Action Research at Educare: Shifting Focus to the Learner for the 21st Century

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Abstract
A new small school, Educare or Edu2 (pronounced edu-car-ai) opened its doors in Montreal, Canada, in September 2019. Edu2 has launched an innovative educational environment to address the challenges of preparing students to live meaningful and fulfilling lives in the 21st century. In order to achieve that, Edu2 has engaged in the challenging work of enacting the belief that students need to take center stage as the empowered owners of their learning. We are investigating, in partnership with the founder/educators of Edu2, the extent to which the school's vision has been successful to date. Our research team committed to chronicling Edu2's first year of operation through the experiences and voices of Edu2 students and teachers. This paper, addressing preliminary findings, explores the experiences of students as they engage with the challenges of student led empowerment and, ultimately, student ownership of learning. Following a rigorous process of thematic analysis, one strand emerged among several with respect to student-reported experience, namely agency. In this paper, we situate our data on student agency within the framework of the Student Ownership of Learning Model (Conley & French, 2013).

Keywords: Student Agency, Empowerment, Ownership, Small School(s), Student-Centered Curriculum, Student Engagement, Student Voice, Youth

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Need for educational change

As we move deeper into the rapidly changing world of the 21st Century, it is clear that many schools are failing students. Classrooms based on lectures, textbooks, and tests are not working for many (Willms, Friesen, and Milton, 2009; Friesen, 2010). School today often stigmatizes students in a structure based on classification, supported by the mechanisms of worksheets, textbooks, desks in rows, teachers lecturing from the front of the classroom, and other outdated approaches. Furthermore, students are sorted into categories for better 'processing in the system', thereby perpetuating the factory model: strong students versus weak, and students who succeed versus those hindered by learning disabilities or social or behavioral challenges.

In Quebec, Canada, only 64 percent of public-school students graduate on time, with Quebec private school results only slightly higher. With an overall provincial graduation rate of 69 percent, Quebec is the lowest of any province in Canada (Homsy et Savard, 2018). As elsewhere, the expectations of teacher, school, and society serve as key drivers of student work, leading to the student disempowerment, disengagement, and overall lack of ownership of learning reflected in the drop-out rates noted above. With the Covid 19 pandemic, and the widespread move to remote instruction, this challenge has only deepened.

Educational goals for 21st Century education: Situating the study and the Edu2 model

The factory model of education has been under scrutiny from teachers, students, researchers, and academics for nearly a century. Progressive teachers have rejected the traditional 'banking' model of knowledge transmission, which sees learners as passive student-receptors (Freire, 1972), and called for the creation of a dynamic learning environment required for success in the 21st Century. Correspondingly, over the past decade in Canada, provincial jurisdictions have been directed by policies that propose the fostering of specific competencies, including: creativity; innovation and entrepreneurship; critical thinking; collaboration; communication; character; culture and ethical citizenship; and computer and digital technologies (C21 Canada, 2012). Today, while governments, school boards, teachers and students are calling for a radical change, many schools have yet to respond.

In September 2019, a new school in Montreal, Quebec, Canada opened its doors: Edu2 or Educare was co-founded by three elementary school teachers, all of whom had become disillusioned with the rigidity and shortcomings of formal traditional school, and wanted to create a learning environment that better reflected their values, beliefs, and vision for education and for society. To do this, the Edu2 founders acted on the belief that personal connections and human relationships are essential to learning, with engagement and wellbeing as key factors in improving academic achievement. Attending to students' intellectual physical, social, and emotional needs, the Edu2 model is designed to honor all aspects of the student experience, supporting and empowering students to gradually take ownership of their learning.

The Edu2 model aligns with the OECD mandate that students should "learn to navigate by themselves through unfamiliar contexts, and find their direction in a meaningful and responsible way, instead of simply receiving fixed instructions or

directions from their teachers" (OECD 2018, p.20). The OECD model includes core foundations: knowledge; skills; attitudes and values; transformative competencies; and a cycle of anticipation, action, and reflection. There, students need to "orient themselves as they exercise their sense of purpose and responsibility while learning to influence the people, events, and circumstances around them for the better" (OECD 2018, p.20).

Edu2 aligns with those who believe that students need the opportunity to flourish and to develop ownership of their learning within an educational model that moves beyond the industrial and even information model to focus on real world contexts and problem solving that is interdisciplinary, creative, and innovative (Friesen & Jardine, 2009) and that remains focussed on the wellbeing of the individual and society (OECD, 2018).

Edu2: The school itself

Edu2's teaching faculty consists of seven staff members: three co-founder teacher/ administrators, one English Second Language teacher, one Science teacher, and an Arts educator. Edu2 was accredited by the Quebec Government as a private, French language middle school, and enrolment in year one was 29 students, aged 10 to 15.

The goals of the school are: 1) To anchor the curriculum in each student's articulation of their academic, personal, and long-term life goals; 2) To create an effective 21st century learning environment where learners are happy, feel cared for, and are engaged in their learning; and 3) To meet the highest global academic standards, as aligned with the provincial curriculum, the Québec Education Program.

Focusing strenuously on student autonomy and agency, in both mandate and practice, Edu2 re-thinks the traditional elements of school: teacher and learner; curriculum; learner responsibility; physical space; relationship to community; life-skills; cooperation; and so on. Students work regularly across multi-aged groups, often on cross-disciplinary inquiry-based projects, and the teacher's role is that of mentor and educational guide for the students, fostering the individual strengths and development of each learner.

In the early days of creating the school, the founders' commitment to the above values and goals also informed all decisions relating to the school's physical space. When determining a site for the school itself, the founders of Edu2 selected the Mile End sector of Montreal, a vibrant and culturally diverse community, replete with art galleries, bookstores, historic architecture, arts studios and maker spaces, restaurants and cafés, music venues, and parks. Rather than investing in standard school resources like gymnasia, or dedicated discipline-based learning spaces such as art rooms, Edu2 saw Mile End as replete with local community resources full of potential 'curriculum' sources, including pottery at collaborative art studios, science discovery in parks and green spaces, and history through community organizations and libraries.

The building is a two-story commercial loft, renovated by Edu2 during the summer of 2019. The space includes (on the first floor) a large and open exercise space, a small seminar room, an inner media room with recording equipment and green screens, and a multi-functional science lab. There are also two windowed and glassed-in

workspaces (one for teaching, and the other a shared office workspace) with flexible furniture.

The top floor, dominated by a large central, open plan collaborative kitchen space, is surrounded on three sides by varied comfortable and informal workspaces with, at one end, adaptable furniture for collaborative work and, at the other, large cushions and plants for individual or group hang-outs, all fostering both student autonomy and collaboration. Edu2 envisions the facility as a warm and welcoming learning space that is flexible and accommodating for the school community.

Focus of this article

This paper draws on data gathered during the one-year research project undertaken at Edu2. We wanted to understand the experiences of both students and teachers in the school's initial year, and to assess whether it has been successful to date in meeting its stated goals.

To achieve this, the research team adopted a phenomenological methodological perspective. This lens sharpened the research focus by looking at the structures of experience and consciousness, uniquely from the student perspective. Corbett and Wilson (1995) observe: "Despite . . . repeated calls for reform aimed at students, young people themselves occupy, at best, a minuscule part of the literature on the process of changing and reforming education". 'Seeing' the success or failure of Edu2's first year through the eyes of its students revealed a nuanced, dynamic, and rich story, told by young people.

Methodology & Methods

Ethnographic data was collected over the year, including weekly in-school observations, and a quantitative survey given to students and teachers in September, February, and June, providing a longitudinal perspective. Interviews in March were carried out with all 26 students and 5 teachers. This paper is limited to a thematic analysis of the transcripts of individual interviews with students.

The interview, consisting of six open-ended questions, allowed for students to recount their experiences to date at Edu2. Students' observations also included insights and comparisons between Edu2 and schools they had attended previously. The student body is comprised of both French-speaking and English-speaking students. Congruent with their highest level of fluency, and based on recommendations from the language teachers, students completed either the English or the French interview.

Interviews took place during the school day and took an average of 12 minutes and 16 seconds to complete. A McGill authorized transcriber was hired to transcribe all vocal recordings, and the French transcripts (n=16) were translated into English using Google Translate, with supervision from a bilingual researcher.

The research team was committed to giving voice to students. Braun and Clark (2006) point out this commitment is futile because our analysis is inevitably contaminated by research bias, including but not limited to our experience of the school over the one-

year study. Acknowledgement of the role and impact of the researchers' decisions, together with a carefully selected methodology, is therefore essential.

This research is grounded in social-constructionism where "meaning and experience are socially produced and reproduced, rather than inhering within individuals" (Braun & Clark, 2006, p.85). We selected thematic analysis to explore the social and cultural context of the school as it arises through the individual recollections of students' experiences (Braun & Clark, 2006). Since the nature of language itself is up to interpretation, and recognizing potential loss of meaning in the translations from French to English, the analysis was based on semantics, seeking explicit and surface meaning of the data (Patton, 1990). The process through which themes were identified and selected is dependent on us, the researchers, and therefore cannot be separated or taken as 'stand-alone' (Ely et al., 1997, p. 205-6). For this reason, the analysis was undertaken from an inductive approach, where reliance on the connection between the data and themes had to be strong to be considered (Patton, 1990). In addition, we refrained from engaging with the literature surrounding each theme until the early stages of the analysis had been completed.

One overarching research questions directed the study:
Is Edu2 effectively implementing its organizational mission and vision?

This question became more specific for the purpose of student interview transcript analysis:
How are students experiencing the Edu2 model in the first year?
What are the strengths and weaknesses of Edu2 from a users' perspective?

For the thematic analysis itself, we followed the six steps outlined by Braun and Clarke (2006), namely: 1) familiarize yourself with your data; 2) generate initial codes; 3) search for themes; 4) review themes; 5) define and name themes; and 6) produce the report. It is important to note that - from 554 data points – our initial thematic analysis yielded four main themes, nine subthemes, and twenty-five detailed subthemes. From the four themes to emerge, we selected agency as the focus of this paper.

Model of Student Ownership of Learning

From our review of the school's stated mission, field observations, and interviews with students, it is apparent that the philosophy adopted and enacted by Edu2 holds student ownership of learning as central. Recognizing this, the analysis of the student interview transcripts provided further insight into the various components of ownership integrated within the school culture. For a grounding of these components in the literature, we turn to the work of Conley & French (2013) whose conceptual model for student ownership of learning comprises five components: motivation and engagement, goal orientation and self-direction, self-efficacy and self-confidence, metacognition and self-monitoring, and persistence (Conley & French, 2013). The design is a circular model, highlighting the potential for positive or negative feedback loops as the model iterates. It is important to note that their categories are not mutually exclusive, exerting positive or negative influences on one another.

Data Analysis & Discussion: Situating results within a conceptual model

Motivation and Engagement

The first component of the five-part model for student ownership of learning is motivation and engagement. Conley & French (2013) describe motivation as the intrinsic individual state, while engagement takes form when motivation is actioned in the real world. In addition, this component helps students to "see the value in coursework, motivate to excel, see the value of learning, and enjoy a challenge" (Conley & French, 2013). Higher levels of motivation and engagement in learning have been shown through correlation to be linked to higher achievements in K-12, and are a good predictor of college GPAs (Richardson et al., 2012).

Student Empowerment refers to the process of becoming a stronger and more confident student. Empowerment is dependent on the environment, but occurs within oneself, resulting in an increased feeling of control over one's life. At Edu2 student empowerment is part of the school's founding mission, and empowerment was vocalized as present, recognised as important, and appreciated in the majority of the student interviews.

In many school contexts, empowerment for students is elusive: "If one believes knowledge is power, it seems reasonable to assume that, at its heart, formal education should be empowering. While few would deny this assertion, "student empowerment" may be one of the great oxymorons of our time" (McQuillan, 2005 p. 639). This observation by McQuillan levies a heavy charge: even schools that pay attention to the difficulty in avoiding this oxymoron may fail at achieving student empowerment. That said, our data analysis at Edu2 points solidly to positive experiences of students regarding empowerment, for example students questioning and learning from their peers, students being able to select from a menu of choices as to what to study, and students choosing the place, academic level, and pace of their learning.

Our findings are buoyed by the research which holds that "[h]aving students exercise a voice in school matters may enhance academic performance, enrich students' understanding of democratic citizenship, and make schools more responsive institutions. The connections can be systemic, intertwining and building momentum in mutually reinforcing ways" (McQuillan, 2005 p.645).

Many concrete structural strategies exist for fostering student empowerment at Edu2. As a commitment to bilingualism, for example, Edu2 has adopted 'English Thursdays', during which communication from the beginning to the end of the day takes place in English for all members of the community. This supports holistic 2nd language learning for the primarily French-speaking students and teachers at Edu2. English Thursdays have motivated many of the students to improve their speaking skills, pushing them outside of their comfort zone. Students reported feeling more empowered to speak in English than in previous school settings. Additionally, students described achieving the highest improvement in their spoken English outside language class situations, for example in content areas like science, while playing board games during free time, or while eating lunch.

Both within English Thursdays and beyond, students identify multiple sources of their learning, including relationships with classmates, family members, and teachers. One student affirmed: **"I learn from everybody who makes mistakes".** Students are motivated to explore, to try and learn new things, and to leave their comfort zone for areas of discomfort. One student observed: "**I am very interested in what it was like before me, like before I was born".** Another student said: **"I could look at a tree and then see a cycle of life, or if I was at home, I could look at my cat and how it walks".** All of these examples show students making connections between personal experience, their newly acquired knowledge, and the broader world around them.

Students who demonstrate ownership of learning can be successful in a wide range of learning environments such as large classes and online courses where they have less interaction with the instructor. Strong ownership of learning by students can even compensate to a degree for less effective teachers. Students who own their learning can go beyond simply following teacher directions. They are more likely to complete complex assignments, solve problems that require persistence, and create original or novel work of high quality (Conley & French, 2013).

Goal Orientation & Self-Direction

The second component of the model proposed by Conley and French (2013) is Goal Orientation & Self Direction. Goal orientation and goal setting enhance students' potential to control the various outcomes in their lives (Bandura, 1997). Conley and French (2013) report that higher goal orientation can lead to a positive growth mindset, the belief that intelligence is not fixed and can change over time (Ramsden et al., 2011). This combination becomes self-direction, where individuals seek things and ways they can learn. It can be improved through "novel and complex work" which students perceive as a challenge they can work through (Bronfenbrenner, 1979; Csikszentmihalyi, 1990).

Goal setting is a powerful process for all students; they are encouraged to imagine an ideal future and are motivated to turn their vision into reality. By setting goals, students choose where they want to go and identify the steps they need to take today to get there. According to Oxford and Shearin (1994), "goal setting can have exceptional importance in stimulating learning motivation, and it is therefore shocking that so little time and energy are spent in the classroom on goal setting" (p. 12).

At Edu2, students set their own learning goals based on personal as well as academic objectives. They revisit these bi-monthly with their mentor, and they also appreciate setting long-term goals. According to students at Edu2, goal setting is an inherent part of the learning process: **"You have challenges, interests and an academic challenge. It's actually you who creates your own journey, you give yourself challenges for two months and then make them harder. You try to make or improve them".** As another student observed: **"It's good to set goals in a year because it allows you to improve where you want to improve".**

It is important here to emphasize the connected nature of the model's components (Conley and French, 2013). No singular component stands above the others; all are

dependent on one other. While the aforementioned motivation and engagement are critical, their impact is limited without goal orientation and self-direction.

As noted previously, for dynamic curriculum resources, Edu2 relies on local professionals and partner organizations, for example the YMCA, local maker spaces, and NGOs. Research shows that school partnerships allow for knowledge sharing and opinion exchange to take place between constituents based on respect and interdependence (Kong, 2019). The work of developing partnerships is challenging but, once established, the benefits run deep: Partners with schools share common goals, objectives and expectations in learning, and collaborate for mutual benefit on technical, resource, and pedagogical support for learning implementation (Kong, 2019).

Edu2 students commit to partner-supported activities for an eight-week period, then rotate to their next. One student described the structure of these activities with outside partners: **“We have many partners, and we have different options for each, but we will do this every week for 2 months".** It is clear that Edu2 students recognise and appreciate the unique situation at their school. As one interviewee stated, “**There are no options like us, as we can make pottery, we can go somewhere else. Other schools are just like school, uh ... physical education stuff like that".**

Students also benefit from partnerships with more formal Montreal institutions, for example university mentoring in robotics, or Montreal Insectarium workshops. Students observed: “**We have our insects upstairs and we have the life cycle, and I can learn from them too because some of them die but we don't know why, so I sometimes check – I look at them how they died or the transformation that they have"** and **"Almost all the options we do we have never done”.**

Edu2 also provides flexibility for individualized student schedules. Students in higher grades can leave school early or work from home as their particular learning goals and needs dictate. Additionally, students are required to manage their after-school responsibilities, for example sports, a creative passion, or employment. Younger students also manage school-based responsibilities such as equipment patrol or lunch clean up.

Student empowerment occurs when young adults make decisions about their own learning, from subject level placement (beginner through advanced), choice of workspace, or activity options.

Self-Efficacy and Self-Confidence

The third component of the model is Self-Efficacy & Self-Confidence. Self-efficacy is defined as an individual’s assessment of the control they are capable of exerting over their daily lives (Bandura, 1997a). When combined with self-confidence, a larger sense of self-worth that is not context dependant, this component of the model by Conley & French looks at “students’ confidence in their ability to complete increasingly challenging and complex academic and career tasks and be able to build on past experiences and success to maximize future successes” (Conley & French, 2013).

Ownership of learning at Edu2 is evident in the reflections of its students. "**Yeah, I have part of the decision, and then I'm the one in charge because I'm the one learning"** and **"Each time I speak with someone it makes me see life from another side, makes me see certain points there that I could not have imagined."**

While students accepted teachers' role in their learning, they clearly saw themselves as responsible for it. One student said **"I do it for me actually. Whereas before I did it for like the teacher, here I do it for myself, I do it for fun, in fact it's even like a hobby, it's not even like work".** A second source of motivation operates through the intervening influences of goal setting and self-evaluative reactions (Bandura, 1977a, 1977b). It is clear that, at Edu2, students have, or are acquiring, ownership of their learning. When facing challenging learning situations, rather than asking the teacher for support, one student affirmed "**Ok, I can do this, I can do this, I can do this"**.

Metacognition and Self-Monitoring

The fourth component of the Conley & French model is Metacognition & Self-Monitoring (2013). The awareness and understanding of one's own thought processes (metacognition) is central to an individual's ability to take ownership of the learning process. Self-Monitoring requires the ongoing practice of engaging with self-reflection about one's cognition, as well as developing and assessing strategies aimed at rendering the learning process more efficient (Vrugt & Oort, 2008). The ability to use appropriate strategies and to adjust accordingly allows individuals to strive towards a deep approach to learning, which is also correlated to higher academic success (Richardson et al., 2012).

The Edu2 experience differs from the way students have previously engaged with learning: **"You have to be open to something new; there are several people that are not capable of that".** Students have reported positive feelings with respect to learning, and also uncovering new fields of interests. For example, after discovering Reggae Pop dance as an option at Edu2, a student voiced the desire, in her words, to **"… teach choreographies to people who love dancing, and to give them links to have lessons and everything".**

One student reported being passionate about art, and described her connection to art class: **"For me it's like a hobby. It's like I'm not in school and playing sports outside of school"**. Edu2 believes that this will benefit students by allowing them to discover and identify the value of personal relevance. With teacher support, students map out a plan to capitalize on their interests, while improving in areas that require it, including adopting new collaborative skills, undeveloped in many student's prior school experience with its focus on individual work. Student ownership requires constructing a personal future vision, while remaining grounded in present work. Goal setting and the autonomous learner are connected. The slow but ongoing paradigm shift in education, from teacher-centred to student-centered learning, further emphasizes the importance of self-regulated and autonomous learning. Thus, it is important that learners develop responsible attitudes and autonomy (Scharle & Szabo, 2007). The support available to students at Edu2 - access to the facilities and to teachers before and after school, or flexible hours to accommodate high level sports - creates contexts for individualized support as required, freeing students up to shape the direction of their learning.

Persistence

The fifth component of the model is Persistence. Conley & French (2013) define persistence as the combination of 'grit' (Duckworth et al., 2007) and academic tenacity (Dweck et al., 2011). In this sense, persistence is the ability to continue applying one's work ethic when facing a difficult task or challenge without becoming discouraged. More importantly, persistence is the outward display of an intrinsic desire to chase "long-term goal obtainment" (Duckworth et al., 2007; Dweck et al., 2011). Interestingly, unlike other theorists addressing persistence, Conley & French (2013) emphasize that persistence can be achieved without having to face adversity,

At Edu2, students not only learn about subject areas, they learn how to become more responsible, autonomous, and persistent individuals. In one student's words: **"You have to manage yourself without the teachers telling you what to do, you must know what to do and not depend on the teacher"**. This is particularly significant since, historically, students have had little experience with power, and the most likely avenue for gaining any would seem to be having schools offer them greater power (McQuillan, 2005). As Cummins (1995) argued, "power is not a fixed, predetermined quantity but rather can be generated in part through interpersonal and intergroup relations" (p. 145).

One way that these group relations can occur and evolve is when students of different ages work together. At Edu2, self and peer reliance proved particularly powerful when younger students were placed with older peers, for example in mathematics. As one 4th grade student explained: **"...before we learned that stuff from fourth, (in) third, and that makes us learn stuff from fifth while we are still in fourth to adapt even better. When we are going to be in fifth, it will be three times easier".**

While multi-age setting can lead to positive social and academic outcomes for students, studies by Chace (1961), Davis (1992), and Hallion (1994) have identified a lack of administrative and parental support, a lack of planning time, problematic teacher attitudes, and a lack of staff training on multi-age instruction as major obstacles to successful implementation of the multi-age classroom. At Edu2, some older students felt disempowered in multi-age group contexts, and preferred not to be perceived at the younger students' level. Inevitably, providing activity options that meet all students' interests, at their level, is a challenging feat.

As students' relationship with learning evolves, so does their ability to see the larger picture and to understand that any opportunity has potential for individual growth. An increased accountability mindset leads to ownership and lifelong learning. One student observed: **"It's through everything, experiences that you have in general life, activities that you take part in, school, just walking down the street, seeing things, new things".** It is clear from our research that the Edu2 commitment towards student ownership of learning is bridging the emergent learning to proficient stage.

Conclusion

Drawing on an established conceptual model (Conley & French, 2013) our analysis of student ownership of learning at Edu2 revealed important findings. Clearly, the evidence showed students at Edu2 to be engaged with each of the various components

of the model, while of course independent from it. The positive feedback loop of the model, revisited on a continuous basis, effectively permits both students and teachers to experience continual growth. In addition, we found that:

1. The model validates the value and effort that Edu2 faculty assigns to personalizing the support that teachers provide to students based on individual levels of proficiency in each of the five components of the model;
2. The model provides a framework with clear potential to inform and enrich Edu2 as it continues to seek to improve its approach and support.

There are always challenges, of course. At Edu2 students appreciated options, and use these to take ownership of their own learning. In some instances, however, feasibility is a challenge. Providing curriculum options for thirty students, each with individual points of departure, personal learning goals, and unique life ambitions may require additional resources and partnerships if these are to be adequate and sustainable.

In conclusion, Edu2 teachers are seen as mentors in the school and, in that role, they fuel student self-growth. In this paper we have documented many instances where Edu2 is successfully placing students at the centre of their learning, while creating space for an acceptance of students' voice, and serving as a catalyst for the positive empowerment of students. One grade nine student captures the potential at Edu2 for life-long, deep-rooted impact:

"This is how you learn how you are as a person. Then they will try to play on your personality so that you become better and that you learn yourself and improve certain points that you have difficulty, negative or positive, so that you are a better person when you graduate".

Future Research: Expanding the Community Partner Ecosystem

Creating and sustaining strong community partnerships is proposed as an important way to ensure the positive conditions that best support learning (Malone, 2020). The next phase of our research at Edu2, 2020-2023, will track the introduction of four new community partners, essential in providing a range of new professional development opportunities for faculty, and increased curricular choices for students. This means that we will enlarge the lens through which we have viewed students' ownership of learning to date, paying much closer attention to the role that school–family–community partnerships play in the holistic development of students. Our focus will be to map and assess the impact of the partners' contributions in support of the school's mission, responding to the needs of faculty, staff, parents and – most importantly students - as they navigate the path towards true ownership of their learning. The student ownership objectives of our upcoming three-year research initiative will be, specifically: to increase student ownership by providing partnerships and learning experiences with outside school institutions; to connect students' passions with real world opportunities; and to empower students to own their role as contributing and vital members of society.

References

Bandura, A. (1977a). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, *84*(2), 191.

Bandura, A. (1997b). Self-efficacy: The exercise of control. New York, NY: Freeman.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Chace, E. S. (1961). An Analysis of Some Effects of Multiple-Grade Grouping an Elementary School.

Conley, D. T., & French, E. M. (2014). Student ownership of learning as a key component of college readiness. American Behavioral Scientist, 58(8), 1018-1034.

Csikszentmihalyi, M. (1990). Flow. New York, NY: Harper and Row.

Cummins, J. (1995). Power and pedagogy in the education of culturally diverse students. *Reclaiming our voices: Bilingual education, critical pedagogy, and praxis*, 139-162.

Davis, R. (1992). *The Nongraded Primary: Making Schools Fit Children*. American Association of School Administrators, 1801 N. Moore Street, Arlington, VA 22209-9988 (Stock No. 21-00192).

Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. Journal of Personality and Social Psychology, 9, 1087-1101.

Dweck, C. S., Walton, G. M., Cohen, G. L., Paunesku, D., & Yeager, D. (2011). Academic tenacity: Mindset and skills that promote long-term learning. Seattle, WA: Bill & Melinda Gates Foundation.

Corbett, D., & Wilson, B. (1995). Make a difference with, not for, students: A plea to researchers and reformers. *Educational Researcher*, *24*(5), 12-17.

C21 Canada. (2012). *Shifting Minds: A 21st Century Vision of Public Education for Canada. Canadians for 21st Century Learning and Innovation*. Available online at: http://www.c21canada.org/wp-content/uploads/2012/11/Shifting-Minds-Revised.pdf (Accessed August 2020).

Ely, M., Vinz, R., Downing, M. and Anzul, M. 1997: On writing qualitative research: living by words. Routledge/Falmer.

Freire, P. (1972). *Pedagogy of the oppressed.* New York: Herder and Herder.

Friesen, S., & Jardine, D. (2009). 21st century learning and learners. *Prepared for Western and Northern Canadian Curriculum Protocol by Galileo Educational Network*.

Friesen, S. (2010). Student engagement, equity, and the culture of schooling. In *Paper presentado en el Canada-United States Colloquium on Achieving Equity Through Innovation. Toronto. Recuperado de http://cea-ace. s3. amazonaws. com/media/CEA-2010-Colloquium-Friesen. pdf*.

Hallion, A. M. (1994). Strategies for Developing Multi-Age Classrooms.

Homsy, M., & Savard, S. (2018). *Décrochage scolaire au Québec: dix ans de surplace, malgré les efforts de financement*. IDQ, Institut du Québec.

Kong, S. C. (2019). Partnership among schools in e-Learning implementation: Implications on elements for sustainable development. *Journal of Educational Technology & Society*, *22*(1), 28-43.

Organisation for Economic Co-operation and Development (OECD). (2018). The future of education and skills: Education 2030. *OECD*.

Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *The modern language journal*, *78*(1), 12-28.

Malone, H. J. (2020). Community schools: bridging educational change through partnerships. *Journal of Educational Change*, 1-11.

McQuillan, P. J. (2005). Possibilities and pitfalls: A comparative analysis of student empowerment. *American Educational Research Journal*, *42*(4), 639-670.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. SAGE Publications, Inc.

Ramsden, S., Richardson, F. M., Josse, G., Thomas, M. S. C., Ellis, C., Shakeshaft, C., . . . Price, C. L. (2011). Verbal and non-verbal intelligence changes in the teenage brain. Nature, 479, 113-116.

Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. Psychological Bulletin, 138, 353-387.

Scharle, A., & Szabo, A. (2007). *Learner autonomy: A guide to developing learner responsibility*. Ernst Klett Sprachen.

Vrugt, A., & Oort, F. J. (2008). Metacognition, achievement goals, study strategies, and academic achievement: Pathways to achievement. Metacognition Learning, 30, 123-146.

Willms, J. D., Friesen, S., & Milton, P. (2009). *What Did You Do in School Today? Transforming Classrooms through Social, Academic, and Intellectual Engagement. (First National Report)*.

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