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Chapter

Critiquing Playful Project-Based Learning as Pedagogy for Entrepreneurship Education

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Abstract

The need to expand entrepreneurship education in learners' schooling is a growing concern globally. It is especially pertinent in countries experiencing high levels of unemployment and ways to expand and improve its implementation is continually sought. Abundant research has been published about preferred pedagogies to enable and foster entrepreneurship education. Amongst these, project-based learning has long been recognized as one of the key teaching-learning strategies to enable meaningful entrepreneurship education. Recently, publications on 'playful' project-based learning as pedagogy for entrepreneurship education have increased notably. Theoretical foundations for this emerging new pedagogy in entrepreneurship education appear to be underprovided. Hence, the theoretical foundations provided by Biesta's three functions of education, namely qualification, socialization and subjectification, were used as an analytical framework to explore what 'good' entrepreneurship education is (or should be) and how the pedagogy of playful project-based learning can bolster it. The chapter contributes to the body of knowledge by expanding insights into theoretical underpinnings for entrepreneurship education, as well as by critiquing playful project-based learning as pedagogical choice for implementing meaningful entrepreneurship education.

Keywords: 21st century skills, competencies, entrepreneurial mindset, life-long learning, meaningful learning, playful problem-based learning

1. Introduction

Youth unemployment is considered a global crisis, with numbers estimated to be between 15% and 18% worldwide [1]. In South Africa, however, youth unemployment reached a shocking 74,7% in the first quarter of 2021, based on the expanded definition for unemployment, which includes the unemployed who have given up finding a job, as well as unemployed persons actively looking for employment [1]. The prospects for young people to find gainful employment after school, even if they are actively looking for employment, therefore seem dismal, especially in South Africa.

Adding to this conundrum, are the constant changes that learners face in everyday life, as well as in preparation for the world of work [2]. These changes are often associated with the requirements of the 21st century, including a focus on knowledge-based

economies, digitization on many levels, changes in the workplace and labor market, an increasing variety of communication modes, multilingualism, environmental and sustainability issues, as well as changes in societal values [2–5], to name but a few. These changes all require that learners develop skills and competencies, as well as different ways of thinking, that will allow them to be more adaptable to change, or to even excel or prosper in changing circumstances. At present, schooling does not prepare learners sufficiently to enable them to flexibly deal with or thrive in changing circumstances [4, 6, 7].

These are two of the main reasons why critics are persistently outspoken about the inadequacies of school education to prepare learners not only for employment, but also for a meaningful life after formal schooling. For example, in an International Monetary Fund study which explored the "causes and consequences of the weak outcomes of South Africa's education system", ([8], p. 13) the researchers found that "South African learners … exhibit substantial deficits in critical learning skills at early levels of education." In a broader view, a report by the World Bank Group ([9], p. iv) noted "insufficient skills as the key constraint to reduce poverty" in South Africa. Furthermore, when learners perceive and experience what they learn in school as useful, relevant and meaningful, their motivation to learn, and keep on learning, is fostered. Quality, meaningful and well-designed education can reduce skill deficits and can reduce the prevalence and extent of unemployment [8, 9].

Exploring ways to overcome these deficits in schooling might therefore be a good point of departure to better prepare learners for the word of work – whether they find employment of self-directedly create their own employment – as well as to make such learning more meaningful as part of their journey to become self-motivated, life-long learners. To support such an investigation, competencies and skills which learners will require for a meaningful life and gainful employment in the 21st century needed to be considered, as well as suitable learning environments and conducive elements which will foster such skills and competencies in preparation for life-long learning. In addition, against the background of limited employment opportunities available in many countries across the world, as is evident in South Africa, serious consideration needs to be given to prepare learners for self-directedly creating their own employment opportunities, or to develop a positive entrepreneurial mindset as part of their schooling. These concepts, and how they were viewed and woven together in the current study, are discussed next.

2. Literature study

The elements that must be included, or the type of learning envisioned for an improved school education is discussed first, followed by descriptions of how such learning ought to be constructed to be most effectively implemented in practice.

2.1 Elements to include to make schooling more meaningful

Against the background of the problem stated in the introductory section, the literature study revealed that several key elements can make schooling more meaningful to 21st century learners, especially considering the reported skills gaps and high levels of youth unemployment. These elements include the development of 21st century competencies and skills, developing an entrepreneurial mindset, preparation for self-directed employment, and fostering life-long learning.

2.1.1 Competencies and skills required for a meaningful life in the 21st century

Entrepreneurship education have been evolving since its introduction into educational systems over the world. Most recently, a trend deviating from the teaching of "objective facts, theory and business plans" for entrepreneurship education was noted, progressing toward "more innovative learning" using pedagogies aimed at developing entrepreneurial thinking, behavior and competencies [10]. Furthermore, the Entrepreneurial Learning Initiative ([4], p. 4) describes entrepreneurship as "the self-directed pursuit of opportunities to create value for others." The focus for entrepreneurship education has therefore expanded to include particular ways of thinking and the application of certain skills and competencies, in order to develop the learner as an individual functioning in a complex and changing world, as opposed to only teaching them about enterprise development [10, 11]. To attain this, Higgins and Refai [12] propose that learning experiences should be designed to enhance or foster entrepreneurial aspirations, competencies and several skills. Competencies are perceived capabilities, personal attributes or a set of skills and knowledge, developed by an individual through education and experiences [13].

The skills referred to here are labeled by various terms in the literature, such as 'soft skills', 'character strengths', 'employable skills', 'entrepreneurship skills', 'deeper learning outcomes', '21st century skills' or 'non-cognitive skills' [2, 3, 6, 10, 13–15]. For the current investigation, these skills were considered as being vital for meaningful living and working in the 21st century, and therefore the collective term '21st century skills' is used. Some of the frequently cited 21st century skills include critical thinking; creative or innovative thinking; enhanced communication; collaboration; self-regulation or self-responsibility; problem-recognition and problem-solving [2, 6, 9, 13–17]. All these skills should be fostered to better prepare learners for life after school, however, the skills needed for identifying and solving problems are crucial to make learning meaningful and connect it to learners' lived experiences [10], as well as to foster learning from mistakes [12, 17], which develops resiliency that learners will need to efficiently adapt to change. Learning should be scaffolded according to processes which will develop learners' way of thinking, as well as their mindsets and which will encourage self-responsibility for or self-directed learning [17], which supports the overall goal of developing life-long learning.

The skills and competencies mentioned here are vital for education, employment and for entrepreneurship, including entrepreneurial thinking or developing a positive entrepreneurial mindset.

2.1.2 Developing an entrepreneurial mindset

The term 'entrepreneurial mindset' is defined and disseminated in various (and sometimes opposing) ways [18]. In the simplest of terms, the Cambridge Dictionary [19] defines a mindset as "a person's way of thinking and their opinions". According to Zappe ([18], p. 5) most definitions for 'entrepreneurial mindset' however include or refer to "a set of characteristics and skills" useful to both entrepreneurs and aspiring entrepreneurs. It therefore makes sense to define an entrepreneurial mindset as utilizing various characteristics (or competencies) and skills to support and develop a particular way of thinking [20]. As an example of such a combined definition, the Kern Entrepreneurial Engineering Network [21] refers to an entrepreneurial mindset as "a collection of mental habits" or ways of thinking that are purposefully applied to create value and positive change. Being able to develop learners' entrepreneurial

mindset would thus increase the value of their schooling and should be aspired to [22]. The value it contributes to learning is so great that an entrepreneurial mindset is even referred to as "an essential life skill" [20]. The Entrepreneurial Learning Initiative ([4], p. 3) further notes that the rapidly changing world requires "everyone to think like an entrepreneur", implying that its value benefits learners other than entrepreneurs or aspiring entrepreneurs. In addition, Jha [20] reiterates that an "entrepreneurial mindset can indeed be taught and cultivated, and that it is imperative to do so". The ultimate aim of entrepreneurship education should be to make learners more engaged in their learning, and to enhance their understanding and involvement in entrepreneurship, which results in changes in perception and intrinsic learning [10]. It should also be noted that an entrepreneurial mindset can be related to entrepreneurial activity but that it is also valuable in many other contexts [21]. One such a context, is the world of work and employment – including self-employment or employment by an employer.

2.1.3 Self-directed employment

Education is intended to prepare learners for the world of work, whether it be for employment by others, or self-employment. Entrepreneurship education has been expanding significantly globally specifically with the purpose to encourage and develop more self-employment opportunities [17]. When suitable educational approaches or processes are utilized and applied in entrepreneurship education, its value can, however, be expanded. For example, creating suitable opportunities for learning or using interactive methods will enable learners "to become 'empowered to do', and [contribute to an understanding of] how such behaviors of thinking can be supported and facilitated" ([12], p. 177). An entrepreneurial mindset, which includes ways of thinking and utilizing competencies and skills, is thus essential for preparing learners for a meaningful life but are also vital to prepare learners for the world of work. Since formal employment opportunities are scarce, learners would have to be taught how to utilize the above-mentioned skills and competencies to identify, select and plan opportunities for creating their own employment, as an expression of self-directed learning. Self-directed learning is an essential skill that contributes to and supports the development of life-long learning [23].

2.1.4 Life-long learning

Education and learning should be viewed as a life-long process, rather than a single or intermittent event [4]. Competencies and skills continue to develop throughout a learners' life, through new and prior life experiences in a variety of contexts [15]. Including continuous and purposeful life-long learning as part of the intended learning in a curriculum will therefore contribute to continued development and construction of knowledge, skills and competencies, which adds value and significance to the lives of learners [15]. Hence, knowing how to learn, and how to continue to learn (life-long learning) is a critical future competence [2]. Entrepreneurship education, and the associated learning and mindset, is stated as key competencies for life-long learning [22], further highlighting the interconnectedness of these learning modes.

In addition to the intended learning and focused skills development discussed above, several other elements – which contribute to the planning of quality education and the implementation of the intended learning – should also be considered. These elements all contribute to the learning environment which can foster or hinder

learning effectiveness and include the learner; the teacher; teaching-learning designs; as well as the teaching-learning or pedagogical approach utilized. Suitable consideration and alignment of these aspects will contribute to the development of a learning environment that will be conducive to fostering the type of learning and entrepreneurial mindset envisioned for South African learners.

2.2 Scaffolding or constructing learning environments to foster meaningful learning

Learning is a contextual process in which learners and teachers play the main roles. The strategies, approaches and choices these role players make or implement in the teaching-learning process are further influenced by their beliefs, "pre-assumptions and understandings, shared realities", as well as the context in which the learning takes place ([12], p. 178). These elements should be carefully considered and scaffolded to foster deep and meaningful learning [22]. In the current study, the type of learner, the changing roles of teachers, real-life learning designed for value creation, and suitable pedagogical approaches to sustain meaningful learning, were the key elements focused on.

2.2.1 The type of learner

In traditional instructional modes of teaching, knowledge was 'transmitted' to learners [17, 23, 24], and they played a passive 'receiving' role. However, direct instruction does not involve the learner in the teaching-learning process and does not support as much learning and skills development as active, practical learning strategies [25]. More recent studies emphasize the role of learners as co-constructors of the teaching-learning process and highlight the utilization of learners' personal or 'real-life' experiences to make learning more meaningful and practically applicable [6, 9, 12, 16, 23, 26]. Learners must be taught how to learn and to enjoy the process, as a foundation for their development as self-directed and life-long learners [27]. Including learners in the learning process using real-world connections increases learners' engagement with their learning process and increases their motivation to learn [3].

The real world is, however, not static and continuously changes, impacting learners' learning in various ways; therefore, changes need to be considered part of the learning environment. Changes are complex and happening rapidly; therefore, learners must be prepared to thrive in a world that demands a different approach to learning [2]. One example of change in the learning environment that has significantly impacted learners is the growth in digital and online resources and connectivity, which resulted in a "dependency culture on a range of electronic media… online communication, social media interaction and information searching" ([17], p. 198). Learners are now much more 'digitally demanding' and expect this to be addressed as part of their involvement in their teaching-learning processes [15, 26]. Technology supports skills development and enhances the transferability of skills such as problem-solving, critical thinking and communication to different contexts [27], making the learning more useful and meaningful.

2.2.2 The changing roles of teachers

Changes in the learning environment affecting learners are also affecting teachers, especially in how they approach the teach-learning process. If the development

of a particular way of thinking (mindset) or specific 21st century skills is a priority, teachers cannot be mere instructors but must become active role players – not only as part of the teaching process but also in the learning process [22]. Teachers become guides or facilitators, and mentors in the learning process, moving away from the lecturer/teacher role [17] and become catalysts of learning [11]. Learner-centered teaching-learning approaches require learners to become more self-directed and collaborative in the learning process, but this does not diminish the teacher's critical role in the process. Teachers must carefully plan and scaffold teaching-learning, including feedback as a multi-directional teaching-learning tool, rather than the traditional one-directional teacher-to-learner feedback [3, 10]. Teachers' own prior learning, beliefs and experiences contribute to the teaching-learning process, resulting in a richer learning experience for both learners and teachers [10, 17]. These adaptations contribute to teachers' continuous life-long learning, as they become deeply involved in the learning process and development of skills. Life-long learning is vital for teachers to enable them to adapt to constant changes in the learning environment, such as curriculum adaptations, technological advances, novel pedagogies or changes in societal values [2]. Continued interest and participation in professional development is therefore vital to contribute to teachers' flexibility in adapting to changes [26], which will contribute to improving schooling.

Despite moving toward more skills-based, active and practical learner-centered teaching-learning, teachers still might face challenges regarding which content to teach, especially concerning entrepreneurship education [11]. It is reiterated that a 'one-size-fits-all' approach for implementing the curriculum is seldomly effective, and therefore the various aspects – such as learners' prior knowledge, teachers' experiences, and the context in which learning takes place – must be carefully considered and intertwined to ensure optimal learning for particular group of learners [10, 24]. Learning should therefore not be removed from lived ('real-life') experiences, nor should it be only focused on the individual.

2.2.3 Real-life learning designed for value creation

Learning experiences that are purposely designed to utilize real-life experiences and to create value for others result in "powerful [learning] that develops entrepreneurial self-efficacy, passion, identity and a personal career vision" ([16], p. 943). This type of learning strongly affects learners' passion for learning, motivates them to continue to learn and increases their enjoyment of the learning process [16]. Exploring and understanding how various issues and factors impact learning will provide insights into how learning contexts could be designed to develop teaching and learning processes to meet the needs of learners to a greater extent [3].

Learning should be designed to reflect learners' real-life contexts and experiences, to enable them to apply the knowledge and skills they have learned in their own lives, as well as to the benefit of those in their communities, which in turn intensifies their interest and motivation in the learning [27]. Creating value for others increases learners' engagement in the learning process, as well as the "perceived meaningfulness of schoolwork" ([16], p. 953). To enable holistic education, learners' family and community contexts, together with teachers and other educational role players, should be utilized to form partnerships to support schools as the core teaching-learning environment in any particular community [3]. In addition, opportunities should be created that will allow learners to apply their skills in different contexts and across different subject domains [17, 26] – in other words, learning should be designed to be

transferable across contexts, or to novel situations [3]. Such transferability establishes a bridge between learners' learning and their real-life experiences [28] to make it more functional. This would be especially valuable against the background of the high unemployment in many countries, to support learners when they have to develop entrepreneurial opportunities for self-employment and to foster a "personal career vision" ([16], p. 943) for themselves.

To enable the fostering of the preferred skills and competencies, together with the effective design and integration of all these elements of the teaching-learning process, the definitive consideration should be how teaching-learning should be approached to implement such learning with optimal benefit for the learners. For this, the selected teaching-learning approach or pedagogy would be decisive.

2.2.4 Pedagogical approaches

Different teaching-learning approaches are needed to enable the mindset and ways of thinking that learners will need in a fast-changing world. What is required is a pedagogical approach that is "dynamic, innovative, collaborative and learner-led" with "creativity at its core" ([17], p. 203). In the same vein, Saavedra and Opfer ([27], p. 8) frankly state that "Learning 21st century skills requires 21st century teaching". It is further recommended that approaches are selected that will support active, learner-centered learning-by-doing, based on experiential problem-based learning experiences [3, 4, 10–12, 17, 21, 26].

Experiential learning pedagogies have a notable positive impact on learning [11, 23] through linking learning to the real-world or lived experiences of learners by solving ill-structured problems [12]. Including reflective practice on their experiences contributes to bridging the gap that often exists between theory and practice [16, 24]. Together with self-directed and peer-to-peer learning, this approach engenders learning even in "resource-constrained circumstances where the path is not clear and the rules are not well defined" ([4], p. 23), making learning more "malleable" ([17], p. 202), which contributes to the transferability of learned knowledge and skills [27]. Experiential learning is often used to foster lifelong learning and entrepreneurship education [9, 11, 21].

Problem-based learning is a well-planned and carefully scaffolded process in which skills development is prominent whilst contributing to the personal development of learners [17] as they identify and solve everyday problems [10]. The whole learning process is scaffolded around a central problem that guides and connects the learning and skills development in the process [25]. Project-based learning is also problem-based, utilizing the same scaffolding and processes, and both these approaches are closely aligned to the intended learning associated with entrepreneurship education [14]. Project-based learning shares several principles of problem-based learning. The main difference is that the solution to the problem in project-based learning is in the form of a system, product, or artifact [14]. Using real-world problems from learners' everyday lives to plan and structure their knowledge and skills development will make such learning more meaningful. The physical product or artifact that is produced at the end of the learning process drives and motivates learners to excel in the learning process, since their solution might make an actual positive difference in their own lives, or create value for members of their community, when they solve or ameliorate the stated problem [16]. Projects can span over longer time intervals and be scaffolded to include developing knowledge, skills and competencies in combination with subject content in various disciplines [3].

Project-based learning can therefore contribute to make learning more meaningful and valuable on various levels.

The many benefits associated with project-based learning necessitates that this pedagogical approach must be implemented from an early age to enable the development of the preferred mindset and skills from the onset of formal schooling. Research increasingly indicates play-based learning as a suitable vehicle to make this happen as part of early education. Adding 'play' to 'learning' will also increase learners' enjoyment of the learning process. Especially in early childhood education, play-based learning is described as a context for learning, which helps learners make sense of themselves in relation to their environment, objects around them, and social interactions [25]. Playful project-based learning utilizes active, learner-centered teaching-learning pedagogies using learning-trough-play and project-based learning as scaffolds to link learning to learners' lived experiences and to "better prepare learners to thrive beyond school by deliberately fostering 21st century competencies" ([29], p. 4). Play-based learning requires learners' deep involvement in active learning, during which they pretend, plan, collaborate, implement and adjust knowledge and skills for particular purposes [7]. Social, emotional, and cognitive skills can be scaffolded into the playful learning process, all of which contribute to motivation, active engagement, enjoyment and self-efficacy in learning [26, 28]. Skills development is pertinently embedded in such an approach to learning. Including some self-directed learning together with peer collaboration, in a safe environment that allows learning from mistakes, will additionally bolster development of these skills [7, 17].

Combining play-based learning with project-based learning supports the merging of meaningful learning with enjoyment of learning and optimal skills development, alluding to its potential to serve as a suitable pedagogy for entrepreneurship education. The question that remains, however, is: how can playful project-based learning contribute to 'good' entrepreneurship education? The next section endeavored to address this question.

3. Theoretical framework

From the introductory section of this chapter, it is clear that in many instances schools are not preparing learners to thrive in life and work after formal schooling. Schools are historically viewed as "a place in between the home and the street, a transition-place, where we are no longer at home but also not yet in the 'real' world" ([30], p. 1). In other words, schools are viewed as providers of learning with the intention to bridge the gap between learners' home life and the real world 'out there', such as the world of economic production or employment. Schools provide a safe place where learners can practice applying their knowledge and skills, without it having to be perfect [30] and where they can learn from their mistakes [7, 22].

To attain these expansive objectives, the learning provided as part of schooling needs to be purposefully planned to contribute to meaningful or 'good education' (or, in the case of the current discussion, 'good *entrepreneurship* education'). As a point of departure, a shared understanding of what 'good education' entails is needed, in view of the requirement for sound theoretical underpinning of the proposed education. To this extent, Biesta [30, 31] reiterates that there is a need to reconsider the purpose of education – in other words, schools or educational institutions have to consider what is valued in or as 'good education'. Consideration should be given to what education – and the learning embedded therein – "is supposed to be *about* and *for*" ([32], p. 91).

That is to say, it matters what learners learn, as well as what they learn it for – what the purpose of their education is [31]. The point of education is not simply that learners have to learn, but rather that "they learn *something*, that they learn it *for a reason*, and that they learn it *from someone*" ([32], p. 91). A clear purpose for education will therefore contribute to a shared understanding of what is valued as 'good education'.

Professor Gert Biesta has developed and widely published a systematic manner or framework for addressing 'good education' by distinguishing between three functions of education [31], which he refers to as 'domains of purpose' for good education [30, 32] in more recent publications. Biesta's three domains of purpose, namely qualification, socialization and subjectification, each contributes to an understanding of what is valued in education, in other words, how 'good' the education is perceived to be as described in the subsequent paragraphs.

3.1 Qualification

In simplest terms, the qualification function of education is making available (through 'teaching', transmission, or facilitation) knowledge, skills and understanding as part of learning [32]. The qualification domain of purpose is often (though not exclusively) linked to economic arguments, including the role that education plays in preparing learners for the world of work, which in turn contributes to a country's economic development or growth [31]. What is prescribed to be taught can be viewed as being representative of what learning is being valued or "considered to be of value" ([32], p. 92). If, for example, the qualification purpose of education is misaligned with the needs of employers, it results in issues such as the skills gap that employers often report between learners' school education and what they actually need to thrive in the world of work [8, 31].

3.2 Socialization

The socialization function of education supports learners in becoming "members of and part of particular social, cultural and political 'orders'" ([31], p. 40). The socialization domain of purpose therefore helps learners to find 'their place in this world' when particular norms and values – related to cultural or religious traditions – are learned. This type of learning can happen explicitly as part of the intended curriculum, or implicitly as part of the hidden curriculum [32], which may result in both desirable and undesirable learning [31].

3.3 Subjectification

Subjectification – sometimes referred to as 'individuation' [31, 32] – serves a purpose opposite to that of socialization [31]. Rather than socializing a learner into a particular group or 'order', the subjectification function of education is the process through which a learner becomes an individual subject. It refers to how an individual exists as the subject of his/her own life, and not (only) as the object of what other people want from them [32]. Education always impacts individual learners, and education as subjectification could be "described as encouraging an "appetite" for trying to live one's life in the world" ([32], p. 97). Subjectification is not the same as 'identity' (which answers the question 'who am I?'), but rather about "how I exist, how I try to lead my life, how I try respond to and engage with what I encounter in my life" ([32], p. 99). It relates to the educational purpose of what a learner will choose to "do" with

his/her identity, as well as with the education they have received [32]. Subjectification allows learners to understand their "existence in and with the world, rather than [their] own personal or subjective opinions, thoughts, and beliefs" ([32], p. 99).

According to Biesta, "good education should therefore always specify its views about qualification, socialization and subjectification" ([31], p. 41). This is also true for 'good' entrepreneurship education that is theoretically sound.

4. Conceptualization

The theoretical foundations provided by Biesta's three functions of education were subsequently used as an analytical framework to develop a shared understanding of what 'good' entrepreneurship education ought to be, as a starting point. These conceptualizations or considerations are based on the themes that emerged from the literature study for elements to include when implementing entrepreneurship education, as well as bearing in mind that current schooling is often not preparing learners to thrive in the 21st century, resulting in skills gaps and high youth unemployment. It is intended to clarify what 'good' entrepreneurship education ought to be. To provide an at-a-glance overview the conceptualization of 'good' entrepreneurship education as framed within the descriptions of Biesta's three domains of purpose [30–32] is presented in **Table 1**. In the table, the term 'others' refers to individuals or groups of individuals that contribute to learners' socialization, which includes family, community members, religious groups, political groups, culture and more.

In the broadest terms, the conceptualizations in **Table 1** firstly provide insights into the qualification purpose of 'good' entrepreneurship education, that is: which content (knowledge, skills and competencies) needs to be included, as well as how it should be facilitated, to be valuable for learners and to address the reported skills gap, as well as to ameliorate unemployment. Secondly, **Table 1** provides insights into the socialization purpose of 'good' entrepreneurship education, in other words, how learning should be constructed to contribute to learners' development as members of a particular society or in a particular social context. These conceptualizations mainly point out that an understanding of the entrepreneurial mindset of the community (the 'others') contributes to how entrepreneurship education should be approached, they emphasize the need to involve others in the learning process, and that entrepreneurship education should create value for learners as well as for others. Thirdly, **Table 1** provides insights into the individuation or subjectification purpose of 'good' entrepreneurship education, specifically how learners can actively make choices to become more entrepreneurial during the learning process, or regarding what they want to do with the entrepreneurship education they receive. 'Good' entrepreneurship education will contribute to positive changes in learners' perceptions of entrepreneurship and foster intrinsic learning [10].

The conceptualizations for 'good' entrepreneurship education in **Table 1** align well with Biesta's description of 'good education' that requires that "they learn *something*, that they learn it *for a reason*, and that they learn it *from someone*" ([32], p. 91).

The 'someone' in this description refers to learning from others as part of the socialization function of education (**Table 1**), but it also includes learning from teachers, which takes place across all three domains of purpose of education. It can therefore be said that the 'good' entrepreneurship education described in **Table 1** will be complemented by an additional 'element' which emerged from the literature study, namely the changing roles of teachers.

	Qualification	Socialization	Subjectification
Competencies and skills required for a meaningful life in the 21st century	develop knowledge, 21st-century skills and competencies for entrepreneurship	understand how others view entrepreneurship, to enable amelioration of undesirable learning/negative impact in hidden curriculum	develop the learner as an individual functioning in a complex and changing world, fostering entrepreneurial aspirations
Developing an entrepreneurial mindset	understand the broader value of entrepreneurship education and develop new ways of thinking	understand how own mindset differs from or aligns with how others view entrepreneurship	learners actively choose to develop a positive entrepreneurial mindset
Self-directed employment	learn how to apply entrepreneurship knowledge, skills and competencies to create employment opportunities	develop and foster connections with others, based on shared values, to recognize and utilize opportunities in communities	become self-active to seek and create own employment opportunities
Life-long learning	develop a love for learning and recognition of the need to keep on learning	share learning experiences with others and learn from others' experiences	actively choose to implement self-directed learning principles to keep on learning
The type of learner	make learning more meaningful, enjoyable; adaptable to change; digitally supported	understand how learners' context and socio-cultural background impact their perceptions of entrepreneurship education	become co-constructors of learning, active participants in the process, choose to be more self-directed
Real-life learning for value creation	utilize learners' 'real-life' contexts and experiences to enable application and transfer of learning: to benefit themselves, as well as others	develop partnerships with communities: identify problems to be solved, utilize local knowledge, values and resources	choose to develop self-efficacy, passion, entrepreneurial identity and a personal career vision
Pedagogical approaches	creative, dynamic, innovative, collaborative and learner-centered; experiential problem–/project-based learning	structure learning around exploring and solving ill-structured problems relevant to or in learners' communities	make connections to make learning more meaningful to the self, choose how this learning will be used in own future

Table 1.
Conceptualizing 'good' entrepreneurship education.

The descriptions in **Table 1** focus on the construction of entrepreneurship education as a process for learners, therefore the roles of teachers – as facilitators of the learning process – are presented separately. Teacher education is viewed as preparation for teaching, and therefore not always perfectly aligned to what transpires in practice in their classrooms. It is, however, vital that teachers be suitably prepared to enable them to facilitate 'good' entrepreneurship education, and therefore their changing roles need to be considered [2, 3, 10, 26]. Analysis of the changing roles

of teachers through the same framework Biesta [30, 32, 33], contributed to insights and conceptualization how their roles can contribute to 'good' entrepreneurship education. As part of the socialization purpose, teachers must invite and value input and contributions from others, for example successful entrepreneurs, community members, or elders, who have knowledge of and experience in entrepreneurship. This approach will broaden the learning experience to include more real-life learning, adding to the value and meaningfulness of such entrepreneurship education. As part of the subjectification purpose of 'good' entrepreneurship education, in which they serve as guides to support learners in to make informed choices, to adapt to change (including learning from mistakes), to choose to become more self-directed and to develop learners' aspirations for continued (or life-long) learning [3, 7, 11, 26]. Finally, teachers contribute significantly to the qualification purpose, which indicates that they must become active facilitators, catalysts and scaffolders of learning, rather than merely transmitting knowledge [11, 17, 22]. These roles in turn highlight the important pedagogical choices teachers have to make to contribute to the effectiveness of their implementation of entrepreneurship education, to optimally benefit their learners.

The above conceptualizations provide insights and theoretical foundations for constructing 'good' entrepreneurship education, which brings us to the final part of the research question that guided this investigation, namely: "how can the pedagogy of playful project-based learning bolster 'good' entrepreneurship education?"

5. Playful project-based learning as pedagogy for entrepreneurship education

"Play exemplifies one of the highest forms of experiential learning" [34]. Despite the perceived dichotomy, which often situates play as the "antithesis of work" ([35], p. 53), research on the contributions of play to learning is mounting. Play therefore provides opportunities for a different type of learning than what was traditionally associated with 'schoolwork'. In broadest terms, play can contribute to experiential learning in three ways: (1) by supporting learners to take charge of their own learning, in line with their own standards of learning; (2) both as part of the process of learning (and the experience thereof) and the outcome of the learning; and (3) through repetitious cycles of learning, which contributes to deepening the learning in each cycle [34]. Play has therefore developed from being viewed as a "reward for completing academic work [to] a context in which academic work unfolds" ([35], p. 69). Although play pedagogy is mostly associated with free play, different types of play are used for learning and involves different role-players. Play-based pedagogies expressly include teacher involvement at varying levels [35]. Depending on the extent of the teacher's involvement in play-as-learning, it can become a well-planned, structured learning experience, which contributes to academic learning and skills development [35, 36].

The educational benefits of play are frequently categorized as being either developmental (such as self-regulation, social- and emotional skills development), or academic (such as numeracy and literacy) [35]. However, increasingly, the essential relationship between play as teaching-learning strategy and entrepreneurship education, is being reported [36–39]. Play-based teaching-learning strategies develop entrepreneurial knowledge, as well as several of the skills and entrepreneurial characteristics required of learners to thrive in the 21st century. Some of these include

problem-solving strategies, imagination, language- or communication skills, co-operation - or teamwork skills, money- or financial management, taking calculated risks, and being future-orientated [36–40]. To enable this education, problem- and project-based learning is often utilized to promote or facilitate playful learning [3, 16, 25, 29]. In addition to developing meaningful, active, engaging and socially interactive learning [25], play-based education contributes a 'fun' element, making learning more enjoyable [25, 37].

Furthermore, although play-based pedagogies are most frequently utilized in early education (that is, education for younger learners) [29, 36–38], it is increasingly being used in adult education – for example in teacher education [41], and even for retirees [38]. Still, it is reiterated that exposing learners to entrepreneurship education early can "lead to an enormous change of mind to building a healthy adolescent" ([36], p. 64), underscoring the constructivist and expansive positive potential of such learning.

A few examples of well-developed playful project-based learning as pedagogy for entrepreneurship education have already been reported from diverse countries such as Australia [25], Canada [35], Indonesia [37], Morocco [38] and Pakistan [36]. All five these studies were focused on play-based learning as part of early childhood (pre-school) education. Additionally, a brief overview of the types of play utilized, types of approaches used, and the reported effects of play-based learning on the development of learners in each country is set out in **Table 2**.

Another descriptive example emerged from Mexico, where learners create "new minicompanies through playful activities" and use multiple perspectives ("economic and social factors and the needs and capabilities of their community") to analyze business projects ([40], p. 295). In addition, the playful project-based learning from Mexico is reported to develop learners' knowledge about creating and managing small businesses; creating value for others; as well as learning about financial administration [40]. This example reflects education *for* entrepreneurship, which brings the learning closer to creating an "entrepreneurial experience" ([40], p. 303) and therefore transcends mere education *about* entrepreneurship. Through this pedagogical approach the transferability of entrepreneurship education is fostered, expanding its value for learners and communities [28]. The example from Mexico also serves the particular purpose to ameliorate unemployment in that country [40].

Other studies exploring playful project-based learning as pedagogy for entrepreneurship education are on-going, for example, in South Africa the Department of Basic Education intends to implement playful project-based learning across all subjects and into all different school phases of the current school curriculum [29, 42]. This plan (like many others across the globe) is still being developed and is in its early stages of implementation, underscoring the need to continue investigations into the suitability of playful project-based learning as pedagogy for entrepreneurship education, and how this can be bolstered.

To contribute to this growing body of knowledge, the conceptualizations developed for constructing 'good' entrepreneurship education earlier in this chapter, theoretically underpinned by Biesta's three functions of education (qualification, socialization and subjectification), were used to contribute insights into how the pedagogy of playful project-based learning can bolster 'good' entrepreneurship education (**Table 3**).

The comparison in **Table 3** indicates that the pedagogy of playful project-based learning holds considerable potential to positively contribute to 'good' entrepreneurship education. As part of the qualification function of education, playful project-based learning can (and does) contribute to the development of knowledge, skills and

	Types of play utilized	Types of approaches used	Reported effects of PPBL on development of learners
Australia	learning through play; integrated pedagogies (child-directed activities with intentional educator facilitation)	active learning, cooperative and collaborative learning, experiential learning, guided discovery learning, inquiry-based learning, project - and problem-based learning, and Montessori education	development of learners' cognitive skills; creative skills; emotional skills; physical skills; social skills; learning becomes more meaningful and joyful; learners iteratively and actively involved in socially interactive learning; adding learner choice and voice to the learning process [25]
Canada	free play; teacher-guided play	play-based learning	offers a meaningful context for children's academic learning; promotes children's exploration and discovery; enabling the development of higher-level thinking skills through inquiry processes [35]
Indonesia	traditional games	playful games to develop entrepreneurship education	the games and the instructions developed and improved learners' entrepreneurial spirit; enriched personal characteristics relevant to the improvement of learners' entrepreneurship characteristics; fosters commitment toward entrepreneurship [37]
Morocco	serious games	Montessori approach	allows learner independence while acquiring manual and communication skills; develops imagination, a positive attitude and skills; increases enjoyment of learning; promotes entrepreneurial thoughts [38]
Pakistan	free play activities; role play; playing games	'play strategies'	improved social behaviors; collaboration, exploration, problem-solving, decision-making, and innovation, positive social habits; development of entrepreneurship skills and –spirit [36]

Table 2.
Comparative analysis of studies reporting playful project-based learning.

competencies for the 21st century, and these can be modified to explicitly relate to entrepreneurship education [36–40]. Both share the requirement for active, real-life teaching-learning approaches to enhance its implementation in practice [36–39]. What is not yet apparent in the pedagogy of playful project-based learning, is the purpose of value creation (for learners themselves, as well as for others). 'Good' entrepreneurship education additionally includes a strong purpose of preparing learners for the world of work, which is not generally emphasized in playful project-based learning [36]. As playful project-based learning pedagogies are primarily used for the education of young(er) learners, the world of work might seem a long way off, reducing the need to make this a key purpose in play-based teaching-learning.

	Qualification	**Socialization**	**Subjectification**
'Good' entrepreneurship education	develops entrepreneurship knowledge, 21st-century skills and - competencies, using active teaching-learning strategies, to create value and meaningful learning for life and work	teach learners to contribute value as members of a particular society, consider others' entrepreneurial mindset, as well as their potential to contribute to entrepreneurial learning	guide learners to make informed choices regarding becoming more entrepreneurial, foster positive perceptions of entrepreneurship and life-long learning, including self-directed employment
Playful project-based learning	develops knowledge, 21st-century skills and - competencies, using active, engaging, experiential teaching-learning strategies	social interaction is encouraged, especially with peers and teachers; values developed, especially as part of early childhood learning	amplifies motivation, enjoyment, self-efficacy and self-regulation in learning;

Table 3.
Contrasting playful project-based education and 'good' entrepreneurship education

The socialization function for 'good' entrepreneurship education and playful project-based learning are divergent. In entrepreneurship education, the socialization function emphasizes consideration and the impact of others' values and norms on the learners' development [3], whereas in playful project-based learning the focus is on socialization with others to develop the learners' own values [25, 35]. Again, this might be attributed to the fact that playful project-based learning is more frequently utilized for younger learners, who are still developing these qualities.

With reference to the subjectification (or individuation) purpose of 'good' entrepreneurship education, there are some consistencies and some inconsistencies. Both contribute to a positive learning experience and both contribute to developing the learner's 'self' [6, 9, 25, 34, 36, 43]. Entrepreneurship education is, however, more focused on development of the learner for the (more distant) future, that is, life after school and the world of work, including self-directedness and making informed choices [7, 11]. Playful project-based learning pedagogy, on the other hand, has a more immediate purpose, for the (present) development of learners' identity, enjoyment of learning, self-efficacy and self-regulation [25, 34, 35]. Yet again, this might be attributed to the fact that playful project-based learning is more frequently utilized for younger learners, who need to develop qualities such as self-efficacy and self-regulation, before they can advance to more complex cognitive and affective decision-making processes, such as making informed choices for their futures, or choosing to become more self-directed.

Notwithstanding these few minor differences, when playful project-based learning is selected as pedagogy for entrepreneurship education, with a few minor adaptations, it can align exceedingly well with the requirements that frame 'good' entrepreneurship education. This pedagogical approach will bolster the effectiveness of the implementation of entrepreneurship education, which in turn will contribute to more meaningful, enjoyable and valuable learning for learners. When more learners actively choose to self-directedly develop their own employment, the high unemployment levels will be ameliorated. Even if learners do not 'become entrepreneurs', the skills and

competencies which they develop as a result of 'good' entrepreneurship education will contribute to reducing the reported skills gap which currently exist between schooling and employers, making these learners more employable and bringing them closer to a better life in the 21st century.

6. Conclusions

The three 'domains of purpose of education' developed by Biesta provided a relevant framework for exploring the theoretical underpinnings of 'good' entrepreneurship education. More detailed insights with regard to the qualification, socialization and subjectification purposes of what 'good' entrepreneurship education ought to entail, could be conceptualized. Playful project-based learning pedagogy can align exceedingly well with the requirements that frame 'good' entrepreneurship education and can be adapted through small adjustments to increase this alignment and its suitability to bolster this valuable education.

This study's comparative overview highlights that there is a need to continue to explore and investigate playful project-based pedagogy for 'good' entrepreneurship education. Playful project-based learning holds much potential to contribute positively to the development and expansion of 'good' entrepreneurship education, especially for young(er) learners. However, particularly when play-based learning is intended for older (more developed or 'mature' learners), careful consideration should be given to better align the socialization and subjectification functions of this pedagogy to the requirements of 'good' entrepreneurship education.

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