Transcript

Episode 147
Pulse of Progress: Looking Back, Moving Forward

The A&P Professor Podcast

Contents

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Introduction

KEVIN PATTON:

[0:00] Sharon Salzberg, the American author and teacher, once wrote, 'Reflection is an essential part of learning.

Debriefing after any experience is key to personal and professional growth."

AILEEN PARK:

Welcome to The A&P Professor. A few minutes to focus on teaching human anatomy

[0:22] and physiology with a veteran educator and teaching mentor, your host, Kevin Patton.

[0:27] Music.

KEVIN PATTON:

[0:31] In episode 147, I debrief the past year of The A&P Professor, I revisit last year's predictions, and I make new predictions for the coming year.

[0:43] Music.

Debrief: Topics, Stats, Reflections

KEVIN PATTON:

[0:49] Well, it crept right up on me. That is, the time of the year when I do my annual debriefing episode, where I pause and reflect, just like I do in my courses and in other aspects of my personal and professional life, and think about how the year went, what I got done, what I didn't get done, what I should have gotten done, and things like that.

And so, I think it's a good experience because all of us can go back and think about, wow, there were some things that I want to go back to and listen to again, or some things that you missed the first time around because, you know, we all get busy and we fall behind on our podcasts and everything else.

So this might be a good little nudge to say, oh, there was an episode about that. I got to go back and listen.

So let's take a look. What did we get done over the last year?

Well, let's take a look at our listener base.

Well, I wish I could because there's really no good way to count how many people are listening to any one episode or really the whole grouping of episodes.

This is a well-known problem among podcasters.

I mean, there are some podcasters that really tear their hair out about this, and I don't really care that much about it. I mean, I do.

I want to see our listenership grow because that's just fun and it's motivating. But you know what?

[2:16] The lesson I learned in the circus is if there are only a handful of people out there in the audience, we're still going to go on with a show because, well, it's not their fault. Nobody else showed up.

Let's give them a good time. We're ready to do it. We have things to give them.

And so that's how I look at this podcast.

But it turns out there isn't just a small handful.

I reckon there's about a thousand regular listeners and maybe another thousand dabblers, people that kind of come and go and maybe listen to one or two and then never come back or listen to one or two and then skip a few and then come back and listen to another one or two.

But I don't know for sure, because like I said, this is a problem.

[3:01] Statistics in podcasts are pretty much impossible to measure because even though we can count how many downloads there are from the main syndicator or distributor of the audio files, that doesn't really necessarily tell us how many people are actually listening to a significant part of the episode.

I mean, they do have some algorithms to kind of weed out the people that like, oops, didn't mean to start that and come back.

But it really isn't that great.

And not Not only that, but some people listen on more than one device, and so that counts as two.

[3:36] I know that a lot of the podcasts that I subscribe to, I subscribe to in more than one podcast catcher because different podcast apps, they work differently.

And some I'd like to listen to with a certain kind of functionality or a different kind of functionality, depending on the kind of podcast it is or the context in which I'm listening to the podcast.

Am I driving or am I there with my device in my hand where I can, you know, do some manual operations as the podcast plays or what?

So, I mean, there's all kinds of what-ifs like that.

So, I don't know, you know, the actual numbers could be twice what I just said, Or it could be half of what I just said, or maybe orders of magnitude more or less than what I just said.

But I don't know. Let's just say around 1,000 listeners. That's pretty good.

I mean, how many of us have 1,000 students that are in a class that are interacting and listening with us?

Well, you know, that's a pretty big class that I have in The A&P Professor podcast.

So that's pretty good. I mean...

[4:51] It'd sure be cool to have more. That'd be even more motivating for me.

But, well, maybe if you share this podcast with somebody, that will help.

Now, how many episodes did we have this year? Well, we had 16 episodes total.

And you can see the titles of each of those, of course, linked to the episode page, as well as a listing of the main topics that were talked about in each episode.

If you go to theAPprofessor.org slash podlist, that's P-O-D-L-I-S-T, podlist, and you'll see that table there.

So you can scan through there, and it's searchable too.

So if you're looking for a particular podcast that from the olden days or maybe just a few episodes ago, you can go in there and do a search.

And most of the segments that are on this podcast are what we call evergreen.

That is, they're not really tied to the current news or events or anything like that.

There are a few like that, but mostly they're evergreen.

So you can go all the way back to the very first season.

You can go back six or seven years and listen to an episode and find that as far as what What you're listening to, it's new and fresh and applicable to what we're doing right now in the classroom as we teach anatomy and physiology.

[6:13] Now, of those 16 episodes, five of them were interviews.

So that's the most interviews we've ever had in a season because this is mostly a monologue show where I'm sharing what I've learned with you.

But I do occasionally have guests on and we talk about things that they've been doing that I know that you'll find interesting, and I mainly have them on because I want to talk about these interesting things that they have to tell us.

So Mindi Fried, you may remember, in episode 133 came on and talked about what it's like to have aphantasia, that is, a relative inability to picture things in your mind like many of us do.

And how does she function as an an A&P teacher, and how did she function as an A&P student with that view of the world?

And then in episode 134, I talked with Jason Organ, who had just been named as the new editor of Anatomical Sciences Education, which is a journal from AAA, the American Association for Anatomy, and what his ideas were for the continuing evolution of that journal.

And we went off on a a couple of side tangents that were very interesting too.

[7:30] And then in episode 135, I talked with Michelle Lazarus, who had just written a book about the uncertainty effect.

And that's a field of study for her, is uncertainty.

And how do we prepare students, especially students in healthcare professions, for the uncertainty that they will grapple with every day in their profession?

And she feels like we haven't done maybe the best job, and I agree with her.

Up until my discussion with her, I never really even thought about it much, that trying to make things simple and certain and uniform for my students may be kind of the wrong

way to go because they need to be able to grapple with uncertainty in a changing landscape and the fact that there maybe isn't always just one right answer.

Things aren't black and white in the world of human biology, and especially when we start doing clinical applications of human biology.

So that was another very interesting episode.

[8:34] And then in episode 142, Dr. Roy Meals, who's been on the podcast before, when he wrote a book about bones, came back to us with his newest book, and that one's about muscles.

We talked about some of the stories he told in that book and just kind of cut up a little bit.

And then in episode 144, our friend Mike Pascoe, whose voice you've heard on this podcast before, because he's interacted with us a number of times.

Mike has just edited a brand new anatomy atlas that came out.

It's called the Kenhub Atlas.

And so he talked about his experiences doing that and what makes that atlas unique in the world of anatomy atlases. And there are some things.

So if you haven't listened to that, you're going to want to listen.

So that was five of the 16 episodes.

And then two of the episodes were what I call winter shorts.

So those are some of those evergreen segments from the olden days that I've remixed and remastered and chopped out some of the ums and uhs and a few of those things.

And can you imagine, you know, I do edit that. And so can you imagine when you do hear the occasional um or uh or whatever, how many more there were that are laying on the floor of the editing room?

[9:53] Metaphorically speaking, I don't have an editing room and when I chop them out, they don't land on the floor.

It's all digital. But you know what I mean. So one of those winter shorts was called Anatomy of Trust.

So it was a couple of segments on promoting integrity in A&P education.

And then the other winter short was called, A Tongue Twister's Guide to Mastering Anatomy Pronunciation.

And that was a couple of different segments from different episodes on this idea of how do we handle anatomy pronunciation with our students.

[10:26] So those were the winter shorts. And then two of the episodes were all about explaining these crazy courses that I do, episodes 140 and 141.

So in those courses, I do a supplement course and I do a pre-A&P course.

I kind of held off on doing episodes about those topics because it's kind of summarizing my life's work in a way, because those courses were sort of the culmination of what I had I'd learned over an entire career of teaching anatomy and physiology in a community college for students that were going to either be transferring to a university or staying at our school and transferring into our nursing programs or health information programs or other health professions programs.

[11:12] So I kind of held back thinking, well, that's sort of like the piece de resistance.

And so I don't want to release that early. And then I kept getting more and more questions about those courses and topics from within those courses kept coming up.

So I thought, well, that'll be a good way to kind of put that all together so that folks have an even better idea of what I ended up with in those two courses and how they interacted with each other and with the main anatomy and physiology course.

And so I went ahead and did it, went ahead and jumped in and did it and kind of pulled everything together.

It was episodes 140 and 141. In there, things like my wacky testing scheme came up, the somewhat alternative grading scheme that I had in my pre-A&P course, and even in my supplement course.

Although they were different in their grading, they weren't your traditional classic grading, at least not 100%.

Ooh, 100%, that's sort of classical, isn't it?

[12:08] Anyway, and there was a whole lot about just different ideas about student success and A&P in those two episodes. So if you haven't heard those, you want to go back and listen to them.

And I'll bet you there are one or two things that are going to pique your interest and maybe give you an idea for something a little different you can do, maybe even in just your A&P course without having to do some separate course.

[12:30] Another episode this season was my big rant in episode 143 about the dangers of rigid uniformity in our courses.

And that kind of harkens back to that discussion I had with Michelle Lazarus about uncertainty in her book about uncertainty, which you ought to read because it's really, I think, very informative for anybody in education, especially healthcare education.

But my point is, is that, yeah, it's, you know, maybe making things like really uniform and, you know, especially like course temp... Okay, I'm starting my rant again.

I just don't like rigid course templates and rigid lists of outcomes that can't be altered and individual course because that, you know, reduces...

Well, okay, I'm getting into it again. go back and listen to episode 143 and you'll know what I'm talking about and see if I just went too far with that or not.

I don't think I did. I don't think I went far enough, but you be the judge and listen to episode 143.

[13:35] And scattered throughout the entire season were a whole bunch of different education topics besides the ones that I just mentioned.

For example, in one segment, I talked about how some recent research has shown that animations that we use as sort of like little decorations or interesting things to make our slides come alive and more engaging and so on, but aren't necessarily animating a concept for better understanding.

[14:00] Those sort of decoration kind of animations add to the cognitive load of students and they can actually do more harm than good. They can be too distracting.

I mean, we know some really are just obviously distracting, but some of them we think are just kind of cool.

But it turns out that students get kind of hypnotized by them and then stop listening to the discussion. So that's not good.

Another thing that came up is, should online tests be timed?

And I advocated for untimed online tests, but you can listen and see what you think.

I talked a lot about our teaching persona. There was one whole episode on our teaching persona and how that relates to authenticity and transparency.

Transparency, all of those are interrelated topics that come up now and again in this podcast over the years and will continue to come up because they're important to me and I think they're important for us to discuss as a group.

[14:59] Another thing that came up that has come up before, and that is the idea of digital micro-credentials.

That is digital badges or certificates that we can use within our course, and I have used within my course, to help motivate students and give them an idea of the progress they're making and make things just a little bit more fun.

And I talked about how gestures impart meaning when we teach and some research related to that. And I talked about something that's often called deep elaboration as a teaching and learning strategy.

[15:32] And we now know that that really helps with neurodiverse students.

And we know that our students do exhibit neurodiversity among the group.

I mean, every one of us is unique in terms of the way our brain functions and how we think.

And there are some big differences and some small differences.

And deep elaboration is a good technique to use for all learners in our classroom.

And another thing that came up pretty frequently is core concepts of A&P.

That popped up here and there.

And another thing that popped up a lot is our perennial favorite, and that is the topic of being playful in our courses.

And there were a bunch of science topics too, not just teaching and learning topics.

Among the science topics, we discussed the idea of do tattoos affect sweating?

And we talked about aural, that is auditory diversity, and we talked about quantum activity and possibly related to consciousness in the microtubules of brain cells.

And that could be related to another topic that came up, and that is the transducer model of brain action.

[16:42] Now, both of those concepts that, you know, there's some quantum activity in terms of consciousness and that it might be going on in the microtubules, and the other concept of the transducer model of brain activity, both those concepts are really out there.

They're not really mainstream scientific thinking, but they're still inside the realm of current scientific thinking.

So it's not pseudoscience, although there are probably some scientists who would claim, oh, that's pseudoscience, but that's just because they disagree with it.

So it's that hypothetical kind of science that is still being argued about and still being investigated and we still need more information about.

But it's very interesting, I think, especially in terms of how it affects the function of the human body, especially the brain and what consciousness is all about.

And those are the kinds of things that help reinforce our understanding of the human body that we can share with students and we can keep them up to date on, well, what are some of the scientific questions that are being investigated right now?

[17:46] Another topic that came up, speaking of the transducer model of brain action, is just the idea of signal transduction in general.

We know that signal transduction happens in cells, it happens between cells, and it's a core concept in understanding many topics and relationships throughout the A&P course.

So we discussed that a little bit.

And then another topic that came up was dendritic action potentials.

And they're involved in a newly discovered kind of nerve signaling in the brain.

And we don't normally think of dendrites as having action potentials, but they can and do. And we talked about that.

Now, that may not be something we want to introduce in our introductory A&P course, but it's not a bad idea for us to know that it exists or that we think it exists.

And maybe we need a little bit more experimentation before we start learning more about it and understanding it more deeply.

[18:45] And we learned about some new ideas about how organelles are moving around inside cells.

It's a little more, well, it was described by some scientists as a dance.

We focused in particular in the so-called dance between mitochondria and the endoplasmic reticulum, or ER.

But we're finding out that, you know, there are organelles that are sort of, you know, touching one another and then moving back and touching one another again, and they're having interactions with each other.

And we're going to be learning soon why they're doing that, how they're doing that, and what kind of interactions are going on in thus deepen our understanding of how cell biology works.

Answer some unanswered questions.

So that's That's been fun looking at sort of the cutting edge of science.

Now, to wrap up our review of topics, I got to mention that one weird episode that I quickly snuck in there at the beginning of this year, and that was episode 131.

That was titled, Is AI the Beginning or End of Learning?

[19:55] Now, you may recall if you were a listener back then that I had pushed back the annual debriefing episode last year so that I could squeeze in that extra episode because things were exploding at that time.

It seems like it, in a way, it had to have been longer than a year ago when all of a sudden everybody, and I mean everybody everywhere, was talking about AI because ChatGPT had just started to become visible in the media.

And then in education, we're like, oh my gosh, our students are now using this to generate ideas.

And not only that, but to generate actual content.

And what are we going to do about that?

Is there anything we can do about that? Is teaching ruined now because students can just ask a bot?

So anyway, those were some of the questions we were discussing back then.

I think the view I took was a little bit outside the mainstream, but it has kind of become the mainstream there, which I hate because I kind of like being on the edge of the mainstream.

I don't want to be part of the middle there, but oh well, that happens.

So then we had the annual debriefing after that.

But wow, that was a time, wasn't it, when that first hit us.

And we're still kind of grappling with it, but I'm not done talking about AI.

That'll come up again in a few minutes.

[21:22] We'll be right back with more.

A Long, Long, Long Episode

KEVIN PATTON:

[21:27] I'm popping in here between segments to let you know that this is a really long episode. episode. Really, really, really long.

When I started editing and realized how long it was going to be, I wondered whether I should maybe split it into two episodes.

But you know what? Nobody has to listen to the whole thing at once, so why not a long episode?

Even better, all our episodes are chunked into segments, which makes it really easy to stop and then pick up where you left off at some other time.

In many podcast players, you can skip directly from segment to segment and thus listen to them in any order you like, or re-listen to one that you realize you weren't listening to very well.

Maybe something was distracting you.

[22:21] If your player doesn't allow skipping to the next segment, I always provide timestamps to help you do that manually.

Yeah, this episode is long enough that it might take you a few days of listening now and then to finish this episode, maybe a few weeks.

By the way, I've intentionally added a few brief messages in between some segments just just to give our brains a momentary chance to switch gears and refocus before moving back to a featured topic.

If that annoys you because, well, maybe you just don't need a quick refocus, well then, just skip ahead.

Debrief: More Reviewing & Reflecting

KEVIN PATTON:

[23:05] We're back now with more of our debriefing discussion.

Another thing I want to mention during this debriefing is that during the last year, I launched a new version of our listener survey.

And not very many people have taken the five minutes it takes to fill out that survey.

But as I said, there really isn't a good way for me to not only count the people who are listening to the podcast, but really connect with them in a meaningful way so that I get good feedback.

Now, I do get some feedback in a variety of ways from listeners.

And if you're one of those listeners that have given me any kind of a feedback, I really, really, really, really appreciate it because I don't get as much of it as I'd like.

And this survey is a way where I can ask some specific questions so that I know some things, some specific things about who's listening, what your interests are, what your preferences are, what ideas you have, and so on.

So if you go to theAPprofessor.org slash survey and just take a few minutes, I sure would appreciate it.

[24:12] And another thing I want to discuss while we're doing a reflection of this podcast is 16 episodes is a little bit more than one episode a month.

And when I started out, lo those many years ago, with the podcast, my goal was to do a weekly podcast.

And I just can't sustain that. It's just, especially as time has gone by and I've added new features and more production value and hopefully usefulness for you, the listener, that all takes time and effort and energy.

And I don't have unlimited time and effort and energy.

[24:55] And especially these days. There's some things going on in my life that are really drawing some of that effort and time away from the podcast.

And so I've had to slow down and made it more of a monthly calendar.

I hope to increase that a little bit over the next year. We'll see how I'm able to do.

And if I can't do it this year, then maybe the next year it'll work.

But it's still a goal of mine.

So bear with me, even though I'd like to do it more frequently. I just can't right now.

And I don't know, maybe it's just all getting to be a little bit too much for me because there is a lot involved in this.

And I enjoy it. It's a blast, but...

[25:39] To sustain that all the time is just very difficult.

But I'm taking some steps to make it work better so that I can sustain it longer. So it's not just all me.

And so, you know, there are some things that can be automated a little bit.

There are some people that I can get to help me.

You know, one of the things that helps is when it's not me just doing monologues, because it takes longer to prepare those episodes where it's just me talking about some topic.

The research I I need to do, the organization, the planning out of the story that I want to tell and outlining that, that all takes a lot of time.

It takes a little bit less time if I'm having a chat with someone.

I mean, it still takes some prep time, but not as much prep time.

[26:25] I'm thinking that, you know, I'll probably, like I did last year, do a few more interviews than I had been doing in the years prior to that.

Another thing I may do is get some more correspondents, like Krista Rompolsky, for example, has been our journal club editor, where a lot of the preparation falls on her. Well, cause, I don't mean it "falls" on her,

She volunteered. She stepped up to do that when she and I had a discussion a few years ago about my issues of sustainability.

And so she offered to do that and is going to be doing it again going forward.

But, you know, she does some of the preliminary research, and then we get together and chat.

And those episodes have a little bit less production time behind the scenes for me than a regular episode, a regular monologue episode.

It sure would be fun, too, to maybe have some guests host sometime.

So if you, my listener, if you think about it, think about, you know, maybe you're thinking of doing a podcast of some sort.

Or maybe you're just like doing this sort of thing, you know, using media and sharing things that you've learned and so on.

Why not think about becoming a correspondent that comes on the show every once in a while to share some things like correspondents do on news programs?

[27:52] Or maybe you want to be a guest host and take over an entire episode and do some monologues or interview someone that you'd like to interview, and then you could be the guest host for that episode.

I've done that on another podcast. It's no longer being produced, unfortunately, it's one of my favorite podcasts.

It was a podcast about podcasting, and that's a blast when you do that.

I don't know, think about that, and I sure would love to hear from you with your ideas about how that might work.

[28:26] As far as production goes, someone who is helping me out a lot is Karen Turner, who was an editor of mine on my textbook years ago.

And I have recently hired her in my business that I have in producing textbook content.

And so she is my personal editor now.

And in terms of what she does for me, part of it is she does help me with my textbooks, helps keep things organized for me and reviews manuscript and so on and helps me maintain the quality, catches issues that I might not have seen.

But she's also helping out with the production of the podcast. So that has helped.

And also, I'm spending some time keeping up with best practices in podcasting.

And that kind of adds to the time, doesn't it? But, you know, if some people can share that with me, then maybe that'll help with the sustainability of keeping this podcast going.

[29:29] Transcripts have evolved. You know, now there's artificial intelligence that can help with the transcripts. But you know what?

I still find myself having to use human transcribers.

That's one thing that Karen Turner is helping me with.

And the thing is, is that even with artificial intelligence, it cannot tell when I'm saying A and P, meaning A ampersand P or A and P.

[29:57] It thinks I'm saying something like the letters A, M, and P, or A, N, and P.

[30:05] There's a lot of terminology I'm finding that is very common, and therefore very frequently used in this podcast, in the world of A and P, that artificial intelligence cannot separate out.

And it really needs a human to go in there and say, no, that's not what he's saying. That's crazy.

It's this other thing. So there's transcriptions proper, but there's also the captions that are derived from the transcriptions.

So the captions in the captioned audiograms that we provide, for example, that's linked to that as well.

And so that all requires, you know, humans to kind of make sure that they're readable and they make some sense.

We're also keeping up with best practices in websites because, you know, there's all this website support of the podcasts that are available, the links and all that.

So, you know, something that we did this year is made the transcripts more searchable.

I'm not going to go into the details of how we did that, but now it should be easier to use the little search box at the bottom of any page at theAPprofessor.org to find any word that was ever uttered in any of the, transcripts of the podcast.

So you can find that episode again and either read the passage you want, or at least you'll know what episode it is at that point that you could go back and listen or listen to that part of the episode.

[31:31] Another thing we did this year is we made the transcripts more available in the PDF format.

Now, they were already available as a PDF in each episode of the TAPPapp.

That's the free app that you can get to use to listen to this podcast, but only this podcast.

And if you want the TAPPapp on your device, all you need to do is go to your device's app store and search for The A&P Professor.

[32:02] That's A ampersand P, The A&P Professor.

Or you can search for my name, Kevin Patton, if The A&P Professor doesn't show up because sometimes that ampersand messes up search things.

But you should be able to find it. It usually works. And you can download it. It's a free app.

There's no extra in-app purchases or anything like that.

And that's actually a really handy way to share this podcast with somebody who doesn't usually listen to podcasts because that's a big hurdle to get over is like, yeah, I know what a podcast is, but I have no idea where I go to listen to one or how I listen to one.

So that would be an easy way to do it is just tell them, go to your device app store and just right now, because everybody knows how to get to their app store and put in The A&P Professor and find it.

And then it's a go from there. but in that TAPPapp I have a PDF file that you can open up and download of the transcript for each episode but now it's available in another place the PDF is now available if you click the little PDF icon at the episode page on that transcript that's on the episode page you click on it and it'll download a PDF for you right

there so if that's what you're looking for...Two different ways to get it, in the app or on the episode page.

[33:25] Another thing we did was we increased the speed of web pages.

And we completely redesigned the homepage of the website and added a new set of graphics.

We got an artist, a graphic artist, to create original graphics and so on using a very contemporary style similar to what you see in other websites.

So we did that. We updated the design of the podcast landing page, the homepage for the podcast part of theAPprofessor.org.

So that would be at theAPprofessor.org slash podcast.

[33:59] And speaking of online stuff, we expanded to more social channels this year.

In case you're there, we can find you or you can find us is really more appropriate.

So in the Threads app, Mastodon, BlueSky, we recently got our invitation for BlueSky and got in there. Reddit, we're on Reddit now.

And TikToks, take a look at those. And if there is a social platform that you think we ought to be in, then send me a message and let me know about that.

And we'll see if we can get that going.

[34:35] And another big change that you may have already noticed, we have had some comments over the years that some people didn't appreciate having those sponsor messages in between segments.

But other people really liked them. So it's kind of like, well, you can't satisfy everybody. But we haven't been having sponsor messages for much of the year this year, about half of the year.

And that was my decision to step away from the sponsorships temporarily because things were just getting too overwhelming for me in general, especially in the podcast and in all of this production that needs to go on and so on.

And believe it or not, that takes some extra time and effort to not only create those sponsor messages, which are always things that I'm finding out and sharing with you.

That takes time and effort to do that, but also just even tending to the business relationship that I have with the three sponsors in terms of those sponsorships have to be tended to.

So I just had to pull back temporarily. So we may do that again.

[35:43] Going ahead in the future. We'll see. Maybe we can make that part of a contribution of guest hosting or correspondence or something like that.

I don't know. Or maybe some guests on the show. But anyway, there's that.

And then something else in the world of The A&P Professor that's not directly linked to the podcast is The A&P Professor Science and Education Updates.

That's the name of it. The A&P Professor Science and Education Updates, which is a newsletter that comes out, I was hoping, like two or three times a week, but it's becoming more like once a week these days.

But again, after reflecting on that, I want to move forward and make it go back to two or three times a week if I can.

If not this year, then next year. But I'm going to try this year.

[36:32] And it's on a new platform. platform we've gone through several platforms because we find a good platform for doing this and then they get sold to Twitter or something and then i think that happened to both of them they got sold to Twitter and twitter says okay now that I bought you i'm putting you away and not letting you out again so they like shut them down and maybe they're buying like a patent or something that it was being used i don't know but it's locking us out of it so now i'm on Substack and that was a little bit different and there's a learning curve.

So that took a lot more time and effort than the older systems I'd been using that no longer exist.

[37:13] And that learning curve, yeah, it's been big.

But like any new learning, it's hopefully pushed back my dementia risk a little bit.

So that's the good part of it. It's been fun. But, oh, man, it came at a time when I really didn't have extra time to do learning.

So hopefully that has settled down.

And I'm really liking the format of it better. But it takes some work to get that to work.

We had 76 issues of that newsletter in 2023, and I hope to get that up to at least 100 issues in 2024.

So as I said, I'm going to push it back up to more frequency if I can.

And I also hope to add some articles of my own.

Right now, they're basically just headlines and snippets from other articles that I've found that I think that you'll find interesting as an A&P educator.

It's sort of kind of getting back to the roots that The A&P Professor started out.

In 2008 as a blog and then we added a website to go along with the blog and then later on, well 10 years later then we ended up with a starting a podcast on top of all that so, yikes what goes around comes around right so if you want to sign up for that free newsletter which you can always unsubscribe from if you don't like it.

You just go to theAPprofessor.org slash updates.

[38:40] So, looking at this from the perspective of having trouble keeping up the pace, I seem to have accomplished more and better than I thought I had this year. So, Yeah, I'm glad I took some time to look back.

Did I Get My Predictions Right?

KEVIN PATTON:

[38:59] Well, it's time to review the psychic predictions I made last year, my predictions for 2023.

And remember, when I use the term psychic, you know, breaking the word parts down.

[RUMBLING] Word dissection.

Psych means mind and ic means relating to, so I mean relating to the mind.

I used my mind. I basically used other people's minds by reading and listening to, I don't know, the trends and what people were saying and then made up my own mind about what I think might really happen in 2023.

And I came up with 11 general categories of predictions that I want to go back and see. Was I close?

[39:43] Get anywhere near, anywhere in the ballpark around any of these predictions.

And I kind of did and kind of didn't. It was kind of a mixed bag, which one would expect with that sort of thing, right?

So there were basically 11 of them. And the first one was AI issues, artificial intelligence issues, because, you know, we had just seen explosive introduction and revelation of ChatGPT, and that had pushed off when I actually did the prediction episode, the debriefing slash prediction episode last year.

[40:16] Yeah, okay, that's still a thing, right?

And I think our thinking as a group of educators, the world of education, especially A&P education, has evolved over time as we learn what it can and can't do, what some of the pros and cons are of it being out there.

But one thing we've learned is there ain't putting that genie back in the bottle.

We can't do that. That's not going to happen. So we now live in a world with artificial intelligence. And so what we need to do is develop new skills and new ways of thinking and new approaches and all that.

And I think that's what happened this year is, yeah, we started dealing with it.

The second one on my list was approaches to cheating mature.

And of course, that's based on the availability of artificial intelligence.

And I think our approaches to cheating have changed.

I think they're just beginning to evolve. And I think that we're starting to really face the issue that there's a lot of collaboration that in one context could be cheating...

[41:20] ...or dishonesty, but in other contexts is really what you want to have, what you want to do.

I mean, in the real world, we collaborate with others to solve problems.

On a test, traditionally, you collaborate with others. That's considered to be cheating.

But maybe we need to rethink that. So there's that.

Then the third one on my list was, I'm going through these fast because I'm realizing as I record these segments that I have a lot of talking I'm doing here.

So I want to kind of speed it up a little bit in any way.

So number three on the list is we got to stop trying to return to 2019.

[41:59] Now that wasn't a prediction. That was just kind of a warning.

And what I meant by that is, you know what?

Teaching and learning changed as a result of the pandemic.

And so many of us are trying to just like reverse time and say, okay, hey, the pandemic is over. It's not really.

The pandemic has not been declared done.

But I know some leaders, political leaders, have said the pandemic is over and people talk and act that way.

But the thing is, is, you know, the pandemic approach to teaching has sort of stopped or petered out.

But the thing is, is that, you know, as the students come back to the classroom, room, we're all changed people.

[42:42] They've now been exposed to other kinds of learning. And some of it went well and some of it didn't go well.

But the thing is, is you just try to turn back the clock and go back to exactly what you were doing, it's not going to work.

And so I think we're seeing that it's not working.

And so what are we going to do about that? What is the strategy to do And that is probably not unrelated to item four on my list last year.

And I said that we're going to get better about turning things around regarding faculty burnout and faculty overwork.

I don't think we did get better about it in general.

I think probably in little pockets here and there that we got better about it.

I think the thing that got better was that probably more and more administrators and other people not in the classroom did start recognizing it more widely and more deeply.

And I think that a lot of lip service has been given to it.

Like, take care of yourself. Well, telling me to take care of myself isn't helping me.

You need to help me take care of myself. You need to give me more time to take care of myself.

You need to give me some strategies and tools to take care of myself.

You need to encourage me to take care of myself, not take care of yourself.

And by the way, here's a new task that you need to add to your list for every course this semester.

[44:10] That is the opposite of what needs to happen to take care of myself.

Yeah, I think I was being overly optimistic on that one.

Number five on the list was that we get better at assessments.

And that relates back to the fact that this isn't 2019 anymore. The world has changed.

And not only is it not 2019 anymore, it's not 2022 anymore where we were still living in the world without ChatGPT.

Now we have artificial intelligence, not just ChatGPT, but other kinds of flavors or iterations of artificial intelligence as well.

You know what? That's going to affect how we do assessments, such as are we going to allow collaboration or not?

What kinds of questions are we going to ask? And so on.

I was involved in a team effort to publish recently an article.

I'll put the link for it. It was headed by our friend Greg Crowther, who's been on our podcast before.

[45:11] And it was sort of using ChatGPT to sort of analyze how students might be able to process different kinds of test items that we ask on our test exams.

So, I think that we're just at the beginning of that, of trying to make better assessments and assessments that maybe make use of artificial intelligence rather than, in a good

way, in a positive way, to demonstrate learning rather than as a way to cheat, get around an accurate assessment of learning.

The number six on my list was that micro-credentials, such as badges and digital certificates and so on, that they advance.

And I think they did advance this year, not sort of in the striking way I was kind of anticipating.

So listen later, because I'm going to be putting that back on my list.

Another thing that's going back on my list is item number seven from last year.

[46:08] Maybe not in exactly the same way, but I had mentioned the efforts for DEI, diversity, equity, and inclusion, stalled.

And I think it did stall in many areas. It was blocked in many areas.

You know, it's just beginning back at the beginning of last year that model legislation was being sent around to various legislators around the country to sort of break down some of the DEI progress that had been made, such as banning DEI positions in colleges and universities.

And those have been spreading around. Well, guess what?

The legislators took them up and put them to a vote and passed them as laws.

And some are regulations at various levels within institutions and so on.

And there's a lot of pushback on this DEI stuff.

And I think that's probably going to go back on my list and happen some more.

But then again, I mean, we did make some progress, I think.

And I'll be talking more about that in the segment I'm doing in this episode about next year's predictions.

Number eight on last year's list of predictions was a greater emphasis on core concepts in A&P.

[47:17] And I think that that's something that's had kind of a slow burn for a long time.

And I think people are recognizing more and more that that is a very useful approach to teaching, not just to like, oh yeah, of course there's core concepts and then move on to the next thing, but actually incorporate that in their thinking about how they teach and what kind of strategies they can develop that make use of the idea of core concepts and how students learn them and how the students use them as a basis for learning everything else.

So I think it's still continuing that slow burn, but I think that eventually it's going to, that fuse is going to get down to the payload and it's going to explode.

So I'm still waiting for it. That'll be on the list for next year too.

And number nine on last year's list was a failure of educational leadership is finally starting to be recognized more widely.

And I think it is being recognized more widely as we see many teachers unions...

[48:19] ...(and I mean that at the secondary and the higher education level, are really making some strides.

Other unions are getting slapped down.

So So it's kind of a mixed result there.

And I think that we're seeing in the news, there's been some big headlines about various failures of educational leadership.

And I think as the general public starts to look more closely at higher education and how leadership is not working is the way it should be on a very wide scale, I think that it's going to be even more recognized in the future.

And then number 10 on last year's list was that.

[49:02] Was sort of related to that, and that is faculty start to crumble.

Departments start to get dissolved or eliminated.

Divisions get rearranged and reduced in size.

Whole schools are in disarray. Whole institutions are messed up, and I think that that's been happening for a long time.

Damage that's being done to faculties that's been going on for quite a while, and we're starting to to see the crumbling as a result of that damage.

And I think it's going to continue.

So yeah, they start to crumble. They're going to continue to crumble going forward.

And then number 11 on my list was more use of podcasts in teaching and coaching students and as learning and assessment projects for students, that is podcasts by students.

And I think we are seeing more of that. I really, you know, I've mentioned many times that I try to stay abreast of advances and trends and so on in podcasting.

And I am seeing a little bit more of that, but I think it still has not reached that wide explosion that I was thinking might have occurred last year.

So, eh, kind of a mixed bag of how well I did on my predictions last year.

Coming up soon are my predictions for this coming year.

Textbook & Academic Authors Association

KEVIN PATTON:

[50:22] I have just a bit more reflecting to do, but before we do that, let's just put that on hold for a second.

I want to talk about the Textbook and Academic Authors Association.

Now, they're not a sponsor of this program. I think you ought to know about them because I think that you will find value in this organization.

I've been a longtime member, decades.

I've been a member of of TAA, which again stands for Textbook and Academic Authors Association.

And yes, I was drawn to it because I'm a textbook author.

But I was drawn to it before I was really into the textbook part of it.

I was doing lab manuals and study guides and things like that and wanted to work on a textbook, but I didn't really know much about that.

And luckily, TAA taught me a lot about that and gave me the skills and the knowledge to kind of start moving into that.

Not only that, but there's the academic author part of it. And what do we mean by academic author?

[51:27] There's several kinds of academic authors that we have among us, and that would be people who do scholarly research of some sort, whether it's scientific research or the scholarship of teaching and learning, and they need to write that up and submit it to a journal.

And there are certain skills that you don't learn in your college writing classes or your high school writing classes or wherever you're taking writing classes.

You're learning a kind of writing that really isn't the same as journal writing.

And many scholars also do monographs.

And many academics have dissertations or theses that could be turned into a book, either a scholarly book or converted into what we call a trade book.

That is a book that you would find on your local bookstore if we still had local bookstores or on the online bookstores and so on.

So there's all these different kinds of writing that we do as academics.

[52:37] That's what we mean by an academic author. And it's not just how to write, but it's the writing life.

The writing life often benefits by having other writers to stay in touch with.

Small groups that you can touch base with and encourage one another.

There's time management.

There's workflow management.

There's how do I find someone to edit this? How do I find someone to do the stats for this?

There's all those kinds of questions, those practical workflow questions.

There are some legal questions that you need advice on.

Sometimes you just need to be trained on what are the legal questions you ought to be asking yourself.

You might think, what? Legal questions? I don't need to deal with that.

Well, maybe you do and you just don't realize that you do.

So there's all of that. And TAA provides so many resources.

We have an annual conference. It got kind of shifted to virtual for a couple of years there because of the pandemic, but then, We're coming back to a face-to-face conference this summer in Nashville, June 21st and 22nd. It's a two-day conference in Nashville.

[53:57] And we get together and we talk about textbooks, yeah. We talk about people that are ready-writing textbooks, people that want to write textbooks.

There are editors there and publishers there.

There are authoring attorneys there and intellectual property attorneys and so on that are giving presentations.

They're available for one-on-one mentoring.

It's all included in the price of the conference. And then there are many resources available on the website, which is at taaonline.net.

That's taaonline.net. And there are on-demand webinars, like a million of them. They're amazing.

I've done a few of them, actually. So you can find those needles in that haystack because it is a huge haystack.

And there's something called a writing gym where you work with someone, sort of an accountability type thing that people that have done it have really raved about. And there are other writing groups.

And memberships are not all that expensive for a published or aspiring textbook or academic author.

It's $100 a year to join.

But they have a special deal right now that you can join for only $30.

[55:12] Yeah, that's right. And you can test it out and see if it's worth that (usual) $100 when it comes time for renewal.

[55:19] The way you would do that is you're going to have to look at the episode page because I'll put the code there, but there's a coupon code.

It would be TAA20 if you're a graduate student or TAA70 if you're a published or aspiring textbook or academic author or you're an industry professional.

So you put that in at the checkout.

So you pick the one you want, you know, let's say the $100 a year published or aspiring textbook or academic author, and then at checkout, that'll be reduced to $30.

And I just mentioned graduate student, that is normally $50 a year, but that goes down to $30.

[55:57] There's also, you can join as an industry professional. So that would be a publisher, such as an editor, could be a authoring attorney or publishing attorney, could be a royalty expert.

It could be, you know, just a whole number of other coaches and trainers of authors.

So that's also $100 a year.

And then there's group memberships. This is actually a really rapidly growing area of TAA, where an institution, such as a university or college, realizes that many or all of their faculty are essentially writers as part of their job.

And they're doing this authoring and need some coaching and some help and some encouragement.

And so they buy an institutional membership where anybody at their institution can then claim an individual membership under that umbrella.

[56:49] And not only that, but then the whole institution gets some additional benefits for the members that are there.

And you can start a TAA chapter if the institution itself isn't interested.

Then you could start a chapter at your institution or within your organization and do something similar to that.

So I could just talk all day about TAA because I'm just so thrilled about it and so excited, and it just, you know, I don't know, it just frustrates me to see so many people who really could, the writing part of what they do could go so much easier for them.

I know it's made it so much easier and fun for me, and it's a great way to network with people, especially across disciplines. Boy, is that fun.

And does that benefit me as an educator too?

So once again, taaonline.net, check it out.

Looking Ahead with New (Old) Predictions

KEVIN PATTON:

[57:46] Well, now it's time to turn toward next year.

What are my predictions for the coming year in the world of teaching anatomy and physiology?

And last year I had 11 predictions. This year I have 12 predictions.

And, well, that's just the way I roll.

I always add one more thing when I can, right?

And don't you do that as an educator too in terms of your course?

One extra activity or one extra concept that you didn't teach last year and you think is valuable so you're going to put it in this year.

One extra outcome or whatever, but I have one extra prediction.

So let's get to them. First one is, I think that there's going to be an increase in the integration of augmented reality, otherwise known as AR, and virtual reality, otherwise known as VR, into our courses.

And just to clarify and remind ourselves, AR, augmented reality, enhances the real world by adding digital elements to the real world.

In other words, we still see and hear everything around us, but now we're adding to that.

Virtual reality is different in that it attempts to replace the real world temporarily with a simulated world that the students are working in.

[59:11] So they have a lot of similarities, and they often work hand-in-hand, so that's why I'm covering them together.

And I think that we're going to have these enhanced AR and VR experiences be more widely used in science teaching, including anatomy and physiology, especially in our lab courses, or at least things that are traditionally covered in lab courses.

For example, simulations of complex processes, physiological processes.

[59:41] Simulations of dissections.

We've already seen a lot of products for those.

Well, I think that's going to be more widely available, more widely used.

[59:50] We're going to see more virtual labs and we're going to see more virtual reality and augmented reality embedded into those virtual labs.

We're going to see immersive learning experiences that you just can't do in a classic classroom setting, such as case studies and mock medical tests and imaging and things like that.

[1:00:14] So let's look for that this year.

So that was number one. Number two is growth of artificial intelligence that is AI.

And we're going to be seeing that being used now more and more for personalizing the learning experience of students.

Now, we've heard about personalized education for a long time.

And a lot of times what that means is that the instructor works with individual students to make sure that their needs are being met, that whatever it takes for them to be successful is provided to them.

And then, of course, over the last decade or so, we've seen tools embedded in learning management systems and other digital learning platforms that help do that personalization.

A lot of those automated testing platforms and quizzing platforms and in review homework platforms are trying to get to that ideal of personalized learning experiences.

Well, I think we're going to see more and more artificial intelligence embedded into those tools, or maybe even new tools that can do more amazing things than ever before.

[1:01:25] They can really react to individual student needs and really figure out where their weak spots are on the spot and then come back to them again.

I've mentioned in several past episodes that I use Duolingo to learn and practice Esperanto.

And I know that many of you use Duolingo to learn Spanish and other languages.

[1:01:50] And that kind of does a little bit of the same thing. There's an algorithm built in there where they come back again with your mistakes, and then they come back with practice sessions for your weak areas and so on. Well, we're going to see that go through the roof.

We're going to see artificial intelligence grab a hold of that idea and really make it very, very personalized.

In using artificial intelligence in that way, you know, that promotes learning, right? Right.

But we're also going to see that flip side that we worried about from the very beginning, you know, a year ago when I first brought this up in this podcast.

This is going to produce some challenges in academic integrity.

We're going to have to figure out how to do that.

So I think that's going to be another main focus of education and A&P going forward.

Before I move on to my next prediction, I want to share a couple of predictions from our friends Mike Pascoe and Jerry Anzalone.

[1:02:46] Both of these folks did as I asked, and that is sent in a couple or three predictions of their own, and I'm glad they did.

It turns out that they kind of resonate with what I had already planned to talk about, so this is going to be fun, I think.

The first one is from Mike Pascoe, and I want to warn you, the first part of it is a little garbled.

When Mike called into the podcast hotline, I think there was like a solar flare or something. I don't know what happened, but there's a little bit of cutting in and out, which we're kind of used to with today's technology, right?

So I did my best to fix it, but I think you'll easily understand his message.

And then that clears up, and the rest of what you'll hear from him and from Jerry sounds pretty clear.

So here's the first predictions from Mike and Jerry.

First, Mike.

MIKE PASCOE:

[1:03:39] Like, do you think we're going to continue to see artificial intelligence push the envelope a little bit more?

What would you indicate that perhaps the action is about AI or [garbled] organization on a public structure?

[1:03:54] Maybe seeing improvements in how clinical case scenarios are managed in AI.

I'm really looking forward to enhancements in AI-provided references and citations for the answers that are generated and provided."

KEVIN PATTON:

[1:04:09] Okay, now here's Jerry Anzalone's prediction.

JERRY ANZALONE:

[1:04:12] Regarding the ubiquity of artificial intelligence, if my microcosm of academia is any measure, I predict that we will see continued confusion and concern over how students use this technology or maybe misuse it.

[1:04:30] At a faculty workshop I attended in January, one speaker floored the audience with just three words that she spoke in the context of AI's impact on instruction, or at least the way she saw it.

She said, content is dead.

[1:04:49] While that comment may have been something of an overstatement, I think it gives faculty good reason to rethink written assignments.

At this point, faculty should know that unscrupulous websites like Chegg, CourseHero, and Study.com sell the answers to homework, including lab activities and even worksheets that instructors might hand out in class.

[1:05:13] But AI makes it easier for lazy students not to think and to crank out responses with just a few keystrokes to written assignments.

So I think instructors need to rethink how and what they may assign as homework or web activities.

[1:05:30] And anyone who's experimented with AI knows that degenerative responses are far from perfect.

But like with most technologies, it's only going to get better over time.

KEVIN PATTON:

[1:05:40] So moving to my third prediction, I have in my notes here, over-reliance on technology.

What I mean by that is that we're going to become so enamored of these artificial intelligence tools that personalize learning, and we're going to be so enamored of the

augmented reality and virtual reality, and all these other tools that have been evolving all along with those tools.

We're going to be so focused on those that it's going to, we run the danger of over-relying on those and thinking, well, the personalized learning platform, that's taking care of all this stuff.

I don't have to deal with it. When in fact, that human touch is still very important.

And even if we can do a good job of building things like empathy and compassion and support of students into those artificial intelligence and other technologically enhanced tools, it's still not going to be the same as having an empathetic, compassionate, supportive instructor.

And so we need to be careful of that. I think we're going to run into some issues with that as we sort that out and try to find what the good balance is.

[1:06:59] I think that we also need to be careful, along with that, of a potentially widening digital divide.

[1:07:07] Because when you advance in educational technology, that means you're advancing in machines, and machines cost money, and not everybody has money available to them for those machines.

I mean, I ran into that years ago when I first started using clickers in the classroom.

And one of the big hurdles that I ran into is not all my students could afford to buy a clicker.

And we provided some alternatives so that we could narrow that digital divide, that gap in ability to acquire the digital tools that the students needed for my class.

And as we go into augmented reality and virtual reality, we might need special equipment or special software or probably both, and we're possibly going to be buying additional resources.

That is, the individual students are buying additional resources, and if not them, then it's us, meaning our institutions buying it.

So not all institutions are rich enough to do that. Some are in real trouble, as a matter of fact, and can't really buy anything extra.

And grants for buying it may or may not be available.

So, yeah, that's an issue. As we use these digital tools more, are we sure that it's equitable, that everyone has access to it?

[1:08:33] So moving on to prediction number four, I think we're going to continue to see a decrease in lecture engagement and even lecture attendance.

Are students going to really still show up for lectures?

And I've been hearing from a lot of my colleagues that many students just don't in the traditional ways of encouraging them, in getting them, penalizing them in ways that try to get them to attend regularly just aren't working the way they used to work.

Students don't want to do that. And I think that's partially from the experience they had during the pandemic when they didn't have to be at lecture.

There was no live lecture for them to be able to attend.

[1:09:17] I think that we're going to continue to see that.

And I think it's possibly going to get worse, at least in some courses and some campuses and with some programs.

But I also think that eventually it's going to swing back up because you know what?

I think we're all learning ways that we can make our lectures more engaging and make them places where students want to come to enhance their learning and to improve their success in the course.

I also think that at the same time, we're going to find that having students come to every darn lecture in a semester just isn't workable anymore.

I think the the atmosphere of the classroom is changing and we're heading toward more of a hybrid approach and you know, that's going to take flexibility and...

[1:10:04] ... new learning, learning of new skills on the part of faculty.

It's going to take flexibility and learning of new skills on the part of our students.

But the place where I think we're going to really hit a wall is with administrators and policymakers and accrediting agencies where they're going to be suspect of things that are not traditional.

We've seen that for a long time. And I think that these larger bodies and these people with larger responsibilities in education are going to need to become more flexible than they have been in the past in order for this to work.

Otherwise, it's going to break and nothing's going to work, in my view.

Brain Break

KEVIN PATTON:

[1:10:49] And that leads us directly into my fifth prediction that I have written down in my list here. But before we do that, I want to take a brief break to talk about breaks.

And the reason I'm doing this is because, well, this is a long podcast and we're kind of in the middle of the longest part of this long podcast going through these predictions for the upcoming year.

And I think it's always a good idea to break up our lectures and break up our podcast episodes with short little breaks so we can refocus.

We can kind of set aside what we were thinking through and thinking about and just focus on something different for just a few minutes.

[1:11:34] And in a lecture in A&P, that could be a clicker question or two.

It could be a quick pair and share type activity.

It could be a playful activity. I've talked a lot about little playful demonstrations that we can do in class or the students can do with each other in small groups or in pairs.

There are all kinds of things.

I sometimes stop and tell a story. Now, the story may not at first appear to be part of what we need to be learning in A&P, but usually I swing around to show at the end how that was kind of a parable or an analogy of some principle that I want to get across to the students.

By stepping aside from what we were talking about, telling this story, wrapping it up with the moral of the story or the point of the story or what the analogy or the model means.

And then we're kind of refreshed. And when we go back into the lecture where we picked up, then we're kind of approaching it with a fresh perspective.

So that's why I like to take brain breaks. And now this one's over.

Let's get back to the main part of this portion of one of the longest podcast episodes in the history of The A&P Professor.

A Couple More Predictions

KEVIN PATTON:

[1:12:58] Prediction five relates to the idea of hybrid courses.

I think we're going to see an expansion of online and hybrid courses.

And I realized that during the pandemic, a lot of folks that weren't used to online education, and I include students, faculty, administrators, the general public, everybody was not used to online learning in the way that we're going to become come used to online learning.

And so therefore, sudden imposed change, that leaves a bad taste in everybody's mouth.

Nobody likes dealing with it. It's always difficult to deal with that.

And you know what? We didn't do a very good job of it in that sudden switch because, well, we couldn't. We weren't prepared for it.

Good online education, and I'm including in there hybrid education.

We need training in that.

We need experience in that. We need to prep courses in a certain way.

And they require a lot of preparation, maybe even more preparation than in a traditionally taught course.

So we suddenly had to leave that aside and just try it, try to make it work.

And it often didn't work very well. And it turned lots of people off, Not only because it was a change, but also because we weren't doing it very well.

[1:14:15] And so that left a bad taste in their mouth. But you know what?

There are more and more studies coming out that show that students prefer online education or at least some online components built into the course.

That doesn't mean that they don't miss some of the things that you can do face-to-face.

[1:14:35] And the same thing with instructors. Faculty are becoming more engaged with and better at doing online learning and are finding that there are ways to connect with students that are different than in a traditional classroom but can be just as effective.

I still believe that many of the connections I formed with my own students in completely online courses were closer connections than I ever did with face-to-face students because you do a lot more one-on-one interaction in an online course, at least the way I've been teaching online courses.

And they also feel a lot more connected to the instructor, if you do it right.

I think we're going to see more and more expansion.

Again, there's going to be some walls to hit. There's going to be just the resistance to change that we see in every field, you know, since the dawn of humanity.

[1:15:30] But also, we're going to run into these structures, as far as as accrediting agencies go, as far as institutions go, national and state and local policies on education.

There are all kinds of walls that are going to resist this evolution toward online and hybrid courses.

And so that's what we're going to be seeing a lot of, I think, over the next year.

But also remember that famous phrase from Star Trek, if you happen to be a Trekkie, resistance is futile.

And so there is, you know, it's happening. It's going to happen whether we like it or not.

[1:16:12] So moving on to prediction number six, I think there's going to be continuing changes in textbooks.

We're already seeing big changes in textbooks, and I'll mention some of those in just a moment. But the first one is that augmented and virtual reality.

I think we're going to see some of that embedded in some of our textbooks, especially, of course, the digital textbooks.

That's really kind of where you would do it. But there are ways of doing some augmented reality with traditional print textbooks. I think we're going to start seeing those in anatomy and physiology in the coming year or so, at least the beginnings of that, the hints of that.

[1:16:50] We've had courseware evolving rapidly recently, so we're going to see that continue.

What I mean by courseware is learning platforms that have what would traditionally be in a textbook are now in this courseware.

So it's still kind of a textbook, at least it's textbook content in a very traditional sense, but it's embedded in this newfangled digital platform.

So we're going to be seeing that evolve rapidly, not only evolve in the sense it's going to be more widely adopted, but we're going to see how it's put together and how it functions and how students interact with it.

We're going to see that evolve pretty rapidly too, and I think that's going to start this year.

[1:17:34] We're going to see continued evolution of open educational resources.

There are many pros and cons of using open educational resources compared to traditional textbooks that are purchased by somebody, by the institution or by the individual student or rent it or something like that.

And so we're going to see that whole balance between open and not open educational resources, versus we're going to see it bouncing back and forth and back and forth, and we're going to see how things evolve there.

But there is going to be a rapid evolution, I think, this year.

And then swinging back to digital books. Now, those have been available for a while, and many publishers are now producing their A&P books in a digital-first approach, meaning that they're thinking digital and, oh, yeah, if you want the print, we can get you a print.

Some of them aren't even doing that last part anymore.

[1:18:31] Involved in that are not only these electronic textbooks, e-textbooks, if you want to call them that.

Mixed in with that is a subscription model that some publishers have started where an institution, for example, can subscribe to a publisher's library and they pay one licensing fee and then every student can have access to any of the textbooks within that library.

And so, of course, that's going to limit teacher and student choice in textbooks because the institution's going to say, well, it's got to be from this publisher.

And if you say, well, that publisher...

[1:19:09] Doesn't have an A&P textbook that really works for my course, that might be too bad.

Or you might have to really jump through some hoops or find some money somewhere.

I don't know how that's going to work.

But we have that kind of subscription model. And then, of course, there are subscription models where students either pay a publisher for their library of textbooks.

And of course, there are some subscriptions where you subscribe to a smaller group of textbooks, or maybe even an individual textbook.

So that's still being worked out. And there are a lot of legal issues that are in the courts right now about that too.

So, you know, who knows where that's going to land, but we're going to see a lot of back and forth on that too as well.

[1:19:53] And also in digital books, I think we're going to see more and more interactivity built into digital textbooks, where it's more than just reading.

And yeah, it's interactive in the sense that you can search easily using a search engine that's built into the e-textbook platform and other kinds of lower, levels of interactivity that the students and instructors, for that matter, can engage in.

I know one kind of interactivity I've used in digital textbooks is you can share highlights and notes among individuals.

And so I share my notes with all of my students so they can go into their e-textbook and toggle my notes on, and they can see little comments I've made.

Like this section here is very important. Make sure you understand this clearly.

This section here is useful information, but you're not going to be tested on any of this.

This is not embedded in our course outcomes, but it does help inform what you need to know for our course outcomes.

I don't say it that way. That's too long. But my point is that I can do those sorts of things, or I might clarify something that isn't so clear in the textbook, or I might emphasize something, like remember that this is so and that is this other way.

There is a level of interactivity already built in, but we're going to see more and more of that.

[1:21:17] I think that's really going to merge with this whole courseware idea where there's just all kinds of things to do, not just look at and read and try to understand that traditional textbook content.

Another thing that we're going to see more of, I think, in digital textbooks and in the courseware is we're going to learn how to use all that data that we get.

And I think the data itself is going to start to be presented in a way that's a little more more easily understandable, and a little more easily analyzed.

And maybe this is where artificial intelligence is going to come in and help us do that analysis and kind of present the results and conclusions of the analysis of the data.

Now, what kind of data am I talking about? I'm referring to data such as where are the students reading or not reading?

I have assumptions about how much my students read and about which parts they skip and which which parts they spend a lot of time with, but that's all guesswork and that's based on very little feedback that is extrapolated to every darn student and we know that that's not really good science.

[1:22:25] It's not useful in any way really, but that's all we got, right?

Until we start looking at data. So if there's data coming back that's showing what my students are doing as far as their reading.

And of course, you know, we need to develop better tools about how to trap that data, how to record that data. But I think we're going to do that.

And I think we're going to get some good data. And I think we're going to get some help in interpreting it and analyzing it.

And then also making decisions about what to do about that. What does that tell us?

[1:23:00] And not only in the reading part of it, but that interactivity part of it.

So if there are some review questions that students can do in the digital textbook, we can get data on that.

And we can already get data on some of the courseware that we already use, right? Some of these quizzing platforms and so on.

But it's not always easy to interpret. And we don't always know what to do with that information once we have it.

Like, yeah, they're messing up on this part here, but what do I do about that?

And so I think we're going to get some good suggestions sort of built in.

And again, this is a good opportunity for artificial intelligence to help us be better human teachers.

[1:23:38] And this really reminds me of that concept of teaching, that strategy of teaching that has been called just-in-time teaching, which a lot of us use some variation of it and don't realize it has a name or it has been given a name.

And there are some other names I've seen for that kind of an approach as well.

And what that means is you're looking at what the students are doing, and just in time, that is in real time, you're saying, okay, they're just really not understanding synaptic transmission at all here.

And so I need to do some things with these students to help them pass that obstacle that most of them are facing now.

And so that's called just-in-time teaching, where you make last-minute adjustments based on the data that you see about what students are understanding and what they're not understanding.

So these data-driven options that are going to be built into digital textbooks and courseware that are going to work much better, that sort of fits into that approach of teaching, doesn't it?

We'll be back with more after this brief message.

What's on TAPP?

KEVIN PATTON:

[1:24:50] You already know that the episode page for this episode and every episode of this podcast can be found online at theAPprofessor.org.

There you'll find a brief outline of the episode with segment timing and titles, an embedded audio player to listen to the episode with a description of each segment, and a list of links for further exploration.

There's also a link to claim your credential for listening to the episode.

And by the way, there's a separate page listing all the badges for all the episodes where you can also claim your professional development credentials.

But back to the individual episode page, there's also an embedded video player to listen to a captioned audiogram of the episode, as well as a complete transcript and a link to a PDF version of the transcript.

But wait, there's more!

There are all kinds of other resources for teaching A&P, such as on-demand seminars, The A&P Professor Book Club, and, well, lots more.

Just explore the menu along the top of any page at theAPprofessor.org.

More New Predictions

KEVIN PATTON:

[1:26:19] So moving on to prediction number seven, interdisciplinary approaches are going to be looked at a lot more than they have been by educators.

I mean, anatomy and physiology is already interdisciplinary in the sense that we're combining what are traditionally separate specialties like neuroscience and osteology and histology.

You know, all these different areas of specialization are coming together in a pretty general way, mixed up a big picture way in an A&P course.

And that's good and that works well. And we can really identify core concepts better and learn those core concepts better when we do it that way, right?

Because we can take signal transduction from neuroscience and then apply those principles to endocrinology and other places in the body where we see that happening.

And we can see how neuroscience and endocrinology really fits into every other system too because they're integrated and they interact with one another, right?

[1:27:25] So we already have that kind of interdisciplinary thing. And then we have a wider interdisciplinary approach going on in A&P when we bring in chemistry and we bring in physics, you know, such as gas pressures in the respiratory system and so on.

So there's, you know, all kinds of physics and chemistry and other sciences that we bring into A&P, and we know that that is helpful in learning.

But many of us, and just the many conversations I've had with y'all at conferences and interactions we've had through this podcast and other kinds of interactions that I've had with my colleagues in the world of A&P, it seems like it's pretty universal that we all bring in a little bit of social things, historical things, historical context of things.

Things, we bring in art and art history, we bring in philosophy, including the philosophy of science, but even broader philosophical principles and so on.

They have a place in our discussions, and that expands student understanding of what it is that we need to focus on in our course, but it also connects it to other courses that that they're taking, or will take, or have taken, and it starts to help them build this broad conceptual framework, this broad world view.

[1:28:49] And know where A&P sits relative to some of these other disciplines.

And not only that, but I want to include in this interdisciplinary approach more focus on soft skills, such as teamwork, including collaboration, communication skills, problem-solving skills, just general logic and reason problem-solving.

There's lots of soft skills, interpersonal relationships, professional relationships, professional attitudes, all of those things, we're going to see more emphasis on bringing those into the A&P course.

And we're going to see that operating in other courses and other disciplines too, I think, but certainly within A&P.

Because all of those things are useful for students in A&P, but also to take that beyond A&P, especially into their professions if they end up in a healthcare profession.

But even if they don't, if they end up in some other profession or career, all of those soft skills are going to be portable and they're going to be able to take that with them.

We're going to see some ups and downs with this interdisciplinary thing though.

[1:30:02] We're going to see more and more faculty putting a stronger emphasis on interdisciplinary courses that blend a science with other subjects such as ethics or policy or global challenges and so on that we face.

On the other hand, students are probably going to push back on that a little bit.

Don't students sometimes tell us like, I didn't think this was a chemistry course.

Why are we spending so much time on chemistry?

Or, you know, when we're trying to figure out, I don't know, cardiac output and things like that.

Like, I didn't think this was going to be a math class. This isn't a math class.

You shouldn't expect me to be able to do math in this class.

And I don't even expect that much math from my students.

And they still sometimes make that comment because it's difficult for them.

And it's kind of a natural reaction to pushback, right? When you're faced with something difficult.

I mean, the first thing is, is like, I shouldn't have to do that.

[1:30:57] It's too difficult. And it's up to us to get them over that hump and help them see that, yeah, they can be successful in it.

So we're going to have that kind of pushback, but we're also going to have pushback from outside our course and outside our institution because there's always this fear of mixing in concepts and soft skills that are not part of the course.

I mean, aren't we seeing that? Like I'm seeing that like in the news all the time, like there is not a week goes by that I don't see where there's been some challenge on the secondary or higher ed level where you're not supposed to do this.

I know of one institution that I'm very familiar with in particular, all the faculty were given a directive to not talk about anything other than your subject in your class.

[1:31:46] You stick to your subject. And I'm just like, I can't do that. I can't teach that way.

I'm sorry. I got to talk about art history when I'm talking about how we represent the body, how we have learned about the body over the years and how that is an evolution.

And we're going to learn more because look where we came from compared to where we are now.

Just think ahead. head, we're going to be in an even better place in our ability to imagine what the body's like and impart that idea to other people without having to do a dissection.

You know, I'm going to go off on a tangent here because I feel really passionate about this interdisciplinary approach.

And thank goodness that my undergraduate education and my graduate education, for that matter, was done in institutions and programs that highly valued interdisciplinary and implemented it.

So I feel like I'm much more broadly educated than some of my peers who were trained at the same time and have the same degree I have, you know, in terms of what it says on their transcript or on their diploma.

[1:32:53] But there are all kinds of other things that got pulled in there from these interdisciplinary parts of courses and interdisciplinary courses that I was forced to take.

I remember complaining about it, like, why do I need nine hours of philosophy if I'm a biology major?

Why do I need nine hours of theology if I'm going to be a biology major?

Now I am so grateful that I was forced into that by the requirements of the degree program that I was in and the institution that I was in, their approach.

[1:33:31] And so I think we're going to, you know, see an emphasis on that and we're going to see pushback from that.

So we're going to see some ups and downs and that's going to start this year or it's going to really start to take off this year. It's already started.

[1:33:43] And then prediction number eight is micro-credentials and badge systems.

And I've talked about that in previous episodes and I just mentioned it a few minutes ago in this episode when we were reviewing the podcast over the year and looking at my past predictions, I don't know.

I think that this year, you know, that's going to continue, the continued use of micro-credentials.

But I think at some point soon, and maybe it'll be this year, it's really going to take off in a big way.

I think it's like inching up and being more and more widely used.

And kind of it goes hand-in-hand with competency-based education.

Now, before you start choking and gagging, There are programs called competency-based education that are rigid applications of one tiny part of what I'm referring to here that I don't think are really a good approach.

And so I'm not, you know, if that's what you think competency-based education is, is some specific program that you probably don't like because they're just, the ones I've seen are pretty goofy.

And they're very rigidly enforced.

[1:34:53] And, yeah, that's weird. But what I mean by that is we're going to really start to use things like alternative grading and personalized education to get all of our students at a certain level of competency.

A lot of times, I have students with good grades in my course, but I know they don't really understand major portions of the course.

[1:35:19] At least that's happened in the past. Now, I changed my course, so that's much less likely to happen later in my teaching of A&P than it would have early in my career teaching A&P.

So I've really embraced this competency-based approach, but there are many different ways of doing it.

And I don't like rigid uniformity anyway.

Did a whole episode on that, remember? And so, yeah, I think this competency-based education is going to be more and more embraced.

And that's not only within individual courses taught by individual instructors, but the entire course at an institution, if there are multiple sections, and throughout programs and throughout whole institutions, we're going to see more of a switch to that level.

And we're going to see micro-credentials and digital badges incorporated in a lot of those approaches.

They don't have to be, but the benefit of it is that they're portable and they can be made accessible.

[1:36:19] So a student in my A&P course, they would learn how to use a regular light microscope, not a virtual one.

And I know some courses use a virtual one and that's fine, but we teach our students students how to use an actual light microscope and use it well and use that to identify and compare and contrast different tissues in histology.

And also look at cell structures and things like that.

That is a skill that if you look on their transcript and see that they have A&P or even specifically A&P Lab, you might think that they know how to use a light microscope.

But maybe in that other section, they weren't using light microscopes.

They were using virtual microscopes.

Maybe not even that. Maybe they were using just images, just digital images and identifying those photographs taken by somebody else.

[1:37:09] That doesn't tell you that they have that skill. But if in my course, once they're competent with the light microscope, if I give them a badge...

[1:37:18] now they can take that badge and put that in their badge backpack.

They can publish that in various areas. They don't have to. They can keep it private. But if they want to, they can.

Let's say they're needing to get a part-time job to help pay for their tuition or these fancy AR and VR goggles that they're going to need for their courses.

Or even just the clicker they want to use in their course, they're getting, you know, maybe they're getting a job in a lab somewhere as a lab tech or a lab assistant and they now have a badge that says, yep, they know all about a light microscope.

Now, they're probably going to need further training on it depending on what they're asked to do, but they have the basics down.

And so that badge is useful, whereas having A&P or A&P Lab on their transcript...

[1:38:04] isn't very useful to a future employer or even a current employer for that matter.

And so that's where you can build in some of those soft skills, some of those interdisciplinary concepts that they've learned, and also the main things.

My students have badges that show that, yeah, they learned about protein synthesis and they achieved a high level of competency.

Otherwise, they wouldn't have been awarded the badge.

We're going to see, I think, micro-credentials being used more and more.

It's kind of chaotic right now because a lot of folks don't know about them.

But not only that, we haven't gotten really good at sort of organizing how we use them and how to verify how authentic the learning is in different badges.

There's still those early painful phases that we're going through.

[1:38:52] Moving on to prediction number nine, diversity, equity, and inclusion efforts, DEI.

I think we're going to continue to have really high ups and really low downs.

Ups and downs over the next year.

[1:39:08] Both Mike Pascoe and Jerry Anzalone had predictions related to this topic of DEI.

So let's listen to them. First, we're going to listen to Mike Pascoe's prediction.

MIKE PASCOE:

[1:39:29] I definitely think we're going to continue our good work on diversity and inclusion in anatomy education.

I think that we will continue to depemphasize eponyms.

We will continue to work on [garbled] our lexicon and include toponyms that give us more information about an anatomic structure and really just downplay that legacy of what was [garbled] done in anatomy education.

KEVIN PATTON:

[1:39:47] Thanks to Mike Pascoe for sending in his predictions, and I think I agree with him completely.

I think that he really hit the mark with that one, and I think that we're already going to see some better representation and more inclusive language in textbooks.

We've already seen some of it. A lot of it's still in the work.

It takes a couple of years to prepare a new revision of a textbook, and it takes a long time to incorporate more art and to really do a thorough job of making sure that the language in every part of the textbook is as inclusive as it can be.

I know a lot of A&P authors that are really working on that, but their book isn't out yet.

They've already done a lot of the work, but the work isn't out there yet, at least not all of it.

Also, it happens in stages. You do as much as you can in this revision, because even though it's two years, that's still limited time for those big old A&P books.

And then the next edition, you do a little bit more, and the next edition you do a little bit more.

So it has to evolve, because that's the way the textbooks work.

[1:41:03] Going to continue to see pushback. I mean, we've seen already some pushback from the outside world, meaning outside of education. education, but also from within.

And there's a lot of pushing back and forth within and among educators.

And we're going to see lots of laws and regulations being put forth or considered that are going to increase diversity, equity, and inclusion, and then others that push it down.

And we're going to build up some things that work really well, and we're going to see them ripped down. And we're going to build some things that don't work really well, or maybe work so badly they do more harm than good, and we're going to have to figure out how to fix them.

So again, as with micro-credentials, we're in a time of chaos and pain, of growth, and so we're going to see that happening over the next year, certainly.

[1:41:57] And now let's hear from Jerry Anzalone regarding some issues related to DEI.

JERRY ANZALONE:

[1:42:03] My second prediction, and maybe this depends on the state in which one teaches, is that A&P instructors can expect to see more controversy over issues of gender, biological sex, and sexual dimorphism.

Due to the political climate of some states, instructors have to be extremely careful about the language they use.

Using examples of sexual dimorphism, for example, in the human skeleton, the reproductive organs, or even the sex chromosomes can be problematic, depending on

how faculty, or students, or worse, politicians and administrators express or interpret that information.

To a degree, this issue crosses over into academic Friedom or maybe the lack of it depending upon your point of view and no i don't have any answers to that one but i think we meaning society in this country is at least at some kind of uncomfortable crossroads on the issue of sexual dimorphism so my non-committal response is something that Yogi Berra once said, when you come to the fork in the road, take it.

KEVIN PATTON:

[1:43:19] Thanks for that comment, Jerry. And I agree with this overall idea that we're kind of still in turmoil.

Doesn't that happen when there are big changes anywhere in society or in science?

We have a period of sort of looking at a potential ideal that we want to get to.

And along the way, there's a lot of back and forth, a lot of struggling with the details and the approaches that we're taking.

And of course, there's always that interaction between scientific disciplines and society and the back and forth there.

And we always have these agents, I'm not going to name them, but you know who they are, agents that decide to poke their noses in areas that they're not experts in.

And that kind of makes it even more chaotic and filled with turmoil.

And even those ideals that we're looking toward may turn out to not really be as ideal an ideal as we thought it should be or would be.

And so a lot of that angst and turmoil and wrestling back and forth actually, in the end, we hope, produces a lot of good in that it refines that endpoint where we get to.

Now, that's the optimistic view, and you know what, that's where I'm going to leave it.

Let's Share

KEVIN PATTON:

[1:44:47] Hey, if you're still considering your list of things that you want to get done this year that will benefit others and will make the world a better place, then, well, why not consider sharing this podcast with others you know in the world of anatomy and physiology teaching?

It'll give them one more set of ideas to think about as they tweak their teaching strategies and find more and better ways to help their students.

And it may spark an interesting conversation with your colleague.

Hey, this would be a great reason to drop a message to that old friend you've been meaning to touch base with, wouldn't it?

And, well, it'll help motivate me to keep at this, to have some more listeners.

Let's Share

Even More New Predictions

KEVIN PATTON:

[1:45:40] Moving on to prediction number 10, faculty life.

Wow, this is a big one. And this is one that really worries me and it really makes me sad and it really makes me angry too.

But I'm also trying to be optimistic because I think that eventually it's got to get to a point where either things collapse and we have to rebuild or folks are going to realize it's about to collapse and we need to turn it around.

Being higher education faculty, it's almost to the point where it's a mostly gig economy.

[1:46:12] What I mean by that is we have far fewer full-time faculty than we ever did.

And that's even at institutions that are primarily teaching institutions like community colleges.

We're seeing more and more community colleges where they're not replacing faculty who leave, or they're getting rid of some of the full-time faculty by collapsing departments or programs.

And what they hire instead are part-time faculty.

And I've been a part-time faculty and full-time faculty for decades.

I've done that together.

And I know a lot of part-time faculty who do other things and teaching is a love and a passion they have, but it's not their only source of income.

It's not the entire career or profession that they have, and that's great.

That enhances the richness of our offerings and student experiences within our institutions, to have some of that going on, but when you get to a point where everyone is part-time...

[1:47:14] then I think that the program suffers, student learning suffers.

We either need to find a better way of doing that, a more sustainable way, because people People who live only on adjunct teaching salaries, they can't sustain life that way.

You just cannot go forward that way. And so fewer and fewer people are going to stay in that situation, and fewer and fewer people are going to choose to get into that situation.

They're going to find other non-teaching professions that can sustain their livelihood and sustain a family.

[1:47:49] I think that that in itself is going to cause a collapse.

And something I've always thought is go to an institution and propose that all of the higher administrators become adjuncts. Let's have, instead of a full-time college president...

[1:48:07] let's have four part-time college presidents. Wouldn't that be great?

They can divide up all their responsibilities.

Hey, there's a conflict in meetings. No problem. One president goes to one meeting and another president goes to another meeting.

And get these five presidents doing all kinds of stuff.

And you probably get more hours for less pay if you have part-time presidents, right? Because isn't that what they're doing with faculty?

And of course, every person I've proposed that to, usually just in conversation, they're just like, you know, you are the goofiest person I ever met is the response I get because that could not possibly work.

I mean, you're just talking gibberish here.

That's just not possible. Well, why is it okay for faculty and not okay for higher administrators?

I agree it won't work for college presidents, but I also don't think it works for faculty either.

Another thing that we see happening in faculty life that's not good is that we're seeing tenure or whatever passes for tenure at various institutions being weakened more and more and more or even eliminated.

And we're also seeing closing of programs and closing of whole institutions, and that's contributing to chaos in faculty life, right?

If we're having to move to this institution and that institution and wondering whether the institution that we're in right now is going to be here in two years.

[1:49:33] More and more faculty are going to start developing side gigs related to teaching.

Not teaching side gigs, because I think we've always done that, and I think we're seeing the danger in that.

And, you know, it's not a bad idea, I guess, to spread things around a little bit.

So if you lose your full-time teaching job, at least you have this part-time teaching job, so you'll be able to pay a few of your bills until you find a new position.

Of course, then you'll find that nobody's hiring right now. And so, gosh, what am I going to do? or at least hiring in your area.

When I say nobody, of course, that's hyperbole, but we do see drops in hiring faculty, especially full-time faculty in higher education.

I think we're going to see more and more faculty getting side gigs that are not teaching side gigs.

They'll probably be related to education, but they're going to be doing things like writing.

[1:50:23] They're going to be maybe producing content for websites.

They're going to be doing things that science journalists do.

Or they might be doing something completely different, like having a cheesecake business that they cater or something.

And so we might see those kind of side gigs. But we're going to see more and more faculty doing that because, number one, they're probably not keeping up in terms of their compensation for teaching.

That is keeping up with inflation and other costs.

But also, they're doing it as some security, some financial security in case things go sideways.

And all of that together, it means that we're going to have more burnout, more fatigue, more early retirements or forced retirements even because of health concerns, because of all this burnout.

And institutions, I think, are finally starting to recognize that burnout has been a serious growth problem among educators.

As I mentioned earlier in this episode, I don't think they have the tools or the will to fix it yet.

And I'm hoping to see the start of that this year, so I'm trying to be a little optimistic there.

[1:51:34] Jerry Anzalone's message on the podcast hotline included this bit about stress and burnout in faculty, and it fits right in here.

JERRY ANZALONE:

[1:51:44] Many podcasts ago, you interviewed Rebecca Pope-Ruark, who spoke about faculty burnout.

I see the problems of faculty stress and burnout being some of the biggest problems we face in academia today, especially as the higher education landscape continues to evolve following the dark days of the pandemic and that frantic transition to online teaching and learning, I'd be very interested to hear more, either from you or from Rebecca Pope-Ruark, or maybe somebody else, about practical steps that faculty can take to recognize and manage their stress so that they can avoid or better deal with burnout.

As I thought about this topic, it seems that there are many different levels of stress, depending on where one falls on the academic spectrum.

For example, faculty who are involved primarily in teaching and college service roles at two-year colleges face a different set of challenges to those who may be pursuing tenure-track positions in research-based institutions.

[1:52:48] Instructors of undergraduate students face different challenges than those teaching graduate or pre-professional students. But we all have something in common.

Many of us are faced with occupational stress. It's constant, and it can be crushing, and we may not be handling it appropriately.

And while I'm sure that there is no one-size-fits-all solution, I'd like to hear what some of the experts, hopefully people in the trenches with the teaching faculty, have to say.

And on that note, I've said enough, so I'll sign off now. Take care.

KEVIN PATTON:

[1:53:22] Thanks, Jerry, for sharing that on the podcast hotline.

I think that you're appropriately concerned about stress and burnout in faculty, not just A&P faculty, but higher ed and other faculty as well.

I really take your suggestion to heart... that's certainly already on my list because you called about this of things that I'm hoping to get together for the coming year or so in our podcast.

If you're listening to this and you have something to share or you know someone who has an important message for us regarding faculty stress or burnout, then let me know that. We'll do something about it.

[1:54:05] Prediction number 11 is science communications.

[1:54:10] I think that we're going to see more and more researchers and other scientists focus on more and better communications of what the scientific community is working on these days and how we think as scientists and how we generally do what what we do in science.

And I think that'll pick up its pace this year.

Personally, I think it's necessary.

First, I think a lot of us science folks don't really know or fully understand what scientists outside our own specialties are doing.

I don't really know what they're doing in quantum physics these days.

I mean, I know a little bit. I read some headlines, but I don't KNOW know. I don't understand it fully.

Just because I teach A&P does not mean that I have any clue about some related topics like contemporary practices or ideas in epidemiology or public health, or how that quantum physics that I don't know much about, how does that play out in biological systems, because apparently it does.

[1:55:16] Or, well, I just don't have a complete understanding of nearly all the various little pockets of science.

I think it relates to an increased appreciation of an interdisciplinary outlook that I mentioned a few minutes ago.

The more interdisciplinary our outlook, the more we can understand that different scientists do different things in different ways, and they've learned a whole lot of stuff that I just don't know about.

And they're going to be learning more about different things that I'm not going to be able to keep up with.

[1:55:51] Secondly, I think that we're going to see the bigger picture being communicated to non-scientists as well.

So, when I talk about science communication, I'm talking about it within science and among scientists of various sorts, but also outside of science with folks outside of science.

And that might cause some discomfort, which may cause even wider knowledge gaps in our society, because people are going to push back and say, no, we don't want to know that.

That information is uncomfortable to us, or that strategy is uncomfortable to us.

But I'm trying to be optimistic about the outcomes.

[1:56:27] And then let's cover prediction number 12.

It has nothing to do with these things going on in society or within our profession.

Profession, it's more about science and the teaching of science.

[1:56:40] Now, this has been bubbling up for some time already, like lava below some isolated Icelandic town, but I think we may soon see an eruption of understanding the roles of the various kinds of fibers that are in our body, the various roles that they play.

For example, the microscopic cellular and extracellular networks of microfilaments and intermediate filaments and microtubules.

I think we're going to learn more about those and see the wider role that they play in the body that we're not really focusing on in A&P.

And I don't think we really understand as completely as we soon will in science.

[1:57:24] But not just those tiny little microscopic cellular, extracellular fibers, but also the body-wide networks of collagenous fibers and elastic fibers that make up the fascia of the body and many other structures of the body and how they relate to each other, but also relate to those little microfilaments and intermediate filaments and other kinds of little microscopic fibers in our body.

And so I think we're going to see fibers being a major topic in A&P.

And I think that's going to start this year, maybe, I don't know.

And I think some people already have an appreciation of that, that they're pulling into their courses.

But I think we're going to see it start to spread. And maybe that'll happen this year.

Maybe it won't. Those are my predictions. We'll review this again a year from now.

So hopefully you'll hear from me before then about other things going on in the world of A&P.

Staying Connected

KEVIN PATTON:

[1:58:20] In episode 147, I reflected on the stats, the topics, and the the sustainability of this chaotic podcast project that I started in 2018.

[1:58:32] The 10th anniversary of the founding of The A&P Professor blog and website.

Yikes, I've been hanging in there for a while, so maybe I shouldn't worry too much about sustainability.

I also dissected my predictions for the last year and made some predictions for the new year, with a little bit of help from our friends Mike Pascoe and Jerry Anzalone.

Hmm, now that I mulled those over, Maybe I should predict that by this time next year, this podcast will be entirely produced by an artificial intelligence bot.

Nah, that wouldn't be any fun. Forget I mentioned it.

But you know what? Let me know your thoughts about the past year of this podcast and your ideas and suggestions for the path forward.

Simply call the podcast hotline at 1-833-LION-DEN or 1-833-546-6336 or send a recording or written message to podcast@theAPprofessor.org and I'll see you down the road.

AILEEN PARK:

[1:59:56] The A&P Professor is hosted by Dr. Kevin Patton, an award-winning professor and textbook author in human anatomy and physiology.

[2:00:03] Music.

KEVIN PATTON:

Contents of overhead bins may have shifted in flight.