

# Creative work-integrated learning: Student-driven, cross-disciplinary, non-placement work-integrated learning in a changing educational landscape

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As higher education faces shifting workforce demands and limited placement opportunities, this study examines how co-designed, non-placement work-integrated learning (WIL) experiences can foster student agency, applied learning, and professional growth across disciplines. Focusing on *Creative WIL*, an initiative involving pre-service and in-service education students and engineering students in a three-day project-based March Break camp for Grade 7 learners in New Brunswick, the study employs a constructivist, participatory orientation and reflexive thematic analysis within an iterative case study design. Centring student voice in shaping inclusive, strengths-based, interdisciplinary WIL experiences, findings show that participants developed key professional competencies, including collaboration, pedagogical responsiveness, and reflective practice, while actively influencing camp design and delivery through feedback and shared decision-making. Five themes emerged: respected autonomy, learning through being and doing, purposeful risk, refreshing perspectives, and hope through impact. This work underscores the transformative potential of student-informed, equity-conscious non-placement WIL models in bridging gaps found in traditional university-practicum-university transitions.

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Keywords: Non-placement, student voice, quality WIL, project-based learning, pre-service educators

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Work-integrated learning (WIL) is a partnership between theory and practice, moving beyond abstract learning to allow students to develop industry-relevant skills in work environments (CEWIL Canada, 2021; Dean & Sykes, 2021; Jollands, 2015; Thomson et al., 2017). WIL has been a constant in certain professional programs such as teacher education, nursing and medical practices, and is also evident in many sciences. Defined as “an educational approach involving three parties ... consisting of authentic work-focused experiences as an intentional component of the curriculum” (Zegwaard et al., 2023, p. 38), WIL comes in many forms and is recognized as an effective way of developing work-ready skills (Keen & Eady, 2022; Zegwaard & Rowe, 2019). Common typologies of work-integrated learning are work experience, field placement, community service learning, internships, apprenticeships, practicum, industry research projects, and cooperative education (CEWIL Canada, 2021; Dean & Rook, 2023). While many of these types of WIL are typical to teacher education programs (practicum placements) and engineering programs (cooperative education opportunities), there have been significant changes in our communities in recent years brought about by the COVID-19 pandemic (Dean, Eady, & Yanamandram, 2020; Dean & Rook, 2023; Pelden & Banham, 2020; Zegwaard et al., 2020), advancements in technology, and high attrition rates and mass exit of qualified teachers from education (Darling-Hammond, 2000; Kistler et al., 2024; Struyven & Vanthournout, 2014), which have impacted the availability and delivery of traditional place-based WIL required by registration authorities (Dean, Eady, & Yanamandram, 2020; Dean & Rook, 2023).

In this paper, we will discuss a non-traditional WIL opportunity offered to students in the Post-graduate 10-month Bachelor of Education, the Master of Education (Exceptional Learners), and students in the Engineering Faculty, Department of Electrical and Computer Engineering at the University of New

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Brunswick (UNB). This study employs a repeated iterative case study design (expanded from Steenhuis' (2015) iterative pragmatic case study method) to examine the evolving implementation of the Creative WIL project, a strengths-based, inclusive design of work-integrated learning that positions student voice at its core. Guided by a constructivist and participatory research orientation, the study emphasizes the co-construction of knowledge between students and facilitators. Each iteration of the project informs the next, with student feedback loops, reflections, and notes from direct observation and interactions directly shaping design decisions, pedagogical adjustments, and research focus. To analyze the data, reflexive thematic analysis (Braun & Clarke, 2022), which acknowledges the subjectivity of the researcher's interpretive role as valuable and inseparable to meaning-making is used. This approach supports a layered, relational understanding of how students experience agency, meaning, and growth within WIL contexts. This approach aligns with the project's commitment to foregrounding student perspectives, not just as data sources but as co-theorists in shaping the narrative of learning and quality WIL. The rationale for the project and the methodological framework is outlined, and findings that demonstrate how student voice can shape innovative and impactful WIL in postsecondary education are shared.

#### DISCONNECTION BETWEEN UNIVERSITY LEARNING AND WORK APPLICATION

Depending on the university program an individual is enrolled in, the student will engage primarily in course-based work, a thesis or project, or practical labs. Professional degrees, like nursing, counselling, education, and engineering, generally have practical work placements or lab experiences, sometimes as integral aspects of the program, while other opportunities are voluntary. In some cases, particularly in the professionally qualifying education programs, there is a sense of being overwhelmed in balancing the professional experience and course-based learning. The fragmentation of pedagogy and practice forces the university student to embody two identities: that of the university student and that of the not-yet-qualified teaching professional. The challenge of maintaining these dual identities is amplified by the teacher shortage, with many students arriving on the university campus having already taught for long stints in K-12 schools as local teaching permits (allows unqualified people to teach). In some instances, pre-service teachers have been left to run practicum classes without supervision due to shortages, manage challenging classroom compositions, and teach outside of the subjects they are qualifying for.

Teacher education programs are designed through a combination of attending university classes and engaging in course-based learning and assignments followed by practicum placements in schools (Thomson et al., 2017). This cycle of course-based learning followed by practicum placement typically occurs three or four times across the program. While this sounds like typical work-integrated learning, we argue that these aspects of the degree are often viewed and experienced as quite separate. Decades of data reporting high attrition rates in education (Darling-Hammond, 2000; Kistler et al., 2024; Struyven & Vanthournout, 2014) may be an indicator of the lack of preparedness and connection between the theoretical learning of the university setting and the actuality of the role, particularly with the rapidly shifting demographics and lived experiences of the current K-12 student population. In the Bachelor of Education 10-month post-graduate program, co-construction of learning opportunities and feedback from students indicate a strong desire for practical examples and experiences that allow practice in realistic scenarios.

The Master of Education students (Exceptional Learners) in our faculty are typically employed as educators, although not always, and are either in resource roles (specialist teachers) or aspiring to take on these roles. The Master of Education (Exceptional Learners) is delivered in a virtual environment with a combination of synchronous and asynchronous elements. Here again, the assumption that university

students are connecting the learnings from their program to their work life is left largely unchecked outside of the submission of assignments and engagement in discussion forums. While students complete course demands and receive extensive feedback on these elements, there is no coordinated aspect of work-integrated learning in this program at our university.

The Engineering students must attain competencies across 12 areas (Engineers Canada, 2023) to gain accreditation. While many of these competencies are easily managed through the labs and other practical experiences within the university setting, some of the 'soft skills' (e.g. communication, teamwork, equity and ethics) cited in the Engineers Canada *Accreditation Criteria and Procedures* document are more challenging to measure and fulfil. At our university, there are opportunities for co-op placements and other WIL arrangements, which are strongly encouraged but voluntary.

WIL experiences are documented as being more impactful on learning than coursework and being formative in work preparation (Thomson et al., 2017). To support Pre-service and Master of Education students in applying pedagogy in practice and to offer an opportunity for the engineering students to develop the required attributes of oral communication, teamwork, and equitable treatment of people (Engineers Canada, 2023), a non-placement work-based learning project was conceptualized (Dean & Rook, 2023). Non-placement work-integrated learning, as outlined by Rook and Dean (2023), "integrate theory with expanding practices and notions of work, but without extended time inside a physical workplace" (p. 243). Importantly, non-placement WIL must be authentic and meaningful in addition to being purposeful for the industry or community stakeholder (Dean, Yanamandram, et al., 2020). By offering a non-placement-based WIL experience it was possible to engage fifteen education students and six engineering students in a project-based learning March Break camp for 30 local Grade 7 students. Bringing together the UNB students from the two faculties at one time as "co-constructors of knowledge rather than passive recipients of predefined curricula" (Drewery et al., 2026, p. 2) enabled the development of teamwork and collaboration across disciplines, and engaged the voice of the university students in all aspects of the design and delivery of the project.

As previously described, this project was conceptualized as a 360-degree learning opportunity, where every participant (the Grade 7 students, the university students, the camp coordinator (first author), and the co-organizer (second author) learns about self, learns from and about others, and learns through the trials of applying pedagogy and practices. In a multidimensional model like this one, there are many opportunities to engage student voice, something that Eady et al. (2025) state is often overlooked as the institutions determine the nature and structure of quality WIL. Therefore, student voice will be represented throughout the paper using direct quotes, a relay of the inductive thematic analysis from interviews, feedback surveys, and reflections, paired with the authors' reflexive insights captured (Braun & Clarke, 2024) during and following the project iterations.

## CREATIVE WIL DESIGN

Associated with credit/no credit courses in the Master of Education (MEd) Exceptional Learners program and Bachelor of Education (BEd) 10-month pre-service teacher program, students were given the choice to either do the traditional classroom-based activities and assignments or engage in the applied WIL program for evaluation to earn their course credits. Engineering students were offered the opportunity to take part in the Creative WIL project through an expression of interest callout.

Education students who elected to participate in Creative WIL would work collaboratively with Engineering students from Electrical Engineering or Software Engineering to co-construct activities for the Grade 7 students to participate in during the camp. The Grade 7 students were young people who

had personal learning plans (PLPs), were identified as being disengaged from learning, isolated socially or academically, or who would benefit from hands-on learning. The authors are committed to providing a barrier-free inclusive design (providing food, transportation, and materials) and sought funding from the Office of Experiential Education at the University of New Brunswick in the first year of the project. In the second year, due to funding changes, the authors extended their search for funds, which were contributed by the Faculty of Engineering, Electrical and Computer Engineering, the Faculty of Education, and the Office of Experiential Education.

#### PEDAGOGICAL FOUNDATIONS OF CREATIVE WIL

Every element of the Creative WIL project was designed with universal design for learning principles in mind (CAST, 2024). This approach was modelled and considered from the beginning of the project, ranging from the expression of interest callouts to families and students to the design of spaces and selection of materials. When WIL programs do not consider social inequities, they risk perpetuating them (Rao et al., 2024). We considered the varied identities and culturally and linguistically diverse learners, ensuring student voice was a key aspect of the project design and implementation. Using project-based learning (PBL) pedagogy, creating strengths-based profiles and co-designing questions, and promoting an innovator mindset, a framework akin to a growth mindset (Dweck, 1986), the focus for the university education students was on applying theory in practice. The university students gained practical experience in developing rapport and identifying connection points through co-developed strengths-based profiles with the Grade 7 students using VIA character strengths (Peterson & Seligman, 2004) to highlight individual capabilities. They worked with the first author to develop guiding questions and prepare the environment using universal design for learning principles (CAST, 2024) for each Grade 7 student. Education students in year 1 (Yr 1) of the project provided input during the workshop, some completed interviews, and 11 completed a general reflection (written or video) at the end of the project. In year 2 (Yr 2) of the project students provided a reflection in writing or video on each element of the project (the workshop, creating strengths-based profiles, the co-planning day with engineering students, and the camp/showcase). In addition, some Grade 7 students were interviewed, and feedback loops were happening consistently between the Grade 7 students and UNB students, the UNB students and each other, and the UNB students and camp coordinator (first author) and co-coordinator (second author).

#### CASE STUDY: THE CREATIVE WIL PROJECT

Each element of the project will be explained with the theoretical underpinning of that element, and the impact will be shared by theme as expressed by university students. Importantly, the entire team was connected in Microsoft TEAMS to share information, consult on queries and offer insights into how to respond to particular challenges. This real-time interaction allowed the team to connect directly with each other and the coordinators. An example of the profound impact of this avenue of communication was being able to change the planned activities quickly (within 2 hours) when it became known that the materials could pose a risk to a student with a disability in year 1. Likewise, in year 2, the team was able to discuss and adjust our risk assessment to ensure equitable and safe access to food and the space.

#### PEDAGOGY WORKSHOPS

Each MEd and BEd student attended a 2-hour virtual workshop on strengths-based pedagogy and how to create a strengths-based profile (Alberta Mentoring Partnership, n.d.; Krutkowski, 2017). In the workshop, students co-construct questions that aligned with this pedagogy and discussed methods of engaging young people.

The engineering students participated in a two-hour virtual workshop with the Director of the Centre for Enhanced Teaching and Learning. This workshop addressed strategies for effective questioning and communication to work collaboratively in teams and convey complex ideas to lay audiences.

### STRENGTHS-BASED PROFILES

Following the workshop, the education students completed strength-based profiles with two Grade 7 students enrolled in the camp. The profiles were hosted online or face-to-face, as per the preferences of both parties. The UNB education students were responsible for establishing a safe and welcoming environment, providing options for engaging activities, and being prepared to communicate in multiple ways, aligning with the principles of universal design for learning (CAST, 2024).

### CO-PLANNING DAY

The engineers and education students also collaboratively generated ideas for working with the Grade 7 students in a full day planning session, providing input on the Grade 7 students they interviewed and giving feedback to each other. The co-planning day was designed to model the practices and pedagogies that would be employed during the camp. Across the day, UNB students experienced soft-landings (low-stake choice activities to get comfortable in the space) and ice-breaker activities. They personalized shirts and developed interest-based activities and opening and closing activities. The UNB students shared their current knowledge of the pedagogies and approaches we were using, learning from each other and building on the concepts together. The co-planning day enabled the UNB students to forge relationships, adopt the pedagogical mindsets required for the camp, and begin to work collectively. As Eady et al. (2025) discuss, the stronger these foundations of community and context the more likely it is that the students will thrive in their WIL experience.

### MARCH BREAK 3-DAY CAMP

The camp was a project-based learning camp. The materials, which were referred to as tinker kits, were universally accessible as was the driving question, "In a place where the winter is long and cold, there may be times when you are outside and need to keep warm and safe. There are also times when you want to have fun! How can we create an electronic or motorized device to keep people safe, entertained, or warm?" This question was co-constructed by the engineers and educators who worked in groups and then collectively to develop a broad enough concept that students could enter and exit the learning as they felt comfortable but specific enough that they could think of something. A few pictures of fun in the snow, people snowed in, people with mobility disabilities who could not move through the deep snow, and vehicles under snow were shown to generate brainstorming.

As an iterative process, the university students engaged in the Creative WIL project were engaged in feedback cycles, designing opportunities based on the voice and unvoiced needs of the Grade 7 students, working collectively to solve challenges as they arose, and eliciting support from the authors when they needed guidance. The UNB students nominated themselves to lead or support various aspects of the camp timetable using a Google form. No UNB student was assigned to any one Grade 7 student and this allowed for the building of supportive relationships and the shared advocacy of all learners in the space. Across the three days of the camp the team met each morning to discuss the plans for the day and highlight intentions. Debrief meetings happened each afternoon to unpack issues that had arisen, find solutions and make democratic decisions.

## CAMP SHOWCASE

Throughout the camp the University students adjusted their interactions and activities, applying feedback from Grade 7 students, the parents, and the first and second authors. As part of project-based learning pedagogy, the learning must extend beyond the walls of the classroom (Kokotsaki et al., 2016). The camp culminated in a showcase for parents, caregivers, and the community. This element contributes to the personal and relational rock and the community/contextual rock of the conceptual model by Eady et al. (2025).

## METHODOLOGY:

The study received clearance from the institutional review board at University of New Brunswick REB 2024-022 and media releases were provided.

Creative WIL ran for the first time in the March 2024 and the second time in March 2025. In each year we recruited for 6 Engineering students and 15 Education students. In year 1, of the 38 expressions of interest by engineering students, only 6 could commit to all the camp days. In the end, one of the engineers did not attend the co-planning day or the camp. Importantly, of the five engineering students, three were from equity-deserving groups in year 1 and four in year 2; in year 1, there were four education students from equity groups, and in year 2, there were three who identified as being from an equity group. Each year international students apply to partake in the experience. In year 1, because of the funding source, we could take international student engineers, but had to limit the international education students participating as they were funded through a different source related to courses. It is valuable to broaden perspectives and ensure equitable access to WIL experiences, something that often does not happen, according to Jackson et al., (2025). There were 12 BEd students and five MEd students in the first year. Three additional Education students were accepted because some identified that they wanted to be part of the program, however they had their practicum placements in another province during the NB March Break. By accepting them, these pre-service teachers were able to complete the strengths-based profile workshop, the profiles, and the co-planning day. They then had to create presentations about their learning to share with their peers in the class of 93 pre-service teachers. In the second year nine BEd students and 8 MEd students were recruited. Before the first workshop, two of the BEd students withdrew due to plans during the March Break, leaving us with fifteen Education students.

This research sheds light on how students across disciplines and educational levels influenced the co-design of the non-placement Creative WIL program. Contributing to an authentic learning environment and engaging in meaningful ongoing reflection on their roles in enhancing the educational experiences of both them and the younger students resulted in real time adjustments during each iteration of the camp and in changes to be applied to future iterations. Student voices were central to the planning, execution, and evaluation of the project, highlighting the importance of active student involvement in quality work-integrated learning (WIL) settings (Drewery et al., 2026). The insights of the UNB students during and at the end of the project, supported by survey feedback from parents and Grade 7 students, were examined in conjunction with the authors' memos to inform the strengths and potential improvements for future iterations of this and other course-linked WIL projects. The data collected, video and written reflections and memos and points shared between the authors, were transcribed and coded. The codes were grouped according to inductive theme and further reflexive memos were attributed to the data. The data were analyzed through reflexive thematic analysis (Braun & Clarke, 2006). This form of knowing the data, giving ourselves space and revisiting it allowed for deeper and more cognizant (less emotional) understanding of what may have been occurring and how the learnings could be applied to the second iteration. The authors continue to engage in reflexive analysis on the data collected from the

second iteration, comparing that with the findings from the first iteration. The revisiting offers renewed perspectives as we grow in our confidence and understanding of meaningful non-traditional WIL. The emergent themes align with the conceptual model inspired by wayfinding rock formations developed by Eady et al. (2025) in that, for each theme, evidence of the community/contextual rock, the programmatic rock, and the personal/relational rock are prominent. The themes revolve around the impact that UNB students have on the WIL experience, and the impact the experience had on them. There were five inductive themes shaped through reflexive thematic analysis: agency through respected autonomy; learning about self, students, and practices through being and doing; risk on purpose to give it a shot; hope through impact; and refreshing perspectives-shedding the problematizing lens.

## REFLEXIVE FINDINGS

In undertaking this work, it is not only fitting but necessary to acknowledge and appreciate the expertise and perspectives the authors bring to the project. As professors, practicing professionals in different fields, and camp directors, neither author can bracket their influence or ignore the orientations they bring to the spaces they occupy in this project. The reflexive analysis process allowed the authors to consider the nuances and essence of statements. The authors were consistently challenged to observe their involvement and the impact of their presence, leading to a deferment of decision making, initiative, and student-driven impact. This was particularly evident in the first iteration of the camp, where the camp director (first author) was attempting to navigate the unknown and respond to unexpected challenges, which resulted in delegating tasks and having to spend unplanned time supporting unanticipated knowledge gaps. For example, one Yr 1 education student commented in their post-course completion reflection, “I would have liked it if we were given more to do so we could try things out” (Yr1.6). A corresponding memo documented by the first author stated,

some of the students are taking initiative and making videos and suggestions while others seem to be waiting; I don’t know what I don’t know, I am being asked questions I expected the engineers to have knowledge about in the labs and with concepts- I really don’t like feeling incompetent.

Student attributes, discussed in Eady et al. (2025) could present an explanation for the discrepancies in student agency and initiative. The sentiment of feeling a lack of competence was shared by a few engineers who stated they weren’t familiar with the labs or with electrical engineering, although the engineers certainly contributed to the themes of learning about self, students, and practices through being and doing and engaging in risk on purpose- give it a shot. The challenge of “being out of our depth with the engineering stuff” (Yr1.1) was shared by many education students in Yr 1 because they were not able to dive in with Grade 7 students when no one knew what the materials did or where they were located within the labs.

While agency through respected autonomy was threatened by a lack of a sense of competence, there were individuals in Yr 1 (usually post-secondary students who had prior experience with young people) and definitely in Yr 2 who gained a strong sense of agency through their respected decisions. This shift is largely due, from the authors’ perspectives, to purposive selection of the engineers in Yr 2, a shift in camp coordination towards a self-determination model of leadership, and the strengths-based approach to nominating themselves to lead different aspects of the camp experience. These changes resulted in UNB students determining where and how they could make impact (fading in and out of direct support with Grade 7 students), pitching in to support one another, and problem-solving with a check-in rather than deferring to the camp coordinator.

Students expressed sentiments of learning about self, students, and practices through being and doing. Having the opportunity to try new things, see different ways of working, and to stretch themselves in practices they may not have encountered before was closely linked to the risk on purpose- give it a shot and refreshing perspectives-shedding the problematizing lens themes.

One education student commented,

I appreciated the opportunity to learn from other people with a wide variety of skills and strengths for this workshop, especially during the breakout groups. I thought there was lots of room for people to offer thoughts and ask questions throughout the delivery of the content and the workshop components! (Yr2.12)

or “I found that witnessing the students really take control of their learning allowed me to be a guide and facilitator of their learning” (Yr2.11). The collective learning fostered the sense of being in it together- this was noted by the second author when he dropped into the camp and found the room abuzz with problem-solving, showcasing, and requests for bigger and stronger batteries. In the wayfinding model, this community stone is what the elements of practice and personal relationships are built upon. This sentiment was expressed eloquently by a Yr 2 UNB student, “I loved the feeling of being part of a collective team. Ed students, Eng students and Grade 7 students combined. We learned from one another and supported one another well.” (Yr2.1). At the same time the sense of community was being built (the foundation wayfinding rock), the pedagogies and practices (middle wayfinding rock) enabled the formation of relationship (the top wayfinding rock). This is evident through Grade 7 students seeking out new friends, new guides (the name for UNB students), and to show off their new learnings and inventions to new persons coming into the space.

Risk on purpose- give it a shot is a theme that emerged in many different ways through the reflexive analysis. It was anticipated that this would be a theme to a certain extent, being a project-based learning approach with an innovator mindset (trial and error). However, it was surprising and enlightening to witness the impact of risk on purpose-give it a shot across the pedagogical, social, and emotional domains. This theme is closely linked to learning about self, students, and practices through being and doing, and to hope through impact as it requires vulnerability and moving out of one’s comfort zone. The sense of jumping in and believing the other people would catch you was palpable in the space. As demonstrated in the comment below, the support was a necessary component of risk on purpose.

Along with the learning came some fun as well. The morning soft start was great. I am always nervous going into new situations and meeting people for the first time. Just like it will help ease the kids into the day the soft start helped me as well. It gave me and the person I was chatting with a commonality. In addition to the soft start, we also had fun trying to build the tallest paper tower. We got to chat with one another, and it gave us a look into each other’s strengths. (Yr2. 4)

This idea of being nervous to be part of the project was novel to the authors and provided useful insights into how we engage UNB students and their voices, particularly those that are often whispered or not yet confident to take a shot. This idea of risk also brought about notions of bravery, trust, and vulnerability. As we continue to (re)consider this data, we hope that a deeper understanding of what it takes to engage in risk on purpose- give it a shot will solidify.

Refreshing perspectives- shedding the problematizing lens is a theme that is closely tied to the first author’s values and hope through impact. Observing these themes emerge from the data and witnessing them in real-time through passing comments, energy in the room, and debriefing conversations has been



uplifting and motivating. UNB students generally commented that they weren't sure how this would work- bringing 30 Grade 7 students that we don't really know and who don't know each other, who all have differing learning requirements, and who may or may not be able to engage in one space for three-days seemed unlikely to succeed. The shift away from these hesitations often began for educators during the strengths-based profile sessions, and those who were still unsure quickly became convinced of the possibilities on the first day of camp with the soft-landing activities (games, puzzles, and food). Education students reflected on their own shifting perspectives:

I learned so much through this experience. I had never done a strengths-based-interview before. It reinforced how important it is to talk to the student directly about their strengths and needs..... Moving forward I am committed to do more strengths-based interviews with the students I work with and focus more on student strengths at the spring transition meetings I attend. (Yr2.5)

I find it so easy to think of what my students with exceptionalities need supports with instead of framing it as "what they are capable of doing" so this has helped me reframe my mindset on a couple of my students. When I talk to my EA's I often say what the students they work with are not capable of doing. (Yr1.15)

The reframing of youth as the problem or as incapable, to bringing strengths is a foundation of the success of the camp. Developing relationships through sound pedagogy and the setting of a universally designed space to grow a sense of community is likely why the request from all parties, including the UNB students, is to extend the camp to five days and offer a summer version. The showcase is an opportunity to share the newfound confidences beyond the 'classroom' walls. UNB students commented, "The first thing that comes to mind as I sit and reflect upon the camp is "I was part of something extraordinary." (Y2.10). The WIL experience has been presented to non-participating peers at the end of year and end of course showcases. Students have described their time in the project as "life changing" and "the best part of their teacher program." This is likely due to the learning about self, students, and practices through being and doing which link to and support the other themes described above. The being and doing build confidence, encourage decision making and thereby agency through respected autonomy. The students are taking risk on purpose- give it a shot just joining the program, working with age groups or youth that they may have never encountered before, and applying pedagogies that may be new to them, and shifting their perspectives through their own reflexive analysis. Ultimately, as the UNB students reflect on the part they played in bringing together the elements of Creative WIL, it leads to hope through impact. This notion is verified through the feedback from parents, colleagues, other professors, and Grade 7 students who share their excitement, appreciation, and desire to return.

#### IMPACT ON ACADEMIC, CAREER, AND PERSONAL GOALS

The impact on students is expressed through the reflections and interviews conducted with and among their peers. In each year an engineering student discussed their decision to pursue education or working with young people in a teaching capacity as a profession. We also had an education student who was formerly an engineer in each year. These unique experiences of being interdisciplinary themselves provided great insights into ways of establishing working relationships and guiding responsibilities in the creation of ideas and in supporting the Grade 7 students in tackling the driving question.

Regarding career and personal growth, there was a general sense of being able to take risks intentionally while trying different things in their own classrooms. One educator stated,

I would say it influenced my career readiness for sure. Although I completed my initial practicum in a middle school, the idea of working there full-time still scares me quite a bit. Having this experience allowed me to recognize that making relationships are 100% achievable and that it isn't as scary as you think it would be. (Yr2.4)

Another stated,

Absolutely. In the short term, the timing of the camp, just a week before practicum, helped ease my pre-practicum jitters and familiarized me with the student learning environment, making me feel more prepared. In the long term, it gave me a new vision of what an engaged classroom looks, feels, and sounds like, which is a goal I can continuously work toward. (Yr2.6)

Furthermore, in line with the literature on what constitutes high-quality WIL (Drewery et al., 2026; Eady et al., 2025), students felt they were heard and contributed meaningfully, more so in the second iteration of the camp. This quote from Educator 8 highlights the general sentiments of the UNB students through the themes of autonomy and hope: "... this was an exciting, encouraging, and educational opportunity. My experience and expertise were valued and well received." As stated by Eady et al. (2025), practitioners should use student reflection of their experiences to inform the creation of quality WIL.

For the Engineering students the themes of learning about self, students, and practices through being and doing and refreshing perspectives- shedding the problematizing lens were evident. The interest and curiosity about the students and practices was evident in the engineers in Year 1 and in Year 2. Many of the engineers enjoy learning themselves and have a desire to teach in some capacity as evidenced by this comment, "I have always enjoyed teaching so this provided a new challenge communication effectively with younger students" (Eng.Yr2.6) while another said the experience, "Developed my teaching and guiding skills" (Eng.Yr2.2). In year 1 an engineer shared that they had really enjoyed working with the students, which surprised them, but they were going to seek out more teaching opportunities. Finally, an engineer shared that the project had impact on their career readiness related to a competency they must demonstrate to qualify as a professional engineer, "This work-learning opportunity did not influence my career direction, but it did impact my career readiness. This integrated learning experience helped me develop my teamwork skills as well as my teaching and mentoring abilities." As the authors consider these comments and the general approach of the engineers, it is noted that the selection of engineers who are confident in their knowledge and already demonstrate a willingness to risk on purpose, is necessary to foster the sense of community and allow the educators to drive the pedagogy and practices.

## EVALUATION OF WIL PROGRAM

The overall evaluations of the Creative WIL program were positive. In the first year there were comments regarding the desire to have more autonomy and control over different elements of the project. This was considered in the second year using the Google form to enlist UNB students to take on leadership and responsibility in different elements. The camp coordinator (first author) and co-coordinator (second author) had a session before the co-planning session in the first year to expose the first author to the spaces, concepts, and materials. Many of the engineers in year 1 were unfamiliar with the space and materials and the team was navigating uncharted waters as we muddled through the designing of the driving question. In year 1 a parent mentioned that their child had a communication disability, and it would be helpful to have a sense of what the students did during the day. To address this a password-protected Padlet was created and managed by some of the UNB students and the coordinator in the second iteration. Particular education students signed up to take photos and do interviews, which they

uploaded to the Padlet for the parents/guardians to view. In future years, after adapting the mechanisms of communication to support autonomy and learning about self, students, and practices, and reflecting on the feedback and comments of participants, the camp coordinators will adjust the processes to further increase autonomy and risk on purpose.

This project underscores the importance of integrating student perspectives in WIL program design and implementation. Through co-design and reflexive practices, our findings demonstrate the power of cross-disciplinary collaboration in cultivating personal and professional growth. The case study reveals that when students are positioned as co-theorists in shaping their learning, WIL can more effectively foster academic development, career readiness, and a confident sense of self. As one education student noted, “the Creative WIL experience has provided me with real experience on how to better support students in their learning, autonomy, and in their sense of belonging.”

Integrating practice and pedagogy in teacher education, and across disciplines, can accelerate competency development through timely feedback, active support, and guided implementation. Future research should explore the pedagogical architecture of the Creative WIL model, identifying the key elements that foster deeper connectivity between theory and practice in course-based WIL. Simultaneously, evolving funding models are essential to ensure that equity-deserving and international students have access to meaningful, barrier-free WIL experiences. The development of open-access tools and sustained cross-faculty partnerships would support scalable, institutionally embedded models of WIL at UNB and beyond, expanding these practical experiences to other fields.

Ultimately, refreshing institutional perspectives to center student input and enable the co-construction of WIL and other practice-based learning opportunities is not just aspirational; it is a shared responsibility. In doing so, we can help bridge the enduring gap between theory and practice, fostering learning experiences that are not only more equitable and inclusive but also more purposefully linked to the practices, relationships, and realities students will encounter in their professional lives.

## CONCLUSION

The Creative WIL project demonstrates how non-placement, cross-disciplinary models of work-integrated learning can bridge gaps between theory and practice in higher education. By centering student voice and embedding reflexive, strengths-based, and universally designed practices, the initiative not only cultivated agency, collaboration, and professional readiness among the university students, but also nurtured relational skills and a sense of mattering with Grade 7 participants. The iterative case study design highlighted how real-time feedback, shared responsibility, and purposeful risk-taking can transform WIL into an experience that is inclusive for all and profoundly impactful.

The first two iterations underscore the importance of co-construction: when students are positioned as co-theorists rather than passive participants, they contribute to shaping more equitable and sustainable models of WIL. For education students, this meant reframing deficit-based perspectives into strengths-oriented practice; for engineering students, it meant expanding technical expertise into relational and communicative competencies. Across both groups, the project reinforced that learning through “being and doing” generates confidence, deepens reflection, and generates a sense of possibility for future practice.

Findings point to the potential of Creative WIL to address challenges commonly associated with traditional placement models, particularly in contexts where equity of access and sustainability are concerns. Sustaining and scaling Creative WIL will require continued attention to equity of access,

particularly for international and equity-deserving students, as well as ongoing cross-faculty collaboration. Funding models and institutional support must evolve to embed these experiences in ways that ensure all students can benefit. At the same time, further research is needed to map the pedagogical architecture that makes Creative WIL effective, identifying the elements that best foster agency, a sense of competence, and meaningful connection between pedagogy and practice. What emerges clearly is that when students are positioned as co-designers of WIL, the result is a deeper sense of professional readiness and confidence to apply learnings to practice.

Above all, the project affirms the transformative potential of WIL when it is designed as a relational, inclusive, and student-driven process. As one participant reflected, “this opportunity has restored my hope about what teaching can be like, of what learning can look and sound like. I have hope again that teaching is for me.” In this sentiment lies the concluding theme, hope through impact. This is a reminder that well-designed WIL that honors student voice and embracing risk, can impact not only skills and competencies but also students’ sense of purpose in their chosen careers.

## ACKNOWLEDGEMENT

This project was funded by the Office of Experiential Education, the Faculty of Engineering, the Department of Electrical and Computer Engineering, and the Faculty of Education at the University of New Brunswick.

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## About the Journal

The International Journal of Work-Integrated Learning (IJWIL) publishes double-blind peer-reviewed original research and topical issues related to Work-Integrated Learning (WIL). IJWIL first published in 2000 under the name of Asia-Pacific Journal of Cooperative Education (APJCE).

In this Journal, WIL is defined as:

*An educational approach involving three parties – the student, educational institution, and an external stakeholder – consisting of authentic work-focused experiences as an intentional component of the curriculum. Students learn through active engagement in purposeful work tasks, which enable the integration of theory with meaningful practice that is relevant to the students' discipline of study and/or professional development (Zegwaard et al., 2023, p. 38\*).*

Examples of practice include off-campus workplace immersion activities such as work placements, internships, practicum, service learning, and cooperative education (co-op), and on-campus activities such as work-related projects/competitions, entrepreneurship, student-led enterprise, student consultancies, etc. WIL is related to, and overlaps with, the fields of experiential learning, work-based learning, and vocational education and training.

The Journal's aim is to enable specialists working in WIL to disseminate research findings and share knowledge to the benefit of institutions, students, WIL practitioners, curricular designers, and researchers. The Journal encourages quality research and explorative critical discussion that leads to the advancement of quality practices, development of further understanding of WIL, and promote further research.

The Journal is financially supported by the [WILNZ](#), [WACE](#), [WIL Australia](#), and the [University of Waikato](#).

## Types of Manuscripts Sought by the Journal

Types of manuscripts sought by IJWIL are primarily in two forms: 1) *research publications* describing research into aspects of WIL and, 2) *topical discussion and conceptual* articles that review relevant literature and provide critical explorative discussion around a topical issue. The journal will, on occasions, consider good practice submissions.

*Research publications* should contain; an introduction that describes relevant literature and sets the context of the inquiry. A detailed description and justification for the methodology employed. A description of the research findings - tabulated as appropriate, a discussion of the importance of the findings including their significance to current established literature, implications for practitioners and researchers, whilst remaining mindful of the limitations of the data, and a conclusion including recommendations.

*Topical discussion and conceptual articles* should contain a clear statement of the topic or issue under discussion, reference to relevant literature, critical and scholarly discussion on the importance of the issues, critical insights into how to advance the issue further, and implications for other researchers and practitioners.

*Good practice and program description papers.* On occasions, IJWIL seeks manuscripts describing an example of good practice, however, only if it presents a particularly unique or innovative practice or it was situated in an unusual context. There must be a clear contribution of new knowledge to the established literature. Manuscripts describing what is essentially 'typical', 'common' or 'known' practices will be encouraged to rewrite the focus of the manuscript to a significant educational issue or will be encouraged to publish their work via another avenue that seeks such content.

By negotiation with the Editor-in-Chief, the Journal also accepts a small number of *Book Reviews* of relevant and recently published books.

### Reference

Zegwaard, K. E., Pretti, T. J., Rowe, A. D., & Ferns, S. J. (2023). Defining work-integrated learning. In K. E. Zegwaard & T. J. Pretti (Eds.), *The Routledge international handbook of work-integrated learning* (3<sup>rd</sup> ed., pp. 29-48). Routledge. <https://doi.org/10.4324/9781003156420-4>

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ISSN: 2538-1032

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