Measuring the effectiveness of academic skills individual interventions on university graduate student writing: To what extent are we making a difference?

Stephen T. Campitelli, Jane M. Page and Jon L. Quach

Academic Skills and Melbourne Graduate School of Education, University of Melbourne, Melbourne, Victoria 3010, Australia

Email: cas@unimelb.edu.au, j.page@unimelb.edu.au, jon.quach@unimelb.edu.au

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Student engagement, retention and success are central to the university context, and an integrated, collaborative partnership between a university program and an academic advising service can be pivotal in facilitating positive student outcomes and a successful university experience. While there is some international research that examines the effect of course-based academic interventions, there is little evidence that measures the impact of individual advising on students’ writing performance outcomes. This article outlines research conducted in an Australian university Graduate program that measures the effect of one-to-one academic skills interventions on individual Teacher Candidates’ writing and presents data on grade and overall writing improvement from pre to post academic skills assistance, as well as students’ perceptions of the impact of the support on their ability to engage with the assessment task. It demonstrates that individualised academic skills interventions make clear and measurable positive differences to student learning outcomes and proposes that they should be retained as a key component of a larger suite of service provision.

Key words: individual consultations, university student outcomes, academic skills intervention, collaborative partnerships.

1. Introduction

Universities invest in a range of mechanisms and initiatives aimed at fostering student engagement, retention and success. One way in which this occurs is by encouragement of collaboration between academic skills support services and faculties/Graduate schools to facilitate positive student outcomes and a successful university experience. Institutions are increasingly interested in measuring the impact of these supports in terms of how they are making a difference to student learning. This article outlines a collaboration developed between the Melbourne Graduate School of Education (MGSE) Early Childhood Education and Care academic staff and Academic Skills (AS) at the University of Melbourne that aimed to optimise support of its students in the Master of Teaching (Early Childhood). This collaboration involved ongoing planning and communication between MGSE Early Childhood (EC) academic staff and the Academic Skills Adviser (ASA) and resulted in a robust broad-range program of support, including targeted workshops and one-to-one (1:1) student assistance. To determine the impact of this support, a focused research project that measured the effect of 1:1 AS interventions (‘itutes’) on individual students’
writing in the first semester of their graduate studies was developed. This paper outlines the significance of this research in the broader research literature and presents findings underscoring the measurable impact of academic skills intervention for students within the context of a wider collaboration. While acknowledging the inherent challenges in measuring the impact of the individual consultation, the research concludes that there is positive effect and that the 1:1 academic consultation has a valuable and ongoing place within the larger suite of academic supports that students need to access.

2. Literature Review

In an era of economic rationalism, transparency and accountability, universities are increasingly required to show evidence of the efficacy and value of their service to the students they serve. This extends to university support services broadly, and academic advising services more particularly. From their inception, language and academic skills services (also known as academic skills advising services) have been called upon by their institutions to strategically justify and evidence their value, and to develop measures that quantify how they make a positive difference to student outcomes (Berry et al., 2012; Chanock, 2007; Chanock, 2002; Huijser, Kimmins & Galligan, 2008; Ma, 2018; Stevenson & Kokkinn, 2009; Storch & Tapper, 2009; Walkinshaw, Milford & Freeman, 2015; Webb & McLean, 2002). This, however, is not a straightforward task. Individual academic advising is but one facet of the broad student success landscape; as such, the variables influencing these outcomes can be difficult to measure, and in many instances, difficult to attribute directly to the advising context (Chanock, 2002; Stevenson & Kokkinn, 2009). The wide variation in advising contexts and the flexible nature of advising have acted as further obstacles to enacting research on its impact (Berry et al., 2012; Chanock, 2002). As a result, research into the effectiveness of advising support on individual student outcomes is under-reported as it is viewed as difficult to assess and hard to measure (Berry et al., 2012; Chanock, 2007, 2002). This is further exacerbated by the lack of consensus as to the best way of doing the research (Berry et al., 2012). Within the context of economic rationalism, and increased demands for sustainability and reach, there exist ongoing questions around academic advising and the services it provides. Specifically, questions regarding the individual consultation, beyond economics, concern dependence, advising boundaries and content, for example (Woodward-Kron, 2007). Despite this, or indeed perhaps because of it, it has been argued that it is incumbent on the university academic skills sector to move beyond discourses of self-justification to be more accountable and to investigate ways of measuring or evidencing its impact (Arkoudis, 2013; Berry et al., 2012; Stevenson & Kokkinn; 2009; Webb & Mclean, 2002). Yet, as Ma (2018) notes, there is limited evidence on the impact of academic skills interventions on student outcomes. This would involve a preparedness on the part of the sector to supplement the standard measurability evidence that focuses on service attendance statistics and satisfaction or experience surveys with data on student success outcomes (Huijser, Kimmins & Galligan, 2008; Young-Jones, Burt, Dixon & Hawthorne, 2012). Generating meaningful student outcome data, in turn, requires a core focus on evaluating the active elements of ASA interventions, such as 1:1 adviser-to-student consultations, that produce measurable reports of effect, and to investigate more closely how and why these interventions positively impact student outcomes (Chanock, 2000; Chanock, 2002; Webb & Mclean 2002). It is, therefore, incumbent on the sector to overcome a traditional slowness in evidencing its work and in sharing it with the wider academic community (Huijser, Kimmins & Galligan, 2008).

The range of studies that exist on the efficacy and impact of ASA services on university student outcomes are broad ranging and have focused, in the main, on subject or whole-cohort programs of support. Examples of these include research by Storch and Tapper (2009) who investigated the impacts of an English for Academic Purposes course on international students’ writing and found improvements in their accuracy of language, use of academic vocabulary and structure. Woodward-Kron (2009) found similar results with students whose writing developed as their disciplinary knowledge increased within a program of study. Shaw and Liu (1998) examined features of
international students’ writing, pre- and post-full time EAP courses, finding that appropriate academic language forms, accuracy, and awareness of genre differentiation increased as a result of undertaking the course. Kasper (1997) investigated the effects of discipline-based content courses on international students’ subsequent performance in mainstream programs, finding that it had a positive long-term effect on post-course academic performance. Similarly, Song (2006) investigated the effects of content-based ESL programs on students’ academic performance, also finding long-term impact in terms of an increase in grades achieved and in mastering disciplinary content, and enhanced cross-curricular academic success. Baik and Greig (2009) examined the impact of a discipline-specific adjunct program on student academic outcomes and found that it had effects on students’ academic success, reflecting a positive relationship between attendance in the adjunct program and the grades achieved in the main program. Muller, Gregoric, and Rowland (2017) investigated the effects of a small-scale writing support program delivered to a group of ESL doctoral students which sought to quantify improvement over a 10-week period. In this intervention, combining written corrective feedback with grammar instruction on a range of common errors evident in ESL postgraduate writing was found to have an effect on reducing overall errors and error types in students’ work, with students by the end of the program better able to identify and correct errors. Finally, a study by Maldoni (2018) sought to measure the impact of embedding within subjects a workshop-based program of discipline-specific academic literacies on engagement, retention, learning and student success with data suggesting that embedding developmental opportunities for learners within disciplinary contexts has benefits in these stated areas.

Further studies have been undertaken on the impact of the 1:1 advising context on student outcomes. Clerehan (1997), for example, explored the dialogic form of learning within the 1:1 context. With a specific emphasis on examining the effect on student learning through the adviser-student discourse, she found that understanding grows through and is founded in the dialogue between the adviser and the student. Huysjer, Kimmins and Galligan (2008) examined the relationship between 1:1 and group teaching and found that individual assistance works most effectively when integrated into course design. Young-Jones, Burt, Dixon and Hawthorne (2012) investigated the impact of advising on student learning, indicating that it did have positive effect and contributed to student responsibility, self-efficacy, students’ study skills, and perceived support. Wilkins (2015) focused on measuring the effect of mathematics support for students in individual or small groups, finding it helped students’ confidence. Walkinshaw, Milford and Freeman (2015) examined the effect of 1:1s on EAL students’ academic writing skills and grammatical competence, finding predictors that point to future positive shifts given continued use of service. Finally, Ma (2018) evaluated students’ use of academic skills workshops and individual consultations, finding that students reported satisfaction with and perceived positive impacts of services on their preparedness and study outcomes.

While these studies collectively highlight the impact of different forms of academic skills interventions on student learning outcomes, there remains a lack of research that has been undertaken on measuring the impact of individual consultations. Notwithstanding the acknowledged difficulty of measuring impact in the individual consultation space, the following pilot study looks to generate data in this under-researched area of academic advising by seeking to measure the effect of 1:1 academic skills interventions on individual students’ writing.

3. Collaborative context

This research took place in the context of a broader long-term collaboration between MGSE Master of Teaching (Early Childhood) academic team members and an MGSE-based Academic Skills Advisor (ASA) from Academic Skills (AS) at the University of Melbourne. The major aim of this collaboration was to optimise support provided to Master of Teaching Early Childhood (EC) Teacher Candidates (TCs*) as they transitioned from undergraduate studies or professional work to graduate studies across the four semesters of the course. (*Note, the terms ‘Teacher Candidate’,
‘TC’ and ‘student’ are used interchangeably in this paper; they all refer to the students enrolled in the M Teach EC program.)

The Master of Teaching EC course is an accredited two-year full time equivalent, graduate level, initial teacher education course. To be eligible for entry to the course, students must have an approved undergraduate degree from a recognised tertiary institution. At the time of the study, students from non-English-Speaking backgrounds are also required to meet English language requirements – to have an overall academic IELTS score of 7.0 or more in all bands. Selection into the Master of Teaching EC is based in the main on academic merit (grade point average) and demonstrated attributes suitable for teaching as assessed by the Teacher Capability Assessment Tool (TCAT). Since its inception, this course has attracted students from a range of disciplinary backgrounds, students with work experience returning to study and a large cohort of international students.

Over a seven-year period, a robust program of support has been put into place to assist TCs transitioning into the EC course. This support was made up of a series of targeted initiatives in the first semester of the program comprised of EC academic staff and AS collaborations as well as specific initiatives directed towards students. The staff collaboration included 1) advice and feedback from the ASA on all EC academic staff members’ assignment briefs and rubrics to ensure that the assessment information being given to the students was consistent, clear and accessible; 2) liaison between all EC academic staff members and the ASA on the requirements of designated assignments; 3) the delivery of professional development sessions by the ASA for all EC academic staff members on providing written and verbal feedback to students on their work; 4) the formation of a working party consisting of EC academic staff members and the ASA to develop academic and oral presentation grading rubrics for EC assessment tasks; and 5) the formation of a working party consisting of EC academic staff members and the ASA to focus on international student support and intercultural communication. This suite of initiatives was built on a mutual respect of the knowledge and skills both parties bring to the collaborative partnership and a joint commitment to developing tools, resources and programs designed to optimise the student success experience. In addition, they mirrored the broader intent of the clinical model of pre-service graduate teacher education in which the Master of Teaching EC is embedded. This model aims to produce interventionist teachers with high-level analytical skills and a deep understanding of the links between theory, research and practice (McLean Davies et al., 2012).

The student initiatives built on these staff collaborations include: 1) a dedicated academic skills Graduate orientation and transition workshop for the entire EC student cohort at the outset of the first semester; 2) a diagnostic language assessment of samples of all TC writing so that those students who may benefit from further AS support may be identified and early-flagged; 3) delivery of targeted assignment-support workshops by the ASA for the entire EC 1st year student cohort with the subject academics in attendance; and 4) follow-up individual sessions (‘itutes’) for EC Teacher Candidates post-workshops if required, including students identified by EC staff as requiring extra assistance. An itute is a UoM Academic Skills term referring to a 30-minute individual (1:1) session with an ASA in which feedback on academic work, most commonly written tasks, is provided to a student, including strengths of their written work and features of the writing that could be improved. It is an advisory session, with a developmental focus on issues and strengths evident in the writing and is not a ‘proofreading’ session. All UoM students have access to four itutes per semester.

4. Method

Against the above background, the Program Coordinator of the Master of Teaching (Early Childhood) and the MGSE-based ASA developed a research project to measure the impact of ASA intervention on individual TCs’ performance on written academic assessment tasks. We focused
specifically on measuring the effect of 1:1 academic skills interventions – the itute – on individual students’ writing in the first semester of their studies.

Following approval to undertake the research from the University’s Human Ethics Research Committee, we presented the research project to the first-year cohort of Master of Teaching EC Teacher Candidates (TCs) and invited any interested TCs to register their interest to participate. It should be noted that all TCs had access to the same number of itutes as participants and, thus, were not disadvantaged by not participating in the research. Students also had the complete freedom of opting out of the research at any time, with no penalty, after they had consented to participate in the research.

Twenty-three first year Master of Teaching (EC) TCs participated in the study across two time periods – 12 students in the semester 1, 2015 cohort and 11 students in the semester 1, 2016 cohort. Of these, all were female, 19 were international students with English as an additional language, two were international students with English as their first language and two were local Australian students.

The research process involved the following steps:

1. An all-cohort assignment support workshop was delivered by the MGSE ASA and the Program Coordinator of the Master of Teaching (EC) in the subject lecture at which the assignment was explained and broken down, and a call for participants put out.

2. Participants were required to submit a first draft (‘Time 1’) of the assignment, a 2000-word essay worth 50% of their grade for the subject Curriculum, Pedagogy and Assessment, three weeks after the workshop (and three weeks prior to final submission, when the entire cohort, including participants would submit their final draft).

3. The submitted Time 1 (T1) de-identified paper was blind-marked, graded and commented on by two experienced academic staff members in the Curriculum, Pedagogy and Assessment subject who shared the marking load and had a thorough understanding of the task and the marking rubric, thus ensuring inter-rater reliability. Participants and the MGSE ASA did not have access to these T1 paper marks or comments.

4. The students and MGSE ASA then met for two compulsory itutes to work on the T1 paper with the MGSE ASA recording advising impressions after each 1:1 meeting. Following the first itute, each participant reworked the essay based on the feedback received and took the reworked essay to a second itute session with the same ASA.

5. Participants then submitted a final Time 2 (T2) paper along with all other cohort students three weeks after T1 submission, post two itutes. The participants’ de-identified T2 papers were marked by the same marker as the T1 draft alongside of the full cohort’s final submissions. Students received their T2 mark as their final grade for that assessment task.

6. Following submission of the final T2 paper, participants were asked to comment on the itute experience by completing a questionnaire consisting of closed and open questions. The questions (see Table 2) aimed to both help clarify what aspects of writing the itutes helped students develop, as well as provide support in the absence of a control group that any quantitative gains seen could in fact be attributed at least to some extent to the impact of the itutes as opposed to other factors, such as outside help and simply getting a second chance to revise their paper.

As a result of the research process, a rich bank of quantitative and qualitative data became available: the differences in grades for T1 and T2 papers and students’ anonymous questionnaires capturing thoughts on the process.
5. Results
5.1. Students’ mark variations from T1 to T2

As outlined in the Method section, twenty-three students submitted a first draft paper (T1), participated in two itutes, then submitted a final paper (T2), with the marks for T1 and T2 compared. No-one withdrew from the research once the process commenced (though nine students did withdraw after initially expressing interest in participating but before the process commenced).

Students’ raw T1 and T2 scores and gains are provided in Appendix 1, with the pattern of gains illustrated schematically in Figure 1. A linear regression established that student scores at T2 were highly correlated with their T1 scores (Pearson’s $r = .85$), indicating that the sizes of the students’ gains resulting from the combination of receiving itutes, the opportunity to revise their work, and any other external factor, were determined to a considerable extent by their T1 score. Figure 1 also suggests that this gain was non-uniform across the cohort, with the weakest students at T1 tending to gain substantially more on average from the intervention than the initially stronger students. This was confirmed by a regression analysis which gave a regression line slope of $b = 0.48$ (95% confidence interval [0.34, 0.61]). Since the confidence interval does not include 1 (the slope of the no change line), the slopes of the regression and no change lines are not the same within statistical uncertainty as would be required if the average gain was uniform across the cohort. It should be noted however, that “regression to the mean” effects can also give the appearance that weaker students gain more from an intervention than stronger students (e.g. Marsden & Torgerson, 2012, and references therein). The ASA impressions of student work (see Section 5.3) though, indicate that it is unlikely that random fluctuations in either students writing, or of the marking of that writing, could explain in total the differential gains seen.

Nevertheless, it is interesting to note from Figure 1 that of the nine students who received an initial fail mark, seven achieved absolute gains of 20–30%. In contrast, of the 14 students who initially received a passing grade, ten made absolute gains of less than 10%, which presumably reflects the fact that the higher the starting point, the harder it is to make substantial gains.

In more detail, importantly, of the nine TCs who received a Fail grade for their T1 paper, all passed the assessment at T2, (or, in two cases, on a subsequent resubmission permitted to failing students falling within a 5% grade of 50%) with six achieving a Pass grade (50-64%) and two a 3rd class honours grade (H3 65-69%) following the second itute intervention (see Table 1 for a breakdown of the University of Melbourne grading system). Of the five TCs who received a Pass grade for their T1 task, four achieved a H3 grade and one achieved a 2nd class honours grade level B (H2B 70-74%) at T2. Of the six TCs who received a H3 grade for their T1 draft assessment task, two increased their mark within the H3 grade band, three achieved a H2B, and one achieved a 1st class honours Distinction grade (H1, 80-100%) a jump of three grades (the largest grade increase of all participants). Of the two TCs who received a H2B at T1, both increased their mark within H2B grade band. The one TC who received 2nd class honours grade level A for the draft assessment task (H2A 75-79%) achieved a 1st class honours grade (H1 80-100%) for the final submission.
Figure 1: Differential benefits based on whether Teacher Candidates passed or failed at first submission. The solid red line represents no change from first to second submission, so points above the line represent improvements in performance. The dashed lines represent absolute gains of 10, 20 and 30% respectively.

Table 1: University of Melbourne grading system

<table>
<thead>
<tr>
<th>Grade</th>
<th>% result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>80-100</td>
</tr>
<tr>
<td>H2A</td>
<td>75-79</td>
</tr>
<tr>
<td>H2B</td>
<td>70-74</td>
</tr>
<tr>
<td>H3</td>
<td>65-69</td>
</tr>
<tr>
<td>P</td>
<td>50-64</td>
</tr>
<tr>
<td>F</td>
<td>&lt;50</td>
</tr>
</tbody>
</table>

5.2. Student Questionnaires

Following the completion of the itutes, student participants were invited to complete an anonymous questionnaire that consisted of six statements rated on a six-point Likert scale and six open-ended questions. Collectively, the statements and questions aimed to gain Teacher Candidates’ perspectives of the effectiveness of the itutes in supporting them to engage with the assessment task, and in the absence of a control group, to provide support for any conclusion that the itutes contributed to any mark gains seen. Twenty TCs completed the questionnaire. Nineteen of these TCs had not undertaken an Academic Skills itute prior to this study, fourteen said they did not
use assistance outside of the two itutes, while the remaining six discussed the task with a partner or with another student or used an electronic (online) resource.

As the data outlined in Table 2 highlights, 85% of the TCs agreed or strongly agreed that they felt more confident to approach the written essay task after the initial AS workshop to the full cohort. In relation to the itutes, 100% of the TCs strongly agreed that the 1:1 sessions helped them to better understand the requirements of the assessment task. More specifically, 90% of the TCs strongly agreed or agreed that the itutes helped them to better understand the structure and organisation of the assessment task and believed that they had helped them to express themselves more clearly; 95% of TCs felt the itutes helped them with the grammar of the written task and with the citation and referencing demands of the paper. Those TCs who did not strongly agree or agree with these statements rated the questions as neither agree nor disagree. None of the TCs registered a disagree, strongly disagree or not applicable/don’t know response.

Table 2: Student questionnaire: ratings of workshop and itutes

<table>
<thead>
<tr>
<th>Questions</th>
<th>Neither agree or disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>% Agree / Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Workshop</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I felt more confident to approach the written essay task after the</td>
<td>3</td>
<td>10</td>
<td>7</td>
<td>85%</td>
</tr>
<tr>
<td>Academic Skills workshop.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Itutes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The itutes helped me better understand the requirements of the written</td>
<td>0</td>
<td>11</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>essay task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The itutes helped me with the structure and organisation of the written</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>90%</td>
</tr>
<tr>
<td>essay task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The itutes helped me express myself more clearly.</td>
<td>2</td>
<td>10</td>
<td>8</td>
<td>90%</td>
</tr>
<tr>
<td>The itutes helped me with the grammar of the written essay task.</td>
<td>1</td>
<td>8</td>
<td>11</td>
<td>95%</td>
</tr>
<tr>
<td>The itutes helped me with the citation and referencing demands of the</td>
<td>1</td>
<td>7</td>
<td>12</td>
<td>95%</td>
</tr>
<tr>
<td>paper.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*0 students registered responses for Disagree, Strongly Disagree or Not applicable/Don’t Know.

Teacher Candidates were also asked six open-ended questions that generated written feedback on the impact of the workshop and the itutes on their understanding of the task and their written response to the task. When asked ‘how else’ the itutes had helped them with the assessment task, many of the TCs referred to issues around the mechanics of writing. Eight TCs, for example, stated that as a result of the itutes, they better understood how to organise and structure a fluent argument. Five TCs believed the itutes had helped them with their grammar, expression, use of language and word choice, and four noted that they helped them with understanding the conventions of referencing, while one added that they provided tips on how to edit. Four TCs believed the itutes had supported them to better understand and clarify the task with one TC noting they
had helped “expand my overall thinking”. Four TCs commented that the itutes had supported them to manage their academic commitments and to complete the task on time for submission.

Teacher Candidates also noted the ‘most effective features’ of the itutes. Many of these strategies were identical to what had helped them to understand and clarify the task and included receiving new knowledge and targeted feedback on: structuring and organising the essay (8 TCs); instructions on how to make the essay more cohesive through linking devices and sequencing advice (4 TCs); detailed advice specific to task and exposure to concrete examples to work from (4 TCs); having the essay being read aloud to them so that they could identify errors (4 TCs); structured support with referencing and citations (3 TCs); and grammar (2 TCs). In addition, TCs identified process features of the support offered as effective including: highlighting and reinforcing, “Hammering” key points (2 TCs); providing clarification of key questions (2 TCs); asking open-ended questions to build understanding and providing the opportunity to analyse the writing more critically (1 TC); and deconstructing the task into manageable steps (1 TC). Again, speaking to the importance of managing time, another student noted that the itutes had supported her to get organised.

A few Teacher Candidates also identified what they perceived to be ‘ineffective’ features of the itutes (note that the majority [60%] of TCs stated ‘nothing’ was ineffective and that they found the itutes a very positive experience). Of those that did mention ineffective features, 5 felt the 30-minute session was too short; 2 would have preferred the ASA to pre-read the paper; 2 would have liked to have received a grade at T1 and 2 would have liked suggestions from the ASA on content (which is out of the purview of an ASA).

In the “further comments” section, TCs noted the value of the itutes in supporting their general health and wellbeing: bolstering mental health, confidence and focus, and reducing their levels of stress. They stated that they valued the opportunity to discuss writing and express their concerns. Two TCs described itutes as ‘helpful and necessary’ and ‘very effective’. All 20 TCs noted that they would use Academic Skills itutes again for forthcoming assessment tasks.

5.3. Insights from ASA impressions recorded after itutes

The impressions ASAs recorded after itute sessions provide both a way of corroborating the significance of the students’ impressions presented in the preceding sub-section, as well as addressing other potential confounds.

Regarding the issues identified and addressed by the academic skills advisor (ASA) in the itutes, the participants represented a mixed group in terms of severity and frequency or extent of issues, however, all participants displayed areas within their work requiring attention and discussion. This reflects a common feature of the itute context in that for students who use the individual service, there are invariably a range of matters to be analysed and discussed and, in the ASA’s opinion, this cohort did not represent an overly weak cross-section of students. As such, the papers presented with a range of issues, some of which were not only common to participants within the research cohort, but extended commonly to others outside of the participant group and indeed more broadly to the general university cohort. These issues included:

- going over the word count;
- not overtly or clearly addressing the question (relevance);
- expression issues (tone, formality, appropriacy of language, grammar);
- cohesion issues (inadequate linking of ideas and flow, lack of interpretive elements);
- coherence (logic) issues;
- organisational issues (paragraphing, sequencing of information, absence of elements, e.g. a clear conclusion); and,
- citation issues (ranging from the technical, i.e. formatting of in text citations and Reference List in the correct style, to the writing aspects, e.g. paraphrasing, use of direct quoting,
number of quotes, use of authors, relevance, interpretation of research, lack of research or more support required at key junctures of the paper).

In terms of these issues encountered, they were present to a greater or lesser degree in all papers and were able to be identified and shifted positively from T1 to T2. Thus, these observations corroborate students’ impressions given in Table 2 of the ways in which they benefited from the itutes.

One of the potential issues with quasi-experimental designs is the question of how much any gain seen can be attributed to the intervention as opposed to other factors. For example, since the students knew they had more than one chance to produce their best work, it is possible that some students did not manage their time effectively in the lead up to T1 and hence submitted a “rushed job” at that time. As a result, much of the gain seen, especially for those who received a fail mark at T1, may be because students had additional time to revise their work rather than specifically because of the impact of the itute (i.e. problems identified in the itute may not have reflected a lack of capability, but rather a lack of time spent revising and editing the work). There are, however, reasons to believe this was not the case, at least in any significant way. In terms of the students who presented with the weakest papers at T1, they had, by their own admission, low levels of confidence performing in an academic writing context. It is worth bearing in mind this was a Semester 1 subject in the first year of a Graduate program that accepts students out of discipline and quite often out of country and culture, and as such, confidence levels often start low. As such, the low level of responses at T1 by these students, in the ASA’s opinion, was more so a result of these confidence or knowledge related issues than any non-effort or poor time management concerns. For the students who underwent the greatest shifts in result, coming from a low base, the emphasis was on moving the response into a markable form (structural or organisational issues) or back into the realm of the question (conceptual; relevance); addressing extensive expression issues not only with grammar, but with tone, appropriacy of language (informality); and use of research (citation, unsupported claims, over-use of direct quoting). Indeed, as noted in the statistical analysis, TCs who failed at the first submission gained more from the itutes than those who had passed at the first submission. This was the case not because they presented with inherently different issues, in the opinion of the ASA, but that those they had were more extensive, frequently evident and overt, and thereby more actionable. In that sense, having the provision of two itutes became invaluable in being able to follow up on the actioning of identified issues for all participants, but particularly for those with more extensive issues.

6. Discussion

The qualitative analyses support the conclusion that the quantitative results can be interpreted as showing that 1:1 academic skills interventions (itutes) have a significant effect on individual Teacher Candidates’ performance in written academic tasks in the first semester of their graduate studies. Of particular note is the fact that every TC’s marks shifted positively from T1 to T2, with the gain ranging from 0.5 to 30 marks. These results, in part, speak to the capacity of itutes to support a wide range of individual TCs with varying levels of skills to improve the quality of their written assessment task at their particular stage of development. Being developmental in nature, rather than correction or proofreading-focused, the itute aims to cause improvement in a range of academic skills, including writing skills, and is, therefore, advantageous for any performance level of student, from struggling to high-achieving. Indeed, the biggest letter-grade shift in this study was achieved by a student who went from 3rd to 1st Class Honours. Across the group, the mean result at T2 was 65.73, or H3, which brought the participants up to the all-cohort average. This may indicate the participant group were weaker than the cohort on the whole, but it is beyond the scope of this paper to offer concrete comparisons between the groups. It is also worth noting again that students beyond the research group had access to, and used, the itute service and benefitted from it, also making determinations about the relative academic strength of the two cohorts (participant and non-participant) difficult to offer. The success of the intervention for all TCs,
however, highlights that academic skills services have value for a range of university students, not just those struggling with the academic expectations of their programs.

Although on average gains decreased as initial score increased (Figure 1), there was one standout in the group who initially got a pass mark, and this student’s case is worth discussing in detail. Focusing on the student who recorded the greatest shift in letter grade (H3 to H1), the level of change in the sophistication of the response from T1 to T2 was clearly evident in terms of organising ideas in prose-based paragraphs rather than using bullet lists; movement from reliance on description to interpretation of research; fixing of incorrect citations; more linked examples provided and discussed (not merely given); better balance to the key sections of the response; and outcomes referred to more effectively. The student was able to take on all the key elements discussed at the two itutes and implement them for T2. When asked how she had been able to achieve this she replied that she had used her extensive notes taken at the session (something all students are encouraged to do, research participants and otherwise) and used them as a checklist to act on.

The student represented, in the opinion of the ASA, an optimal response to the developmental intent of the itutes. If this student is not an outlier, then further data might in fact reveal larger gains in the initially passing group than is indicated in Figure 1, but further research would be needed to determine this.

The results of the research study also highlight that individual itutes have a positive effect on Teacher Candidates who are struggling with an academic task, as demonstrated by the subgroup analyses. It is important to note that nine of twenty-two (41%) TCs participating in the intervention would have failed their first assessment task, some of them significantly, if they had submitted their T1 paper as their final draft, that is, if they had not had access to the itutes. Without awareness of the shortcomings of the first paper, these TCs would have been at subsequent risk of failing their second assessment task for the subject and hence the subject as a whole in their first semester of graduate studies. Importantly, these students were all international students who were transitioning to a new country, new university and a graduate course that is taught in English often in a discipline different to their undergraduate program. For these students, the itutes provided critical support at a time when they are dealing with multiple transitions and could have been a key factor that supported their confidence, engagement, retention and longer-term success in graduate studies. These results further point to the efficacy of the advising context and the value of the 1:1 consultation in identifying and addressing the needs of a range of students that they might not otherwise recognise themselves. In this way, they offer students responsive, flexible and individualised support that is not available via other resources, such as on-line materials.

In addition, this study generated data of students’ perceptions of the features of the itute that assisted them in engaging with the assessment task. All of the TCs strongly agreed that the 1:1 sessions helped them to better understand the requirements of the assessment task. Teacher Candidates’ responses also underscored itutes as assisting them to:

- structure and organise their essay (90% strongly agreed/agreed),
- express themselves more clearly (90% strongly agreed/agreed), and
- help them with grammar and citation and referencing demands (95% strongly agreed/agreed).

Receiving new knowledge in each of these areas was further noted by the participants as the most effective features of the itute. These commentaries also noted the value of being offered concrete strategies, examples of grammar, language and word choice, advice and structured support in each of these areas. Having dedicated time to ask and clarify questions, to analyse the writing critically, and deconstructing the task into manageable steps were specific strategies that participants felt assisted them to successfully engage with the task with one student noting it helped “expand my overall thinking”. In this way, these commentaries highlight the individual nature and demand-range of the 1:1 academic skills sessions and the varied advantages students derive from them, depending on personal need. They also speak to the flexibility of the 1:1 in responding to the
needs of individual students over trying to blanket cover the needs of many students in the economically more appealing workshop or larger group context.

Moreover, individual TCs further noted the broader value of assistance in terms of the bolstering of mental health, confidence and focus, the reduction of stress levels and the value of the opportunity to discuss writing and express their concerns. Chanock (2002) reminds us that the 1:1 results are not just seen in marks, but also speak to levels of “confidence and commitment to learning” (p. 200). These responses highlight the importance of 1:1 sessions not only in the benefit they bring to students in tangible terms (grade, handing in on time, understanding the task, grammar, referencing), but also in terms of the less tangible outcomes such as confidence, anxiety and stress management, emotional wellbeing and the value and importance of being listened to at a crucial juncture of the program. This attention to the individual in a new and large institutional setting may be a very powerful driver to retention, success and engagement. These broader benefits are important for understanding the holistic impact and benefit of itutes for individual students that also impact more broadly on student learning and outcomes.

The success of the intervention, in part could be attributed to the fact that the itutes took place within a robust broad-range program of broader collaborative support. Of the participants in our study, 85% strongly agreed or agreed that they felt more confident to approach the written essay task following the workshop. Thus, the broader program of support that was offered at the outset of the intervention also fed into TCs’ perceptions of the itutes. In addition, ASA familiarity with the assignment and subject, and academic staff buy-in to a before and after marking process meant that we were, for the advisory context, in a ‘closed loop’; a relatively rare and almost ‘privileged’ position to be able to measure a very known, controlled, measurable and familiar situation with a set group of students and very willing academic staff. As Chanock (2002), points out, the 1:1 context often means that the subject and assignment matter are often beyond the adviser’s control, and thus, difficult to measure, but in the context of this study it was not the case. Indeed, the adviser’s understanding of the contextual individual needs – borne out by the broader program of support – made the effect of the itute session easier to assess and measure. In addition, working within a university where discipline staff valued and trusted the expertise of the ASA and the institution itself supported itutes as an effective means of teaching and learning support created the context in which it was possible for the intervention to take place and to demonstrate the effectiveness of the intervention.

Chanock (2000) reminds us that the 1:1 academic session is only one facet of the work of academic advisers and, in an increasingly accountable and demanding, busy tertiary institutional landscape, is a vulnerable aspect of advising. In thoughts voiced more than two decades ago, but still very salient, Clerehan (1997) further argues that advisers need solid reasons for why we include the 1:1 or “be prepared to give it up” (p. 69). She goes on to cite Swales (in Clerehan, 1997) who notes the “hopelessly cost ineffective” (p. 69) nature of these sessions and responds that the 1:1 becomes cost effective if it assists students to complete their studies. Our study shows that 1:1 consultations do positively impact student outcomes which in turn influences retention. The results of our study highlight that the 1:1 academic sessions have demonstrated, and in some cases immense, value to students transitioning into a Graduate program of studies and that this model is, therefore, money well-invested. This study has generated important data on the effects of itute sessions on individual Teacher Candidates’ performance in written academic tasks in the first semester of their graduate studies as well as the features and strategies that effectively supported them to engage in the assessment task. In this way the study has expanded discussions beyond course interventions on student learning to the impact of a partnership between a university program and an academic advising service on student outcomes. While this research study has generated new data, we note nonetheless that this was a small, targeted research study. The data generated in this study, in turn, underscore the value in investing in further research that investigates these questions with a larger cohort of diverse students and tracks and monitors how a learning intervention in the first semester of studies assists students beyond the 1:1 academic skills
sessions in other assignments, other subjects or in other learning contexts. Exploring further how 1:1 academic sessions support students to engage with their program, facilitate their learning and intersect with other course learning initiatives will build a more nuanced and holistic understanding of how contemporary academic advising services facilitate positive student outcomes and a successful university experience in the future.

7. Conclusion

The evaluation of service in the academic skills advising space has acknowledged difficulties inherent in the context in terms of assessing impact. This small-scale study shows it can be meaningfully accomplished and that it does generate useful data on the efficacy of the 1:1 academic skills sessions for graduate students in their first semester of study if gains in marks are triangulated with qualitative evaluations by both participating students and the ASAs conducting the sessions. Most importantly, this research study has highlighted that 1:1 academic skills interventions (sessions) have a significant and measurable positive impact on individual Teacher Candidates’ performance in written academic tasks in the first semester of their graduate studies. As such, they constitute an important component of academic skills advising. Young-Jones et al. (2012) propose that quality academic advising is situated to serve well as a point of connection between the student and the institution, thereby promoting engagement with the program of study and is ‘vital’ to student success. Indeed, if study engagement is at the forefront of the academic advisers’ brief, then the 1:1 session should retain an important place within the larger suite of service provision.
## Appendix 1. Pre and post intervention assessment marks and grades

<table>
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<th>Final mark Final submission T2</th>
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| Mean 52.17 | Mean 65.73* | Mean Shift 13.55 | Mode grade F | Mode grade H3 | Mean shift 1.2 grades |

*p < 0.05

**These two papers were eligible for a resubmission as per MGSE guidelines. Resubmitted papers are only eligible for a maximum 50% grade. The original T2 marks and not the 50% grade were used in the statistical analysis. These are included as, technically, these two students passed the assessment after resubmitting the paper at T2, thereby gaining a resubmission mark of 50.
Measuring the effectiveness of academic skills individual interventions

References


