

RETOUR SUR LA COGNITION DE L'ENTREPRENEUR, LES PRATIQUES PÉDAGOGIQUES QUI LA STIMULENT ET LE FUTUR DE LA RECHERCHE EN ENTREPRENEURIAT : UNE SECONDE INTERVIEW DU PROFESSEUR NORRIS F. KRUEGER, JR.

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Retour sur la cognition de l'entrepreneur, les pratiques pédagogiques qui la stimulent et le futur de la recherche en entrepreneuriat : Une seconde interview du Professeur Norris F. KRUEGER, Jr.

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Dans notre première interview, Norris Krueger nous avait entretenu de ses travaux sur la cognition entrepreneuriale. Il plaidait pour un enseignement de l'entrepreneuriat davantage adossé à des « expériences critiques de développement » permettant aux étudiants de penser et d'agir comme le font les experts entrepreneurs. Nous le retrouvons, sept ans plus tard, avec le sentiment que cette voie pédagogique fait lentement son chemin et qu'elle n'est, par ailleurs, pas incompatible avec un enseignement à distance et asynchrone tel que nous l'impose la pandémie actuelle. Norris revient, par ailleurs, sur une recherche publiée en 2017 qui souligne que les travaux menés en entrepreneuriat pour mesurer les effets d'apprentissage des dispositifs pédagogiques implémentés dans l'enseignement supérieur manquent de robustesse. Il met en lumière les travaux menés en pédagogie et différents outils devant nous conduire à adopter de meilleures pratiques et réaliser des mesures plus fiables. Enfin, il revient sur les tendances en recherche cognitive pour souligner l'importance d'étudier les intentions entrepreneuriales de façon dynamique, voire écosystémique, et identifie les recherches dites « translationnelles » comme pouvant réellement faire progresser le champ de l'entrepreneuriat.

- Mots clés : cognition, éducation entrepreneuriale, apprentissage expérientiel, intentions entrepreneuriales

In our first interview, Norris Krueger talked about his work on entrepreneurial cognition. He advocated an entrepreneurship education more based on “critical developmental experiences”, that allows students to think and act as entrepreneurial experts do. Seven years later, he is back with the feeling that this pedagogical path is slowly gaining grounds and that it is not incompatible with online and asynchronous education as imposed by the current pandemic. Norris also talks about a paper published in 2017 that stresses that studies carried out in entrepreneurship to measure the learning effects of the pedagogical practices implemented in higher education lack robustness. He highlights the work carried out in pedagogy, and various tools that should lead us to adopt better practices and make more reliable measurements. Finally, he shares his views on trends in cognitive research, especially on the importance of studying entrepreneurial intentions in a dynamic, or even ecosystemic way, and identifies “translational” research as potentially important to really help entrepreneurship to move forward as a field.

— *Keywords: cognition, entrepreneurial education, experiential learning, entrepreneurial intentions*

In our first interview, we talked a lot about entrepreneurial pedagogy. You were making a plea for a more experiential teaching around experiences of critical development. In 2017, you co-authored a study published in AMLE that identified and reviewed 159 published articles (from 2004 to 2016) measuring the impact of entrepreneurship education in higher education. In 2020, what are your thoughts on entrepreneurial pedagogy? How should the effects of education be measured?

I wish that the notion of critical developmental experiences had more traction but, until more entrepreneurship instructors get training in education theory & practice, it will continue to be slow going. Fortunately, we are working on that! In Belgium, you may have noticed the Dutch BKO initiative which accrediting bodies are starting to look at enviously. Nudged by the EPIC project¹ (OECD/EU) as well, there's a marvelous group of most of the very best thinkers and doers in entrepreneurship education slowly moving forward on a webinar series to teach this.

The most important takeaway from that AMLE study was that almost none of the articles and papers were all that well done. Business schools like to think they are better than education schools but, I think, many of those published articles would have been desk rejects in education. That speaks to a severe lack of theory (or misunderstanding of it) by scholars and by editors/reviewers. We can fix that! But will we? Especially with the need to publish so quickly.

If AACSB and others decide that b-schools need to assess the impact of teaching (already asking schools to assess community impact) who is better positioned than entrepreneurship²? We now have the tools like EPIC (and EntreComp³) and, it's not completely biased of us to think that our colleagues are better educators. I do like the EPIC framework although it could be built out further. Education research argues that there are four-plus categories of impact (what are we trying to change for learners?): Knowledge; Skills; Mindset; Behaviors. It also makes sense to assess what our critical stakeholders want EPIC addresses all of these. If anyone reading this is interested in a multi-nation study, let me know! There is also the makings of a terrific community of practice.

1. <https://heinnovate.eu/en>

2. For more on how entrepreneurship educators help: www.bit.ly/2021EntEdManifesto

3. <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/entrecomp-entrepreneurship-competence-framework>

Has/should the COVID crisis change(d) our way of teaching entrepreneurship? Has entrepreneurship education become more important?

Online and deeply experiential were once considered antithetical. Yet we are finding more and more ways to be deeply experiential, even in asynchronous settings, occasionally even more experiential. Again, a look at education theory and practice helps. What are the lessons we want learners to take away? Today we have to be (get to be!) more focused on that process. Even writing lesson plans...

Most of our colleagues will say that they are trying to be deeply experiential but they are not, certainly not as deep as they hope. Instead, they offer hands-on activities. Hands-on does not equal experiential, not at all. However, there is booming interest on formal models of project-based learning (PBL). In fact, there are widely accepted “gold standard” principles of PBL⁴ that have proven powerful in driving deep, transformative learning. That will be my part in the webinar described above. None of the seven standards are terribly difficult other than your dean may have a heart attack! What are the best outcomes from great PBL? Learners significantly become more action-oriented, more resilient to adversity, better at connecting the dots, and... Doesn't that sound familiar? Like key facets of the entrepreneurial mindset? Even though most of our colleagues need to get better at PBL (and education theory in general) they are still better than many in our universities. Also, many programs already sell entrepreneurship education as generating important life skills (think NFTE, India's Udyam Foundation, etc.). In these awful budget times, schools should be doubling down on our colleagues. (Selfish, I know... both to support our friends and to get that training out there... but there really is an edge.)

About the interaction between mindset and ecosystems, you said that “If so much work on mindsets and ecosystems is so disappointing (especially to practitioners and policymakers) maybe we have lost sight of this insight?”. What did you exactly mean?

Simply that we study entrepreneurship at a macro level and a micro level but do not connect them. Multi-level studies are a pain with many statistical traps but still needed. How does a healthy ecosystem support great entrepreneurial learning opportunities? How does growing the entrepreneurial mindset across more people support a growing ecosystem? Do they co-evolve in a virtuous circle or not? In hindsight, the disappointment I referred to is largely that so much of our research fails to be relevant and in too many cases nor is it rigorous. To do that takes time and our “publish quickly or perish” world isn't helping but there are great exceptions.

What progress have we done in the field of entrepreneurial intentions since the interview?

Too much? Not enough? Seriously, I'm not sure that we have. The very power of TPB and variants has trapped us. It seems overwhelmingly clear that intentions is a dynamic process and we should treat it like that. So, yes, too many studies, not enough innovation. My own interests lie in looking at “what lies beneath”⁵ – the more I read neuroscience, the more I am fascinated by the deeper cognitive structures. The mindset of expert entrepreneurs (“expert” in the cognitive sense) is so important because as we understand it better, the easier it is for us to assess... and to train!⁶

4. www.pblworks.org

5. www.bit.ly/ETP2007

6. For example, www.bit.ly/KruegerWelp needs major updating but writing it really opened my eyes!

Could you tell us about your work over the last 7 years?

The cognitive science/neuroscience insights have been a long, tough road but rewarding in insights. (Spoiler alert: Science is HARD. Fun but hard.) Also, a bit humbling to know that I am learning things that the average kindergarten teacher can do in their sleep! It has been frustratingly slow, but work on the mindset is moving forward, especially as we apply it to learning/education. Anyone interested?

On the macro front, I spend so much time talking and working toward healthier entrepreneurship ecosystems – also very rewarding. It's less on the scholarly front, that practice, but it's nice to think I'm helping, plus I get to hang out with spectacularly great people who are building ecosystems (often with no credit). The research will pick up –via the Academy of Management and ICSB and the Kauffman ESHIP ecosystem building initiative, I've been able to bring academics and practitioners together in productive ways⁷. Overall, I am so thrilled by all the young/new talent in our field. Helping nurture that has been a blast. Occasionally, it leads to coauthoring but that is less important than seeing how they shake things up.

Is there anything in the original interview that you might want to complement, that you would change?

Shorter sentences? Mostly, I have been kicking myself that I have not done more to move forward in directions that I am positive will help. It even stalled my response to you. But recently, I heard the great song “*Je Ne Regrette Rien*” and took heart. I am eager to do more. Write more. Collaborate even more. Find a sacred cow to slay. Traveling companions welcome!

A last question: How has the field of entrepreneurship at large been evolving since the interview? What are the most promising areas of research?

I always ask just as mathematician David Hilbert asked in 1900 – is our field growing or just getting bigger? Definitely getting bigger and it is growing in a few areas – but I may be biased here – like Ecosystems, mindset, and I think that social entrepreneurship/innovation is on the brink of a leap forward.

The need to publish quickly is a barrier – quantity over quality might work in the early days of a field but shouldn't we be beyond that? If we as a field can figure out how to bring balance, that would be huge. Entrepreneurship scholars and educators have so much to offer. Maybe we can follow the great example of open innovation which has found ways to publish and do deep thinking and offer much to practitioners.

Translational research⁸ is going to be critical for us to move forward as a field. It turns out, it is much more difficult than most realize. AoM made a gallant effort that fell short; maybe Kauffman Foundation's new ESHIP effort will bear fruit (definitely pulling for them!)⁹.

Références

NABI, G., LIÑÁN, F., FAYOLLE, A., KRUEGER, N., WALMSLEY, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, 16(2): 277-299.

7. See for example www.bit.ly/2020ecosysPDW

8. e.g. the process of transforming knowledge from basic biology and clinical trials to creating implementable practical techniques and tools that address critical medical needs.

9. Norris invites readers to join the conversation, norris.krueger@gmail.com