

*Effectiveness of Learning Objectives Articulated in Some of the Undergraduate Textbooks
in Developing Entrepreneurial Skills in the Students*

Beatrice Ngulube, Tshwane University of Technology, South Africa

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Abstract

Entrepreneurs are needed in great numbers for economic growth and economic development since they are increasingly recognized as a driving force for innovation and job creation. To achieve this, the teaching and learning of entrepreneurship should be given the centre stage. A paradigm shift from a salaried society towards an entrepreneurial society should take place. Entrepreneurial students need to be more entrepreneurial in their thinking to effectively contribute to job creation. Hence, why many institutions are greatly interested in teaching entrepreneurship to solve the problem of unemployment. However, little is known about how entrepreneurship textbook objectives assist in developing skills, argumentative minds, creativity, and critical thinking in students. Textbook objectives have a significant impact in improving courses and increasing student learning and satisfaction. The study presents a content analysis of 92 objectives of an entrepreneurship textbook which is prescribed by three universities in a developing economy. The results revealed that entrepreneurship textbooks need more development to be more effective in developing entrepreneurial skills and innovative minds. The analysed textbook only has 7.7 % of the desired entrepreneurial skills are covered. There is a shortfall of 92.3 % of appropriate objectives. It is recommended that entrepreneurship teachers should prescribe textbooks with objectives and topics which focus on the development of entrepreneurial skills and prepare students to become real entrepreneurs not business managers. Secondly prescribed textbooks should follow a constructive alignment process where the learning objectives represent what the student would gain from the experience.

Keywords: Effectiveness, Objectives, Entrepreneurial Skills, Undergraduate

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Introduction

Recently, researchers have shown an increased interest in entrepreneurship education as a factor of economic growth and job creation. In terms of economic uncertainty and jobless growth, entrepreneurship should become a viable career path (Bohlmann, Rauch and Zacher (2017). Educational institutions should make sure that textbooks and all the resources they use promote the development of entrepreneurial mindsets. Prescribed textbooks as the main resources used in teaching and learning need to be regularly assessed for suitability and relevance. Analysing textbook objectives is, therefore, vital to find out if they develop skills they are intended to develop in each discipline because learning objectives are guided by national goals as indicated in the national curriculum document. The study, therefore, aims to evaluate the effectiveness of entrepreneurship objectives in developing desired entrepreneurship skills. It is of great importance to assess objectives particularly entrepreneurship objectives because the discipline is viewed as the major conducive factor to economic growth, Schumpeter (1934) quoted in Abdullah, (2020). On the other hand, learning objectives assist learners in developing requisite skills apart from guiding the learner's reading. It is, therefore, imperative to assess textbook learning objectives since they play a vital role in directing the focus of the lesson (Simon, Budke, & Sch€abitz 2020).

Additionally, learning objectives help students improve their learning strategies to promote academic independence and excellence. It is of paramount importance to analyse and evaluate textbook objectives because they are intentional targets created for a specific activity of what students should know and able to do at the end of a chapter or a unit.

With this present research, I wish to contribute to the body of knowledge by making textbook writers and educators aware of the importance of learning objectives. Textbooks still play a pivotal role in teaching and learning by providing useful ready-made material to both teachers and students (Charalambous 2011). It must be noted that if textbook objectives are not well written they de-skill students and their teachers especially novice teachers. Learning objectives also play a major role in learning and teaching because they drive student learning and enhance their understanding and they develop the desired skills in students. Objectives are as powerful in learning as well as measuring worth. In general objectives give focus and enable the readers to extract the main content from their reading. Conversely, some researchers are of the opinion that entrepreneurial education is "unteachable" (Abdullah, 2020). This opinion is opposed by Huang-Saad, Bodnar and Carberry (2020) who are of the notion that entrepreneurship is built upon active learning that is problem-based learning. Stemming from this argument problem-based learning equips students with skills and knowledge to approach challenges and difficulties using a variety of ways (Huang-Saad et al 2020).

It is, therefore, imperative to assess textbook learning objectives since they play a vital role in directing the focus of the lesson and they are taken as a process that must be deeply thought out and justified with cogent argument (Simon, Budke, & Sch€abitz 2020). Precisely objectives define what we should be teaching and assist students in the mastery of some fundamental academic skills. This then makes this research worthily because curriculum developers and textbook authors must take cognisance of this when formulating objectives especially the idea of aligning learning objectives with national curriculum document of the subject. More importantly good objectives should aim at encouraging students to take a deep approach to reading the subject content.

The major tenet of this article is to make teachers, publishers and curriculum developers realise how important textbook objectives are in developing desired skills. Prescribed textbooks should therefore follow a constructive alignment process where the learning objectives represent what the student would gain from the experience. On the other hand, textbook objectives should aim to provide academic guidance which helps students improve their learning strategies to promote academic independence and excellence in developing competences. In terms of entrepreneurship education objectives should develop an entrepreneurial mindset. This is taken a step further by Huang-Saad et al (2020 p. 9) who mentioned that “entrepreneurial minded learning leads to a broader set of professional skills that can be gained through entrepreneurial mindset development”. Textbook learning objectives should not be taken for granted in any learning environment. The next section illustrates the importance of objectives in teaching and learning of entrepreneurship education.

The importance of learning objectives

The use of learning objectives in instructional design results in more efficient use of instructional time and, therefore, improves learning since they assist in capturing the content that enables ongoing improvement (Dean 1994 cited in Combs 2008). This, therefore, alludes to the fact that the effectiveness of textbook objectives has a significant impact on improving courses and increasing student learning and satisfaction (Combs 2008). Textbook objectives are fundamental in the teaching and learning of any subject content in the textbook alongside pedagogical strategies. Successful lessons stem from good learning objectives hence textbooks should have clear formulated challenging objectives. This is vital because learning objectives are not only an instruction or a sentence, but are part of a production context (Simon, Budke, & Sch€abitz 2020). However, pedagogical studies are beyond the scope of this research study.

Learning objective analysis is not only essential for cognitive processes but also facilitate the acquisition and deepening of the development of entrepreneurship skills and knowledge processes in students. Objectives also cultivate active learning, critical thinking, independent learning, collaborative, and participatory learning (Simon, Budke, & Sch€abitz 2020, Mokhtar et al 2010, Ristanto 2020). Objectives which promote such type of thinking are higher order objectives according to Bloom’s taxonomy. Higher order objectives are linked to active learning strategies or approaches used to improve students’ interests and often lead to deep level understanding (Mokhtar et al 2010). Active learning will, consequently, lead to the acquisition of the learning outcomes of a course. Ristanto (2020) confirmed that objectives provide an opportunity to develop analytic, inductive, and deductive thinking skills to solve fundamental event-related problems. These are the type of objectives needed to develop entrepreneurial skills in students. Therefore, textbook objectives should strive to encourage the development of such skills and mindsets in students in order promote the culture of enterprising.

In support entrepreneurship education objectives should focus on cultivating the attributes of an entrepreneur (Cooney 2012, Bohlmann, et al 2017, Kouakou, Akolgo and Tchamekwen, 2019). Entrepreneurs are individuals or teams who can create employment opportunities where others do not and attempt to exploit those opportunities (and Huang-Saad et al 2020). Bohlmann, et al (2017 p. 1) further remarked that, entrepreneurship knowledge assist students in evaluation and exploitation of opportunities to create new and useful products and services. This strongly points out to the focus of this research that; entrepreneurship education

objectives should be taken seriously by textbook writers, curriculum developers and educators. Moreover, other researchers such as, Rogan (2015) and Fellnhofer, (2017) seem also to point out that the knowledge of entrepreneurship education is central to value creation which drives capital markets to economic evolution. According to economic evolution theory, the economy is always in the process of change, and the change needs to be manipulated by people with creative and innovative minds (Nelson 2008). As a result, learning objectives used in entrepreneurship lessons should aim towards developing such skills in students. Conversely critics argue that entrepreneurial education is “unteachable” (Abdullah, 2020). This is opposed by (Jiminez-Moreno & Wach (2014) who discovered a link between entrepreneurial education and positive attitudes toward entrepreneurship. In support Sherkat, & Chenari, (2022) argue that entrepreneurship is a skill that can be taught and learnt.

The knowledge of entrepreneurship with its emphasis on critical thinking, independent learning can produce a graduate who are agile to economic challenges. Entrepreneurs are asserts globally especially considering the downsizing and restructuring activities in the 1980s and 1990s, the 2008 economic crisis and the effects of COVID-19 pandemic. Research of this nature can positively improve the teaching of entrepreneurship education and encourage students to be entrepreneurs in a world where employment is difficult to come by. Apart from that the research can assist educators to see the nature of the objectives to be included in the entrepreneurship textbooks. It is of fundamental importance to choose textbooks with a significant coverage of entrepreneurial skills.

Problem statement

The world needs doers, makers, and cutting-edge thinkers to create the companies that will provide long-lasting employment for the country’s citizens (Rodov and Truong 2015). The same sentiments are echoed by Fellnhofer (2017) whose recent evidence suggests that entrepreneurship education does not only benefit the entrepreneur, but it contributes to economic growth, increases societal resilience and personal growth as well. That implies that learning institutions should focus on developing entrepreneurship skills among their students. Textbook used by students is a good indicator of such an intent. This research sought to find out how the learning objectives in one of the prescribed entrepreneurship textbooks develop entrepreneurial skills in undergraduate students. The analysis of learning objectives can be useful in assisting textbook authors and educators to identify and formulate objectives which develop entrepreneurial skills and critical thinking. There is relatively little research around the importance of learning objectives in the teaching and learning particularly in the teaching of entrepreneurship. The study presents an analysis of 92 objectives of an entrepreneurship textbook which is prescribed by three universities in a developing economy.

The following three research questions were central to this research:

- What is the focus of the objectives given in the textbook?
- Which higher order objectives are used in the textbook to develop entrepreneurial skills?
- Do the analysed textbook’s objectives focus on entrepreneurial skills?

Methodology

The focus of this study was to gain insight on the importance of learning objectives stated in the textbook in cultivating entrepreneurial skills in students. Content analysis was adopted to

analyse learning objectives and to answer research questions. Analysing textbook learning objectives is useful for promoting the development of comparison competencies and argument on entrepreneurship content. (Simon et al 2020). A prescribed textbook was chosen because most of the content, class activities as well as examination focus come from prescribed books. The textbook was purposively selected on the basis that it is prescribed by three higher education institutions for undergraduate entrepreneurship students in a developing country. The researcher found the analysed textbook on the websites of these institutions through google search.

According to research, learning objectives should cultivate active learning, critical thinking, independent learning, collaborative learning, and creative learning (Simon, Budke, & Sch€abitz 2020, Mokhtar et al 2010, Ristanto 2020). A considerable amount of literature has confirmed that these attributes equip students with desired entrepreneurial skills (Ristanto 2020). This research article paid particular attention to these five entrepreneurial skills to assess the objectives of the 16 chapters of the analysed book. The following section presents data analysis.

Data Analysis

As alluded earlier the researcher analysed objectives from an undergraduate entrepreneurship prescribed textbook which has sixteen chapters and 92 objectives. The analysis was done chapter by chapter paying attention to the focus of objectives in each chapter (see table 1). The first question is “What is the focus of the objectives given in the textbook?”

Table 1: The focus of the objectives

Book Title	Basics of Entrepreneurship	
Chapter and Topic	Number of objectives	The focus of the objectives in each chapter
Chapter 1 Topic: Basic business concepts and the business environment	8	Students are exposed to the business environment with no focus of the development of any entrepreneurial skill in students. See the analysis given in table 7.
Chapter 2 Topic: Entrepreneurship and small medium and micro enterprises (SMMEs) in perspective	4	The chapter introduces students to aspects of small medium and micro enterprises (SMMEs) in perspective. One objective cultivates critical thinking (see table 7).
Chapter 3 Topic: The identification of feasible business ideas	7	The focus of the learning objectives in this chapter is to make students aware of the importance of creativity. A significance perspective of entrepreneurship agenda is pushed in this chapter. There are 7 objectives and four of them do have entrepreneurial aspects in them.
Chapter 4 Topic: The viability of a business idea	8	The objectives in this chapter focus on need analysis, the calculation of break-even point and the drawing of a cash budget.
Chapter 5 Topic: The business Plan	7	Objectives in chapter 5 focus on the importance of a business plan which is a good skill to purpose but no objective is aligned to the desired skills.

Chapter 6 Topic: Product decisions what to offer to customers	6	The focus in this chapter is around the definition and description of a product. Only one objective is relevant see table 7.
Chapter 7 Topic: Price decisions	5	The objectives focus on the importance of pricing. The topic is good, but the formulation of objectives is not entrepreneurial.
Chapter 8 Topic: Distribution: getting the product to the customer	4	The objectives in this chapter focus on the general knowledge of distribution and types of distribution.
Chapter 9 Topic: Promotion: communicating with your market	4	The importance of promotion and various promotional mix are discussed in this chapter. No objective is aligned to entrepreneurial skills.
Chapter 10 Topic: Advertising your small business	4	The chapter is about the importance of advertising. Only one objective out of four cultivates entrepreneurial skills.
Chapter 11 Topic: Operations management	14	Students are exposed to the operations management, but no objective develops the desired skills.
Chapter 12 Topic: The human resource function	5	The importance of human resource function is the focus of the objectives in this chapter. Not even a single objective develops entrepreneurial skill.
Chapter 13 Topic: An introduction to financial management for entrepreneurs	7	The importance of financial management and various financial activities. This is an important topic, but objective cultivates entrepreneurial skills.
Chapter 14 Topic: financing the capital requirements of a small business	4	Objectives in this chapter make students aware of the different types of sources of capital.
Chapter 15 Topic: The break-even analysis	6	The calculation and advantages of break-even analysis is stressed in this chapter.
Chapter 16 Topic: Budgets	6	Objectives in this chapter focus on the general knowledge of a budget.

Table 1 displays the topics of the textbook and the focus of each chapter's objectives. However, chapter topics were not analysed, the analysis was based on objectives. The analysis shows that the focus of the objectives is not aligned with the development of entrepreneurial skills. The title of the book is even misleading because objectives do not even focus on developing basic entrepreneurial skills. What emerges in the analysis is that the content of this textbook focuses on teaching students to be managers not entrepreneurs. The topics and objectives are more of business management not entrepreneurial skills.

Most of the learning objective are lower order objectives. Objectives which develop entrepreneurial skills fall in the higher order category and these are the ones which develop critical thinking. Higher order objectives should be central in the teaching of entrepreneurship since they promote, creativity and innovation. Creativity and innovation are fundamental in developing entrepreneurial skills. Several researchers have reported that entrepreneurship students should be equipped with problem solving skills (Ristanto 2020). To encourage problem solving skills objectives should be higher order objectives. Higher order objectives are poorly represented in this textbook. The question to ask is therefore, "Which higher order objectives were used in this prescribed textbook?" Perhaps, also considering how effective

The verb analyse was used in the following objectives:

- Determine the break-even point of a business.
- Determine whether a need exist for a product or service.
- Determine the break-even point of a business.
- Determine whether a sustainable profit can be made.

Table 4 shows that determine was only used in chapters three and four. The verb determine is crucial because it can develop the potential of individuals to be more creative, critical in their thinking and effective in problem solving. In chapter 3 students are asked to determine their own level of creativity in identifying feasible business ideas. The verb is appropriately used in objective 4 which is in line with critical thinking. In this objective, students are encouraged to think broadly to determine factors which contributes to a successful business.

Table 5: Objectives with the verb create

Chapters	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Number of verbs	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2

The verb create was used in the following objectives:

- Define creativity.
- Determine your own level of creativity.

To develop entrepreneurial skills objectives should cultivate creative minds to bring entrepreneurial ideas into real platforms (Kassean, Vanevenhoven, Liguori, and Winkel, 2015). This is the verb which should be used in objectives to trigger student’s innovative and creative minds. Table 5 analysis indicates that students were not asked to create anything. The verb is used in two objectives in chapter 3 as shown in displayed objectives. The second objective provokes a bit of thinking, if we assume students were asked to showcase their innovation minds and creativity explaining what they did and what they were planning to do to show creativity in terms of product or service creation.

Table 6: Objectives with the verb explain

Chapters	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Number of verbs	3	0	0	0	1	2	1	0	1	0	1	1	6	1	2	0	19

The verb explain was used in the following objectives:

From 19 objectives which utilised the verb explain only one objective from each chapter was taken as a sample.

- Explain the motive for starting up a business.
- Explain the character of a business plan.
- Explain the function of packaging.
- Explain the objectives of pricing.
- Explain the three main objectives of promotion.
- Explain the dynamics of operation management.

- Explain the concept of human resource maintenance.
- Explain the most important financial activities in a business.
- Explain what is involved in choosing the applicable sources of finance.
- Explain the break-even concept using a graph.

Table 6 depicts how the verb explain was used in this textbook. The verb “explain” was used 19 times in the textbook, appearing 6 times in chapter 13. To some extent the verb was overused in this textbook. There was great emphasis on learning objectives with the verb explain which is a shortfall in terms of the development of critical thinking in students. There is no solid knowledge building and critical thinking. The verb explain does not cultivate critical thinking instead it encourages recall, where students are asked to recite what they would have read in the chapter. The other verbs which were repeatedly used in the textbook to emphasize the notion that the textbook encouraged the recitation of information are, list, define and name. Such objectives are repeated in several objectives of the textbook. The following table presents textbook objectives benchmarked with the desired entrepreneurial skills.

Table 7: Textbook objectives benchmarked with the desired entrepreneurial skills (n=92)

Chapters	Number of objectives	Objectives Which promote active learning	Objectives Which promote critical learning	Objectives Which promote independent learning	Objectives which promote collaborative learning	Objectives Which promote creative learning
1	8	none	none	none	none	none
2	4	none	1	none	none	none
3	7	1	none	1	1	1
4	8	none	none	none	none	none
5	7	none	none	none	none	none
6	6	none	none	none	none	1
7	5	none	none	none	none	none
8	4	none	none	none	none	none
9	4	none	none	none	none	none
10	4	none	none	1	none	none
11	14	none	none	none	none	none
12	5	none	none	none	none	none
13	7	none	none	none	none	none
14	4	none	none	none	none	none
15	6	none	none	none	none	none
16	6	none	none	none	none	none
Total	92	1	1	2	1	2
Percentage		1.1%	1.1%	2.2%	1.1%	2.2%
Percentage of the desired skills.	7.7 %					

Table 7 displays the number of objectives that promote desired entrepreneurship skills chapter by chapter marching them with the five skills which many researchers considered to develop skills. The skills which most researchers agreed that they promote entrepreneurial skills include cultivate active learning, critical thinking, independent learning, collaborative learning, and creative learning. Objectives in this prescribed textbook were benched marked with these ones. See the analysis in table 7. According to the analysis there is a limited coverage of entrepreneurial skills in this prescribed textbook, see table 7. Most of the objectives do not seem to focus on developing entrepreneurial skills. It is evident that this

prescribed textbook does not promote skills needed by entrepreneurs. Learning objectives should be formulated in such a way that students develop a specific skill. More importantly good and well-structured objective cultivate an attitude of self-confidence in students which is extremely important in entrepreneurship education (Mensah, Zeng, Luo, Xiao, & Lu 2021). Objectives in this textbook develop less than 10 % of the desired entrepreneurial skills. Entrepreneurship education must be coupled with content that is rich in learning principles, innovation, and reflection to enhance ventures' effectiveness (Elmuti, et al 2012). This is all missing in this entrepreneurship textbook. This is rather essentially problematic for a textbook under the title of "entrepreneurship" to actually be called an "entrepreneurship" textbook. Why are they calling it such when the objectives of the textbook are not entrepreneurial in nature? There should be an underlying philosophy that informs book publishers to call a textbook entrepreneurial. Unless one argues that the term entrepreneurial has many layers to it and that what one may call entrepreneurial may not be so in light of another. The analysis, however, clearly indicates that learning objectives in this textbook do not focus on cultivating comprehensive entrepreneurial skills in students.

Discussion of the results

The textbook only covered 7.7 % of the desired skills by the entrepreneurs according to the benchmarked ones. Critical thinking skills in entrepreneurship learning could be developed through creative learning, active, learning, and critical learning but in this textbook critical thinking is not encouraged, only 2 objectives require critical thinking which is 1.1 % of the 92 objectives (see table 7). All the objectives lack simulation. Simulation is very important in developing skills; this is supported by Farashahi and Tajeddin (2018) who argue that students perceive simulation as the most effective way of developing their interpersonal skills and self-awareness followed by case study and lecture, respectively. In this textbook this is all missing and critical thinking is not even taken as a priority though students with critical thinking are assets to every nation. Research has confirmed that, students with good critical thinking skills are more agile to socioeconomic, scientific, and practical problems (Ristanto 2020). More importantly good and well-structured objective cultivate an attitude of self-confidence in students. Having suffered from the ills of COVID-19 educational systems should internationally produce graduates who are fit for purpose especially in the field of entrepreneurship for economic growth and job creation.

Learning objectives in this textbook promote theoretical thinking, there is no practicality, like looking at case studies of those prominent entrepreneurs and role play and the invitation of guest speakers or site visits to see and appreciate what other people are doing. Site visit is one of the several activities in the scientific approach include observing, asking, trying (Ristanto 2020). Indeed, students are more interested and engaged in learning when local experiences and global or extra local perspectives are connected (Klein, 1995, p. 365; Roberts, 2014, p. 193 quoted in (Simon, et al 2020). It might be argued that some of the factors might be reflected through pedagogical strategies. It is appalling that most of the learning objectives are about managing the existing business like they are being taught management skills. Students are not even encouraged to critique case studies or compare case studies and reflect on their strengths and weaknesses.

Furthermore, most of the learning objectives analysed do not promote critical thinking or argumentation see the focus of the objectives in table 2. About 92.3 % of the objectives do not develop entrepreneurial skills at all. There is a great shortfall around entrepreneurship advancement. Learning objectives were oriented towards the extraction of simple knowledge

from the text. This is supported by Abdullah (2020) who observed that the entrepreneurship courses offered at various academic levels are run with the aim of teaching 'about' entrepreneurship rather than to 'create entrepreneurs' in the true sense of the term. This really relates to the findings of this research.

In this textbook learning objectives are simple cognitive learning objectives. This might be because textbook writers who are not aware of the complex needs of the curriculum as well as the nation. This is line with Simon et al (2020), who researched on geography tasks and found out that tasks had only simple cognitive objectives and were not oriented towards competency acquisition. Hence researchers like (Young, 2014, p.20; Maude, 2016, p. 75) suggest that to be able to critique or debate on subject content, students must have access to the "epistemic tools provided by the discipline to construct knowledge" to acquire not only procedural knowledge, but also "knowledge on their own knowledge", and therefore "powerful knowledge". Learning objectives need serious thought application not reproducing what is in the text. There is a need to develop learning objectives that encourage the use of teaching and learning approaches which develop practical skills, values, and attitudes in students, which are functional in the world of work where innovation is key (Shumba, 1993; Nziramasanga, 1999 quoted in Matorevhu 2020).

The analysis clearly evidenced that learning objectives in this textbook do not instil in students the desire to become entrepreneurs and they do not cultivate entrepreneurial skills. Most of the objectives do not encourage deep learning, critical analysis, and the application of knowledge. See tables 1 to 7. This raised questions about the authentic of this textbook in developing entrepreneurship skills, the textbook is more of a management of business textbook because all the chapters and the objective are silent about the development of entrepreneurship skills. The teaching of entrepreneurship should assist in uncovering the hidden traits in students and develop them sufficiently to become a successful entrepreneur" (Elmuti, Houry & Omran 2012). Like any discipline entrepreneurship can be learned because innovation is not an activity limited to a special group of people with family business. Conversely entrepreneurs also should have personal skills such as innovation, risk taking, and persistence students can learn these skills through an effective entrepreneurship education to become successful entrepreneurs (Henry et.al, 2005 quoted in (Elmuti et al 2012).

It is of great importance that curriculum designers and textbook writers should come up with strategies for designing curriculum, content and objectives that are instrumental in exposing graduates to skills that enable them to function effectively in their chosen professions as entrepreneurs. If these stakeholders take this into consideration entrepreneurship objectives should create in students a culture that foster entrepreneurial hunger and determination.

Conclusion

Based on the research findings, it can be inferred that the objectives in this entrepreneurship prescribed textbook are not effective in enhancing entrepreneurial skills. Also, the results were that, while the 16 analysed chapters had learning objectives, they are only simple cognitive objectives and were not oriented towards competency acquisition. There is a great shortfall for instance, there are no case studies and students are not exposed to role play and no fieldwork nor invitation of motivational speakers. Furthermore, learning objectives are not learner centred. There was no apparent reference to skills development and the development of skills related to entrepreneurship are not taken note of. The learning objective are mostly

lower order objectives aligned to business management. Objectives in entrepreneurship textbooks should focus on developing entrepreneurial skills. Also, further research could consider analysing the exercises and pedagogical strategies used to develop entrepreneurial skills. The recommendation is that textbook writers should be subject specialists and experts in formulating learning objectives and instructors should thoroughly examine the appropriateness of a textbook before prescribing it.

References

- Abdullah, A. (2020). A Survey of Entrepreneurship Education at University level in Bangladesh. *Entrepreneurship Review*, 1(1), 52-69. <https://riiopenjournals.com/index.php/entrepren-review>
- Azim, MT & Al-Kahtani A.H. (2014). Entrepreneurship Education and Training: A Survey of Literature. *Life Science Journal* 2014;11(1s):127-135]. <http://www.lifesciencesite.com>
- Bohlmann, C. Rauch, A. & Zacher, H. (2017). A Lifespan Perspective on Entrepreneurship: Perceived Opportunities and Skills Explain the Negative Association between Age and Entrepreneurial Activity. *Frontiers in Psychology*. 8:2015. <https://doi:10.3389/fpsyg.2017.02015>
- Charalambous, C.Y. (2011). Prospective teachers' learning to provide instructional explanations: how does it look and what might it take? *Journal of Mathematics Teacher Education* (2011) (14),441–463. <https://doi.10.1007/s10857-011-9182-z>
- Combs, K. L., Gibson, S. K., Hays, J.M., Saly, J., & Wendt, J. T. (2008) Enhancing curriculum and delivery: linking assessment to learning objectives. *Assessment & Evaluation in Higher Education*, 33 (1) 87-102, <https://doi:10.1080/02602930601122985>
- Cooney, T. M. (2012). Entrepreneurship Skills for Growth-Orientated Businesses. Report for the Workshop on 'Skills Development for SMEs and Entrepreneurship', Copenhagen, 28 November 2012.
- Elmuti, D., Khoury G., & Omran O. (2012). Does entrepreneurship education have a role in developing entrepreneurial skills and ventures' effectiveness? *Journal of Entrepreneurship Education*, 15 (2012), 83-97.
- Farashahi, M. & Tajeddin, M. (2018). Effectiveness of teaching methods in business education: A comparison study on the learning outcomes of lectures, case studies and simulations. *The International Journal of Management Education* 16 (2018), 131–142. <https://doi.org/10.1016/j.ijme.2018.01.003>
- Fellnhofner, K. 2017. The power of passion in entrepreneurship education: Entrepreneurial role models encourage passion? *Journal of Entrepreneurship Education*, 20(1), 69–98.
- Hammad, A. 2014. Analysis of Timmon's Model for Entrepreneurial Process: A Critical Examination (November 11, 2014). <http://dx.doi.org/10.2139/ssrn.2676804>
- Huang-Saad, A. Bodnar, C. & Carberry, A. (2020). Examining Current Practice in Engineering Entrepreneurship Education. *Entrepreneurship Education and Pedagogy*.3(1), 4–13. <https://doi/pdf/10.1177/2515127419890828>

- Kassean, H., Vanevenhoven, J., Liguori, E. and Winkel, D.E. (2015), "Entrepreneurship education: a need for reflection, real-world experience and action", *International Journal of Entrepreneurial Behavior and Research*, 21(5), 690-708. <https://doi.org/10.1108/IJEER-07-2014-0123>
- Kouakou, K.K.E., Li, C., Akolgo, I.G., Tchamekwen, A.M., (2019). Evolution view of entrepreneurial mindset theory. *International Journal of Business and Social Science* 10(6), 116-129. <https://doi.org/10.30845/ijbss.v10n6p13>
- Matorevhu, A. (2020). O-Level Mathematics and Science Teachers' Alignment of STEM Skills Oriented Instructional Objectives with Assessment in a High Stakes Examinations Environment. *International Journal of Trends in Mathematics Education Research*, 3(1), 1-7. <https://doi.org/10.33122/ijtmer.v3i1.165>
- Maude, A., (2016). 'What might powerful geographical knowledge look like?'. *Geography* (Sheffield, England) 101(2), 70–76. <https://doi.org/10.1080/00167487.2016.12093987>
- Mensah, I. K., Zeng, G., Luo, C., Xiao, Z., & Lu, M. (2021). Exploring the predictors of Chinese college students' entrepreneurial intention. *SAGE Open*, 11(3), 21582440211029941.
- Mokhtar, M.Z., Tarmizi, R.A., Ayub, A. F.M. & Tarmizi, M.A.A. (2010). Enhancing Calculus Learning Engineering Students Through Problem-Based Learning. *WSEAS Transactions on advances in engineering education*. <https://www.researchgate.net/publication/268291357>
- Nelson, R. (2008). Economic Development from the Perspective of Evolutionary Economic Theory, *Oxford Development Studies*, 36(1), 9-21, <https://doi.org/10.1080/13600810701848037>
- Ristante, R.H., Djamahar, R., Heryanti, E. & Ichsan, I. Z. (2020). Enhancing Students' Biology-Critical Thinking Skill through CIRC-Based Scientific Approach (Cirsra). *Universal Journal of Educational Research*. <https://www.researchgate.net/publication/341030037>
- Rogan, M. (2015). How Important Is Education to Entrepreneurial Development? Accessed 12/1/2019 from: <https://knowledge.insead.edu/blog/insead-blog/how-important-is-education-to-entrepreneurial-development-4164>
- Rodov, F. & Truong, S. (2015). Why Schools Should Teach Entrepreneurship. Accessed 9/03/2019 from: <https://www.entrepreneur.com/article/245038>
- Schumpeter, J. (1934). *The Theory of Economic Development*. Harvard University Press, Cambridge.
- Sherkat, A.; Chenari, A. (2022). Assessing the effectiveness of entrepreneurship education in the universities of Tehran province based on an entrepreneurial intention model, *Studies in Higher Education*, 47:1, 97-115, DOI: 10.1080/03075079.2020.1732906

Simon M., Budke, A. & Sch€abitz, F. 2020. The objectives and uses of comparisons in geography textbooks: results of an international comparative analysis. Published by Elsevier Ltd. This is an open access article under the CC BY license. <https://doi.org/10.1016/j.heliyon.2020.e04420>

Young, M., 2014. Knowledge, curriculum, and the future school. In: Young, Michael, Lambert, David, Roberts, Carolyn, Roberts, Martin (Eds.), Knowledge and the Future School: Curriculum and Social Justice. Bloomsbury Publishing, pp. 9–40.

Contact email: ngulubeb@tut.ac.za