

## Chapter 3

# Listening to Leaders: Investigating the Role of the School Leader in Implementing Entrepreneurship Education

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### ABSTRACT

*Entrepreneurship education in primary and secondary schools has the potential to foster student creativity and innovation and to support learning that recognises opportunities in a dynamic and challenging global community. This chapter provides a background to recent research in entrepreneurship education and school leadership, which are vital to fostering successful student learning, and proposes researchers utilise a Delphi method to gain insights from local community entrepreneurship leaders given their understanding of the local context. These community experts are able to identify locally relevant ways to deliver entrepreneurship education and schools that are known to exemplify successful models. The Delphi method is adaptable for both quantitative and qualitative research and offers the potential for mixed research for targeted deeper inquiry into the vital role of leaders in model entrepreneurship education schools. Recommendations are made for both researchers and school leaders to develop an understanding of the local context for entrepreneurship with a Delphi study.*

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## **INTRODUCTION**

The current health and environmental crisis has necessitated a global response for 21<sup>st</sup> century students to adopt an approach to learning that is resilient, adaptable (OECD, 2020), agentic (OECD, 2022d) and able to explore innovations that may positively shape their future society (Jones, 2019). While containment of the ongoing COVID-19 pandemic has had elements of success, inequity regarding vaccines and approaches to public health perpetuates its spread (Ghebreyesus, 2021). The loss of learning time for students within a traditional school environment has meant many students have needed to learn or complete assessments online; forego extracurricular activities and experiences such as school social events, drama productions, outdoor environmental education camps, sports and graduations. Their lives over the last two years have meant spending more time at home with adults who are simultaneously facing a disrupted working life, while others have yet to return to school (Catherall, 2021; Trudon, 2021). Remnants of unshakeable, predictable patterns offered by schools with stream-lined subjects on a trajectory for specialist courses in higher education (Benade, 2017) buckled under the pressure and rapid change to innovate education proved to be possible (Zhao, 2020). Challenging conformity in education has not been a new issue with calls to provide cross-curricular solutions, foster students to navigate chopping and changing conditions (OECD, 2018b) and seek opportunities for innovations with an entrepreneurial mindset (Lackéus, 2015), solutions that can also support learning during the outbreak of a pandemic (Scharmer et al., 2020).

The current pandemic has exacerbated the need for entrepreneurial learning which fosters the skills and capabilities needed for future society including adaptability, resilience, agency, creativity, innovativeness (OECD, 2022b, 2022c). Future society will require students to create innovations to improve and increase sustainable living (see the United Nation's Sustainable Development Goals, <https://sdgs.un.org/goals>), to rectify the damage done to the planet, to find solutions to poverty, and to further innovate digital technology, agriculture and medicine for increasing human populations (OECD, 2022a; United Nations, 2022) which an entrepreneurial approach offers (Ploum et al., 2018; Rieckmann, 2021). Encouraging students and schools to move away from the current systems in society that are unsustainable is required and school leaders have the power and expertise to create learning environments that empower, foster student creativity and their propensity to innovate-solutions for future society (Rieckmann, 2021) which a cross-curricular entrepreneurship education school curriculum can offer (Strachan, 2018).

In entrepreneurship education, student energy for creative problem-solving is guided by dedicated teacher planning, community collaboration (Lackéus, 2020) and needs to be built upon the solid foundations established by committed leadership with clear vision (Kirkley, 2017; Wibowo & Saptono, 2018). Inquiry into the implementation of entrepreneurship education provides insight into the manifestations of students' experiences and learning outcomes (Garbuio et al., 2018; Hassi, 2016), teacher's evolving pedagogical dispositions (Ruskovaara et al., 2015), or community support (Lee et al., 2015). However, while these measures extrapolate the effectiveness of an entrepreneurship education school, should we wish to disseminate and propagate success, more attention must be paid to listening to leaders who have enabled innovations in entrepreneurship education within school and community settings. The leadership role is central to transform pedagogy (Day et al., 2016; Robertson et al., 2009) enhanced by community and stakeholders connection to improve student outcomes and successful leaders present evidence with vision for motivating teachers to embrace innovation (Daniëls et al., 2019; Louis & Robinson, 2012). An evaluation of the local context for entrepreneurship by consulting local successful entrepreneurship

leaders positions and connects research on experiences of educational school leaders within the interests of the community.

This chapter provides an overview of entrepreneurship education and leadership research, then proposes a Delphi study to contextualise entrepreneurship education in consultation with local community entrepreneurial leaders, and finally suggests further inquiry possible through a mixed-method research project design into educational leaders' narratives and experiences regarding their cultivation of an entrepreneurial learning school. It is argued that a quantitative Delphi study enables researchers to learn from experts in the community regarding characteristics for developing student entrepreneurship that are locally relevant and identify leading entrepreneurship education schools. The Delphi informed the parameters of local entrepreneurship education and identified potential participants for qualitative research where local leaders share insight into what enables local effective practice.

## **Entrepreneurship Education**

In entrepreneurship education, students are fostered to pursue interests, learn independently, be adaptable and resourceful, assess risks, and develop self-efficacy for entrepreneurship by attaining entrepreneurial knowledge, skills and capabilities (Lackéus, 2015). Entrepreneurship is a creative or innovative response to opportunities or challenges across many different contexts and yet has been greatly hindered by limited interpretations to be understood as only meaning the pursuit of a business start-up (Gibb, 1987). However, entrepreneurship education incorporates diverse forms of entrepreneurship that recognise opportunities to address social (Bisanz et al., 2019), democratic (Tiemensma & Rasmussen, 2019) and sustainability (Rieckmann, 2020) concerns as well as economic entrepreneurship. The three main philosophies of pedagogical approaches recognised are whether students will learn *for* entrepreneurship with training, learn *about* theories on entrepreneurship, or learn *through* entrepreneurship experiences (Hannon, 2005). Strategies include curricula as a cross-curricular approach, as a separate compulsory or optional subject, or integrated into compulsory or optional subjects (Bourgeois, 2012). However, a broad cross-curricular approach to subject knowledge embedded in a school culture for entrepreneurial innovations can encourage divergent thinking and ensure more connections are made for students by emanating *real world* contexts (Lackéus, 2015; Val et al., 2017). The school environment, curriculum, personnel and the entrepreneurs operating within the surrounding community provide a rich and diverse context within which student creativity can flow.

Students can be fostered to develop entrepreneurial knowledge, skills and capabilities throughout their schooling (Ho et al., 2018; Huber et al., 2014) and tertiary education (Dedoussis et al., 2013). According to Lackéus (2020), learning to be entrepreneurial is optimised in the classroom when the learning focus shifts perpetually between understanding established knowledge, being innovative with knowledge, being agentic and creating value for others such as those in the community. When students participate in entrepreneurial learning, they are engaged, cooperative and motivated (Garnett, 2013; Kirkley, 2017; McLarty et al., 2010) because they are applying their skills and ideas to solving 21st century problems (Lackéus, 2020). Students gain self-efficacy (Din et al., 2016; Huber et al., 2014), learn to take risks and recognise opportunities (Ho et al., 2018). Entrepreneurship education can also encourage the development of effectuation (Sarasvathy, 2001) whereby educators and students alike are encouraged to see themselves as change agents, capable of utilising available resources to make a difference to future society and are able to move away from old traditions that disregard and/or perpetuate social, economic and environmental problems (Ploum et al., 2018; Rieckmann, 2020; Scharmer et al., 2020).

## Research on Entrepreneurship Education in Schools

Prior to writing this chapter, a review of 35 articles on entrepreneurship education in primary and secondary schools was undertaken (Hardie et al., 2022a). This literature review identified that: entrepreneurship education had a range of benefits for students and teachers; the majority (77%) of research undertaken focussed on secondary school education; curricular reform for implementing entrepreneurship education encouraged innovations to teacher practice (Jusoh, 2012; Kirkley, 2017), was interpreted to suit different school contexts (Elo, 2016; Hassi, 2016), and encouraged the use of support programmes (Huber et al., 2017; Norberg, 2017). However, while teachers were found to value innovation of their teaching methods (Hocenski et al., 2019; Kirkley, 2017), issues arose from the use of curricular reform as a catalyst (Fejes et al., 2019; Seikkula-Leino et al., 2019). School leaders were key to implementing entrepreneurship education as curricular reform alone was not enough to transform teacher practice and create a school culture for entrepreneurship (Hämäläinen et al., 2018). Leaders were found to promote, motivate, enable, resource and create networks with businesses and support programmes that support entrepreneurship (Hämäläinen et al., 2018; Kirkley, 2017; Lee et al., 2015). The literature review also found there were concerns that entrepreneurship education practice would advance a neoliberal agenda to burden the individual rather than society with economic responsibility (DeJaeghere, 2014; Korhonen et al., 2012; Norberg, 2016) (Hardie et al., 2022a). In schools that had created an entrepreneurial culture, leaders maintained a clear vision for entrepreneurship education and ensured teachers knew the value of the innovations introduced (Hämäläinen et al., 2018; Kirkley, 2017; Lee et al., 2015).

The literature review found leaders play a critical role in curricular reform (Kirkley, 2017), to support teachers, open doors to programmes (Birdthistle et al., 2016), create networks within communities and support innovations in entrepreneurship education (Abo-Shabana et al., 2018; Hämäläinen et al., 2018; Lee et al., 2015) (Hardie et al., 2022a). Research methods described within the literature were collated to compare how often leaders were asked about entrepreneurship education in their school (Hardie et al., 2022a). Leaders were rarely included as participants in study designs on entrepreneurship education ( $n = 6$ ) when compared to teachers and students. Two studies included a leaders' survey (Birdthistle et al., 2016; Hämäläinen et al., 2018), five studies included leader interviews (Abo-Shabana et al., 2018; Birdthistle et al., 2016; Kirkley, 2017; Lee et al., 2015; Testa & Frascheri, 2015) and one study included the school leader in an action research project (Elo, 2016). However, researchers have reported that leaders were key to implementing successful entrepreneurship education practice (Hämäläinen et al., 2018; Kirkley, 2017; Lee et al., 2015) and new ways of doing things may be encouraged by knowing more about their support and involvement in strategies. Therefore, deeper inquiry into five studies that included a leader interview were undertaken. For this chapter, a second literature review into the implementation of entrepreneurship education was also carried out to add to this inquiry and found a further 20 studies with four more studies that included educational leader interviews (Bisanz et al., 2019; Danaher & Slatery, 2015; Johansen, 2018; Sommarström et al., 2020).

## Past Research into the Stories of Entrepreneurship Education Leaders

A summary of the emerging research from nine studies that included leader interviews on entrepreneurship education was compiled in order to understand in depth the narratives and experiences of leaders (as summarised in Table 1).

Table 1. Key themes identified from interviews with entrepreneurship education leaders in 9 research studies

In nine studies on entrepreneurship education (EE) leaders spoke about:			
Vision	Collaboration and networking	Supporting teachers	Valuing EE learning
<ul style="list-style-type: none"> <li>• Motivate stakeholders with passion, commitment &amp; mentoring (Kirkley, 2017; Lee et al., 2015)</li> <li>• Develop school culture (Abo-Shabana et al., 2018; Kirkley, 2017)</li> <li>• EE prioritised with policies and curricula (Johansen, 2018)</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate to engage families, community, local businesses, other schools, &amp; EE support programmes (Abo-Shabana et al., 2018; Johansen, 2018; Kirkley, 2017; Lee et al., 2015; Sommarström et al., 2020)</li> <li>• Collaborate with teachers and allocate release time (Danaher &amp; Slattery, 2015; Lee et al., 2015)</li> <li>• Seek out resources and funding (Johansen, 2018; Lee et al., 2015)</li> </ul>	<ul style="list-style-type: none"> <li>• Support teachers to network with the community &amp; businesses (Abo-Shabana et al., 2018; Lee et al., 2015)</li> <li>• Support teachers through change (Johansen, 2018; Sommarström et al., 2020)</li> <li>• Enable EE professional development for teachers (Johansen, 2018; Lee et al., 2015)</li> <li>• Allocate paid management units to teachers who lead EE (Kirkley, 2017)</li> </ul>	<ul style="list-style-type: none"> <li>• Value for EE grows with experiences (Sommarström et al., 2020)</li> <li>• Crosscurricular fosters students' entrepreneurial capabilities (Birdthistle et al., 2016; Johansen, 2018; Lee et al., 2015)</li> <li>• Student-centered (Lee et al., 2015)</li> <li>• Contextualised by collaborative planning (Danaher &amp; Slattery, 2015)</li> <li>• Hands-on (Testa &amp; Frascheri, 2015)</li> <li>• Involves creativity, leadership, self-efficacy, problem solving, critical thinking (Abo-Shabana et al., 2018)</li> <li>• Students prepared for future careers (Abo-Shabana et al., 2018; Birdthistle et al., 2016)</li> </ul>
<b>Challenges:</b>			
Time and money	Managing change	Lack of resources	Research issues
<ul style="list-style-type: none"> <li>• Allocating time (Abo-Shabana et al., 2018; Birdthistle et al., 2016; Testa &amp; Frascheri, 2015)</li> <li>• Networking takes time to build relationships (Sommarström et al., 2020).</li> <li>• Not mandatory so not timetabled (Birdthistle et al., 2016)</li> <li>• Cost of field trips or programmes in schools (Testa &amp; Frascheri, 2015)</li> </ul>	<ul style="list-style-type: none"> <li>• EE implementation was resisted and not managed well (Abo-Shabana et al., 2018; Sommarström et al., 2020).</li> <li>• Increasing teacher workloads can negatively impact EE (Sommarström et al., 2020).</li> <li>• Governments can require more policies in other ways of learning rather than EE (Birdthistle et al., 2016)</li> </ul>	<ul style="list-style-type: none"> <li>• Most funding is allocated to specific subject areas (Birdthistle et al., 2016; Sommarström et al., 2020)</li> <li>• Hard to acquire professional development (Abo-Shabana et al., 2018)</li> </ul>	<ul style="list-style-type: none"> <li>• Research methods into EE can be unsuitable to schools and do not always develop students' entrepreneurial intent. (Testa &amp; Frascheri, 2015).</li> </ul>

Note: Author-based on work by Abo-Shabana et al., 2018; Birdthistle et al., 2016; Bisanz et al., 2019; Danaher & Slattery, 2015; Johansen, 2018; Kirkley, 2017; Lee et al., 2015; Sommarström et al., 2020; Testa & Frascheri, 2015.

Four main areas to innovating entrepreneurship education practice were found in the nine studies on leaders' perspectives: vision; collaboration and networking; support for teachers; and value for learning approaches (Abo-Shabana et al., 2018; Birdthistle et al., 2016; Bisanz et al., 2019; Danaher & Slattery, 2015; Johansen, 2018; Kirkley, 2017; Lee et al., 2015; Sommarström et al., 2020; Testa & Frascheri, 2015). Leaders were key motivators for engaging teachers, stakeholders and the community in the value of entrepreneurship education. Leaders recognised the importance of supporting teachers in innovating entrepreneurship education and ensured stakeholders knew the benefits of their investment. A cross-curricular, student-engaging approach was recommended along with student-led, hands-on learning.

## Listening to Leaders

Table 2. A sample of definitions used for different educational leadership theories

Instructional Leadership	Transformative Leadership	Distributed Leadership	Situational Leadership	Pedagogical Leadership
<ul style="list-style-type: none"> <li>• Clear vision</li> <li>• Creates goals for teachers and students</li> <li>• Leads the curriculum</li> <li>• Monitors progress</li> <li>• Creates a positive school culture</li> <li>• Guides and aligns pedagogy to achieve student outcomes (Hallinger, 2005)</li> <li>• Presents evidence of practices that improve student outcomes (Louis &amp; Robinson, 2012)</li> <li>• Promotes stakeholder engagement, student diversity, and ethical practice (Murphy et al., 2007)</li> </ul>	<ul style="list-style-type: none"> <li>• A vision for change created with stakeholders (Callejo, 2009)</li> <li>• Build teacher agency and commitment (Leithwood &amp; Jantzi, 1999)</li> <li>• Transform school culture and teacher pedagogy</li> <li>• Improve teacher relationships and working conditions, share knowledge</li> <li>• Encourage problem solving and students thinking skills, including for sustainability</li> <li>• Motivate and engage learners to improve learning (Fullan, 2002)</li> </ul>	<ul style="list-style-type: none"> <li>• Democratic teacher leadership</li> <li>• Teacher collaboration (Robertson et al., 2009)</li> <li>• Reflects the differentiation of tasks and routines</li> <li>• Learning is a product of interactions between actors</li> <li>• Leadership is on a distributed and focused continuum (Gronn, 2000)</li> <li>• Leadership is the sum of contributions from the group (Gibb, 1954)</li> </ul>	<ul style="list-style-type: none"> <li>• School context determines what leaders can do</li> <li>• Focus on attitude and behaviour of teachers and characteristics of the school</li> <li>• Challenging contexts can influence student outcomes</li> <li>• Seek to improve power relations and inequities (Daniëls et al., 2019)</li> <li>• Consensus decision making (Hallinger, 2011)</li> </ul>	<ul style="list-style-type: none"> <li>• Generate shared vision</li> <li>• Focus on teacher well-being and relationships</li> <li>• Grow teacher capacity by promoting and leading teacher professional development (Webb, 2005)</li> <li>• Expert teachers lead</li> <li>• Collaborative culture</li> <li>• Focus on student achievement and well-being (Robertson et al., 2009)</li> </ul>

These nine studies revealed that leaders were challenged with the task of sourcing and allocating money, time, and resources as well as ensuring implementation of entrepreneurship education was manageable for teacher workloads and included teacher professional development. Poor implementation risked resistance from teachers and, in one study, students did not develop entrepreneurial self-efficacy and knowledge which impacted on their entrepreneurial intent (Testa & Frasier, 2015).

However, across the 55 studies from both the first (35) and second (20) literature reviews, just three studies (Abo-Shabana et al., 2018; Kirkley, 2017; Lee et al., 2015), demonstrated how research into the experiences and perspectives of leaders who enable and transform practice can inform successful approaches and areas that are challenging. This is an under-researched area and yet clearly of critical importance if curriculum transformation is to occur.

## Educational Leadership Research

### Educational Leadership Styles

Educational leadership research has investigated various leadership styles which impact positively on student social and academic outcomes (Table 2). A review of 75 studies on leadership theories by Daniëls et al. (2019) found four types: instructional leadership; transformative leadership; distributed leadership; and situational leadership. Strategic leadership (Bendikson, 2022), and pedagogical leadership (Robertson et al., 2009) have also been shown to be effective ways of improving school performance.

Differentiating between different styles of leadership presents a challenge as there are many overlaps between the styles. Research into leadership styles has been compared in the literature for their effectiveness to articulate goals and a vision for the school, as well as to improve teacher pedagogy and student outcomes. Discussions in the literature (described in Table 2) on transformative leadership, distributed

leadership, strategic leadership and pedagogical leadership emphasised a need for more democracy in leader–teacher relationships when compared to articles on instructional and situational leadership. A review of studies on leadership by Robertson et al. (2009) found that, when the impact of leadership styles on student outcomes was compared, pedagogical leadership made a positive impact 3–4 times greater than transformational leadership, whereas a blend of instructional and transformative leadership is recommended by Day et al. (2016) and Fullan (2002). As Fullan (2002) explained, while instructional leadership as a strategy can improve numeracy and literacy data, leaders need to retain student-centred learning approaches that are more motivating and engaging for students to explore their creativity and passions, by striving for transformative leadership practice that moves away from narrowed learning for testing.

However, the 2020 evaluation report of the Teaching and Learning International Survey (TALIS) 2018 recommended leaders adopt distributed leadership practices. The report described the shift from instructional leadership to distributed leadership as transformative leadership and found an increase in distributed leadership was positively correlated to frequency of collaboration between teachers (Schleicher, 2020). This approach is more likely to support an entrepreneurially focussed curriculum with opportunities for innovation. The TALIS report (Schleicher, 2020) recommended high levels of instructional leadership that strongly foster a collaborative culture and teacher agency alongside distributed leadership approaches.

Strategic leadership, which was discussed as an important aspect of all leadership styles included: clear vision; collaboration with teachers to create goals and annual plans; monitoring teacher impact and progress (student and teacher voice); learner centredness and problem solving for improvements (Bendikson, 2022). According to Davies and Davies (2004), strategic leadership involved putting strategies into action, building teacher capabilities and commitment to the school, making changes and taking up opportunities at the appropriate time.

## Leadership Style in Context

Context was important to the leadership style employed according to Tan (2018) who measured the indirect effects of principal leadership on the achievement of 15-year-old students ( $n = 254,475$ ) in mathematics from 10,313 schools in the OECD and found instructional leadership improved student outcomes in disadvantaged communities whereas distributed leadership was detrimental to their results. The review conducted by Daniëls et al. (2019) also found school context to influence the approach leaders take and recommended future studies take context into account when researching effective leadership in schools.

Preference for a leadership style was determined by country. In Australia (Jensen et al., 2015), China (Hou et al., 2019), Germany (Greatbatch & Tate, 2018), Indonesia (Dania & Andriani, 2021), Kazakhstan (Schleicher, 2020), New Zealand (The Education Hub, 2020), and the United States (Hallinger et al., 2020) instructional leadership is a common approach. Whereas, in countries such as Japan (OECD, 2018a) Finland (Lahtero et al., 2017), Estonia, the Netherlands and Canada (Greatbatch & Tate, 2018) distributed leadership is a more common approach. The Council of the European Union (2013) explicitly states leaders should use distributed leadership in their recommendations. However, Germany has tended to show preference to use more instructional and pedagogical leadership over distributed leadership, which Greatbatch and Tate (2018) attributed to principal/vice-principal management arrangement in schools and a greater focus on excellence in teaching as a pathway to leadership roles.

Countries also stipulated best practice for leaders by providing a guide which included a list of competencies, behaviours or dimensions expected from leaders; English examples of guides are in Table 3.

## Listening to Leaders

Table 3. A sample of guidelines for best practice in leadership

Country	Reference	Leader Dimensions Guide
New Zealand	New Zealand Council of Educational Research (2018)	“Leadership Capability Framework”
Australia	Australian Children’s Education and Care Quality Authority (2020)	“Standard 7.2 Leadership” – in Australia’s National Quality Framework
United States	Simon et al. (2014)	“Turn Around Leader Competencies”
United Kingdom	Department of Education (2020)	“The Head Teacher Standards 2020”
China	<i>Translation by Feng (2020)</i>	<i>Guide name unknown – “key leadership practices”</i>
Council of the European Union	Council of the European Union (2013)	<i>Union criteria – “effective leadership criteria”</i>

Guides listed a range of dimensions from 4 to 13 items per guide for an educational leader to demonstrate. Many of the listed goals in these guides echoed more than one type of leadership style. In New Zealand, the leader’s role is “building and sustaining collective leadership and professional community,” a sentiment of distributed leadership however, instructional leadership is also encouraged (New Zealand Council of Educational Research, 2018, p. 5). In the United States, leaders are “Influencing for results (working through and with others),” (Simon et al., 2014, p. 14) similar to instructional leadership in influencing teacher pedagogy to improve student results – yet the word “with” implies also using a more democratic distributed leadership approach, illustrating once again a lack of distinguishable starting gates and lanes in leadership styles.

## Qualities of an Educational Leader

Leadership is multidimensional with many qualities that shape the behaviour, attributes and mindset of leaders (Vermeulen et al., 2020) and culminate into a unique set of strengths and challenges for the leader and their school (Figure 1).

Leadership can be influenced by context such as preference for leadership style, budget constraints, and locally expected leadership competencies or the leaders’ own skills, personality, beliefs, values (Robertson et al., 2009), well-being (Dewa et al., 2009) and relationships (Fullan, 2002). Qualities lower down in Figure 2 can be less visible, yet influence those qualities further up in the diagram and vice versa; for example, as discussed, the dominant culture and economic structure of the context can influence requirements leaders must meet in leadership competencies and style (Yang, 2021).

## The Direct and Indirect Impact of Leaders

Leaders are key to improving student learning outcomes through direct and indirect actions, developing teacher pedagogy, supporting a collaborative school culture that works towards collectively defined goals, and fostering positive relationships within the community (Hattie, 2015). In disadvantaged communities, school leaders can be instrumental in raising student achievement (Day et al., 2016; Stronge & Xu, 2021; Tan, 2018). How leaders positively impact student outcomes is measured by how leaders influence teachers and students directly and change conditions or influence teachers indirectly (Robert-

Figure 1. Examples of dimensions that determine the qualities of an educational leader

Note: The underlying and least noticeable qualities are indicated as lower down and in a darker shade and influence the qualities that can be more noticeable which are indicated by the lighter background.



son et al., 2009), such as teacher's agency, pedagogy and work conditions (Leithwood & Jantzi, 2006), school organisation and culture (Day et al., 2016).

Leaders are key to creating a school culture where teachers have collective efficacy that, together, they can make an impact on student learning, engagement and achievement (Donohoo et al., 2018). According to Leithwood et al. (2011), leaders who promote collective leadership improve teachers' knowledge skills motivation, and working life – which directly improves student outcomes. They also found sharing leadership with teachers, parents and students did not compromise a leader's influence and was more common in higher-achieving schools than lower-achieving schools (Leithwood et al., 2011).

### Transforming Schools for Entrepreneurial Learning

For substantial change to occur in classroom practice, leaders and their leadership style can have a significant impact (Robinson & Timperley, 2007). The style of leadership employed might be determined by the context (Greatbatch & Tate, 2018), how much change is required to move towards the vision and goals set out by a school or government policy (Hattie, 2015), and may require a fusion of the different styles described in this chapter. However, evidence on the practices of successful school leaders who influence curriculum reform or innovative developments that would support an entrepreneurial mindset was found to be limited to three studies (Hardie et al., 2022a). Therefore research on how leaders successfully implement entrepreneurial learning is required to uncover the decisions and experiences that are required to enable the much needed entrepreneurial learning for students living through a pandemic and planning for their futures. Researchers need to utilise methods which provide the opportunity to inquire into the specific practices of leaders providing more detail of experiential evidence (Day et al., 2016), especially in the context of what is required and possible for leaders and entrepreneurship in the school's community.

## The Key Role of Educational Leadership in Entrepreneurship Education

Necessary to the development of an entrepreneurial education school is educational leadership with a strong vision to lead and support curriculum reform (Brauckmann-Sajkiewicz & Pashiardis, 2020). Educational leaders energise the development of a culture for entrepreneurship, ensure teachers know and understand the value of innovations introduced, create networks with businesses and support programmes (Hämäläinen et al., 2018; Kirkley, 2017; Lee et al., 2015), in order to determine the possibilities for entrepreneurship by ensuring the support and resources are available (DeJaeghere, 2013; Ho et al., 2018; Jones & Iredale, 2014).

Entrepreneurship education has developed over the past forty years since it was introduced as a way to address low unemployment (Jones & Iredale, 2014; Pepin, 2018); however, its implementation has continued to be sporadic and limited as teachers and leaders have not been adequately trained (Hämäläinen et al., 2018; Ruskovaara & Pihkala, 2015; Seikkula-Leino et al., 2019), lack access to resources (Neck & Corbett, 2018) or have not been exposed to enough evidence of the value of entrepreneurship in schools (Hardie et al., 2022a; Fejes et al., 2019; Hämäläinen et al., 2018; Lackéus, 2020). Leaders may not be aware of the importance entrepreneurship education has for future society or the importance of their role in its implementation (Hämäläinen et al., 2018). Even when entrepreneurial learning is written into curricula, without educational leadership support it is often prioritised less than the assessment-driven curriculum that relies on the memorisation of subject knowledge in both schools and in higher education (Rieckmann, 2021).

Educational leaders who have mastered inclusion of entrepreneurial learning hold key evidence for understanding effective implementation of entrepreneurship education as they have engaged in a process of transforming curriculum implementation (Hardie et al., 2022a; Donohoo et al., 2018).

While the emerging research shown in Table 1 outlines aspects of leaders, in comparison to the plethora of research on leadership styles to enhance successful schools or transform schools (highlighted in Table 2), to be more successful there is clearly more to understand about leadership in entrepreneurship education. Leaders can transform pedagogy to foster student entrepreneurship by setting goals and strategies for cross-curricular and innovative learning with collaborative teaching spaces, and foster collective efficacy and professional development for entrepreneurship education pedagogy. In opening schools to networking with successful entrepreneurship leaders and programmes, leaders can connect their communities for positive social interactions (Hattie, 2015) around what is best for student outcomes.

Descriptive narratives from educational leaders can enlighten and provide testimony to researchers and other educators on the importance of educational leadership in effectively implementing entrepreneurship education and how to prepare students for the challenges of learning, to recognise opportunities and create innovations to improve the outlook for their future society.

## A Future Direction for Entrepreneurship Education Leadership Research

To cultivate and foster school students' entrepreneurial capabilities and creativity more extensively, research is needed to understand the experiences and practices of school leaders who are key players in supporting innovations to entrepreneurship education. Innovations implemented to advance entrepreneurship education teacher practice have received minimal research attention (Hassi, 2016; Ratten & Usmanij, 2021). The reviews of the literature discussed in this chapter found innovations to entrepreneurship education was a result of teachers' adaptation to curricular reform and student experience. Of

the nine studies that inquired into the experiences and perspectives of school leaders, only three of these studies (Abo-Shabana et al., 2018; Kirkley, 2017; Lee et al., 2015) focused on how leaders themselves innovate entrepreneurship education within their school communities.

Purposive sampling to interview leaders who are successfully implementing effective innovations in entrepreneurship education will provide evidence for other leaders to utilise when seeking to motivate commitment from their school community. Educational leaders who are successful can explain the key decisions and experiences that have enabled innovations which are practically useful for their local context.

## Contextualising Research into Entrepreneurship Education Leadership

The context of the school greatly influences the possibilities for entrepreneurship and the support and resources available (DeJaeghere, 2013; Ho et al., 2018; Jones & Iredale, 2014). Leaders who make the most impact on improving student outcomes adapt their strategies to suit the local context (Day et al., 2016). Effective educational leaders seek networks with the local community as they can provide mentorship (Kozlinska, 2016), authentic learning experiences (Ruskovaara et al., 2016) and guidance on trends in entrepreneurship in a range of community projects and employment areas (Bischoff et al., 2018; Lee et al., 2018). However, incorporating context into defining entrepreneurship education has been debated and seen as counter-intuitive to entrepreneurship for individual agency and diversity (Blenker et al., 2012). Attempts to contextualise entrepreneurship education into collective, localised models can be seen to once again affirm the one-size-fits-all model of institutions and their prejudices (Blenker et al., 2012; Jones & Matlay, 2011). Yet, while schools are becoming more multicultural with globalisation, as Fisher (2021) explains, effective leadership requires addressing local values and cultural orientations, especially in styles of leadership. Identification of community entrepreneurship leaders' definitions of successful entrepreneurship education enables the alignment of goals and values for developing entrepreneurial students who can successfully navigate current and future societal demands and opportunities (Bischoff et al., 2018).

Ramsgaard et al. (2021) argued that context matters when defining entrepreneurship education and developed a "Context Hive" model to guide learning conversations between higher education educators and students about how entrepreneurship can be enacted within the local context. Teachers were reported to have moved away from directing what resources and contacts should be approached to allow students to explore and build their own networking skills while ensuring students were aware of what would be possible within the context (Ramsgaard et al., 2021).

The current authors propose that the value of considering the local context is not to reinforce structures in society but to share ideas amongst leaders on how to enhance entrepreneurship education according to local values and available resources and networks in society. Fayolle et al. (2016) describes consideration of the local context in research in order to further enhance society as using a socio-constructivist lens. According to the bioecological systems theory of Bronfenbrenner and Morris (2007), a student develops within social systems. Entrepreneurship education ecosystems contain shared systems that determine what is possible for entrepreneurship in schools (Belitski & Heron, 2017; Fiore et al., 2019). Research into local interpretations of entrepreneurship can help to share understanding between educational leaders on ways to contextualise and adapt strategies of entrepreneurship education at a microsystem level to foster students' entrepreneurial learning.

## **Research to Enhance Entrepreneurship Education**

A Delphi approach has rarely been used in entrepreneurship education research (Hardie et al., 2022a), yet is a very effective method of gathering collective views which can be more insightful than an individual's (Anderson, 2010) making it a useful tool to assess local values on entrepreneurship education. In New Zealand, identifying a school delivering an effective entrepreneurship education curriculum can be difficult. The national curriculum policy was updated in 2011 to include an “enterprising” approach to learning (Ministry of Education, 2011, p.3) and 13 characteristics of an entrepreneurship education school were provided as a self-assessment checklist in a resource website for school leaders and teachers termed “Education for Enterprise” (Ministry of Education, 2013). However, for the external researcher, these characteristics for identifying an entrepreneurship school can generally only be gained through external evaluation such as the Education Review Office, information on a school website, or as used by the current authors via a referral through a Delphi study.

In order to gain an understanding of an effective, localised model of entrepreneurship education, a quantitative Delphi method was utilised as it defined complex parameters (Linstone & Turoff, 2002) and also posed the opportunity to ask experts to nominate schools for qualitative research which will enable future research into the experiences of educational leaders (Mutch, 2013) through a mixed-method approach. This project, once completed, will follow a mixed-method explanatory sequential design (Creswell, 2015) where the later phases of a study are interpreted with consideration of previous phases.

### **The Delphi Method**

A Delphi can be used to prioritise a set of characteristics or define issues that may have a range of interpretations by seeking consensus from experts over multiple rounds (Charro, 2020; McPhail & McNeill, 2019). A Delphi study usually involves no more than 30 participants who are experts in their field to form consensus regarding a topic or issue over, often, no more than three to four rounds (Ruppert & Duncan, 2017). Delphi methods can involve open-ended questions (Hatt, 2018) or quantitative measures of predetermined items (Irdayanti et al., 2015). The key elements to an effective Delphi is that the quality of participant expertise must be high (Charro, 2020), participation is anonymous (Neck & Corbett, 2018), and participants are given an opportunity to reflect on the overall results after each consecutive round (Bray et al., 2012).

### **The New Zealand Entrepreneurship Education Delphi Study**

In 2021, an initial quantitative Delphi study was conducted by Hardie et al. (2022b) which provided an opportunity to rapidly update an understanding of the characteristics of an effective entrepreneurship education in the New Zealand context. The study recruited participants according to their reputation as local successful entrepreneurship leaders or entrepreneurship education leaders. A literature review found 25 characteristics could be collated from international studies into effective practice for entrepreneurship education and these characteristics were presented to 28 entrepreneurship expert leaders recruited through referrals in the community. A Likert survey with a 5-pt scale of importance for each characteristic in entrepreneurship education was used to enable participant completion within 3 to 5 minutes. The overall results were shared with participants before a second 3-5-minute survey was distributed with the ranked characteristics according to round one. Participants were asked to tick those characteristics that identify

an effective entrepreneurship education school, and 20 participants responded. which collectively prioritised seven characteristics for enhancing student learning in the New Zealand context. The results of the second round were sent to participants along with the opportunity to give feedback; however, no changes were added in the third opportunity and two rounds were deemed sufficient to have exhausted responses.

## **Defining Local Entrepreneurship Education Through a Delphi Study**

The Delphi study stimulated interest from participating local leaders in entrepreneurship who wanted to share their knowledge for how educational leaders may effectively implement entrepreneurial learning in schools. The entrepreneurial experts selected characteristics to which they could contribute – such as authentic learning experiences and mentorship for students – which demonstrated their interest to network with schools and contribute to learning. Results indicated that two characteristics from the Delphi findings were similar to the New Zealand Education for Enterprise resource (Ministry of Education, 2013) that was to provide students with authentic, real world learning and foster enterprising attributes. However, none of the other 11 Education for Enterprise characteristics were deemed by the participant group consensus determinants of effective entrepreneurship education in New Zealand.

At least half of the participant entrepreneurship leaders identified one or more schools in New Zealand currently implementing entrepreneurship education effectively. The Delphi enabled rapid determination of the currently effective characteristics for entrepreneurship education and provided information for locating leaders whose experiences will be collated through follow-up interviews in order to support the growth of entrepreneurship education in schools across the community. The findings of the Delphi demonstrated how local entrepreneurial leaders understand the key contexts for entrepreneurship, the characteristics of entrepreneurship education and how to best prepare students for the current time and a projected future. Participants also provided information about who the educational leaders within their communities were, and who could provide narratives of their experiences to enhance entrepreneurship education. The benefit of using a Delphi method was two-fold, firstly, a range of entrepreneur experts within and outside the education system could quickly and effectively provide their views on effective practice for entrepreneurship education in New Zealand and secondly, the Delphi method enabled them to respond to the views of others relative to where they believed the priorities were for teaching.

The Delphi study revealed that when educational leaders network with entrepreneurs from a range of careers in the community, they develop a greater understanding about the required characteristics for entrepreneurship. Networking between school leaders disseminates information about current opportunities and needs for entrepreneurship, effective practice for entrepreneurship education and may encourage further networking with the community. School leaders can also link teachers and students to mentors, authentic experiences, and resources.

## **Envisioning Entrepreneurship Education Leadership Research**

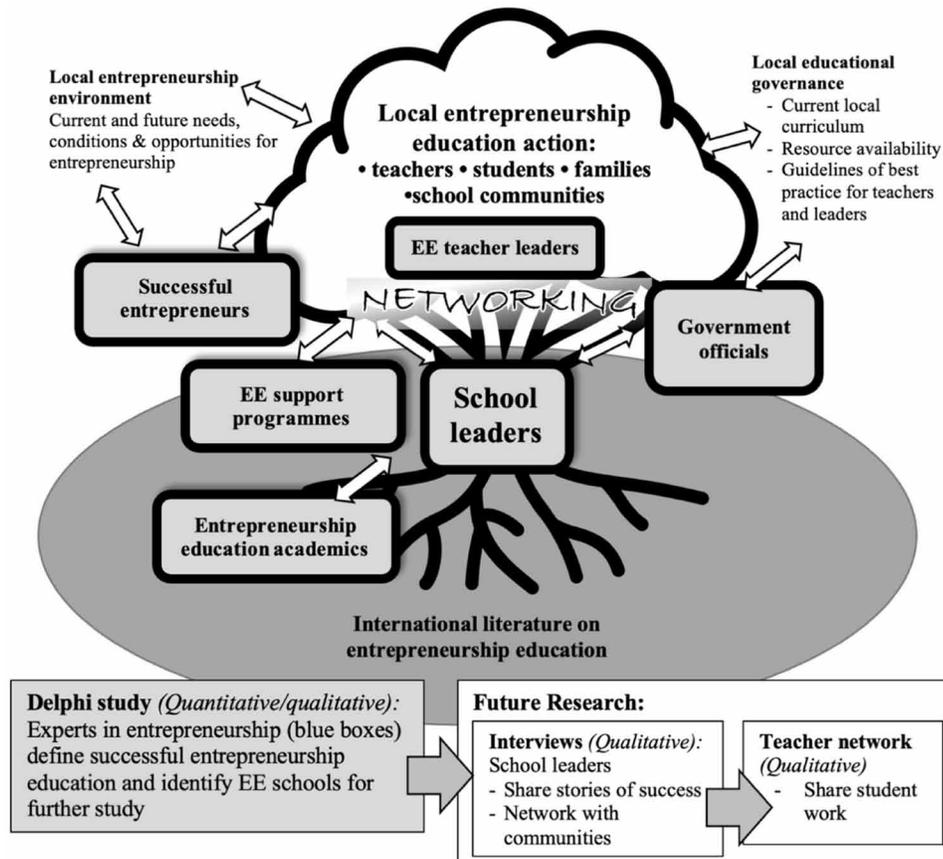
Local research into entrepreneurship education leadership could take into consideration local values for leadership styles (Daniëls et al., 2019; Fisher, 2021; Tan, 2018) and preferences for student's entrepreneurial learning (Hardie et al., 2022b) within the current context for entrepreneurship (Ramsgaard et al., 2021). An analogy for growing local understanding of effectively implementing entrepreneurship education through research is presented in Figure 2. as a living tree, strongly supported by leadership, responsive to its environment, and able to grow through many networking connections.

## Listening to Leaders

Figure 2. Research into local entrepreneurship education leadership

source: authors

Note: Arrows indicate flow of interactions, information, support, or resources as a rationale for growing local efficiency in entrepreneurship education. Grey arrows show sequence of mixed-method research.



Just like tree roots that absorb material that is critical, and which forms the basis for productive growth, in this analogy, international and national literature is used by stakeholders to learn and develop successful strategies and practices. Local educational leaders support the school's potential through holding up a vision for entrepreneurial student learning, fostering teacher collective efficacy and professional development, monitoring student outcomes and encouraging people to branch out and connect through collaborative relationships internally, and externally to opportunities for teachers and students through networks. The white arrows go both ways in Figure 1 because investment in people and inclusive entrepreneurial systems is two-way, empowering people to action and connect ideas that symbiotically contribute to the local niche.

Developing a picture for effective entrepreneurship education leader approached through research that began with a Delphi study established the local context for entrepreneurship education with local community leaders in entrepreneurship and opens doors through existing networks for referrals to identify school leaders to investigate their effective practices. Illustrated in Figure 1 is also future research that Delphi supports to inquire into leaders' stories; narratives that explain the opportunities, actions and

decisions enabling areas of success within the school communities' evolving teacher practice and the student learning body, the context of local educational governance and guidance on leadership and the local entrepreneurship environment that families, alumni and the wider community traverse. Subsequently, these schools could also share in a teacher network with exemplars of student work.

A post-pandemic world will require citizens with an entrepreneurial mindset. Therefore, school leaders need to embrace an entrepreneurship education growth model through research that surveys and connects with local entrepreneurship leaders. Such research can provide understanding into how to address current societal needs and opportunities and move away from following curricula written for a different future trajectory. As Fullan (2020) explains, education has now been forced to quickly change in a range of ways due to the pandemic, from what was once sluggish adaptation to the needs of students and the future of society; it is predicted that it will take at least the next 10 years for educators to make the necessary changes. Whereas Sahlberg (2020) doubted education will change without a shift of philosophy from one that expects knowledge acquisition to fostering student creativity and innovation, and proposes a shift from writing policies for schools to following creative avenues to share culturally relevant and effective ideas. Identification and communication of relevant characteristics of entrepreneurship education for local communities currently and in the projected future, society needs clarification through research from a variety of local entrepreneurs and educational leaders to enhance their use in schools.

## **FUTURE RESEARCH DIRECTIONS**

In-depth research, including interviews and observation of school leaders, is required to understand how entrepreneurship education can be effectively implemented. Local school areas can have limited experience in implementing entrepreneurship education (Jusoh, 2012; Korhonen et al., 2012; Norberg, 2017) so disseminating research about how effective entrepreneurship education is innovated and enabled would be useful support for leaders in those communities.

The current climate for entrepreneurship education has changed and research is needed to support immediate work for schools that require change. While existing networks can provide insight, the Delphi method can draw on deep understandings from existing research and disseminate new knowledge through rigorous, peer-reviewed scholarship. Characteristics of entrepreneurship education for a Delphi study could also be determined in the first round of a Delphi by collating descriptive answers to open questions to participants (Irdayanti et al., 2015) and then quantitatively find agreement for thematically synthesised categories in later rounds. A Delphi could also be utilised by educational leaders to survey their own communities and assess what characteristics for entrepreneurship education are pertinent to the time and context.

Future research into leaders' in-depth narratives is crucial. Should we wish to disseminate and propagate successful experiences of entrepreneurship education, more attention must be paid to identifying and listening to leaders who have enabled the complex innovations in entrepreneurship education with an understanding of the context for entrepreneurship in the community.

## CONCLUSION

Current post-Covid research into the perspectives and experiences of educational leaders who effectively innovate entrepreneurship education in their local context is needed to equip all leaders with the evidence required to motivate and support innovation within their schools. Educational leaders are key to enabling the type of learning where students are prepared with entrepreneurial knowledge, skills and capabilities to adapt, seek opportunities, develop strategies for resilience and engage with their learning while schools, families, communities and the world manage a pandemic that shows no signs of remission. While there is some emerging research into leadership in this entrepreneurial area, more is required to enhance the effective implementation of entrepreneurship education in multiple locations.

The current chapter covered five types of leadership to illustrate various approaches to leadership and their effectiveness was found to be correlated to context and the amount of change required to move strategically towards goals to improve student outcomes. The Delphi method offers researchers the opportunity to establish connections within the local context for entrepreneurship education according to entrepreneurial leaders in the community who are aware of the demands and opportunities of the dynamic and changing environment, as shown in Figure 1. Research into how leaders effectively implement entrepreneurship can provide descriptive accounts of all the facets that are required for connection and to enable and grow entrepreneurial learning.

A Delphi approach should be used more often by researchers as entrepreneurship education is a complex topic that can manifest successfully in a variety of ways depending on the local environment and current practices and culture and leadership required within the school. Existing understanding of the local context was possible by presenting international research of entrepreneurship education to local entrepreneurial leaders and entrepreneurship education leaders to collectively consider and refine those characteristics that are most important for educational leaders to action in schools. Within that group of local entrepreneurial expertise, existing networks were found that can inform the researcher of local schools that are successfully enabling and growing entrepreneurial student learning, and such inquiry was found to stimulate further interest from the community to connect, encourage and stimulate growth of entrepreneurship education in local schools.

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## KEY TERMS AND DEFINITIONS

**Cultural Responsiveness:** Leaders, teachers include and value diverse cultural approaches to learning, relating, and establishing knowledge. In New Zealand, the indigenous Māori and Pacific rim nations' cultures are given special positioning in the school curriculum.

**Digital Technology:** Electronic devices, and computer programs and systems developed to improve efficiency and create new opportunities and capabilities to broaden the abilities for students to learn at any location and at any time.

**Entrepreneurial Learning School:** Primary (elementary) and secondary schools (high schools) where students are engaged in opportunities to be creative and innovative, risk takers, who recognise opportunities and are able to incorporate their interests into their work or create value for others. Schools can foster student entrepreneurial skills, knowledge, and capabilities through aspects such as resourcing, planning, vision, strategic goals, professional development, entrepreneurial pedagogy and leadership.

**Extra-Curricular:** Student-elected activities such as a sports team or special interest club that is separate from their school subjects.

**Local Context:** A specific geographical location with its own unique combination of social, economic, environmental, cultural, and political dynamics at a particular point in time. In New Zealand, teachers are expected to ensure examples reflect the local context wherever possible.

**Pedagogical Dispositions:** A teacher's approach to teaching and learning inclusive of their teaching philosophy, values and beliefs, goals, focus, skills, knowledge, and capabilities.