IDENTIFYING DISCIPLINE-BASED STUDY SKILLS: A PRELIMINARY NEEDS ANALYSIS

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ABSTRACT

As undergraduate students begin their first year of study, they are expected to possess a set of transferable study skills. Teaching and learning support staff are typically called upon to provide assistance, through institution-wide skills workshops, for students in need of further skills development. An alternative approach is the movement towards embedding study skills within the curriculum to better address the specific study skill needs of each disciplinary community. This study used survey data from 191 students, as a means of conducting a preliminary needs analysis of students' study skills in three, first-year undergraduate courses. A hierarchical regression analysis revealed that particular study variables (i.e., tutorial attendance, comprehending readings, integrating knowledge sources into writing) were significant predictors of final term grades. The findings of this study may assist academic departments who wish to embed study skill support within their undergraduate courses.
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Keywords: Attendance, Discipline-based, Feedback, First-year undergraduates, Transferable study skills, Undergraduate students

INTRODUCTION

The increasing diversification of the first-year undergraduate student population continues to present various challenges for transitioning students and for academic and administrative staff, all of whom must adapt to an ever-changing institutional environment. One of the issues that is particular to the first-year student experience is the gap between what skills students are expected to have prior to their first day of classes and what skills they actually possess. The lack of academic readiness (Lowe & Cook, 2003) for succeeding in their new study environment raises the question, so why are undergraduate students in this predicament?

An increasing body of literature has pointed to three interrelated areas that partially explain transitioning students' lack of preparation for higher education. Although there is much variability in high schools or other educational institutions, an overt focus on teaching content knowledge (e.g., teaching to the exam or assessment) may supersede time devoted towards study skill development (e.g., information literacy skills, writing skills) (Julien & Barker, 2009; Smith, Given, Julien, Ouelette & DeLong, 2013). These skills, essential for academic study, take time to develop and may not be explicitly taught within secondary or tertiary courses. Secondly, the transition from a prescriptive, structured, or teacher-supportive type of learning to a more self-directed or self-regulated style of learning may alienate some learners who are not able to cope with the rigours of independent study (Gargallo, Campos & Almerich, 2016; Keane, 2011). First year students may still rely on previous ways of learning that exhibit learner dependency instead of learner autonomy. And thirdly, students tend to

experience a significant decrease in the degree and type of social support including less informal interaction with tutors or peers (Wilcox, Winn & Fyvie-Gauld, 2005). First year undergraduate students may also perceive a lack of guidance or reassurance that they are on the right track in particular areas of their learning including feedback on assessments (Jones, Yeoman, Gaskell & Prendergast, 2017; Robinson, Pope & Holyoak, 2013) and expected language standards (Jenkins & Wingate, 2015).

Another challenge with addressing the gap between first year students' expected and actual skills relates to the perceived responsibilities of academic staff. When students experience difficulties adapting to the expectations of tertiary level study, lecturers and tutors may not feel that it is their responsibility to provide assistance with developing their understanding of how to think critically, how to write and use language persuasively or how to work independently (Baer, 2008; Jenkins & Wingate, 2015). In addition, academic staff may not feel that they possess the requisite expertise to teach these skills. With the trend towards increasing workloads on academic staff (Houston, Meyer & Paewai, 2006), teaching and supporting students' needs may be one amongst many priorities that exist alongside their research-focussed activities.

When academic staff are unable to provide study skills assistance for struggling first year students, co-curricular support is provided typically in the form of pre-study orientation programmes, preparatory skills training workshops, and peer mentoring relationships. These are representative of a traditional study skills approach that have been criticised as ineffective, due to its underlying weak assumption that skills are easily transferable to disciplinary contexts (Gamache, 2002; Wingate, 2006). As collaboration between disciplinary experts and linguistic/support skills staff continues to increase (Briguglio, 2014; Etherington, 2008; Hyland, 2006) and as study skills are embedded within degree courses (Durkin & Main, 2002; Ganobcsik-Williams, 2006; Wingate, Andon & Cogo, 2011), research-led efforts are being made to find alternative options to the generic, institution-wide, study skill workshop model. The academic socialisation (Duff, 2010; Beatty, Collins & Buckingham, 2014) and academic literacies models (Lea & Street, 2006; Lillis, Harrington, Lea & Mitchell, 2016; Lillis & Tuck, 2016), along with "transition pedagogy" curricular principles (Kift, 2015, Kift, Nelson & Clarke, 2010), have gained favour as theory-based frameworks that critically evaluate how learning becomes actualised in the first year of study. These models have endeavoured to better understand the context-driven needs of students in order to suggest ways to improve pedagogical practice. This study thus follows recent trends toward cross-disciplinary and institutional collaboration to identify students' needs with the goal of integrating study skill training within the curriculum.

Study skills can encompass a broad range of affective, cognitive, and social-psychological behaviours including motivation, concentration, time management, and literacy skills. Cottrell (2013, p. 36) defines study skills in terms of self-management skills for study, academic skills, people skills for studying with others, and task management skills. Alternatively, Crede and Kuncel (2008, p. 427) define study skills in terms of how they reflect "students' knowledge of appropriate study strategies and methods and the ability to manage time and other resources to meet the demands of the academic tasks." Studies using both large-scale survey data (Gurung, Weidert & Jeske, 2010; Nonis & Hudson, 2010) and in combination with interviews or focus groups (Lizzio & Wilson, 2004; Ramsay, Barker & Jones, 1999; Van der Meer, Jansen & Torenbeek, 2010) have suggested that study habits have a significant impact on academic outcomes. However, due to the varying research contexts of reported studies, there is little consensus regarding which types of study behaviours may be highly effective and for what reasons (Gurung et al., 2010). The context of the learning environment and expectations of the discipline are what drive the use of particular study behaviours.

As lecture-style classrooms continue to merge with online technology, blended learning (Cheung, Kwok, Shang, Wang & Kwan, 2016; Sharma & Barrett, 2007; Thorne, 2003) has become commonplace in current tertiary educational praxis. The integration of online learning management systems (Moodle, Blackboard), with traditional teaching formats presents a challenge for undergraduate students who may struggle with dealing with the competing demands of each learning environment. Students must prioritise their time (Britton and Tesser, 1991; Macan, Shahani, Dipboye & Phillips, 1990; Trueman & Hartley, 1996) and manage their workloads (Kember, 2004; Kyndt, Berghmans, Dochy & Bulckens, 2014) to achieve a balance between their academic commitments. No longer are students restricted to attending class but may decide, as an alternative study pathway, to access lecturers' notes (Harmon, Alpert, Banik & Lambrinos, 2015; James, Burke & Hutchins, 2006). If students choose one study pathway over another, there is a potential for particular study skills to be developed or not developed. This study thus examines two interrelated contexts of learning, the classroom context and the working-on-the-assignment context, to investigate undergraduate students' use of specific study habits and how they influence academic performance.

CLASSROOM ACTIVITY

Although research indicates that classroom attendance is linked with higher grade performance (Caviglia-Harris, 2006; Credé, Roch & Kieszczynka, 2010, Grave, 2011), students may be prone to absenteeism depending on their level of interest, commitment and use of time management strategies. Many tertiary courses offer tutorial classes in addition to lectures. These tutorials provide a chance for students to understand and apply concepts covered during the lecture through hands-on tasks that allow for greater tutor-student and peer interaction. When students face simultaneous time commitments, they may regard tutorials as less important and potentially skip these learning opportunities. Previous research (Carriger, 2016; Garnjost & Brown, 2018) has indicated mixed results when comparing the effectiveness of lecture style teaching with alternative teaching methods (e.g., problem-based, team-based, case-based learning, flipped classrooms). Some studies (Huggins & Stamatel, 2015; Stanley & Marsden, 2012) suggest that smaller discussion-based classes have primarily non-grade associated benefits (i.e., increased familiarity with other students, improved attitudes towards learning, improved oral communication skills); however, Hartman, Moberg and Lambert (2013) point out that cohesion between students may be a significant factor that impacts the learning in these smaller class environments. The need to tease apart these two forms of attendance may nevertheless be informative to further understand how lecture or tutorial attendance differentially impacts grades.

Listening to academic lectures is one of the mainstays of tertiary learning, often accompanied by the ubiquitous use of PowerPoint as a teaching and learning tool. Research has criticized the use of this presentation format since it encourages theatre-like monologues, limited interaction amongst audience members, and passive engagement with content material (Adams, 2006; Craig & Amernic, 2006; Hill, Arford, Lubitow & Smollin, 2012; Tufte, 2006). In contrast, the use of these presentation slides provides visual and lexical support for comprehending lecture content (Field, 2011; Lynch, 2011), a way of maintaining listener focus and recognising key points (James et al., 2006), and in combination with learning management systems (Moodle, Blackboard), facilitates note-taking and reviewing information (James et al., 2006; Rodgers & Webb, 2016).

Pre-reading (Sharma, Van Hoof & Pursel, 2013) and note-taking (Kobayashi, 2006) assist students with recognising, understanding and reviewing key terms and concepts during the lecture. However, students may decide to rely on online posted PowerPoint slides as a replacement for note-taking, thus putting less pressure on them to comprehend lecture content and reducing the effects of absenteeism (Harmon et al., 2015). Student-initiated note-taking appears to have a partial effect on grade performance (Nonis & Hudson, 2010) since it promotes a deeper level processing of information. The positive effects, however, are less visible unless they undergo a subsequent review of their own notes (Kobayashi, 2006).

ASSIGNMENT ACTIVITY

Undergraduate assignments vary from course to course but may elicit the use of particular study behaviours within an academic culture (Brick, Herke & Wong, 2016). Essay writing represents a significant challenge for many tertiary students (Ivanic & Lea, 2006; Krause, 2001), who may experience issues with adjusting to writing lengthy texts (Scouller, Bonanno, Smith & Krass, 2008) and more discipline-specific writing practices (DePalma & Ringer, 2011; Hunter & Tse, 2013; Murray, 2016). This is compounded by the fact that students are engaged in 'course switching', where they must "interpret the writing requirements of different levels of academic activity" (Lea & Street, 1998, p. 161). When students switch disciplines, courses, or tutors, they must make a concerted effort to demystify the implicit assumptions of each writing assignment.

Students resort to different ways of reading academic material resulting from their previous engagement with reading as a meaningful activity (Mann, 2000). Reading exposes students' understanding of the readings and their interpretation of what the assignment is asking them to do. Since reading complex texts is particularly challenging, students may opt to attend lectures or access lecture notes as a trade-off for reading texts (Pecorari, Shaw, Irvine, Malmström & Mežek, 2012). Along with instructor-supplied readings, beginning undergraduate students may not have much experience with searching for academic sources of information (Currie, Devlin, Emde & Graves, 2009; Leckie, 1996; Prabha, Connaway, Olszewski & Jenkins, 2007), constructing and organising discourse (Campbell, Smith & Brooker, 1998; Samraj, 2004) or synthesising one's ideas with the views of published academics (Hirvela, 2016; Keck, 2006).

Even if there is an expectation that first-year tertiary students will develop their study skills over a three to four year period, for some students, the first-year experience will most likely be an awakening experience of learning, through a trial-and-error approach, to acculturating to these study practices. If teaching and administrative staff are concerned with the retention of all their students, they may need to consider ways of identifying and developing study skills and behaviours that lead to academic satisfaction and success. Tapping into students' beliefs and perceptions of their learning experiences is a starting point to investigate potential changes to an existing curriculum. Previous studies have shown that students are highly cognizant of their study skills and how study behaviours impact academic performance (Fernsten & Reda, 2014; Lizzio & Wilson, 2004; Ning & Downing, 2011; Ramsay et al., 1999; Scouller et al., 2008; Van der Meer et al., 2010). By relating their perceptions of their study skill use to their grade performance, this study thus aims to provide further insights into the process of identifying context-specific study needs.

DESIGN AND METHODOLOGY

Research was conducted at an undergraduate institution in New Zealand. Consultations with the College of Business and the institution's teaching and learning support centre indicated that many students faced difficulties with their first-year writing assignments. Three courses were selected to survey students' perceptions of their study skills including two first-year undergraduate Business courses and one English for academic writing course, comprised primarily of Business majors. All enrolled students whose first or dominant language is not English are required to complete the writing course as part of their Business degree. All three courses are credit-bearing introductory level courses at the university.

In consultation with the academic course coordinators, the design of the survey was based on identifying study habits related to the classroom context (lecture and tutorial attendance, listening to lectures, pre-reading, note-taking) and the assignment context (understanding the assignment brief, finding sources of information, understanding the readings, organising discourse, integrating sources into writing). The rationale for dividing the two contexts into separate study habits was to discern whether any differences resulted from attending or not attending classes on final grade outcomes. For lecture and tutorial attendance, survey questions inquired into students' percentage of classroom attendance on a four-point Likert scale (i.e., 75-100%, 50-75%, 25-50%, 0-25%). Other survey questions asked students to rate their usage of specific study skills over the semester based on another four-point Likert scale (i.e., excellent = 1 to poor = 4). Discussing content, asking questions, peer review and other forms of oral academic literacy were not included in the survey since the courses placed less emphasis on utilising these skills.

In the last week of classes, convenience sampling was used to ask for volunteers to participate in the study. 191 students filled out surveys at the end of the 12-week term resulting in a sampling ratio of 22.5%. Informal class observations (i.e., 3 x 2 hour lectures and 3 x 1 hour tutorials) were also used to identify any differences between the lectures and tutorials. Note-taking of three areas focussed on (a) what types of content knowledge were covered (e.g., information about the readings), (b) which study skills were discussed (e.g., finding library sources), and (c) what kinds of classroom interaction occurred (e.g., questions for the tutor about the assignment). The class observations were used as a verification tool to interpret the survey data; therefore, the findings in this paper solely focus on reporting the first year students' survey responses.

Once the students completed their questionnaires, their responses for their study skills and classroom attendance were converted into ordinal variables for SPSS. Final grades were also recoded on a 10-point scale (e.g., A+ = 1, A = 2, A- = 3… D = 10). A hierarchical regression analysis was then used to forecast an outcome (i.e., students' final course grades or dependent variable) from several predictor variables (i.e., study habits or independent variables). Assumptions for using this statistical analysis were met (Field, 2014). This study's sample size (N = 191) was adequate taking into account the number of independent variables. Individual case values for Mahal's distance did not exceed the limit for 10 independent variables (i.e., 23.21 for $p < 0.01$ as cited in Field, 2014). None of the independent variables were highly correlated and collinearity statistics were well within accepted limits. Histograms and scatterplots were also used to check normality and linearity. The reliability of the study skills items also showed good internal consistency with Cronbach's $\alpha = .82$.

RESULTS AND DISCUSSION

A general overview of the students' self-ratings of their study skills and attendance can be seen in Table 1 below. Grade, as the dependent variable, represents students' final letter grade for the course. The mean grade value of 6.35 (or approximate letter grade equivalent of a B-) is accompanied by a standard deviation of 2.28 that reflects a wide variation of final grades ranging from a 1 (or A+) to a 10 (or D). Lecture attendance was very good as indicated by a mean of 1.56, suggesting that a large proportion of students attended 75-100% or 50-75% of their lectures. Tutorial attendance, on the other hand, was lower (mean = 2.20) and its larger standard deviation suggests a degree of variability in students' attendance to these class tutorials. Other study habit self-ratings ranged from a mean of 2.31 (Understanding assignment briefs) to 3.05 (Pre-reading), with values closer to one or four indicating respectively higher or lower self-ratings.

Table 1: Descriptive statistics for study variables

Variable	Mean	*SD*
Grade	6.35	2.26
Classroom activity		
Lecture attendance	1.53	.86
Tutorial attendance	2.20	1.16
Pre-reading	3.05	.76
Understanding lecture content	2.39	.69
Note-taking	2.62	.82
Assignment activity		
Understanding assignment briefs	2.31	.67
Finding information sources	2.45	.82
Comprehending the readings	2.51	.71
Organising writing content	2.57	.66
Integrating sources into writing	2.54	.78

Hierarchical multiple regression was used to predict the influence of various study variables on final grades. With grade as the dependent variable, two models were tested: one with study habits related to the classroom context (i.e., attendance, pre-reading, understanding lecture content, note-taking) and another model inclusive of the other study skills related to completing assignments (i.e., understanding assignment briefs, finding information sources, comprehending the readings, organising writing content, integrating sources into writing). The study variables in the classroom activity were entered into the first block and the remaining study variables from the assignment activity were entered into a second block in SPSS. Attending classes and its associated study skills accounted for 8.3% of the variance in the grades. After entering the rest of the assignment study variables into the second model, the total model explained 18.3% of the variance in grades. This implies that study skills may only partially account for final grades as other study behaviours (e.g., motivation, concentration, time management, resilience) also underlie students' academic performance.

ANOVA results indicated that the total model is significant, F (16, 46) = 4.04, $p < .001$. The regression analysis also revealed that tutorial attendance (*beta* = .255, $p < .001$), comprehending the readings (*beta* = .253, $p < .001$), and integrating sources into writing (*beta* = .220, $p < .001$), were significant predictors of final grade performance (see Table 2 below).

Table 2: Summary of hierarchical regression analysis for variables predicting grades

Variable	*Beta*		*t*
Classroom Activity			
Lecture attendance	-.016		-.199
Tutorial attendance	.176	*	2.243
Pre-reading	.035		.425
Understanding lecture content	.084		1.025
Note-taking	.146		1.775
Classroom and Assignment Activities			
Lecture attendance	-.029		-.384
Tutorial attendance	.255	**	3.220
Pre-reading	-.024		-.289
Understanding lecture content	-.077		-.885
Note-taking	.040		.481
Understanding assignment briefs	-.087		-.991
Finding information sources	.069		.842
Comprehending the readings	.253	**	2.779
Organising writing content	.043		.480
Integrating sources into writing	.220	**	2.642

Note: ** $p < 0.01$. * $p < 0.05$

The positive beta value for students' attendance in the tutorials may be explained by the fact that these classes enabled longer and more in-depth discussions around assignment expectations. Observations of the tutorials revealed more student-initiated questions to the tutor and opportunities for students to talk amongst themselves about their upcoming assignment. Class observations of the lectures, on the other hand, indicated that they were primarily focussed on introducing and discussing content related to the weekly topics. In general, some students may have perceived tutorials as an optional extra instead of regarding them as opportunities to seek out strategies and tips for approaching the assignment, to query any conflicting information they may have received, or to simply talk through their understanding of their assignment expectations. Students were engaged in a range of tutor-led cognitive activities (e.g., questioning, clarifying, monitoring) that enabled them to grasp a better understanding of their assignment expectations. The importance of attending tutorial classes cannot be generalisable to other learning contexts since what happens in tutorials may be different across each tutor, course or institutional setting. If the lectures had allocated time to using these study behaviours, then tutorial attendance as a variable, may not have been a significant predictor of their final grades.

Two of the "assignment activities", comprehending the readings and integrating sources into writing, were also significant factors in predicting final grade performance. Academic journal articles are generally not written for a first-year, undergraduate audience

and may require much scaffolding on the part of the instructors to clarify the meanings of these texts. Informal discussions with tutors and students pointed towards difficulties with both the quantity (number of readings and/or number of pages to read) and quality (complexity of the readings, argument structure, academic language) of the readings. This suggests that struggles with reading may have led to reduced motivation and minimal engagement with the academic texts (Chong, 2016). Comprehending the content of readings is a cognitively different process from identifying and interpreting content appropriate for the assignments. Integrating sources into writing (paraphrasing, quoting, summarising) also requires knowledge of literacy skills that are specific to each discipline. Class observations revealed that attention was paid to developing students' understanding of how to integrate sources into their writing but this appeared in the form of tips instead of hands-on activities. Instructors may need to consider ways to develop students' literacy skills through modelling, scaffolding, and collaboratively discussing disciplinary expectations. With teaching assistance, undergraduate students' attention could be drawn towards learning how to read complex texts (Frey & Fisher, 2013; Major, Harris & Zakrajsek, 2016) and how to synthesise these knowledge sources with their own in their written assignments (Hirvela, 2016). These skills may be second nature to academic staff but for first-year students, they may simply be second guessing their own writing expectations at the undergraduate level.

CONCLUSION

As student populations continue to diversify, increasing demands are being placed on undergraduate institution's teaching and learning support services to provide academic assistance for all enrolled students. The traditional skills approach has been criticised as inadequate in catering to the discipline-specific needs of undergraduate students. The aim of the study was not to identify skills that could be incorporated into an institution-wide workshop model, but instead, identify specific skills that could be modelled, scaffolded, and supported within a particular course culture. Although other study skill instruments exist in the literature (e.g., Goldfinch & Hughes, 2007; Gurung et al., 2010), this study's survey instrument included study habits identified by academic teaching and support staff that could be potentially addressed with changes to the curriculum. The study is thus limited in its generalisability to other undergraduate learning contexts; however, it may provide an insight into a localised approach for identifying context-specific study skill needs. In addition, survey-based self-ratings may have provided a very limited perspective on their study skills and habits. Using ethnographic approaches (e.g., Mizrachi & Bates, 2013) would have provided a finer-grained analysis revealing the situation- and person-specific nature of understanding students' study behaviours.

This study has provided an insight into students' perceived use of study skills that may offer some direction for instructional staff wanting to improve their students' learning outcomes. A hierarchical regression analysis revealed that tutorial attendance, comprehending readings, and integrating sources into writing were significant predictors of students' final grades. Although students may have preferred learning styles and strategies for coping with their study demands, they may be unaware of how study behaviours (i.e., class absenteeism, reading complex texts) impact their academic outcomes. Teaching staff may need to embed study skills within their instructional practices to guide the development of their students' emerging study skills. Students need to sort through a vast array of information from their lectures and tutorials, readings, and downloaded online resources to comprehend topics and synthesise this knowledge into their course assignments. These are challenging tasks for first-

year undergraduate students who are expected to adapt quickly to the norms and expectations of their tertiary learning environment.

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REFERENCES

Adams, C. (2006). PowerPoint, habits of mind, and classroom culture. *Journal of Curriculum Studies, 38*(4), 389-411. https://doi.org/10.1080/00220270600579141

Baer, L. (2008). Misunderstandings about student transitions to university: A slow-motion dialogue between staff and students. *Journal of Geography in Higher Education, 32*(2), 303-320. https://doi.org/10.1080/03098260701514132

Beatty, S., Collins, A., & Buckingham, M. (2014). Embedding academic socialisation within a language support program: An Australian case study. *The International Journal of the First Year in Higher Education, 5*(1), 9-18. https://doi.org/10.5204/intjfyhe.v5i1.180.

Brick, J., Herke, M., & Wong, D. (2016). *Academic culture: A student's guide to studying at university* (3rd ed.). South Yarra, Vic: Palgrave Macmillan Australia.

Briguglio, C. (2014). *Working in the third space: Promoting interdisciplinary collaboration to embed English language development into the disciplines*. National Teaching Fellowship, Curtin University. Sydney, NSW: Australian Government Office for Learning and Teaching.

Britton, B. & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology, 83*(3), 405-410. https://doi.org/10.1037/0022-0663.83.3.405

Campbell, J., Smith, D., & Brooker, R. (1998). From conception to performance: How undergraduate students conceptualise and construct essays. *Higher Education, 36*(4), 449–469.

Carriger, M. (2016). What is the best way to develop new managers? Problem-based learning vs. lecture-based instruction. *The International Journal of Management Education, 14*, 92-101. https://doi.org/10.1016/j.ijme.2016.02.003

Caviglia-Harris, J. (2006). Attendance and achievement in economics: Investigating the impact of attendance policies and absentee rates on student performance. *Journal of Economics and Finance Education, 4*(2), 1-15.

Cheung, S., Kwok, L-F., Shang, J., Wang, A., & Kwan, R. (Eds.). (2016). Blended learning: Aligning theory with practices. *9th International Conference, Proceedings from the ICBL 2016 conference*, Beijing, China, July 19-21. Gewerbestrasse, CH: Springer.

Chong, S. L. (2016). Re-thinking aliteracy: When undergraduates surrender their reading choices. *Literacy, 50*(1), 14-22.

Cottrell, S. (2013). *The study skills handbook, fourth edition*. New York, NY: Palgrave Macmillan.

Craig, R., & Amernic, J. (2006). PowerPoint presentation technology and the dynamics of teaching. *Innovative Higher Education, 31*(3), 147-160. https:/doi.org/10.1007/s10755-006-9017-5

Credé, M., & Kuncel, N. (2008). Study habits, skills, and attitudes: The third pillar supporting collegiate academic performance. *Perspectives on Psychological Science, 3*(6), 425-453. https://doi.org/10.1111/j.1745-6924.2008.00089.x

Credé, M., Roch, S., & Kieszczynka, U. (2010). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research, 80*(2), 272-295. https://doi.org/10.3102/0034654310362998

Currie, L., Devlin, F., Emde, J., & Graves, K. (2010). Undergraduate search strategies and evaluation criteria: Searching for credible sources. *New Library World, 111*(3/4), 113-124. https:/doi.org/10.1108/03074801011027628

DePalma, M-J., & Ringer, J. (2011). Toward a theory of adaptive transfer: Expanding disciplinary discussions of "transfer" in second-language writing and composition studies. *Journal of Second Language Writing, 20*(2), 134-147. https://doi.org/10.1016/j.jslw.2011.02.003

Duff, P. (2010). Language socialization into academic discourse communities. *Annual Review of Applied Linguistics, 30*, 169-192. https://doi.org/10.1017/S0267190510000048

Durkin, K., & Main, A. (2002). Discipline-based study skills support for first-year undergraduate students. *Active Learning in Higher Education, 3*(1), 24-39.

Etherington, S. (2008). Academic writing and the disciplines. In P. Friedrich (Ed.), *Teaching academic writing* (pp. 26-58). London: Continuum.

Fernsten, L. & Reda, M. (2011). Helping students meet the challenges of academic writing. *Teaching in Higher Education, 16*(2), 171-182. https://doi.org/10.1080/13562517.2010.507306

Field, A. (2014). *Discovering statistics using IBM SPSS statistics* (4th ed.). London: Sage.

Field, J. (2011). Into the mind of the academic listener. *Journal of English for Academic Purposes, 10*(2), 102-112.

Frey, N., & Fisher, D. (2013). *Rigorous reading: 5 access points for comprehending complex texts*. Thousand Oaks, CA: Corwin Literacy.

Gamache, P. (2002). University students as creators of personal knowledge: An alternative epistemological view. *Teaching in Higher Education, 7*(3), 277-294. https://doi.org/10.1080/13562510220144789

Ganobcsik-Williams, A. (2006). Building an academic writing programme from within a discipline. In L. Ganobcsik-Williams (Ed.), *Teaching academic writing in UK higher education* (pp. 98-109). Basingstoke: Palgrave Macmillan.

Gargallo, B., Campos, C., & Almerich, G. (2016). Learning to learn at university: The effects of an instrumental subject on learning strategies and academic achievement. *Cultura y Educación, 28*(4), 771-810. https://doi.org/10.1080/11356405.2016.1230293

Garnjost, P., & Brown, S. (2018). Undergraduate business students' perceptions of learning outcomes in problem based and faculty centered courses. *The International Journal of Management Education, 16*, 121-130. https://doi.org/10.1016/j.ijme.2017.12.004

Goldfinch, J., & Hughes, M. (2007). Skills, learning styles and success of first-year undergraduates. *Active Learning in Higher Education, 8*(3), 259–273. https://doi.org/10.1177/1469787407081881

Grave, B. (2011). The effect of student time allocation on academic achievement. *Education Economics, 19*(3), 291-310. https://doi.org/10.1080/09645292.2011.585794

Gurung, R., Weidert, J., & Jeske, A. (2010). Focusing on how students study. *Journal of the Scholarship of Teaching and Learning, 10*(1), 28-35.

Harmon, O., Alpert, W., Banik, A., & Lambrinos, J. (2015). Class absence, instructor lecture notes, intellectual styles, and learning outcomes. *Atlantic Economic Journal, 43*(3), 349-361. https://doi.org/10.1007/s11293-015-9470-6

Hartman, K., Moberg, C., & Lambert, J. (2013). Effectiveness of problem-based learning in introductory business courses. *Journal of Instructional Pedagogies, 12*, 1-13.

Hill, A., Arford, T., Lubitow, A., & Smollin, L. (2012). "I'm ambivalent about it": The dilemmas of PowerPoint. *Teaching Sociology, 40*(3), 242-256. https://doi.org/10.1177/0092055X12444071

Hirvela, A. (2016). Academic reading into writing. In K. Hyland, & P. Shaw (Eds.), *Routledge handbook of English for academic purposes* (pp. 127-138). London, UK: Routledge.

Houston, D., Meyer, L., & Paewai, S. (2006). Academic staff workloads and job satisfaction: Expectations and values in academe. *Journal of Higher Education Policy and Management, 28*(1), 17-30. https://doi.org/10.1080/13600800500283734

Huggins, C. & Stamatel, J. (2015). An exploratory study comparing the effectiveness of lecturing versus team-based learning. *Teaching Sociology, 43*(3), 227-235. https://doi.org/10.1177/0092055X15581929

Hunter, K. & Tse, H. (2013). Making disciplinary writing and thinking practices an integral part of academic content teaching**.** *Active Learning in Higher Education, 14*(3), 227–239. https://doi.org/10.1177/1469787413498037.

Hyland, K. (2006). English for specific purposes: some influences and impacts. In J. Cummins, & C. Davison (Eds.), *The international handbook of English language education, Vol. 1* (pp. 379-390). Norwell, MA: Springer.

Ivanic, R.. & Lea, M. (2006). New contexts, new challenges: The teaching of writing in UK higher education. In L. Ganobcsik-Williams (Ed.*), Teaching academic writing in UK higher education* (pp. 6-15). Basingstoke: Palgrave Macmillan.

James, K., Burke, L.. & Hutchins, H. (2006). Powerful or pointless? Faculty versus student perceptions of PowerPoint use in Business education. *Business Communication Quarterly, 69*(4), 374-396.

Jenkins, J.. & Wingate, U. (2015). Staff and student perceptions of English language policies and practices in 'international' universities: A UK case study. *Higher Education Review, 47*(2), 47-73.

Jones, H., Yeoman, K., Gaskell, E., & Prendergast, J. (2017). Perceptions of university assessment and feedback among post-16 school pupils. *Assessment & Evaluation in Higher Education, 42*(8), 1233-1246. https://doi.org/10.1080/02602938.2016.1259388

Julien, H., & Barker, S. (2009). How high school students find and evaluate scientific information: A basis for information literacy skills development. *Library & Information Science Research, 31*, 12-17. https://doi.org/10.1016/j.lisr.2008.10.008

Keane, E. (2011). Dependence-deconstruction: Widening participation and traditional entry students transitioning from school to higher education in Ireland. *Teaching in Higher Education, 16*(6), 707-718. https://doi.org/10.1080/13562517.2011.570437

Keck, C. (2006). The use of paraphrase in summary writing: A comparison of L1 and L2 writers. *Journal of Second Language Writing, 15*, 261-278. https://doi.org/10.1016/j.jslw.2006.09.006

Kember, D. (2004). Interpreting student workload and the factors which shape students' perceptions of their workload. *Studies in Higher Education, 29*(2), 165-184. https://doi.org/10.1080/0307507042000190778

Kift, S. (2015). A decade of transition pedagogy: A quantum leap in conceptualising the first year experience. *HERDSA Review of Higher Education, 2*, 51-86.

Kift, S., Nelson, K., & Clarke, J. (2010). Transition pedagogy - A third generation approach to FYE: A case study of policy and practice for the higher education sector. *The International Journal of the First Year in Higher Education, 1*(1), 1-20.

Kobayashi, K. (2006). Combined effects of note-taking/-reviewing on learning and the enhancement through interventions: A meta-analytic review. *Educational Psychology, 26*(3), 459-477. http://dx.doi.org/10.1080/01443410500342070

Krause, K-L. (2001). The university essay writing experience: A pathway for academic integration during transition. *Higher Education Research & Development, 20*(2), 147-168. https://doi.org/10.1080/07294360123586

Kyndt, E., Berghmans, I., Dochy, F., & Bulckens, L. (2014). 'Time is not enough.' Workload in higher education: A student perspective. *Higher Education Research & Development, 33*(4), 684-698. https://doi.org/10.1080/07294360.2013.863839

Lea, M., & Street, B. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education, 23*(2), 157-172. https://doi.org/10.1080/03075079812331380364

Lea, M., & Street, B. (2006). The "academic literacies" model: Theory and applications. *Theory into Practice, 45*(4), 368-377. http://dx.doi.org/10.1207/s15430421tip4504_11

Leckie, G. (1996). Desperately seeking citations: Uncovering faculty assumptions about the undergraduate research process. *The Journal of Academic Librarianship, 22*(3), 201-208.

Lillis, T., Harrington, K., Lea, M., & Mitchell, S. (Eds.). (2016). *Working with academic literacies: Case studies towards transformative practice.* Perspectives on writing. Fort Collins, CO: The WAC Clearinghouse/Parlor Press.

Lillis, T., & Tuck, J. (2016). Academic Literacies. In K. Hyland, & P. Shaw (Eds.), *Routledge handbook of English for academic purposes* (pp. 30-43). London, UK: Routledge.

Lizzio, A., & Wilson, K. (2004). First-year students' perceptions of capability. *Studies in Higher Education, 29*(1), 109-128. https://doi.org/10.1080/1234567032000164903

Lowe, H., & Cook, A. (2003). Mind the gap: Are students prepared for higher education? *Journal of Further and Higher Education, 27*(1), 53-76. https://doi.org/10.1080/03098770305629

Lynch, T. (2011). Academic listening in the 21st century: Reviewing a decade of research. *Journal of English for Academic Purposes, 10*(2), 79-88.

Macan, T., Shahani, C., Dipboye, R., & Phillips, A. (1990). College students' time management: Correlations with academic performance and stress. *Journal of Educational Psychology, 82*(4), 760-768. https://doi.org/10.1037/0022-0663.82.4.760

Major, C. H., Harris, M. S., & Zakrajsek, T. (2016). *Teaching for learning: 101 intentionally designed educational activities to put students on the path to success*. New York, NY: Routledge.

Mann, S. (2000). The student's experience of reading. *Higher Education, 39*(3), 297-317.

Mizrachi, D., & Bates, M. (2013). Undergraduates' personal academic information management and the consideration of time and task-urgency. *Journal of the American Society for Information Science and Technology, 64*(8), 1590-1607. https://doi.org/10.1002/asi.22849

Murray, N. (2016). An academic literacies argument for decentralizing EAP provision. *ELT Journal, 70*(4), 435-443. https://doi.org/10.1093/elt/ccw030

Ning, H. K., & Downing, K. (2011). The interrelationship between student learning experience and study behaviour. *Higher Education Research & Development, 30*(6),765-778. http://dx.doi.org/10.1080/07294360.2010.539598

Nonis, S., & Hudson, G. (2010). Performance of college students: Impact of study time and study habits. *Journal of Education for Business, 85*(4), 229-238. https://doi.org/10.1080/08832320903449550

Pecorari, D., Shaw, P., Irvine, A., Malmström, H., & Mežek, Š. (2012). Reading in tertiary education: Undergraduate student practices and attitudes. *Quality in Higher Education, 18*(2), 235-256. http://dx.doi.org/10.1080/13538322.2012.706464

Prabha, C., Connaway, L.S., Olszewski, L., & Jenkins, L. (2007) What is enough? Satisficing information needs. *Journal of Documentation, 63*(1), 74-89. http://dx.doi.org/10.1108/00220410710723894

Ramsay, S., Barker, M., & Jones, E. (1999). Academic adjustment and learning processes: A comparison of international and local students in first-year university. *Higher Education Research & Development, 18*(1), 129-144. https://doi.org/10.1080/0729436990180110

Robinson, S., Pope, D., & Holyoak, L. (2013). Can we meet their expectations? Experiences and perceptions of feedback in first year undergraduate students. *Assessment & Evaluation in Higher Education, 38*(3), 260-272. http://dx.doi.org/10.1080/02602938.2011.629291

Rodgers, M. & Webb, S. (2016). Listening to lectures. In K. Hyland, & P. Shaw (Eds.), *Routledge handbook of English for academic purposes* (pp. 165-176). London, UK: Routledge.

Samraj, B. (2004). Discourse features of the student-produced academic research paper: Variations across disciplinary courses. *Journal of English for Academic Purposes, 3*(1), 5-22. https://doi.org/10.1016/S1475-1585(03)00053-5

Scouller, K., Bonanno, H., Smith, L., & Krass, I. (2008). Student experience and tertiary expectations: Factors predicting academic literacy amongst first-year pharmacy students. *Studies in Higher Education, 33*(2), 167-178. https://doi.org/10.1080/03075070801916047

Sharma, P. & Barrett, B. (2007). *Blended learning: Using technology in and beyond the language classroom*. Oxford, UK: Macmillan.

Sharma, A., Van Hoof, B., & Pursel, B. (2013). An assessment of reading compliance decisions among undergraduate students. *Journal of the Scholarship of Teaching and Learning, 13*(4), 103-123.

Smith, J., Given, L., Julien, H., Ouelette, D., & DeLong, K. (2013). Information literacy proficiency: Assessing the gap in high school students' readiness for undergraduate academic work. *Library & Information Science Research, 35*, 88-96. http://dx.doi.org/10.1016/j.lisr.2012.12.001

Stanley, T., & Marsden, S. (2012). Problem-based Learning: Does accounting education need it? *Journal of Accounting Education, 30*, 267–289. http://dx.doi.org/10.1016/j.jaccedu.2012.08.005

Thorne, K. (2003). *Blended learning: How to integrate online & traditional learning*. London, UK: Kogan Page.

Trueman, M., & Hartley, J. (1996). A comparison between the time-management skills and academic performance of mature and traditional-entry university students. *Higher Education, 32*, 199-215. https://doi.org/10.1007/BF00138396

Tufte, E. (2006). *The cognitive style of PowerPoint* (2nd ed.). Cheshire, CT: Graphics Press.

Van der Meer, J., Jansen, E., & Torenbeek, M. (2010). 'It's almost a mindset that teachers need to change': First-year students' need to be inducted into time management. *Studies in Higher Education, 35*(7), 777-791. https://doi.org/10.1080/03075070903383211

Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first year experience of higher education. *Studies in Higher Education, 30*(6), 707-722. https://doi.org/10.1080/03075070500340036

Wingate, U. (2006). Doing away with 'study skills'. *Teaching in Higher Education, 11*(4), 457-469. http://dx.doi.org/10.1080/13562510600874268

Wingate, U. & Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education, 12*(1), 69-81. https://doi.org/10.1177/1469787410387814