

**THE ROAD TO EXCELLENCE IN INTERNATIONAL ENTREPRENEURSHIP EDUCATION:  
FURTHER ANALYSIS OF THE ORIGINAL 2005 ARTICLE**

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## **THE ROAD TO EXCELLENCE IN INTERNATIONAL ENTREPRENEURSHIP EDUCATION: FURTHER ANALYSIS OF THE ORIGINAL 2005 ARTICLE**

### **ABSTRACT**

In the same way that monopolies damage markets – because they artificially limit products or services that are otherwise unlimited – I have argued (Mitchell, 2005) that prevailing (but erroneous) beliefs about entrepreneurs and especially about how they are created, effectively limit the extent of entrepreneurship available to us: by limiting the development of entrepreneurial thinking (i.e., entrepreneurial cognitions). When viewed in the light of the emerging deliberate practice paradigm, which considers entrepreneurial cognition to be a specialized expertise that can be taught and learned; and when entrepreneurship is viewed broadly, as value creation (not just venture creation), I argue that entrepreneurship education can be both more effective and international (in the border-spanning sense). I reason that the deliberate practice approach to entrepreneurship education and pedagogy responds to weaknesses that exist in the beliefs and assumptions surrounding entrepreneurship and entrepreneurship education. I propose that in order to challenge these underperforming norms we should both acknowledge their inherent subjectivity, and then employ the lens of “essential contestability” (Gallie, 1956) to explore the possibilities for improvement offered by the deliberate practice approach. I offer the hope that such improvements can lead to more effective development of entrepreneurial cognitions anywhere on the globe.

### **INTRODUCTION**

In the first version of my original article (Mitchell, 2005), I attempted to demonstrate (using some then recently-developed border-spanning cognition-based entrepreneurship theory), that as a global society we have in certain ways been wrong in our approach to entrepreneurship education, and that as a result, entrepreneurship education as an engine of global value creation might be “ready for a tune-up” (2005: 187). Using an entrepreneurial cognitions-based argument, I argued (based upon my previous cross-cultural research into entrepreneurial expert scripts) (e.g., Mitchell et al., 2000, 2002, and others) that international entrepreneurship education is more about creating the *border-crossing* entrepreneurial cognitions that are universally present in entrepreneurs – based upon developing *the same* model in a variety of settings – vs. trying to develop differing models to match setting variety. Global entrepreneurship can thus be defined to be: *the capability to create new and valuable transactions anywhere on the globe* (Mitchell, 2003).

In the original article, after presenting some brief background, I therefore outlined the relationship between education and value creation, to support the argument that while entrepreneurs ARE special, creating them is general—that there is, in actuality, a commonly available process for creating the entrepreneurial expertise that has in the past been viewed to be an uncommon and inaccessible process. I then proceeded to present and discuss the international implications of the emerging “deliberate-practice school” of entrepreneurship education for the creation of global entrepreneurs. The chapter concluded with some suggestions for ‘tuning up’ entrepreneurship education as a ‘global value creation engine.’

My discussion of the deliberate practice approach to entrepreneurship education – both then and now – draws heavily upon the expert information processing theory branch of entrepreneurial cognition research. For readers not readily familiar with this research stream and its specialized terminology, in this article (which cannot due to space constraints fully develop the definition and

use of each important term) I simply insert a working definition (or footnote) when these terms are used along with sufficient references that a deeper understanding is available should it be desired. As a beginning point I paraphrase (to shorten) the definition of entrepreneurship presented in the original article: *to use transaction cognitions to organize exchange relationships that reduce the obstacles from economic frictions to create new units of value*. In this definition, transaction cognitions are the specialized mental models (knowledge bases and problem solving processes) that entrepreneurs use to make plans, build trust, and create products and services that are competitive. Exchange relationships occur among transaction creators, their works (products/ services), and others (usually customers). The obstacles in need of reduction are introduced by these transaction elements: creators: bounded rationality, works: specificity, and others: opportunism – as illustrated in Figure 1. Each new exchange (transaction) is a new unit of value. My research has demonstrated that this underlying structure is universal in business; and can form the basis for both the definition and objective of entrepreneurship (to create new units of value), and thereby a foundation for a teaching pedagogy.

{Insert Figure 1 about here}

Briefly, the pedagogy as described in detail in the original article has the following summary attributes:

- Role of the instructor: coach, educator, innovator, and researcher
- Contents: knowledge base, problem-solving processes
- Starting competences: novice-level skill
- Ending competences: enhanced-novice-level skill
- Teaching and learning material: experiential
- Teaching methods: deliberate practice (Figure 2)
- Evaluation methods: individualized cognitive skill demonstration (e.g., searching, screening, planning/financing, setup, startup, and operations/growth scripts); cognitive-script-cue recognition.

In brief, the deliberate practice teaching method is fundamentally experiential in that it applies sufficient instructional intensity and duration of learning experiences with key content, to produce the mental software (e.g. expert use of a knowledge base within a domain and problem-solving cognitive process) that yields expert performance. The highlighted portion of Figure 2 illustrates the portion of the general expertise acquisition model on which the deliberate practice pedagogy concentrates.

{Insert Figure 2 about here}

The deliberate practice approach to entrepreneurship education and pedagogy responds to weaknesses that I have perceived exist in the beliefs and assumptions surrounding entrepreneurship, and entrepreneurship education. An apt lens through which to examine the assertions of the original article that challenge the norms of entrepreneurship education is the lens of “essential contestability” (Gallie, 1956). My thesis was, and is, that due to the attributes inherent to the field, that entrepreneurial education as a contributor to high performance economic results remains unfulfilled in its potential. In this analysis of the original article, I am hopeful that by utilizing the lens of essential contestability, that the problems and possible solutions can be brought into focus.

## FURTHER ANALYSIS: ESSENTIAL CONTESTABILITY

In defining the phenomenon of essential contestability Gallie (1956: 169) suggests that some concepts “involve endless disputes about their proper uses on the part of their users,” and he suggests five criteria (or elements) by which to identify and examine concepts using the essential contestability lens. During my career, I have observed that entrepreneurship education and pedagogy has continued to suffer – more than somewhat, I believe – from each element of the essential contestability that possibly is inherent in the field of entrepreneurship education and pedagogical construction. From my vantage point, I suggest that entrepreneurship education and pedagogy is essentially contestable because it can be seen (by applying the terminology introduced in Gallie, 1956: 169) as: (1) *appraisive*: “what is an entrepreneurially-educated student” is open to interpretation, (2) *internally complex*: teaching techniques and methods, and the specifications surrounding the phenomenon of study (i.e. entrepreneurship) vary widely (see Footnote <sup>1</sup>), (3) *variously describable*: the importance of the contribution of each suggested approach to entrepreneurship, and hence to value creation and distribution, for example, is still at issue, (4) *modifiable*: the form and substance of entrepreneurial education and pedagogy can presumably morph depending upon circumstance (variations in the deliverer or the delivery method) because it is open in character, e.g. focus varies among opportunity, jobs, small business skills, value creation etc., and (5) *used competitively*: various users vie for the precedence of their interpretations of the meaning and purpose of a particular educational approach or pedagogy. In short in my current view, entrepreneurship education and pedagogy as a concept-grouping has had, and continues to have, essential contestability problems.

How can the assertions in my 2005 article be organized and analyzed in terms of essential contestability criteria to see, hopefully, how the deliberate-practice approach can contribute? In the following paragraphs I summarize a few of the essential contestability problems that gave rise to (and still give rise to and create the need for) deliberate-practice-based expertise-development focused the alternative approach to entrepreneurship education that I both advocate and practice.

### Appraisive Interpretation

Gallie (1956: 171) indicates that appraisiveness accompanies achievement, because people need to judge, for example, among better and worse results of effort. As might be anticipated, appraisive interpretation occurs in the analysis of a wide variety of phenomena. Examples of appraisive phenomena include: art, conservatism, culture, Christianity, etc. Concerning entrepreneurship as a phenomenon (and as a subject of educational interest), appraisal has centered on the nature of the entrepreneurial domain. The Entrepreneurship Division of the Academy of Management suggests, in its recently-revised domain statement, that the field encompasses:

[As its] *specific domain*: (a) *the actors, actions, resources, environmental influences and outcomes associated with the emergence of entrepreneurial opportunities and/or new economic activities in multiple organizational contexts, and (b) the characteristics, actions, and challenges of owner-managers and their businesses.* (Revised 8/2011)(Academy of Management, 2014)

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<sup>1</sup> A search on Google.com using only the search term “entrepreneurship courses” produced 62 pages of Internet web content, each containing a unique assemblage of courses and/or concepts ostensibly designed to educate entrepreneurship students.

At least five questions raised in the original article<sup>2</sup> involve appraisals of sorts: (1) the nature of entrepreneurs: born vs. made, (2) the definition of entrepreneurship: broad vs. narrow; (3) expected outcomes: enhanced novices vs. expert venture-ready entrepreneurs, (4) implications (of the deliberate practice of entrepreneurship): transition vs. first-tier economies, and (5) perceptions: veneration vs. castigation of entrepreneurs in general.

**The nature of entrepreneurs: Born vs. made:** On page 186 of the original article (Mitchell, 2005), I raise the question of the “born vs. made” entrepreneur, noting the nature of the appraisiveness argument, stating:

*“Scholars continue to argue whether entrepreneurs are born or made (Katz & Shepherd, 2003; Mitchell, Busenitz, Lant, McDougall, Morse, & Smith, 2002), with those of the “born” persuasion pointing to traits (Berlew, 1975; Ibrahaim & Soufani, 2002) such as high locus of control (Rotter, 1966) and needs such as need for achievement (McClelland, 1965) as reasons that people become entrepreneurs; and those of the “made” persuasion noting that the psychology of the entrepreneur (Brockhaus, 1982; Brockhaus & Horowitz, 1986) or of new venture creation (Shaver & Scott, 1991) involves much more than traits: such things as person, process and choice (1991: 23). Practitioners offer up an almost infinite variety of explanations for entrepreneurial success ...”*

Thus, in the midst of this controversy, the question: ‘What is the entrepreneurially educated student?’ is almost philosophical in nature – it involves a worldview of sorts. Most entrepreneurship educators argue that their role is important in “made”; and yet the public appraises entrepreneurship as unique vs. pervasive – i.e. as “born.” In my encounters with non-entrepreneurship colleagues in the university setting, and in the classroom, the preponderance of these experiences suggests that “born” assumptions prevail – and hence, that entrepreneurship “education” remains essentially contestable on born vs. made appraisiveness grounds, consequently prompting my choice of a deliberate practice-based entrepreneurship education pedagogy as a potential response.

**Definitions: Broad vs. narrow.** Similarly, the many-faceted suggestions for defining entrepreneurship contribute to its contestability. Some definitions are broad, and others narrow. For purposes of a pedagogy that is sufficiently general to cross geographical borders, I have suggested the following (Mitchell, 2005: 187):

*“ ... global entrepreneurship is defined as the capability to create new and valuable transactions anywhere on the globe (Mitchell, 2003), then in this chapter we may define global entrepreneurs to be: those individuals whose capability for creating valuable new transactions crosses geographical, cultural, and economic borders”*

Capability is one of those results that are appraisive in nature; and as noted above, the evaluation of the cognitive capability is demonstration-based; and entrepreneurship “education” remains essentially contestable on broad vs. narrow appraisiveness grounds. I maintain that use of a broad-based definition rooted in a deliberate-practice-based individualized script-development<sup>3</sup>

<sup>2</sup> Page numbers refer to the location in the original publication.

<sup>3</sup> My prior research suggests that expert entrepreneurs have a set of ordered actions (sequences) and personal performance standards (norms) that the literature terms an “expert script”; and that the transfer of this knowledge base and problem solving processes (Mitchell & Chesteen, 1995; Mitchell et al. 2000, 2002, etc.) can be developed on an individualized basis through use of the deliberate practice pedagogy. Hence the term: “individualized script development.”

pedagogy, can resolve definitional issues by enabling many other definitions to be included within a type of “big-tent” (vs. small-tent) approach (cf. Mitchell, 2011).

**Expected outcomes: Enhanced novices vs. experts.** One of the many criticisms of entrepreneurship education that I hear from colleagues in other business disciplines is the expressed doubt that entrepreneurship students can really become entrepreneurs when they graduate (which I take to mean ‘start a business’). In my research I have asserted and tested the notion that an entrepreneur is a type of ‘expert’ who possesses specific cognitive skills that develop as a cognitive ‘script’ (e.g., Mitchell & Chesteen, 1995; Mitchell et al., 2000). In the original article (Mitchell, 2005: 208), I recognize this reality, while more finely calibrating exactly what outcomes can be expected from deliberate-practice based, cognitive-skill-acquisition-focused entrepreneurship education (and these outcomes comprise a much larger set than venture creation only):

*“The second specific educational implication may also be derived from the results illustrated in Mitchell, 2005: 248. While the experiential and expert enhancement-based pedagogy is successful in the creation of a new group of “enhanced novices,” it certainly does not produce experts in a few months.”*

Unbundling the messages in this quote, we can infer that based upon the empirical results reported (e.g., in Mitchell 2005 – and elsewhere since that publication) that there are testing results which provide relatively fine-grained distinctions about what outcomes might reasonably be expected from a script-enhancement pedagogy rooted in deliberate practice. Specifically: that some elements of expertise<sup>4</sup> can be developed within a semester-length course; while others take longer.

In response to the outcomes element of essential contestability, I argue that the imprecise notion that skills created in one or several university courses (that cannot practically deliver the commonly-recognized 10,000 hours in deliberate practice required to produce an expert) should be discarded in favor of a more-precise and realistic outcome: the realization by almost all entrepreneurship students of enhancement of their skills as further described in the Appendix of the original article (Mitchell, 2005).

**Implications: Transition vs. first-tier economies.** Also appraisive in nature are our assumptions about the requisite economic environment: in particular assumptions leading to the idea that people in transition economies are excluded from high performance entrepreneurship. In the original paper I argue (Mitchell, 2005: 212) that such a dismissal is unwarranted; that entrepreneurial-cognition-based skill is also possible within transition economies:

*“... I suggest that the deliberate practice model of entrepreneurial education ... might provide a means to address the unfortunate and unnecessary exclusion of the majority of the world’s population from the high performance entrepreneurial results possibility set ... if this exclusion rests primarily on the absence of the requisite cognitive system, and if the requisite system is very likely to be widely transferable when based upon the application of the deliberate practice model ...”*

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<sup>4</sup> The term “enhanced novices” flows from the expert information processing theory literature, which suggests that a novice is a generally capable individual (e.g. a business-educated student without any entrepreneurship experience), but who is not yet able to perform at the level of experts. In this study, an “enhanced” novice was the term used to describe individuals who had acquired some of the dimensions of expertise (as therein defined); but not all of them; hence gaining some of the necessary knowledge based and problem solving skills, but not at a sufficient level. The empirics are more fully reported in Mitchell (2005).

Admittedly, this assertion concerns the possibility of achievements that are prospective in nature, and are thus appraisive, and by extension essentially contestable. (Upon additional reflection, however, it occurs to me that entrepreneurial-cognition-based skill is a necessary (though not sufficient) condition; and that capital formation capability (cf. deSoto, 2000) is also necessary, in combination, to approach sufficiency.)

**Perceptions: Veneration vs. castigation of entrepreneurs.** One additional appraisiveness-based obstacle that creates contestability problems in entrepreneurship education and pedagogy is based in the perceptions surrounding entrepreneurs within a society. In the original article I argue (Mitchell, 2005: 229) that:

*“In a celebrity-driven culture ... certain kinds of veneration (or castigation) of, for example, the super-rich or super-successful entrepreneur can backfire. Celebrity by its very nature is exclusive. Veneration-based activities send the sub textual signal that very few individuals can attain this status ... [and] we incur the vast opportunity cost of lost entrepreneurial value due to erroneous self “selection out” of the realm of entrepreneurial possibility: either because we think we cannot attain the heights (veneration), or because we think that we cannot bear to experience the depths (castigation).”*

The very nature of appraisiveness invokes the wide variations in perception that can help or hinder effective societal assumptions about entrepreneurship. In response, I argue for assumptions of inclusiveness in entrepreneurship education against prevailing perceptions of exclusiveness.

### **Complexity**

It has also been argued that entrepreneurship is a complex phenomenon (e.g., Minitti, 2004). Gallie (1956, pp. 171-2) explains that internal complexity in a phenomenon most often combines constituent parts to create a whole, and that such complexity effects – or brings about – elements of essential contestability. In the original article I argue to the contrary – and consistent with Simon (1981) – that entrepreneurship is complex only in the sense that the internal (cognitive) environment of the entrepreneur must adjust to the almost infinite variety in the outer environment. I recently confirmed this hypothesis in an extensive simulation based upon empirically-derived inner-environment prior probabilities (Mitchell, et al., 2014a, forthcoming).

In the original article, I spoke to the complexity issue to challenge the prevailing assumption that certain entrepreneurial functions (e.g. the evaluation of new venture viability) are inherently complex (Mitchell, 2005: 188); and that the acquisition of entrepreneurial expertise is special vs. general (See Figure 2: also 2005: 191, Figure 1). I argue instead, that there are latent structures that simplify our understanding of ostensibly complex phenomena as suggested by Merton (1968) that the concepts of “latent process” and “latent configuration” can be employed to identify processes that exist below the threshold of superficial observation (Merton, 1968: 115), but which (when identified) clarify the analysis of complex [and thereby seemingly irrational] social patterns (1968: 118).

Thus, at present, even the phenomenon of complexity is contested within the field of entrepreneurship education. Additional study is still required; but I argue that to the extent that the obstacles created by debates over impossibilities (that arise due to reliance upon assumptions of undue complexity) can be resolved, that the clarity of content in entrepreneurial education and pedagogy can be specified more accurately for the benefit of both teachers and learners (see the Morse & Mitchell, 2005 casebook as an illustration of this pedagogy).

## **Variably Describable Contribution**

Proceeding from the complexity argument Gallie (1956: 172) argues that explanations of the worth of some concept ought to “include reference to the respective contributions of its various parts or features. In fine, [it is] *initially* variably describable” (emphasis in original). When applied to the context within which the original article was written, variability in description of the contribution of entrepreneurship education is apparent. For example, within the field, possible contributions include (non-exhaustively): (Mitchell, 2005: 197) more effectively utilizing the effects of social friction; (2005: 198) more realistically understanding the nature of opportunity-creating market imperfections; (2005: 203) more deeply addressing the cognitive stance of learners; (2005: 207; and Appendix 1) more accurately identifying the likely impacts/outcomes of entrepreneurship-script-based pedagogy; (2005: 210) more correctly anticipating the outcomes and contributions in third and fourth-tier economies; (2005: 231) more clearly articulating the impact and implications of deliberate-practice/entrepreneurial-script based pedagogies on economic literacy – the capability to independently create new value.

Thus, because there exist a broad array of potential contributions of the deliberate-practice/entrepreneurial-script based pedagogy, the assertions in the original article are (admittedly) open to being contested. Nevertheless, it appears (at least to me) that the deliberate-practice/entrepreneurial-script based pedagogy has appeal for solving problems with entrepreneurial learning that competing pedagogies may not address so specifically or so effectively. Specifically, I suggest that by concentrating on the development of the two primary elements suggested in Figure 2 (and the detailed discussion within the original article, where this diagram was denoted Figure 1): (1) a specialized knowledge base, and (2) problem-solving skills, the deliberate-practice/entrepreneurial-script based pedagogy enables better utilization of the inherent power in the minds of learners.

## **Modifiability – Open in Character**

There also exist a variety of observations within the original article that speak to modifiability reasons for the essential contestability of entrepreneurship education and pedagogy. These observations, I believe, better enable learner-effectiveness (as obstacles to conceptualization of entrepreneurial tasks are removed).

With regard to modifiability, Gallie (1956: 172) asserts that where a concept is open to modification due to changing circumstances, essential contestability is also indicated. In the original article, these flexibilities are acknowledged and addressed. For example, one line of reasoning that affects how teachers and learners engage the notion of uncertainty is the juxtaposition (Mitchell, 2005: 188) of a fate-based worldview (e.g. outcomes depend upon the “gods”) – which implies non-modifiability of outcomes – and a scientifically-based worldview (e.g., modifiability exists as problems are subjected to testing according to the scientific method). Another line of discussion in the original article (2005: 197, Figure 3), concerns the helpful vs. hindering role of high vs. low socioeconomic friction. Here I make the argument that responses to unhelpful effects can modify consequences, and in fact enable opportunity. I further argue (2005: pages 204, 210) that the content of entrepreneurial scripts which in earlier research has been characterized as static is in fact dynamic as is now being argued in the recently-emerging social-situated cognition (cf. Mitchell et al. 2011) stream of cognitive science research.

Thus, while the assertions in the original article argue for modifiability, and hence support the assertion of essential contestability, these assertions also provide a new window through which



to view entrepreneurship pedagogy. By providing firm arguments for alternative conceptions of (for example) uncertainty-engagement worldviews, of the role of socioeconomic frictions, of the function of entrepreneurial scripts as dynamic vs. static, I believe that learner-effectiveness is enabled, through the removal of obstacles to the conceptualization of entrepreneurial tasks.

### Competing interpretations

Finally according to Gallie (1956), for a phenomenon to be essentially contestable, “each party [necessarily understands] that its ... use [as a phenomenon] ... is contested by ... other parties; [and that the employment of] an essentially contested concept means to use it both aggressively and defensively” (1956: 172). In the original article, I argued both aggressively and defensively – thus further confirming that competing interpretations exist; and also suggesting the importance of both aggressive and defensive arguments that arise due to the educational difficulties created by trying to assist learners to engage essentially contestable concepts.

In the “aggressiveness” department in the original article, I first attempted to contradict (see Mitchell, 2005: 186) the prevailing assumption that because entrepreneurs are themselves special (for a variety of reasons), that becoming an entrepreneur is nevertheless general. Second, I have argued (also on page 186) that what we have thought to encourage entrepreneurship may in reality have discouraged it, asserting reasoning as follows:

*“If the creation of entrepreneurs in reality, depends in a non-trivial manner, upon a process that is generally accessible to any individual who is willing to undertake the deliberate practice necessary to create in themselves the required entrepreneurial cognitions, then we may ultimately discover that the activities based in the “specialness” paradigm that we have intended should stimulate entrepreneurship (such as entrepreneur of the year, the listing of curiosities such as youth v. wealth, etc.), have in fact discouraged it by inadvertently persuading all but the most bold or foolish (in short, all reasonable persons) that entrepreneurship is not for them. New approaches to the creation of global entrepreneurs are therefore needed ...”*

In the “defensiveness” department in the original article, I have attempted to counter some of the prevailing assumptions about entrepreneurship education. For instance, one primary assertion – also reflected in the complexity issue – is the potential role of entrepreneurial education, especially in transition economies. I argue (2005: 213) that:

*“Education is likely to play a significant role in the development of solutions to the problems faced by transition economies. But what education? And for whom?”*

*There exists some degree of skepticism that general concepts have a place in such a discussion due to the problem that “every transition economy is different” (Peng, 2001: 106). But as noted earlier in this chapter, there also exists evidence in support of the assertion that there are also regularities—especially cognitive regularities—that do cross borders and can be reliably transferred (Charness et al., 1996; Mitchell et al., 2000) and suggest that the possibility of creating educational models applicable more generally to transition economies is indeed possible. So while I readily acknowledge that vast differences exist among transition economies in such areas as culture, size, former economic traditions, level of preparation for the market—and the list could perhaps go on endlessly—I am also constrained to argue based on both experience and study, that a balanced approach must also allow for the identification and utilization of similarities as well.”*

I also defend against the specialized treatment of entrepreneurship education within the business-school curriculum. For example in the original article, on page 232, I observe:

*“Thus, the deliberate practice paradigm of entrepreneurship education suggests that entrepreneurship education should be a general part of all b-school education, and that this can be accomplished: (1) with courses that teach students opportunity thinking: how to identify the first order, unit-based, new value through quantity increases-creating elements in all the business disciplines, (2) by specializations that are open to the self-selection of all interested students from disciplines both within and beyond the b-school, and (3) by enacting the complement of the technology transfer that (as discussed in the previous subsection) is termed “entrepreneurship-transfer,” where instead of engineers, etc. transferring technology to business people; the b-school transfers effective entrepreneurial cognitions to transaction creators ...”*

I believe that I am justified by the foregoing analysis to observe that as entrepreneurship educators we are plagued with competing interpretations (both inside and outside the entrepreneurship education community); and this plague is diminishing to all concerned. What, therefore, does it mean for the entrepreneurship field when those of us who are charged with the creation of effective (and possibly efficient) pedagogies for entrepreneurship education must wrestle with a phenomenon that is essentially contestable? In the next section of this extension of the original analysis, I explore some possible consequences.

### **POSSIBLE CONSEQUENCES**

The consequences of essential contestability are often observed as confusion: confusion in understandings, and confusion among actions. In the original article I attempted, though a detailed and thorough description of an alternative theoretical foundation and pedagogy, to cut through the appraisiveness, complexity, variously describable, modifiability and competing-interpretation constraints. While that article was not organized according to Gallie’s (1956) framework, I have in this analysis of the original argument tried to demonstrate – hopefully persuasively – that essential contestability is a problem that gives rise to the relevant and timely set of sub-issues in entrepreneurship education and pedagogy noted in the preceding paragraphs. In such a light, this analysis of the original article can be thought of as a type of template that can be utilized to more-clearly understand the nature of the obstacles to effective entrepreneurship education, and to articulate at least one coherent response: a deliberate-practice-based expert-script enabling pedagogy.

As suggested by one of the reviewers of this article, a real-life illustration of the effectiveness of this pedagogy might assist the reader. In brief, during the period 1997-2003, I conducted a quasi-experiment supervised by the IRB of my institution, wherein students participated in a version of the deliberate-practice pedagogy I have been articulating herein and expertise levels were measured according to generally accepted script-detection methods (e.g. Mitchell et al, 2000, 2002, etc.). The results of this study (all 233 of the master’s level and undergraduate entrepreneurship business students compared with a control group – using an alternative “business plan preparation” pedagogy at another large public university) were published in *Frontiers of Entrepreneurship Research* (2005). They show – using independent sample t-tests and repeated measures GLM – “...a significant multivariate F-statistic for the between subjects effect of group (treatments vs. control) and the within subjects effects of expertise and the interaction expertise x group. Univariate tests within subjects show a significant main effect for

arrangements, willingness, and ability cognitions, which suggests that student expertise is significantly enhanced by taking entrepreneurship education.”

However, notwithstanding the progress made possible by the original article in articulating obstacles inherent in pedagogy development in entrepreneurship education (and one possible solution being described and tracked in detail: the deliberate-practice/ entrepreneurial-script based pedagogy), major questions about the relevance of entrepreneurship education and pedagogy to the social and philosophical conversation surrounding prospects for organizing entrepreneurship education and pedagogy for the future, remain. One cannot help but wonder about the extent to which we, as entrepreneurship scholars, might have inadvertently argued ourselves into the corner that bedevils all who are charged with the responsibility for planning for and educating for the future: Each proposed advancement introduces a corresponding limitation according to the crucial balance inherent to each phenomenon or system under analysis – and when this balance is altered, the consequences cannot always be foreseen. So let us suppose that a deliberate-practice-based and entrepreneurial script-enabling-focused model of entrepreneurship education and pedagogy emerges from the shadows of essential contestability – with the help of this article plus the past and future work of other contributors to these *Annals*. What might be the consequences?

One inevitable consequence is that new discovery can be anticipated. Kuhn (1970: 97) argues that by “... their stubborn refusal to be assimilated to existing paradigms” a certain set of anomalies (some conceivably exposed by the essential contestability of the concepts that prompted the writing of the original article) identify phenomena about which new theory might be developed. What might be an example of entrepreneurship-education-related phenomena that requires new theory? Recent dialogue among entrepreneurial cognition scholars (cf. Mitchell, et al, 2011, Mitchell et al, 2014b) suggests that theory is needed to guide the transition from a static conceptualization of entrepreneurial thinking to a dynamic one. New theory for the action-based, embodied, socially-situated and distributed entrepreneurial cognition-based instruction that follows from the dynamic view is foreseeable in prospect.

Also, because there will always be competing interests, the articulation of essential contestability in entrepreneurship education and pedagogy offered in this extension of the original analysis might suggest that contests over best-practices will continue and intensify – possibly with increasing returns for all concerned (cf. Mitchell, 2011). Another consequence of systematically working to transform essential contestability obstacles into a new paradigm that incorporates entrepreneurship education and pedagogy’s relevance, then, might be that the debates will continue to swell before they begin to subside.

## CONCLUSION

*“Education is a deliberate process of drawing out learning (educere), of encouraging and giving time to discovery. It is an intentional act. At the same time it is, as John Dewey (1963) put it, a social process – ‘a process of living and not a preparation for future living’.” (Smith, 2012).*

The entrepreneurial-script-based/deliberate practice view of entrepreneurship education and pedagogy comports well with the foregoing quotation. In the original article I attempted to articulate how entrepreneurship education *could be* an experiential process: where the ‘living is the learning.’ Certainly deliberate practice – as described in the original article – which includes *all* of the elements of intensity, duration, and relevant content (2005: 191) is a prime means for instructors to encourage discovery: both of new ideas and of self.

From a critical thinking perspective (e.g. Bloom’s Taxonomy, cf. Bloom et al, (1956)) the original article – assuming the foundational knowledge and comprehension of you, the scholarly reader – achieves application and analysis critical-thinking objectives. Hence, its presentation of an alternative view of entrepreneurship education and pedagogy, and especially of the role of deliberate practice is, I hope, credible and helpful. However, as I have also indicated within this analysis of the original argument, as the kind of synthesis that can effectively address the needs of transition economies, this pedagogy is missing the key element of also building the requisite financial capital to match the building of the cognitive human capital. Thus, new courses and approaches are needed to solve the “registration problem” in third and fourth-tier economies (see deSoto, 2000): where people have land but no title, businesses with no license, inventory with no property rights, and hence have no collateral with which to engage the world-wide financial community in backing new entrepreneurs and their ventures. Also, with an imposed theoretical thesis in this update, such as my use of essential contestability in this article as a springboard toward further pedagogical development (as demonstrated herein), both this extension of the original analysis and the original can better be seen to be the entrepreneurship-educational stepping-stone that it is intended to be.

So, in conclusion, we ought to focus on the questions that people are asking – those who are concerned with big questions (such as the role of entrepreneurship education and pedagogy in shaping the future of the market system): How, for example, can the distinctiveness-focused demands of wealth creation that require the acquisition and practice of both human and financial capital, be conciliated with the inclusiveness-focused requirements of wealth distribution that make for a sustainable entrepreneurial economy within a given society? Will the deliberate-practice approach as a possible pedagogical pathway remain in the educational shadows; or will it emerge, as a result of explicitly encountering essential-contestability-fueled obstacles, into a new light, to take on a more influential and possibly imaginative role in business school thought and curriculum? Both this extension of the original analysis and the original article are an invitation to further engage in the conversation surrounding the further development of entrepreneurial education and pedagogy: by removing (or at least reducing) artificial limits on something that is more or less unlimited – entrepreneurial growth as a fundamental feature of human enterprise.

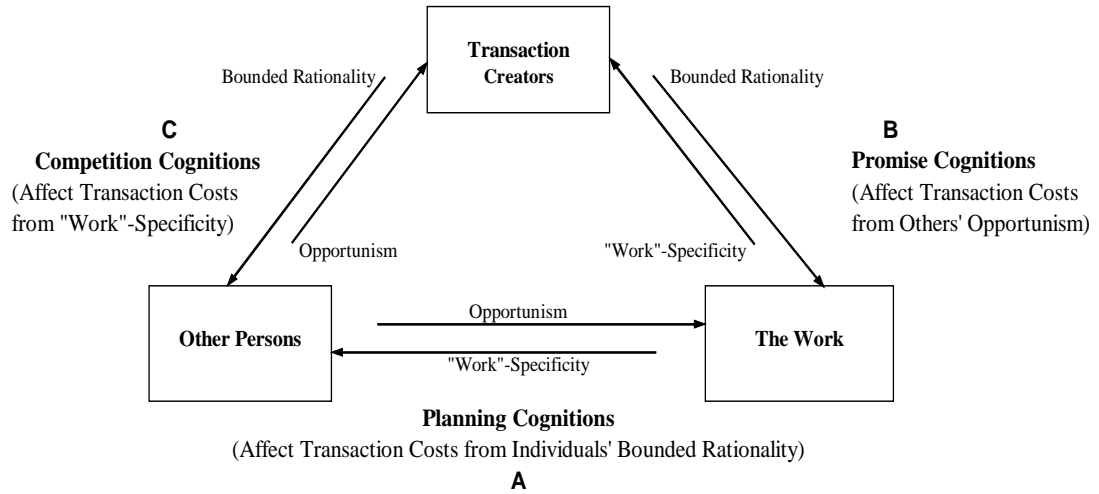
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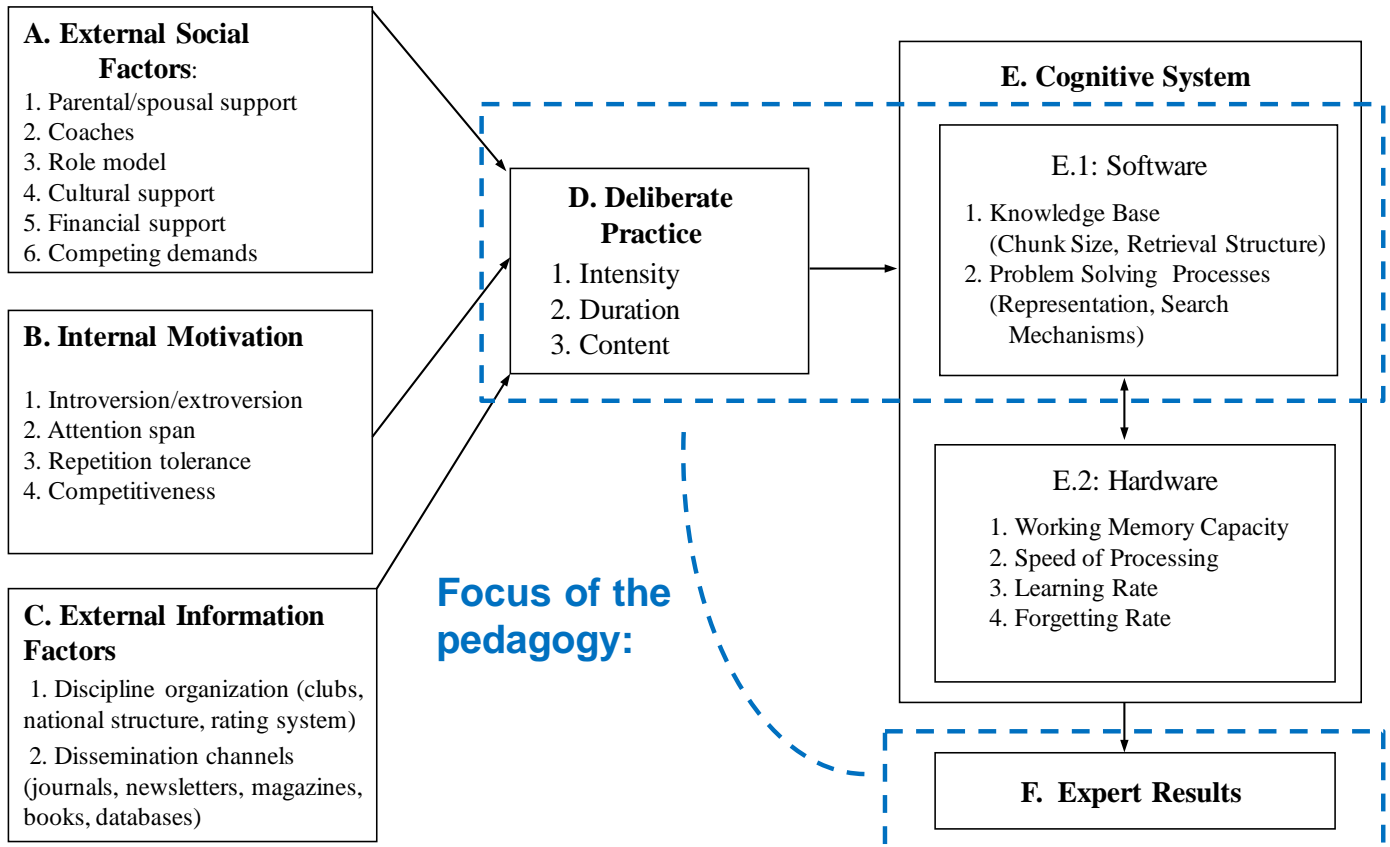
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**Figure 1: The Basic exchange transaction, its obstacles, and its cognitive solutions**



Mitchell 2001, 2005: Based on Gardner (1993); Williamson (1985)

**FIGURE 2:**  
General Model of Expertise/Skill Acquisition



Adapted from Charness et. al., 1996; Mitchell, 2001, 2005