

Olivia PODOLAK LEWANDOWSKA<sup>1</sup>

ORCID: 0000-0002-2914-8944

Moaz SHOURA<sup>2</sup>

ORCID: 0009-0008-1920-6945

Marco AGAZIO SAMA<sup>3</sup>

ORCID: 0000-0002-9823-6999

---

## **Implementing Work-integrated Learning in a Large-enrolment Undergraduate Course: A Case Study Using the Incentivized Improvement Method (IIM)**

**Wdrażanie nauczania zintegrowanego z pracą zawodo-  
wą na kursie licencjackim o dużej liczbie uczestników:  
studium przypadku z wykorzystaniem Metody  
Motywowanego Doskonalenia (IIM)**

---

<sup>1</sup> Olivia Podolak Lewandowska, PhD, University of Toronto Scarborough in Toronto, Canada, email: [olivia.podolak@mail.utoronto.ca](mailto:olivia.podolak@mail.utoronto.ca)

<sup>2</sup> Moaz Shoura, PhD Candidate, University of Toronto Scarborough in Toronto, Canada, email: [moaz.shoura@mail.utoronto.ca](mailto:moaz.shoura@mail.utoronto.ca)

<sup>3</sup> Marco Agazio Sama, PhD, University of Toronto Scarborough in Toronto, Canada, email: [marco.sama@mail.utoronto.ca](mailto:marco.sama@mail.utoronto.ca)

## Introduction

Postsecondary institutions have increasingly recognized work-integrated learning (WIL) as a critical strategy in bridging academic coursework and professional practice. WIL connects authentic, task-based work experiences into the curriculum (often through partnerships with external organizations), providing students with opportunities to develop both technical competencies and transferable skills such as collaboration, communication, adaptability, and critical thinking (Billett, 2009; Jackson, 2015; Smith, 2012), while enhancing student engagement and learning (Patrick et al., 2008).

Despite its utility, WIL remains difficult to scale as postsecondary institutions continue to expand student enrolment. Indeed, most WIL initiatives are concentrated to small, upper-year, or professionally oriented courses where logistics, supervision, and feedback can be more easily managed (Jackson, 2017; Trede, 2012). Large-enrolment undergraduate courses are often excluded from WIL due to significant barriers, including limited instructional resources, the logistical complexity of coordinating projects and class time with external partners, the challenge of offering meaningful guidance to students at scale, and the difficulty of designing projects that maintain academic rigour while accommodating diverse learner needs (Biggs et al., 2022; Jackson et al., 2025; Jackson et al., 2016; Tran & Soejatminah, 2016). Assessment design constitutes another significant yet often overlooked barrier. Open-ended WIL projects are not well-suited to standardized grading systems, making it difficult to construct fair and detailed rubrics (Jackson, 2018). Given that students apply course concepts in varied ways, rubrics with rigid checklists may constrain creativity or penalize valid approaches that do not follow a predefined path. To address these challenges, some educators have proposed collaborative rubrics that involve all stakeholders – students, instructors, and workplace partners – in defining expectations (Rust, 2007; Gonsalvez & Freestone, 2007; Hodges, 2011). However, these approaches introduce their own challenges, including leniency bias and low inter-rater reliability (Gonsalvez & Freestone, 2007; Trede & Smith, 2014).

If WIL is to be integrated into undergraduate curricula, assessment strategies must evolve to support a shift from knowledge acquisition to application. This paper presents a case study of a large-enrolment undergraduate statistics course of almost 200 students in which the incentivized improvement method (IIM; Sama et al., 2025) was used to support a WIL assignment. The IIM is

a three-stage, feedback-driven “ungrading” (Stommel, 2024) framework that evaluates student work through effort, revision, and improvement, rather than criterion-based rubrics. Although not developed specifically for WIL, the IIM’s flexibility enabled its use in this context. This case study, therefore, details the logistical implementation for future adaptation in similar contexts, and examines its effectiveness in this setting.

## Methods

### *Participants and course setting*

The present case study was conducted in a large undergraduate foundational statistics course ( $N = 186$  students) in the Fall 2024 semester within the Department of Psychology at the University of Toronto Scarborough. The primary learning objective for the course was to build students’ knowledge of statistical theory and relevant software use. The class consisted of students with diverse levels of academic preparedness, making it a suitable setting to investigate the adaptability of the IIM within the context of a WIL assignment. The project was conducted in compliance with the reflective practice guidelines outlined by the University of Toronto, ensuring that no identifiable or sensitive student information was collected or disclosed.

The WIL project was introduced as a course assignment encompassing 15% of the students’ final grade. In the first eight weeks of the thirteen-week course, students learned the theoretical and mathematical foundations of statistical analyses alongside complementary training in JASP software (Version 0.19.1, JASP Team, 2024). The initial draft of the WIL assignment was due in the ninth week, followed by a two-week grading period for teaching assistants (TAs) to grade and provide feedback to students. The revised submission was subsequently due in the last week of class. To reduce the number of TA grading hours required to implement this assignment, and to encourage collaboration, students worked in pairs, unless accommodation necessitated that a student work alone.

### *WIL assignment design*

Students analysed a large, 245-variable dataset provided by an external not-for-profit organization in Canada. The assignment was framed as a statistical consultancy task which emphasized open-ended inquiry. Students formulated their own research questions and hypotheses, selected appropriate statistical analyses, interpreted the results, and communicated their findings

in both a research-style report for academic audiences and a visually engaging infographic for general audiences, gaining hands-on experience with core elements of data analysis. This mirrored real-world consultancy scenarios where a client is often statistically naive, requiring consultants to explore and interpret the dataset as “experts”. The pedagogical focus of this assignment was on transferable skills in critical thinking and problem solving, rather than testing rigid, procedural knowledge in statistics.

The primary deliverable was a technical report formatted according to APA guidelines, consisting of two core sections: an “Analyses and Results” section, as well as a “Discussion and Conclusion” section, within a strict, two-page limit. Each submission required the use of at least two statistical analyses learned in class; however, students were permitted to substitute appropriate alternative analyses not covered in class if they could be justified. This flexibility encouraged self-directed learning by motivating students to explore and apply methods outside the core curriculum. To ensure transparency, students submitted all raw calculations and JASP outputs alongside their reports.

To extend and enrich the learning experience, students completed two optional supplemental submissions: a lay infographic (submitted individually or in pairs), and a personal reflection (submitted individually), each for extra course credit beyond the 15% allocated to the main WIL assignment. The infographic required students to translate statistical findings for non-expert audiences, reinforcing scientific communication skills. Although it was not evaluated using the IIM framework (mainly due to limited availability of TA grading hours), it provided an opportunity to examine grading consistency across TAs, which is discussed later in this case study. The reflection aimed to support metacognitive awareness by encouraging students to evaluate their learning and reflect on their experience with the IIM.

### *Assignment grading structure: The IIM*

As mentioned, one challenge of implementing an open-ended WIL assignment is constructing an appropriate grading rubric. Since students developed their own unique research questions and analytical approaches, creating a universal answer key was simply not feasible. This is where the IIM was effective, because rather than relying on a criterion-based rubric, it allowed graders to focus on individualized feedback and allowed students to demonstrate learning through revision. TAs were trained to evaluate student work holistically, emphasizing the application of statistical knowledge and reasoning over

itemized grading criteria. This approach supported more equitable evaluation by allowing students with varied academic preparation, accessibility needs, and language proficiencies to engage at their level of readiness. This approach also benefitted TAs by providing structured experience with iterative feedback processes that mirror professional and academic writing, where work is refined through ongoing critique, peer review, and revision.

Following IIM guidelines (for a detailed description, see Sama et al., 2025), students first submitted a complete initial draft of their report. This initial submission was graded holistically using a simplified rubric, with scores of either 6/10 (adequate effort, or pass) or 4/10 (inadequate effort or fail). In rare instances, scores of 0/10 were reserved for submissions that were too poor in quality for revision or did not follow the assignment instructions. After receiving detailed feedback from their assigned TA, students had the option to revise and resubmit their work for up to four additional points<sup>4</sup>, which could result in a maximum grade of 10/10 if a 6/10 was received on the first submission. TAs were familiarized with the dataset and participated in a calibration session to align grading expectations and improve consistency. They were also trained in effective feedback strategies and instructed to provide at least ten substantive comments per page, focusing on conceptual clarity and analytical technique. Minor, surface-level corrections (e.g., grammatical, typographical) were also encouraged, but did not count towards the minimum number of comments required.

It should be noted that the optional infographic submission was not evaluated using the IIM grading scheme, but rather a traditional rubric that emphasized clarity of communication, content accuracy, and aesthetic presentation. The personal reflection was marked for completion only.

## Analyses and Results

There were 98 assignments<sup>5</sup> initially submitted with an average grade of 5.29/10 ( $SD = 0.96$ ). Of these, 35 assignments received 4/10 whereas 63 received

---

<sup>4</sup> The use of 4/10 or 6/10 as baseline grades in our assignment design was based on the University of Toronto's passing grade of 50% (i.e., 5/10). Since grading thresholds vary across institutions, these benchmarks can be adjusted accordingly. For example, at an institution where the passing grade is 70%, students could instead be assigned 6/10 or 8/10 on their initial submission, with the potential to earn up to 2 additional points upon resubmission.

<sup>5</sup> The total number of students for the class was  $N = 186$ , which should have resulted in 93 pairs; however, 10 students had various accommodations that required them to complete the

6/10. No submissions received a score of 0/10 or 10/10, which is to be expected as these scores are typically reserved for submissions of exceptionally poor or perfect quality, respectively. Of the 98 initial submissions, 95 were revised and resubmitted for additional points. This high rate of participation indicates that many students chose to engage in the revision opportunity, even if they already received a passing grade (e.g., 6/10).

The average improvement following resubmission was a +2.66 increase from their initial grade ( $SD = 0.80$ ), yielding a final average grade of 7.86/10 ( $SD = 1.28$ ) across all assignments, including those of students that did not opt to revise their initial submission. This final average aligned with institutional expectations at the University of Toronto and was consistent with historical grade trends in this course, despite variation in assignment format in prior semesters. To assess the consistency of grading across the seven TAs, a Kruskal-Wallis  $H$  test<sup>6</sup> was conducted to compare final grades across TAs. The test was not statistically significant,  $H(6) = 7.36$ ,  $p = .289$ ,  $\epsilon^2 = 0.00$ , indicating no meaningful differences in grading patterns across TAs. This result is notable given the absence of a traditional grading rubric and highly varied approaches from students, suggesting a degree of grading consistency within this implementation of the IIM. That is, despite the open-ended nature of the assignment and the lack of standardized, itemized criteria, grading practices were consistent across TAs.

As mentioned previously, students were offered the opportunity to complete an optional supplemental assignment in the form of an infographic, submitted individually or in pairs. In total, 71 infographics were submitted. These were evaluated using a standardized rubric assessing three key criteria: (1) translation of content, including the clarity, accuracy, and appropriateness of information drawn from their technical reports; (2) communication and data presentation, with emphasis on accessibility to a lay audience, judicious use of text versus visual aids, and appropriate use of statistical and scientific

---

assignment alone. Therefore, there were 88 assignments completed in pairs, and 10 assignments completed individually, for a total of 98 submissions. Preliminary analyses showed that there were no significant differences in the mean grades of assignments completed individually or in pairs for both the initial and revised submissions; therefore, the two groups were collapsed for simplicity's sake.

<sup>6</sup> A Kruskal-Wallis  $H$  test was used instead of an analysis of variance (ANOVA) due to violations of the normality assumption in the grade distributions for three of the TAs, as indicated by significant Shapiro-Wilk tests,  $p < .05$ .

language; and (3) overall aesthetics and professionalism, including visual appeal, creativity, and adherence to standard writing mechanics.

Given that the optional infographic submissions were not evaluated using the IIM structure, it presented an opportunity to crudely examine grading variability among TAs using a traditional, rubric-based approach. An additional Kruskal-Wallis  $H$  test was therefore conducted to compare infographic grades across six TAs (one TA opted not participate in infographic grading), which yielded a statistically significant result,  $H(5) = 14.00$ ,  $p = .016$ ,  $\epsilon^2 = 0.11$ , suggesting that there were differences in grading between TAs. This finding is notable given that the infographic rubric was highly structured, in contrast to the open-ended technical report graded using the IIM. Despite greater variation in student approaches, the IIM yielded more consistent assessment outcomes across graders. While limitations to this analysis certainly exist, such as incomplete grader participation and potential self-selection bias (e.g., higher-achieving students may have been more likely to complete the optional task), the observed variability provides a useful comparison, demonstrating that even with a standardized rubric, grading inconsistency persisted, underscoring the value of the IIM's holistic evaluation model.

In addition to student performance metrics, qualitative feedback was gathered from 136 optional reflection submissions completed at the end of the course, as well as course evaluations at the end of the semester. While no formal thematic analysis was conducted, student comments were reviewed to better understand students' perspectives on the WIL assignment and the IIM framework. Many students described the open-ended nature of the project as an opportunity to exercise creativity and apply statistical skills in a realistic setting. Others highlighted the value of revising their work in response to detailed feedback, noting that the process was both motivating and educational. Several reflections emphasized increased confidence in conducting independent data analysis and an appreciation for the project's real-world relevance. Selected quotations from student reflections are presented below to illustrate these themes:

1. *"The assignment enhanced my ability to visualize data effectively through tools like JASP, enabling me to identify patterns, test assumptions (e.g. normality, homogeneity of variances, etc.), and present results in a clear and meaningful way. Collaborating with a partner further strengthened my teamwork and communication skills. Coordinating tasks, aligning on analytical approaches, and*

*synthesizing our interpretations into a cohesive report required both compromise and strategic planning. This experience emphasized the importance of diverse perspectives in research and taught me how to integrate feedback constructively to enhance the quality of a project. Perhaps most importantly, I gained valuable insights into the iterative nature of research, particularly in dealing with non-significant results. This assignment taught me to view such outcomes not as failures but as opportunities to refine hypotheses, consider alternative explanations, and address limitations in data or methodology.”*

2. *“The most enjoyable aspect of this course for me was the assignment. This is because I had the chance to apply my knowledge to real-world data and get a sense of how data analysis actually is. While being the most enjoyable, it was also the most challenging as we were given a huge dataset with about 245 variables and 1100+ participants. Navigating it seemed overwhelming at first but looking at the variable list and having a rough idea about the areas I wanted to focus on helped narrow it down. Once the dataset was cleaned up, the rest flowed smoothly apart from a few times where changes to how the data was represented had to be made but those were relatively easier to handle.”*

Despite the generally positive feedback, some concerns were raised that are common to WIL implementations, and to statistics assignments more broadly. Some students noted that the unstructured nature of the assignment made it difficult to know how to approach the dataset, particularly when faced with hundreds of variables and no predefined research questions. Others expressed concerns about the logistics of working with a partner, citing challenges in dividing tasks equitably, coordinating schedules, and ensuring shared accountability. One student commented:

*“As it was a partner assignment, I found myself taking on most of the workload because my partner lacked initiative. I had to assign tasks and micromanage their contributions, which I found frustrating and unfair as we would receive the same grade. This experience diminished my enjoyment of the assignment, as I would have preferred the option to complete it independently.”*

While such issues are not unique to this course and assignment and are cited as pedagogical trade-offs in authentic WIL contexts (Riordan et al., 2017), they highlight the need for careful scaffolding, clear expectations, and ongoing support when implementing open-ended projects at such a large scale.

The main concern relating to the structure of the IIM itself was dissatisfaction with the limited range of scores (i.e., 4/10 or 6/10) available on the

initial submission. For some students, the lack of intermediate scores created a sense of unfairness. For instance, one student commented:

“The assignment’s grading was confusing and not really set up in a way that would be beneficial to students. In the first draft, you could only get 6/10 or 4/10 and the TAs were picky about things which cost us grades. There was no option to get 5/10 or even 4.5/10. For the final revision, you get anywhere between +1 to +4 grades added to your first draft grade but there is no guarantee what you will get extra points because we are just told to do our best to improve based on the editing done by the TAs. If we still don’t get it right, what are we supposed to do then?”

While the IIM was designed to emphasize improvement and reduce grade anxiety by decoupling high-stakes performance from initial drafts, the baseline scores and structured point adjustments were intentionally set to encourage iterative learning and reflection (Sama et al., 2025). Usually, concerns regarding the initial starting grades abated once students better understood the resubmission and revised grading process. Therefore, continued and clear communication of this rationale could help students better understand that these thresholds are not arbitrary but serve to guide effortful engagement and meaningful skill development throughout the assignment.

## Discussion

The findings of the present case study suggest that the IIM can effectively support the integration of WIL into a large-enrolment undergraduate course, by enabling nearly 100 student groups to complete an open-ended assignment despite common barriers including logistical complexity, grading demands, and the need for individualized feedback.

The IIM’s emphasis on revision and individualized feedback – focusing on effort and improvement rather than the perceived quality of a single submission – aligns with the iterative nature of real-world problem solving and professional work, in which feedback is used to refine ideas and deepen insight. This approach positions assessment as an active, ongoing learning process rather than a static judgment of performance. Grading initial submissions based on effort may also contribute to creating a lower-stakes environment in which students can engage with feedback, learn from early mistakes, and be rewarded for improvement, while still adhering to expected grading distributions in postsecondary contexts. Consistent with this interpretation, the high rate of

resubmissions (approximately 96%) suggests strong student engagement with the revision process. Rather than being deterred by critical feedback, many students appeared to use it as a basis for further development. This is consistent with prior research indicating that formative assessment is most effective when paired with opportunities for revision (Carless & Boud, 2018).

The IIM also offers a feasible grading approach in high-enrolment courses. Assessing WIL projects is challenging, as the expected project outcomes are not easily standardized. The use of rigid rubrics can be time-consuming and may inadvertently constrain diverse approaches, particularly when students are asked to pose their own questions or apply concepts flexibly. This case study suggests that a shift toward holistic evaluation – supported by calibration – was still associated with consistent grading outcomes across TAs despite the absence of detailed rubrics. Framing the TA role as analogous to editorial peer review, rather than grading, further supported this process and better modelled how writing is applied in real-world contexts. Together, these elements suggest that feedback-centred, holistic assessment can be implemented in large-enrolment courses while maintaining reasonable consistency and academic rigour, provided that appropriate supports are in place.

Although this was not directly measured in the present case study, the structure of the IIM may have implications for academic integrity in the context of generative artificial intelligence (AI). Given that the IIM requires students to engage meaningfully with personalized feedback, final submissions must reflect a trajectory of development that is difficult to reproduce through AI-generated responses. Moreover, instructors and TAs gain familiarity with students' writing and reasoning across submissions, which may help identify inconsistencies in voice or argumentation as evidence of academic dishonesty. While not a comprehensive solution (and speculative at best), this process-oriented structure may function as a partial deterrent by foregrounding transparency and accountability.

Despite these strengths, some challenges still remain. Some students found the holistic grading system with a capped initial grade (e.g., 6/10) discouraging, particularly when they perceived their initial submission as high quality. This underscores the importance of clearly communicating the IIM's rationale behind the grading structure and its role in supporting learning. Ensuring consistency in the quality and clarity of feedback comments across TAs is also an ongoing concern, particularly when evaluating highly individualized submissions that

vary in topic and methodological approach. Even with calibration sessions in which expectations are explicitly communicated, variability in the depth and clarity of feedback could persist, ultimately affecting how effectively students are able to revise their work. This is especially salient in WIL contexts, where tasks are open-ended and may lack a single “correct” approach; thus, a lack of quality feedback early on could be detrimental to a student’s final product through no fault of their own.

The design of this case study itself also has several limitations that constrain the strength of its conclusions. First, the absence of a control or comparison condition (e.g., a traditionally graded cohort completing the same assignment) limits the ability to attribute observed outcomes specifically to the IIM. Second, improvements in grades between initial and revised submissions cannot be interpreted as direct evidence of learning gains, as they may also reflect students’ responsiveness to feedback or familiarity with expectations. Moreover, participation in revisions, infographics and end-of-course reflections was self-selected, which may bias interpretations of student engagement and experience. Third, while qualitative feedback from students was reviewed, it was not analysed using a formal coding procedure, and no inter-rater reliability metrics were established. Despite these limitations, student feedback provides some support for the practical value of the IIM in this context. Students frequently identified the opportunity to revise as motivating and valued applying statistical skills to real-world problems, suggesting that the model can support engagement and skill development within the constraints of a large-enrolment course.

Taken together, this case study suggests that the IIM is a promising approach for integrating WIL into large-enrolment courses within the specific instructional context examined here. While the findings are limited in scope, they illustrate how structured opportunities for feedback and revision can support both pedagogical goals and logistical feasibility. Future research should continue to examine the model across multiple offerings and institutional contexts, while incorporating more systematic qualitative and comparative designs to better assess its scalability and generalizability.

**Abstract:** Work-integrated learning (WIL) provides students with authentic, real-world experiences that enhance engagement, skill development, and employability. However, implementing WIL in large-enrolment courses remains challenging due to the logistical complexity of coordinating and assessing open-ended assignments. This case study examines the use of the Incentivized Improvement Method (IIM; Sama et al., 2025), a three-phase, feedback-driven assessment model informed by “ungrading” (Stommel, 2024), to support a WIL assignment in a large undergraduate statistics course. Ninety-eight student groups completed a data analysis consultancy project that was evaluated holistically, with emphasis on responsiveness to detailed feedback rather than adherence to a traditional rubric. Course-level metrics indicated high participation in the revision process, as well as consistent grading across teaching assistants, while qualitative student feedback highlighted the value of real-world application and opportunities for improvement. These findings suggest that the IIM offers a feasible approach to assessing WIL in large-enrolment settings, where standardization is challenging but individualized feedback remains central.

**Keywords:** work-integrated learning, incentivized improvement method, writing assessment, large-enrolment courses; inclusive pedagogy

**Streszczenie:** Uczenie zintegrowane z pracą zawodową (Work-Integrated Learning – WIL) zapewnia studentom autentyczne doświadczenia z rzeczywistego środowiska pracy, które zwiększają ich zaangażowanie, rozwój umiejętności oraz szanse na zatrudnienie. Jednak wdrażanie WIL na kursach o dużej liczbie uczestników pozostaje wyzwaniem ze względu na złożoność organizacyjną związaną z koordynowaniem i ocenianiem otwartych zadań. Niniejsze studium przypadku analizuje wykorzystanie **Metody Motywowanego Doskonalenia** (Incentivized Improvement Method – IIM; Sama i in., 2025), trzystopniowego modelu oceniania opartego na informacji zwrotnej i inspirowanego koncepcją „nieoceniania” (ungrading; Stommel, 2024), jako wsparcia dla zadania realizowanego w ramach WIL na dużym kursie statystyki dla studentów studiów licencjackich. Dziewięćdziesiąt osiem grup studentów zrealizowało projekt konsultingowy z zakresu analizy danych, który oceniano holistycznie, kładąc nacisk na sposób wykorzystania szczegółowej informacji zwrotnej, a nie na zgodność z tradycyjną rubryką oceniania. Wskaźniki na poziomie kursu wykazały wysoki poziom uczestnictwa w procesie wprowadzania poprawek oraz spójność ocen przyznawanych przez asystentów dydaktycznych. Z kolei jakościowe opinie studentów podkreślały wartość praktycznego zastosowania wiedzy oraz możliwości doskonalenia własnej pracy. Wyniki sugerują, że metoda IIM stanowi wykonalne podejście do oceniania WIL w warunkach dużej liczby studentów, gdzie standaryzacja jest utrudniona, ale indywidualna informacja zwrotna pozostaje kluczowym elementem procesu dydaktycznego.

**Słowa kluczowe:** uczenie zintegrowane z pracą zawodową (WIL), Metoda Motywowanego Doskonalenia (IIM), ocenianie prac pisemnych, kursy o dużej liczbie studentów, pedagogika inkluzywna

## References

- Biggs, J., Tang, C., & Kennedy, G. (2022). *Teaching for quality learning at university*. McGraw-Hill Education (UK).
- Billett, S. (2009). Realising the educational worth of integrating work experiences in higher education. *Studies in Higher Education*, 34(7), 827–843. <https://doi.org/10.1080/03075070802706561>
- Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8), 1315–1325. <https://doi.org/10.1080/02602938.2018.1463354>
- Gonsalvez, C. J., & Freestone, J. (2007). Field supervisors' assessments of trainee performance: Are they reliable and valid? *Australian Psychologist*, 42(1), 23–32. <https://doi.org/10.1080/00050060600827615>
- Hodges, D. (2011). The assessment of student learning in cooperative and work-integrated education. In R. Coll & K. Zegwaard (Eds.), *International handbook for cooperative and work-integrated education* (pp. 53–62). World Association for Cooperative Education.
- Jackson, D. (2015). Employability skill development in work-integrated learning: Barriers and best practice. *Studies in Higher Education*, 40(2), 350–367. <https://doi.org/10.1080/03075079.2013.842221>
- Jackson, D. (2017). Developing pre-professional identity in undergraduates through work-integrated learning. *Higher Education*, 74(5), 833–853. <https://doi.org/10.1007/s10734-016-0080-2>
- Jackson, D. (2018). Challenges and strategies for assessing student workplace performance during work-integrated learning. *Assessment & Evaluation in Higher Education*, 43(4), 555–570. <https://doi.org/10.1080/02602938.2017.1378618>
- Jackson, D., Dean, B. A., & Eady, M. (2025). Equity and inclusion in work-integrated learning: Participation and outcomes for diverse student groups. *Educational Review*, 77(2), 329–350. <https://doi.org/10.1080/00131911.2023.2182764>
- Jackson, D., Rowbottom, D., Ferns, S., & McLaren, D. (2016). Employer understanding of work-integrated learning and the challenges of engaging in WIL opportunities. *Studies in Continuing Education* 39(1), 35–51. <https://doi.org/10.1080/0158037X.2016.1228624>
- JASP Team (2024). JASP (Version 0.19.1) [Computer software].
- Patrick, C. -J., Peach, D., Pocknee, C., Webb, F., Fletcher, M., & Pretto, G. (2008). *The WIL [work integrated learning] report: A national scoping study*. Queensland University of Technology.
- Riordan, R. J., Hine, M. J., & Smith, T. C. (2017). An integrated learning approach to teaching an undergraduate information systems course. *Journal of Information Systems Education*, 28(1), 59–70.
- Rust, C. (2007). Towards a scholarship of assessment. *Assessment & Evaluation in Higher Education* 32(2), 229–237. <https://doi.org/10.1080/02602930600805192>

- Sama, M., Shoura, M., & Lewandowska, O. P. (2025). The incentivized improvement method (IIM): A scalable, effort-driven structure to writing assignments in students. Retrieved from [https://osf.io/preprints/psyarxiv/gmkds\\_v1](https://osf.io/preprints/psyarxiv/gmkds_v1)
- Smith, C. (2012). Evaluating the quality of work-integrated learning curricula: A comprehensive framework. *Higher Education Research & Development*, 31(2), 247–262. <https://doi.org/10.1080/07294360.2011.558072>
- Stommel, J. (2024). Ungrading: An introduction. *Pedagogy*, 24(3), 327–340. <https://doi.org/10.1215/15314200-11246255>
- Tran, L. T., & Soejatminah, S. (2016). ‘Get foot in the door’: International students’ perceptions of work integrated learning. *British Journal of Educational Studies*, 64(3), 337–355. <https://doi.org/10.1080/00071005.2015.1128526>
- Trede, F. (2012). The role of work-integrated learning to develop professionalism and professional identity. *Asia-Pacific Journal of Cooperative Education*, 13(3), 159–167.
- Trede, F., & M. Smith. (2014). Workplace educators’ interpretations of their assessment practices: A view through a critical practice lens. *Assessment & Evaluation in Higher Education* 39(2), 154–167. <https://doi.org/10.1080/02602938.2013.803026>