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Review Article

Entrepreneurship education today for students' unknown futures

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Society requires education to prepare students with the tools and ability to navigate and find success for unknown futures. Entrepreneurship education has the potential to deliver the relevant curriculum and competencies to support young people to develop resilience, independence, innovation and ability to recognise opportunities to live productive and rewarding lives in this new post COVID-19 environment. Entrepreneurship has been encouraged by government initiatives to address rapidly evolving challenges due to economic disruption. The purpose of this study was to conduct a literature review of entrepreneurship education pedagogy in order to understand the growing evidence of the effectiveness of programmes that support students to act on opportunities that address social, economic, and environmental issues that have arisen in their communities. An analysis of 45 studies across nine countries suggests that although these types of learning opportunities are written into curricula, students rarely experience this type of learning in their schooling. Sustained interest in entrepreneurship through effective methods such as assistance from external trainers and value creation throughout schooling develops students' intent for continued study of entrepreneurship at university. Teachers need opportunities to build confidence, knowledge and capacity to develop effective entrepreneurship education learning experiences that are relevant to today's students' future life challenges.

Keywords: Entrepreneurship; Enterprise; COVID-19; Education; School

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1. Introduction

Our global 'new normal,' we are told, is a state of disruption with an economic recession forecast to match if not surpass the Great Depression (Baker et al., 2020, para. 21). As of May 26, 2020, over 5.6 million people have contracted the COVID-19 virus, over 340,000 people have died, and 213 countries and territories have been affected (Worldometer, 2020). 'Lockdowns' are our new vernacular and have confined people to their homes. Parents have balanced online schooling with online work as businesses and schools have had to temporarily close to stop the virus spreading. Lockdowns imposed to contain the virus shattered the economy and millions of people have been forced into unexpected unemployment. Businesses have been closed beyond their capacity to reopen, global trade chains broken, manufacturing stopped and started, borders closed to travel

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devastating the tourism and hospitality industry, and industries stigmatised as potential virus spreaders have been shunned (Akkermans et al., 2020; Bhattacharjee & Jahanshah, 2020; Gössling et al., 2020; Haeffele et al., 2020). The continued spiralling down of the global economy means that large scale redundancies leads to more unemployment as constrained household budgets tighten purse strings.

New Zealand has been fortunate to have contained the virus and while still refining the border control as citizens return to keep the virus out of the country, the government is focused on propping up the economy and an entrepreneurial approach to recovery is recognised as vital (Robertson, 2020). 'An Early Mover's Initiative of Nations,' involves leaders from nine countries that have contained COVID-19, and together have discussed the best way to reopen the economy (Wade, 2020). New Zealand is part of this group along with Australia, Austria, Czech Republic, Demark, Greece, Israel, Norway, and Singapore. Internationally, small and medium enterprises (SME) have been hit hard by the economy shut down (Akkermans et al., 2020) yet are seen as key to a recovery plan (Dai et al., 2020; Fernandes, 2020; McKee & Stuckler, 2020; Robertson, 2020). Up until COVID-19, SME have added almost three quarters of the total jobs in the United States each year (Harrington & Maysami, 2015) and are recognised as pivotal to creating employment and reducing the gap between rich and poor (Nseobot et al., 2020). The talents and passions of students can be realised through the creation of SME businesses (Kirkley, 2017). How is public education building entrepreneurial intent in learners so that they envision using their talents and passion as SME e-commerce owners that can create much needed employment and equity in revenue in a battered and recovering economy?

Students have endured isolation from school which provides essential social interaction for many young people. Formal assessments have been cancelled or changed, family stress has increased, while routines have been restricted and modified (Bryant et al., 2020; OECD, 2020; UNESCO, 2020; Van Lancker & Parolin, 2020). Schools provide many students with lunches, help regulate behaviour, and keep a connection to mitigate family issues (OECD, 2020; UNESCO, 2020). In addition to providing more support to vulnerable groups, the purpose of education needs to be re-evaluated to better support student wellbeing and resilience (OECD, 2020; UNESCO, 2020). Public education needs to empower learners with competencies that take time to develop (Lackéus, 2015; Rieckmann, 2020) and magnetise student engagement so that students develop resilience behaviours and remain connected (UNESCO, 2020). It is of concern that so many students have been reported to lack intrinsic competencies and motivation to construct their own learning while at home (Bryant et al., 2020; OECD, 2020; Reimers & Schleicher, 2020; UNESCO, 2020; Van Lancker & Parolin, 2020; Zhou et al., 2020).

Public education providers need to lean into a new normal with a localised and contextualised curriculum that encourages creativity and innovation, supports wellbeing and resilience, (OECD, 2020) develops competencies (Rieckmann, 2020) and promotes student engagement and self-motivation (UNESCO, 2020). In this paper we provide evidence that entrepreneurship education provides the opportunity for students to gain meaning from their learning and develop the types of competencies that will support them throughout their lives. This literature review of entrepreneurship education pedagogy provides growing evidence of the effectiveness of programmes that support students to act on opportunities that address social, economic, and environmental issues that have arisen in their communities.

1.1. Theoretical Framework

Entrepreneurship education is an approach to learning that has been adopted across Asia, in China, Indonesia, (Wu & Wu, 2017), Singapore (Ho et al., 2018) and Malaysia (Din et al., 2016), in most of the European Union countries, and in the United States, with the European Union countries taking a more practical approach (Ierapetritis, 2017). Global interest grew on the topic of entrepreneurship in the early 1980s as the economy's focus turned to small and medium-sized (SME) businesses as a solution to unemployment (Jones & Iredale, 2014; Pepin, 2018). In Finland

(Komulainen et al., 2009) and Sweden (Fejes et al., 2019) entrepreneurship education is written into the curriculum for all year levels and across all subjects. In the United States, 'entrepreneurship education' is the terminology used; while 'enterprise education' is used in the United Kingdom (Lackéus & Middleton, 2015); and in New Zealand's curriculum students are to explore what it is to be 'enterprising' (Ministry of Education, 2011). As an approach to education, enterprise and entrepreneurship students are supported to be innovative and creative (Gibb & Ramsey, 2011), encouraged to use their initiative and be adaptable (Dahlstedt & Hertzberg, 2012; Smith & Price, 2011).

1.1.1. A narrow or broad view of entrepreneurship education

There are two perspectives on entrepreneurship education. A narrow view of entrepreneurial education is thought to confine entrepreneurship to a business subject that provides an opportunity to gain knowledge and understanding about marketing, finance, human resource development, strategy and acquiring capital (Lackéus, 2015; Osiri et al., 2015). Taking a broader view of entrepreneurial competencies requires learning through ventures or designs that respond to opportunities in a wider range of subject areas and problem solving opportunities throughout the surrounding community and can appeal to students who are interested in ventures that serve a broader purpose in society (Kirkley, 2017; Osiri et al., 2015). While some argue that the narrow and broad views be kept separate (Jones & Iredale, 2014) and there is preference for the broader view (Davidsen, 2015; Lackéus, 2015), these views can co-exist (Fejes et al., 2019) when students learn *about, for,* and *through* entrepreneurship (Hannon, 2005).

1.1.2. Learning about, for or through entrepreneurship education

In a public education or schooling context, entrepreneurship education experiences can be designed to teach students *about*, *for*, or *through* entrepreneurship. Learning *about* entrepreneurship has been described as learning the 'what' and 'how' of entrepreneurship (Nabi et al., 2018), by presentations of the associated theories and knowledge (Lackéus, 2015). Learning *for* entrepreneurship is preparing students to start a business (Caird, 1990; Moberg, 2014) with technical, practical and teacher-guided instruction (Elahi, 2019; Sirelkhatim & Gangi, 2015). Learning *through* or *in* entrepreneurship is to experience real life ventures (Piperopoulos & Dimov, 2015) to develop skills and competencies in entrepreneurship (Caird, 1990; Lackéus, 2015; Moberg, 2014; Sirelkhatim & Gangi, 2015). Age has been related to approach (Figure 1) by Dahlstedt and Hertzberg (2012) and (Lackéus, 2015) with learning *through* and *for* suited to primary and secondary school students while *about* suited to university level . However, there is growing consensus that learning *through* entrepreneurship education is more effective even for tertiary level (Kleiman, 2015; O'Leary, 2012; Scharmer et al., 2020). Learning *for* entrepreneurship has been found to be more effective in fostering entrepreneur identity at lower secondary school level but less engaging (Moberg, 2014), and while still worthwhile, should be presented as a variety of ways learners could act, considering complex conditions, rather than taught instrumentally (Rieckmann, 2020).

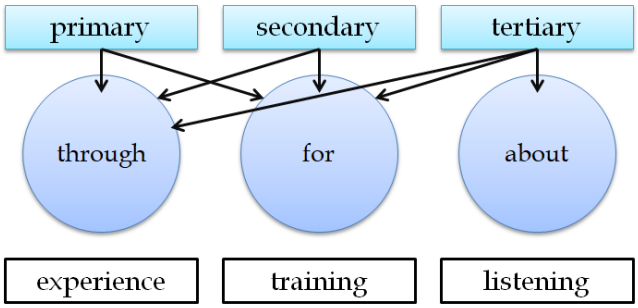

Figure 1. Entrepreneurship education approaches in relation to education level. (Author based on work by Dahlstedt & Hertzberg, 2012; Kleiman, 2015; Lackéus, 2015; O'Leary, 2012; Rieckmann, 2020; Scharmer et al., 2020)

2. Method

A literature review was conducted using the systematic review method outlined by Tranfield et al. (2003). This method was also used by Wu and Wu (2017) in their review of entrepreneurship education across Asia-Pacific countries. The systematic review method allows the researcher to gather literature from different methods and contexts in order to elicit themes and areas that require further research (Tranfield et al., 2003). There are three stages according to Tranfield et al. (2003) to carrying out a systematic review; 'planning the review', 'conducting a review', and 'reporting and dissemination (p.214).'

2.1. Research Design

The review was planned in the first stage to sample perspectives from a range of countries that provided entrepreneurship education studies that had measured the effectiveness of the programmes in terms of outcomes for students. As Tranfield et al. (2003) state, a procedure must be planned in the first stage for selecting studies in the second stage to be synthesised and included in the review. In the third stage the researcher produces a report and distributes the findings. The final inclusion criteria are set out in Table 1.

In the second stage the keywords used to identify the literature included; 'entrepreneurship education', 'enterprise education,' and 'effectiveness' or 'school' or 'primary' or 'secondary' or 'pedagogy.' Once a range of countries had been determined following initial searches of those terms, searches would also include the name of the country. The articles were recorded and summarised in a table to include reference and country, design assessment measures, age range and group, focus of the study, number of participants, and outcomes/findings.

It was found that the initial inclusive criteria 1, which was for an even distribution of five studies per country needed to be adjusted to improve the assessment of relevance to the purpose of the study. Searches that related to the study for Finland found seven studies whereas New Zealand and Netherlands each had four. Three studies from Finland were excluded to improve the distribution of studies across countries; one had a very small sample size, one was an earlier study of an author already included and one was more focused on politics and considered less pertinent to the purpose of this study. University studies and longitudinal studies on the schooling of entrepreneurs were also found to be relevant so criteria 1 was amended and criteria 6 was introduced. Criteria 6 however, excluded the United States which had 4 out of 5 studies from university level and Germany as all three studies found were at university level. As Tranfield et al. (2003) explains, assessment of the relevance to the study informs the researcher during the selection process.

Table 1
The Procedure for Selecting Studies for the Review Based on Inclusion and Exclusion

Inclusion	Exclusion
➢Studies related to the topic of the effectiveness of entrepreneurship or enterprise education in public education	➢Studies that do not relate to the effectiveness of entrepreneurship education or enterprise education
➢Published between 2010 and 2020	➢Where countries had exceeded five studies, did not make a new contribution to the purpose of this study
➢Contributed to accumulated evidence for one country	➢Countries that resulted in less than two studies from primary and secondary schools
➢At least two studies relating to entrepreneurship education in primary and secondary schools for one country	➢Literature that had not carried out a study

Identification of research, selection of studies, quality assessment, data extraction, monitoring process and data synthesis was carried out in stage two of the systematic review. The criteria for the procedure resulted in forty five studies gathered across nine countries over a period of two weeks that related to the effectiveness of primary and secondary entrepreneurship education within the period 2010 to 2020.

During the third stage of the systematic review, an interpretative approach was used to carry out a thematic analysis and synthesise findings across the 45 studies. The third stage was completed through producing the report and dissemination of the recommendations.

2.2. Participants

The age range, group information and number of participants for each study were recorded in a table during data extraction (Table 2).

2.3. Data Collection Instruments

The research consisted of using Google Scholar and The University of Auckland search engines to find journal articles that had conducted studies into effectiveness of entrepreneurship education in primary, secondary and tertiary levels (Figure 2). These studies aimed to provide empirical evidence on the outcomes of entrepreneurship education from the viewpoint of students, teachers, lecturers, principals, or working adults. The review sought to understand the effectiveness of programmes in developing students' attitudes, skills, and competencies towards entrepreneurship.

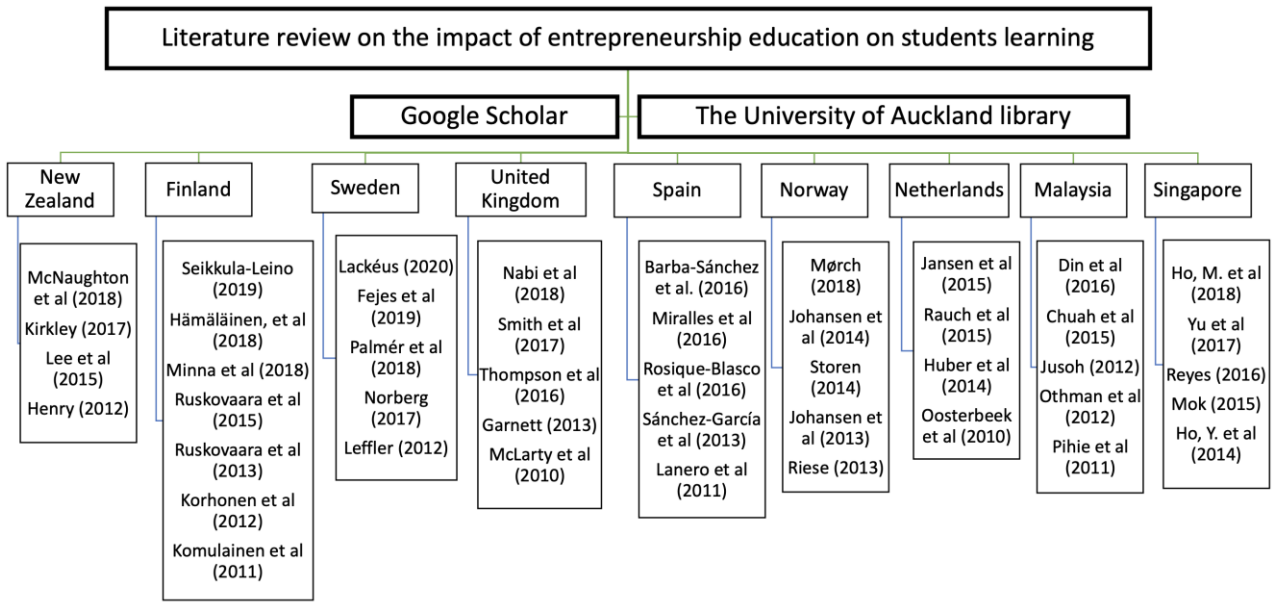

Figure 2. Distribution of literature ordered according to country and year of publication

3. Results

The findings are presented according to the four themes that arose in synthesising the studies.

3.1. Benefits for Students from Entrepreneurship Education

Within the 45 articles on entrepreneurship education, 18 studies investigated the benefits to students. An overview of these studies are listed in Table 2 with descriptions of the benefits found and summarised in Figure 3.

Table 2
Within a Sample of 45 Articles Collected to Understand the Effectiveness of Entrepreneurship Pedagogy in Nine Countries, 18 Studies Focused on the Benefits of Entrepreneurship Education for Students

References & country	Design Assessment measures	Age Range & Group information	Focus of study	Number of participants (*n*)	Outcomes/ Findings
Lackéus. (2020) Sweden	Survey, SSI	8 to 15 year olds	Comparison of EE methods	Q n=1048 SSI n=291	Value creation had strong effects on student engagement, motivation, knowledge and skills acquisition.
Ho et al. (2018) Singapore	Survey Quasi-expe-rimental	13 to 16 year olds	Impact of entrepreneurship training	n=328	Higher entrepreneurial skill set and mindset efficacies, and improved ability to scan and search for, and evaluate and judge entrepreneurial opportunities.
Nabi et al. (2018) United Kingdom	Survey, SSI longitudinal	First year university students	Role of EE in fostering entrepreneurship intentions	Q n=150 SSI n=49	Demonstrated higher entrepreneurial learning, inspiration and intentions as long as the learning experiences were positive
Palmer et al. (2018) Sweden	Design research	Teachers of 6 to 12 year olds	EE integrated into maths	n=30	Entrepreneurship competencies were of positive value in maths lessons. (Creativity, resilience, courage, initiative, collaboration, & responsibility)
Kirkley (2017) New Zealand	FG, SSI	Secondary Schools	Effectiveness of EE	n=6123	Reduced direct teaching workload. Students' attitudes improved with more engagement in school
Barba-Sanchez et al. (2016) Spain	Quasi-experimental	Primary school Year 3 - 6	Effectiveness of EE	n=49	Entrepreneurship intent rose from 0% to 56% after two years of EE
Din et al. (2016) Malaysia	Survey	University students	Effectiveness of EE		Improves entrepreneurship skills, self efficacy, business plans and risk thinking
Miralles et al. (2016) Spain	Survey	Average age of 35 years	Entrepreneurial intent in adults	n=431	Knowledge of entrepreneurship increased entrepreneurial intent
Thompson et al. (2016) United Kingdom	GEM data ph calls	18-45yrs	Influence of EE on career	n=16343	Students from compulsory courses in EE were two and half times more likely to take part in university and government ventures. Those in voluntary EE were six times more likely to continue to higher levels.
Rauch et al. (2015) Netherlands	Pre- and post- test	University students	Effectiveness of EE	n=96	Increased attitudes, perceived behavioural control and entrepreneurship intentions

Table 2 continued

References & country	Design Assessment measures	Age Range & Group information	Focus of study	Number of participants (n)	Outcomes/ Findings
Mok (2015) Singapore	Survey	University teaching staff	Effectiveness of EE	n=208	EE enhances quality of graduates
Ho et al. (2014)	Survey	University	Impact of EE	n=836	Venture creation had a significant positive influence on students' entrepreneurial engagement.
Huber et al. (2014) Netherlands	Survey & observed	Primary school Yr 6	Effectiveness of EE through 'BizWorld'	Treatment n=1729 Control n=684	Treatment group developed more efficiency in entrepreneurial non cognitive skills for risk taking, self-efficacy, creativity, need for achievement, persistence, a 'can do' attitude, and analysing. Improved teacher motivation and knowledge of EE
Støren (2014) Norway	Survey	University graduates	Effectiveness of EE	n=2827	Increased entrepreneurial skills through=skills for=increased ability to start-up business
Garnett. (2013) United Kingdom	Action research, Survey, Journals, SSI	Teachers a students at 3 schools	Effectiveness of EE	Teachers n=3 Students n=79	Students motivated by creativity and ownership of learning. Students liked learning new skills.
Lanero et al. (2011) Spain	Survey	University students	Impact of EE	n=800	Increased feasibility, intent, and student involvement for entrepreneurship
Pihie et al. (2011) Malaysia	Survey	Secondary school students	Entrepreneurship intention	n=2574	Vocational and technical subjects have positive attitudes towards entrepreneurship, achievement cognition, achievement affect, self-esteem cognition and innovation affect.
McLarty et al. (2010) United Kingdom	Survey, FG & observed	Secondary schools	Perceived impact of EE	Schools n=408	Increased student's confidence, motivation, engagement, improved aspirations, behaviour, retention, attendance, influenced career choices, increased number of student-led activities

Q: questionnaire/survey; SSI: semi-structured interview; FG: focus groups

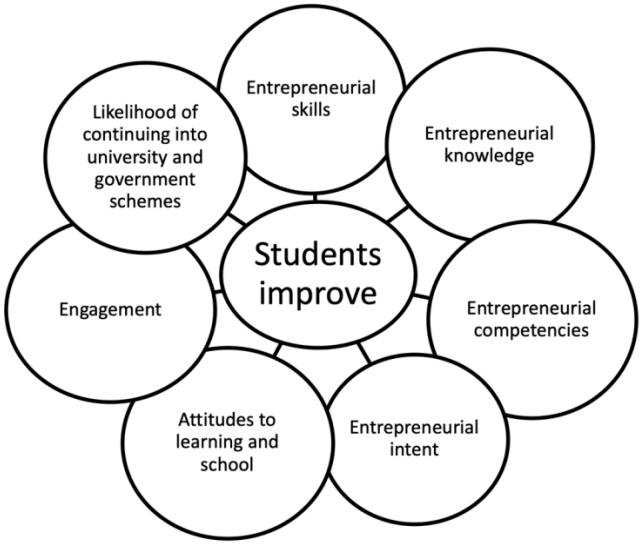

Figure 3. Categories from thematic analysis of the theme 'benefits of entrepreneurship education' found within 18 studies that focused on student outcomes

3.2. Developing Entrepreneurial Intent

The theory of planned behaviour (Ajzen, 1991) was often used to show how entrepreneurial intent could be developed (Figure 4).

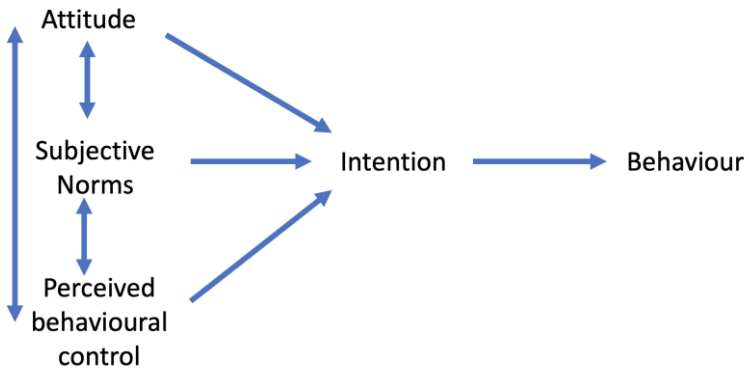

Figure 4. The theory of planned behaviour (Ajzen, 1991)

This theory was used in Spain by Lanero et al. (2011) in order to study 800 university students' intentions towards entrepreneurship and found intentions were related to perceived behavioural control and perceived feasibility of entrepreneurship. Miralles et al. (2016), also in Spain, used the theory to study entrepreneurship intent in 431 working adults and found that knowing about entrepreneurship and seeing it as an attractive career choice influenced intention. Chuah et al. (2015) used the theory in Malaysia to study entrepreneurial intent in 204 university students. Positive attitude, subjective norm, image, finances and perceived behavioural control were found to increase intent. Ho et al. (2018) used the theory and found positive levels of engagement in 836 secondary school students when using venture creation in Singapore.

Four studies recommended that intent be developed earlier in education in order to build and maintain entrepreneurial intent in learners (see Table 3 and Figure 5).

Table 3
Studies with Findings and Recommendations to Develop Entrepreneurial Intent

References & country	Design Assessment measures	Age Range & Group information	Focus of study	Number of participants (n)	Outcomes/ Findings
Nabi et al. (2018) United Kingdom	Survey & Interview	First year university students 18-25 year old	The role of EE in developing intent	Survey n=150 Interview n=49	An accumulation of positive experiences for university students lead to a strong increase in entrepreneurial intentions.
Din et al. (2016) Malaysia	Survey	University students	Effectiveness of EE	n=130	Enhanced self-efficacy, risk taking and business plan skills Recommended: allowing primary school students to explore their interests through entrepreneurship education, then start to introduce the basic steps in high school as preparation for deeper knowledge in university
Rosique-Blasco et al. (2016) Spain	Survey	Secondary school students	How skills & socio-cultural factors affect intent	n=1244	Found: developing creativity, proactivity, risk taking, and role models promote entrepreneurial intent.
McLarty et al. (2010) United Kingdom	Survey & observed	8 to 10 year olds	Effectiveness of EE	n=130	Recommended: students become more involved in businesses at a younger age so that they are aware of their capabilities and career options as they make vocational choices in subjects at aged 14.

EE: Entrepreneurship education

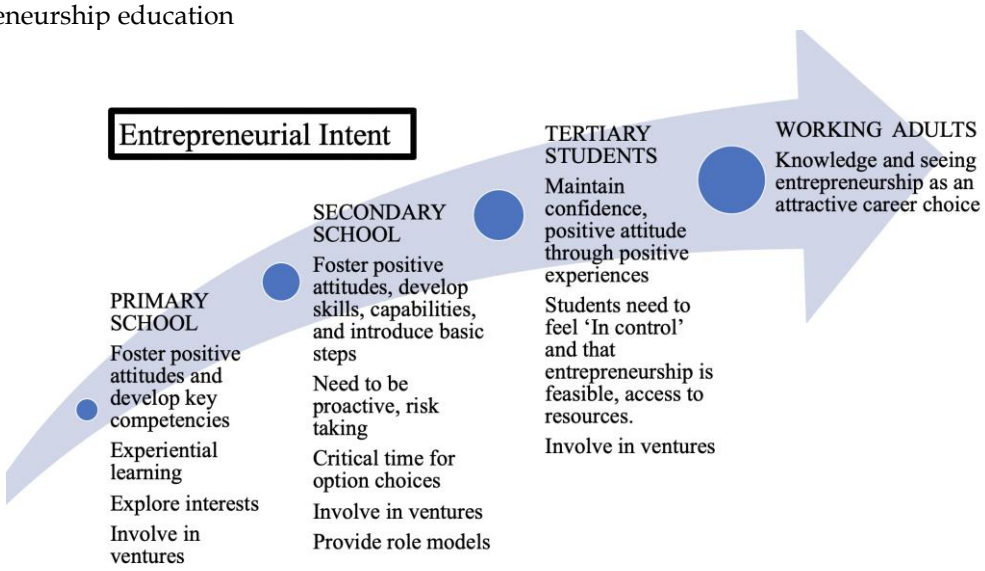

Figure 5. Recommendations for fostering entrepreneurial intent in eight international studies (Author based on work by Barba-Sánchez et al., 2016; Chuah et al., 2015; Ho et al., 2018; Huber et al., 2014; Lanero et al., 2011; Miralles et al., 2016; Mørch, 2018; Thompson & Kwong, 2016)

However, five studies found that entrepreneurship education could reduce intent as students felt it would be too hard to be an entrepreneur. While this was explained as a reality check by Huber et al. (2014), Nabi et al. (2018), and Oosterbeek et al. (2010), Nabi also highlights that in their study they found a single negative experience such as a tutor focusing too much on business failure could deter students. As Chuah et al. (2015) explains, their study showed intent can be negatively affected by entrepreneurship education because students need to be supported and encouraged with learning experiences that allow them to develop.

McNaughton and Yun (2018), found New Zealanders to have very low participation in entrepreneurship education at university (Table 4). When this was examined further in the Global University Entrepreneurial Spirit Survey report (Sieger et al., 2019), New Zealand students had the highest rate amongst countries in the study for not taking any entrepreneurship education courses and graduates future five year plan still had lower entrepreneurship rates globally, ranking 45th out of 54 countries (Table 4).

Table 4
Average Rate of Entrepreneurial Intent in New Zealand (McNaughton & Yun, 2018) compared with the Global University Entrepreneurial Spirit Students' Survey (GUESSS) (Sieger et al., 2019).

Findings	Guess	NZ (n=1920)
Have not taken any Entrepreneurship education courses	50.3%	79.9%
Undergraduates who want to be employees	79% taken from	80%
Postgraduates who wish to be employees	GUESS report	85.7%
Undergraduates with entrepreneurial intent	9.3%	3.9%
Postgraduates with entrepreneurial intent	10.2%	4.9%

Employment was seen as a more desirable option than entrepreneurship in two countries where the opposite would be expected. In Spain, entrepreneurship education initiatives were few and far between and employment was seen as the safest option, even though unemployment was as high as 55% in under 25 year olds (Sánchez-García et al., 2013). Whereas, in Norway 90% of secondary schools provide entrepreneurship education (Johansen & Schanke, 2013) and employment was preferred as the easiest option because jobs were plentiful (Støren, 2014).

3.3. Pedagogical Approach to Entrepreneurship Education

The pedagogy of teaching entrepreneurship is critical in terms of student engagement and motivation. A study in Singapore, compared 142 students 13-16 years of age who were trained in entrepreneurship by teachers and hired external enterprise education providers with 186 students who were not (Ho et al., 2018). Students' efficacy and alertness was found to be significantly higher with training (Figure 6).

Four studies recommended using a combination of for entrepreneurship and through entrepreneurship approaches and four studies recommended using just the through entrepreneurship approach (Figure 7).

In Sweden, definitions *about*, *for* and *through* were thought to be too focused on pedagogy and instead compared three foundational entrepreneurship approaches, value creation, venture creation and idea and artefact creation (Lackéus, 2020). Value creation was found to be the most effective tool in developing motivation, knowledge and skills in 1048 students 8-15 years of age. Students felt passionate about contributing to others and society. Venture creation was also valued by students as it connected to the realities of starting up a business.

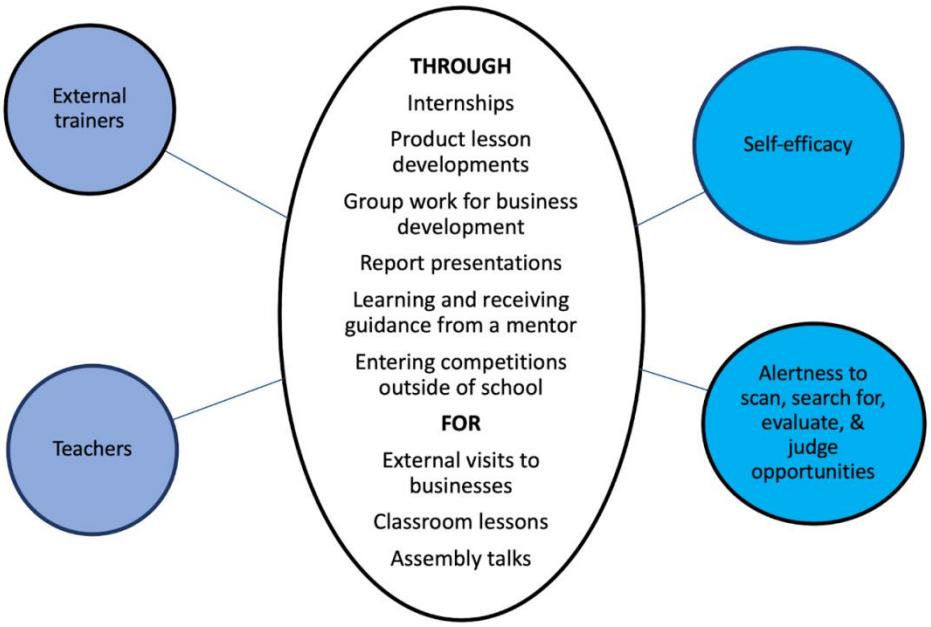

Figure 6. 'For' and 'through' approach to entrepreneurship education in Singapore with 13-16 year old students (n=142) (Author based on work by Ho et al., 2018)

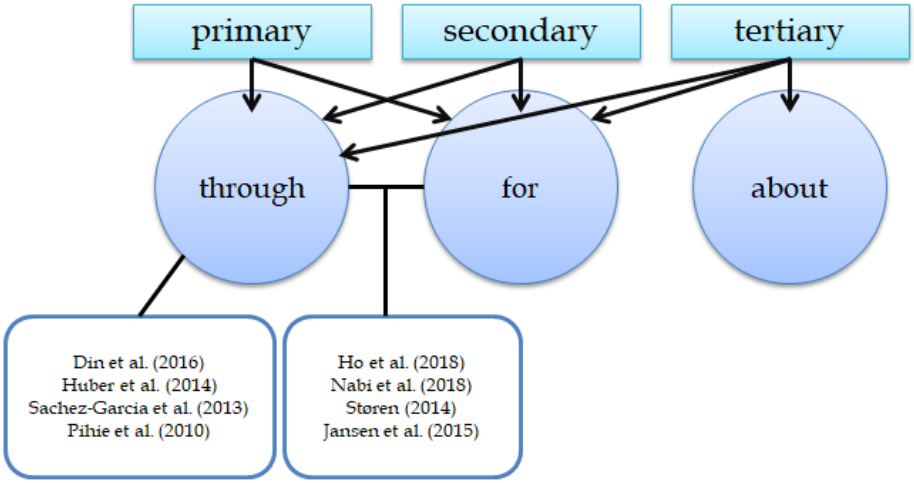

Figure 7. A comparison of entrepreneurship education approaches used in eight of the studies with arrows to indicate what has been recommended for education level

3.4. Teacher Confidence, Knowledge and Capacity

Teachers lack experience and confidence to develop effective entrepreneurship programmes. Issues in entrepreneurship education were described in 11 studies and these could be resolved through training teachers and principals, improving curricula, and fostering teacher commitment (Figure 8).

Issues in entrepreneurship pedagogy	Developing entrepreneurship education
Finland • Teachers required to implement EE faster than the development of teacher commitment. Commitment grew with training (Seikkula-Leino, 2019). • 49.2% of 1359 teachers in Finland had no training. (Ruskovaara, 2015). • Only 50% of principals had developed enterprise orientated activities (Hämäläinen et al., 2018). • Teachers lacked understanding of EE (Komulainen, 2011; Korhonen et al., 2012). Malaysia • Teachers readiness was moderate (Jusoh, 2012). • Students wanted improvements to EE (Othman et al., 2012). Sweden • Low value to teachers (Fejes, 2019). • Teachers lacked understanding of EE (Leffler, 2012; Norberg, 2017). United Kingdom • Schools need guidance to understand (McLarty, 2010) and implement EE (Smith et al., 2017; Thompson et al., 2016). • Teacher's belief need to align with EE (Garnett, 2013) Singapore • University lecturers have differences in values towards pursuing entrepreneurial activities (Reyes, 2016)	Finland • Those who had trained were 3-4xs more advanced in entrepreneurship education methods (Ruskovaara, 2013). • Trained Principals increase and support EE (Minna et al., 2018). Singapore • Hired trainers to work alongside teachers (Ho et al., 2018). • 93% university lecturers want university-enterprise co-operation and 85% agree the relationship allows research project size and scope to be enlarged. (Mok, 2015) New Zealand • Schools had clearly defined vision of EE. Teachers worked with researchers which resulted in renewed energy and enthusiasm (Kirkley, 2017). Norway • Teacher as mentor guided learning (Riese, 2013). • Value creation an effective tool to motivate students and improve, knowledge and skills acquisition (Lackéus, 2020) Spain • Institutions act as an environmental support of EE (Lanero et al., 2011). Malaysia • EE requires a shift in pedagogy (Ahmad, 2013).

Figure 8. Issues in entrepreneurship education (EE) pedagogy with developing EE, including training, curricula and commitment

4. Discussion and Conclusion

Entrepreneurship education has the potential to develop students' competencies, knowledge and skills to confidently act on opportunities, address issues and solve problems that have arisen in their communities. However, this literature review found barriers in developing students' entrepreneurship capabilities and intent, and in supporting teachers to implement effective programmes.

There is no knowing how long or how deep the impact of the current economic depression caused by the COVID-19 pandemic will penetrate our globe and standard of living (Baldwin & di Mauro, 2020). Entrepreneurship education in public schooling and universities requires urgent attention and focus to support and enable young people to understand how they can adapt to a changing environment, (Rieckmann, 2020) to lead and understand the emerging possibilities (Scharmer et al., 2020). This literature review found benefits for students who experience entrepreneurship education including, the development of self-efficacy, motivation and engagement, positive attitudes for identifying and acting on opportunities with knowledge, skills and creativity. Future success in the aftermath of a pandemic requires students to be adaptable, resilient (OECD, 2020), opportunistic, innovative and entrepreneurial which are all capabilities that can be developed through effective entrepreneurship education (Lackéus, 2020; Maritz et al., 2020).

The current literature reveals clear evidence that in order for entrepreneurship education to be effective student's need positive 'hands on' experiences to be fostered throughout schooling and into university so that they can build entrepreneurial intent and confidence. Entrepreneurship education helps to foster the intent of students to be entrepreneurs (Marire, 2015; Rauch & Hulsink, 2015) and can take time to form (Gorgievski & Stephan, 2016). However, this review of the literature found that university graduates have been emerging with high rates of intent to be employees and not business developers or owners (McNaughton & Yun, 2018; Sieger et al., 2019). The OECD (2019) 'Employment Outlook 2019' report repeatedly states that young people are more at risk than other age groups of being underpaid and underemployed, especially if they lack education. While Morgan (2020) argues that students need knowledge plus socialism and not entrepreneurship for future success, Lackéus (2017) explains entrepreneurship can be developed

for the purpose of serving others, develops skills and competencies and enhances student engagement. The multitude of issues that have arisen for families in this current global crisis requires teachers to be receptive to learners (Bryant et al., 2020; UNESCO, 2020) who when placed at the centre of learning can connect to being entrepreneurial for their communities (Mika et al., 2017) and for employment in a post-Covid world.

This study found that teachers need opportunities to build confidence, knowledge and capacity in order to develop effective entrepreneurship education learning experiences that are relevant to today's students and prepares them for future life challenges. . Teachers may not have experienced any form of entrepreneurship activity themselves and therefore lack the confidence to facilitate this learning as they may have stronger content and pedagogical knowledge in traditional curriculum areas. Entrepreneurship education can be effectively implemented with experiential approaches to learning, such as value creation (Lackéus, 2020) and support from external trainers to develop programmes (Ho et al., 2018). Further studies are needed to understand the attitudes and values of teachers who are effectively supporting students to engage in entrepreneurship education. Developing research knowledge and expertise of the specific resources and training that is required to encourage teachers who have not yet gained experience would provide value for policy makers and school leaders to encourage this cross curricular approach to learning. A deeper understanding and models of initiatives that encourage young people to develop confidence in entrepreneurial endeavours in a rapidly changing and uncertain economic environment is urgently needed and an area that would be prudent for education leaders to focus. Further study into current and potential influences that foster entrepreneurship intention in the young people of today, such as online platforms, may help to connect their interests to the classroom.

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