatically incorrect. I'm putting the correct answer in. And if there is more than one correct possibility, I try to think of those and put those in the answer key as possible answers, but I'm not going to put wrong things in. And so you got to get used to that, that it's got to be exactly right.

Kevin Patton (01:15:58):

And there can't be extra spaces because depending on the learning management system, it may or may not accept those extra spaces at the beginning or end of a word that you don't even see are there. It looks like it's supposed to be right, but you're not seeing that there are some added spaces that the computer says, no, no, no, those spaces don't go there. And there can't be extra words. This happens a lot with students where, let's say it's a fill in item, it'll be something like the outer boundary of a cell is the blank membrane, and they will fill in plasma membrane. And you think, well, that's all right answer. No, it's not. Because when fill that in, that sentence now becomes the outer boundary of the cell is the plasma membrane membrane because they put in plasma membrane membranes in there twice. And that's wrong. And so it gets marked as wrong and they don't realize they did that. So they really need to be very careful and precise in the way they fill in those blanks.

Kevin Patton (01:17:01):

Another thing that students have since the beginning of time wrestled with is if you have a multiple choice item and sometimes those items are the kind of could correctly respond to that as some of the choices could correctly respond to that item, but there's one that is clearly the best choice, they need to be answering the best choice. Now I'm not a big fan of putting things that really are three good responses. Only one is the goodest of the three. Sometimes I think that that's more about how my brain works versus how their brain works. And that's not necessarily fair.

Kevin Patton (01:17:41):

But there are some times when we do ask pretty high level questions where we are asking for some high level discrimination and they need to get used to that. And so that's something that we need to be transparent about why we're doing it and how we're doing it. And they always have that test item challenge where they can say no, this one wasn't fair when you did that. And here's why it's not fair. And here's why my interpretation is just as good as your interpretation. Hey, I'm open to that. They can make a good case. Then I'm open to that. We can support students as they stumble through them. And they will, because telling them upfront, which I do, never really hits the mark. They have to stumble with it before they can see what I'm talking about, but they have multiple attempts and they have a supportive teacher, or at least I try to be. So it'll be okay. Really, it'll be okay.

Kevin Patton (01:18:34):

So yeah. Okay. Long episode, but I still have more than I want to say. So you know what? I'm going to put that in the next episode. So if you still want to hear some more details, so you want to go beyond what I've already told you in the way I do things regarding these tests, just to see how I'm doing it, see if my art has anything to inform your art with, then it'll be in the next episode. And if after hearing this episode and the last one, you have some reactions, you have some questions, whatever, by all means, let me know about that. And that'll help guide what I talk about next time. Or if you want to come on an episode and chat about it there, we can do that. That would be wonderful.

Staying Connected

Kevin Patton (01:19:17):

Teaching and testing methods that are sidestream rather than mainstream are fun to talk about and debate, but you need colleagues who've listened to this episode to have that conversation. Well, that's okay. There's an easy way to share this podcast with a peer, simply go to theAPprofessor.org/refer to get a personalized share link that will not only get your friend all set up in this episode, it'll also get you on your way to earning a cash reward. If you don't see any of the links to related resources in your podcast player that I always provide in every episode, just go to the show notes or the episode page at theAPprofessor.org/100, where you can explore any of those ideas that are mentioned in this episode. And while you're there by the way, you can claim your digital credential for listening to this episode. And you're always encouraged to call in with your questions, comments and ideas, hit the podcast hotline. That's 1-833-LION-DEN, or 1-833-546-6336, or send a recording or written message to podcast@theAPprofessor.org. You're always invited to join my private A&P teaching community way off the social platforms at theAPprofessor.org/community. I'll see you down the road.

Aileen (01:20:59):

The A&P Professor is hosted by Dr. Kevin Patton, an award-winning professor and textbook author in human anatomy and physiology.

Kevin Patton (01:21:11):

Do not drive or use machinery until you know how this episode affects you.