



# FUTURE FOCUS

## DANIELS TACKLES HIGHER ED TOPICS

By Tom Schuman

*EDITOR'S NOTE: A 20-minute-plus interview with the Purdue University president includes additional comments on a new polytechnic high school (Page 20), income share agreements (Page 30) and the initial Gallup-Purdue surveys (Page 32). In addition, view a video bonus (bottom right) with perspective on the future of undergraduate education.*

**BizVoice®: Is the need to create the Purdue Polytechnic High School a statement that our public education system is not producing the type of students to succeed at schools like Purdue?**

Daniels: Yes, in part. In part, we're excited about a new mode of teaching at what was our College of Technology and now the Purdue Polytechnic Institute. We'll be teaching in a way that we think is really well suited to the needs of business and the needs of today's economy. Multidisciplinary, most of the work in projects and teams, most of it team taught, everybody has work and internship experiences. Everybody works on major, semester-long projects. We do think that it may be well suited to the high school years too.

But we're putting that high school in inner city Indianapolis for a reason and that is that, try as hard as we can, we can't have as diverse a student body as we would like to have based on those students who emerge from Indiana high schools and present themselves here at Purdue.

**BV: You don't do this without first transforming the College of Technology. Is that correct?**

Daniels: What we really started out to do was to see whether we might not fashion a new mode here at Purdue. It will be competency-based, meaning students will advance at their own rate, not on a fixed calendar. So maybe some of them will finish in fewer than four years and get on to work and a productive life more affordably.

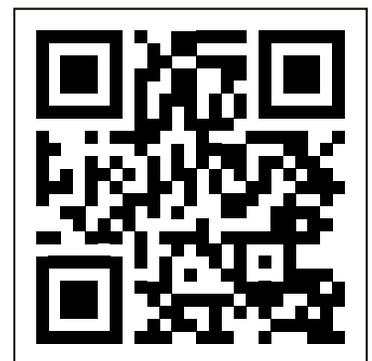
This is a rigorous place. It's hard to get good grades. We teach predominately difficult subjects, STEM subjects and the like. But everything our faculty teaches, they have high expectations. We think it's an exciting new way to learn for students of all kinds.

**BV: What goes into the process to determine whether this makes sense in other Indiana communities?**

Daniels: Great question. We're hopeful of success. Will there be a demand? Will students show up? It's a charter school; nobody has to go there. Once they're there, will they last? Will they like this curriculum? It's going to be difficult, probably harder than what's going on at other places. Will they succeed and graduate? From our end, I intend that everybody who graduates from that school gets a Purdue admission in their diploma, no questions asked. No fees.

But will they choose to come here and continue on? So all those questions we'll be watching very carefully. But I have very high hopes it will succeed and if it does, we already have technology centers run by that college around the state – so we do have a platform, if it does work, to bring it up to scale and start it in other places, which would be great if all that came to pass.

**VIDEO BONUS:  
DANIELS ON THE FUTURE  
OF UNDERGRADUATE  
EDUCATION**





Mitch Daniels continues to put a high priority on making college more affordable and providing a high value for students.

**BV: Talk more about competency-based education. Why is that so important and why does it make sense for the business community to be excited about it?**

Daniels: So we live in education with a lot of old practices, a lot of them tied literally back to when we were a farming economy. Nobody's done much to change that, at least until recently. Two things about competency-

based education. If a student can move faster and demonstrate mastery if given a subject, why not structure the school so that he or she can move on at their own rate. If they finish sooner, they will have spent less money along the way and they will be out earning money sooner. Now, second point is that more and more businesses are beginning to question the value of the diplomas that students are showing up with. Not a Purdue diploma; I

think I can prove that.

Businesses have been using the college diploma as a signal that a student is smart and somehow prepared and ready to be productive. Increasingly, young people are showing up with a diploma who can't do much or don't want to work or aren't proving able. So we are seeing more and more businesses, maybe whole industries, setting up their own way of finding out, their own tests or certification programs. Google is a recent good example. If the outside world moves to a competency measurement and begins to disregard these pieces of paper called college diplomas, schools issuing those diplomas better move to react to that.

**BV: How many people within higher education are ready to make that move or how difficult is it going to be to change those years and years of doing things a certain way to an entirely different model?**

Daniels: The right answer is not very many and real hard. That's why I'm so pleased that our faculty in the Purdue Polytechnic Institute have been willing to



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take the leadership they have. That particular experiment, it could have importance elsewhere on this campus as a demonstration to other faculty that you ought to be thinking about the same things too.

I put up two prizes two years ago now to try and spur new innovation here on the campus. One of them was to come up with the best competency program. The College of Technology was that winner. My whole hope was by giving birth to these new experiments, we might see some emulation elsewhere. Hasn't been much of that so I have to keep working on that.

**BV: Can competency-based education and what I will call the traditional diploma system, can they work together or is it a transition from one to the other?**

Daniels: I don't know. I think they can work together. I'd be surprised if a competency model just swept all before it and everything went in that direction. There may be some disciplines that remain better suited to what we've been accustomed to. I would expect it to evolve and move from one field to the next. I think it's at least as probable that the world moves to some alternative way of certifying the readiness of people and that may happen much more swiftly than higher ed changing within itself.

**BV: Affordability: Where are we at – are we getting to a better place?**

Daniels: We better because people are more and more skeptical of these enormous costs – these price levels. Here at Purdue, we've held tuition flat; we're in the third year now. It will be zero increase again next year; we don't know anything beyond that. Room and board is cheaper than it was when I got here. Brought it down in two steps; still working on that. And, of course, we're working hard to raise scholarship money.

It's still not inexpensive to go here. I think it's important to remember – and I never talk about affordability without taking about value – a good college education, the kind we think we are providing here at Purdue, is worth every penny and more. The student absolutely will reap the benefits, not just in that first or second job but throughout his or her life. So yes, we wanted to get off the price escalator, to help our students' families with the cost here and now, but we have to reinvest everything we can in strengthening

the academic offering. I always say the numerator matters most. The value, the quality of what we're doing – if it's high, the price is clearly justified. But if not, it's not.

**BV: Income share agreements (a new financing method; see Page 30). What is the most difficult part of that innovative concept?**

Daniels: We're going to find out. Like so many other things, until you go to market, you don't know. It may prove to be difficult to reach a market; there may not be much demand; it may be too different. Maybe not a lot of students will take an interest in it. Or there will be demand but maybe someone has overestimated the supply, dollars, investors who would like to participate. I'm less worried about that.

As soon as we started talking about it, we began hearing from people all over the place who have been looking for somewhere where this concept could get tried. Or there could be mechanical issues that haven't been carefully enough foreseen in the enforcement of these contracts over time. Or in the consumer protections that we think have been built in, but there may be flaws in that – we'll see. The first test is going to be, as with any new product: Are there consumers? Are there customers in sufficient numbers to make the whole thing work?

**BV: You said the Purdue Polytechnic High School hopefully helps fill the need for more diversity. Does income share cater to a specific need or is it a little broader than that?**

Daniels: I wish I knew. The answer to so many questions is we'll tell you after the window opens. What kind of students will be interested? In what kind of students will investors be interested? It's certainly tempting to think and hope that maybe low-income students would rather not go into debt but rather shift the risk from themselves to an investor, and leave Purdue with no debt or very little debt but with a contract to share a fraction of the earnings they are about to start collecting. I can certainly see it working that way, but we won't know until we know. It's purely voluntary. The market will tell us.

**BV: Are you having as much fun as you thought you would?**

Daniels: I didn't know what to expect.



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Yes, I'm having fun. It's hard not to have fun when you get to hang out with smart people and young people all day. That is just not a bad deal at this point in the game. It's fun because of the great place this is, the great people who populate it. I'm very proud of our mission. I've said to friends – who said, Gosh they were surprised I wound up doing this – Well, I was surprised too. The reason I finally agreed to it was because I couldn't think of a job, except maybe the one I was leaving, where if a person did a good job, he could do more for Indiana.

If Purdue performs really well, we not only turn out outstanding talent, both indigenous and increasingly students who come here from somewhere else and we find (them) settling in Indiana – brain gain style. We're spinning off 25-plus companies a year. We were 16th in the world in patents last year; we're probably headed for the top 10 this year. We've really got that engine working now. That's fun. That's very satisfying to see these brilliant people coming up with ideas, going out and trying them, hopefully some will grow up and hire a lot of Hoosiers. It's a 24/7 job. It's got its headaches, but anything worthwhile does. I just feel very fortunate to be here.