Improving written communication using a blended-learning approach and self-regulated learning dimensions

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Abstract

This study analyses the effectiveness of a blended-learning strategy, designed to improve the written communication skills of a cohort of accounting and finance students. Moore and Morton (2017) stressed that the written communication gap arises mainly owing to students' inability to utilise their writing skills in a dynamic process. This paper therefore explores whether a blended-learning approach can improve the written communication skills, on the basis of the students' ability to become 'independent learners' by using the self-regulation learning (SRL) strategy.

The findings reveal that SRL dimensions play a significant role in the successful application of the blended-learning strategy. The dimensions also support the blended approach to enhancing written communications skills among accounting students. The study has relevant and practical suggestions for promoting the application of a blended-learning strategy using SRL successfully. Additionally, our findings offer a learning strategy to address the unresolved skills gap, affecting written communication within business schools and beyond.

Keywords: blended learning; self-regulated learning, written communication skills gap.

1. Introduction

The quantitative skills gap of students leaving higher education (HE) and its impact on the transition into the work environment has been examined extensively (Cook, Watson and Vougas, 2019). A growing body of literature also details how adequate levels of written communication can help new graduates find their first jobs (Finch, Nadeau and O'Reilly, 2013; Nickson et al., 2012; Remedios, 2012). Over the last decade, both academics and practitioners agreed that written communication is one of the most important skills for students to have, because communication competence strongly supports high-performance outcomes (Russ, 2009). Although higher education institutions (HEIs) have for some time now been working on preparing students for the world of work, the United Kingdom (UK) Commission's Employer Skills Survey still identified written communication skills in graduates as lacking (Davies et al., 2012).

Business schools have been criticised for failing to develop students' writing skills effectively (Pittenger, Miller and Allison, 2006) and there is an argument that we need more active teaching strategies to enhance the writing skills of business students (Kermis and Kermis, 2010). Therefore, drawing on the literature highlighting the benefits of the blended-learning approach (Gonzalez-Gomez et al., 2016; Pellas and Kazandis, 2015), this research
investigates how blended learning can enhance the writing skills of business school students.

The written communication skills gap investigated by Moore and Morton (2017) found that written communication requirements are often unique to specific professional areas or workplace roles. The reported lack of basic skills in the area of written communication requires a rethink about how HE can reduce the gap by developing the students' writing ability sufficiently for them to identify the distinctiveness of all communicative situations (Moore and Morton, op.cit.), an approach which requires the conceptualisation of writing as a process (Dyson and Freedman, 1990). The critical literacy approach (Luke, 2000) describes a cognitive view of writing and explains the conscious use of language in context and how it can be developed in a collaborative, learner-centred environment. To enable the learner to achieve this, writing skills need to be connected with a self-regulated learning (SRL) strategy (Lienenmann and Reid, 2008).

SRL is grounded in the social cognitive theory of Bandura (2001); it is a dynamic, constructive process, whereby students are responsible for setting their own individual learning goals, monitoring their learning progress and controlling their motivation, behaviour and cognition (Pintrich, 2004). According to Zimmerman and Schunk (2001), intrinsic and extrinsic learning goals, as significant drivers for the success of the SRL strategy, appear to be an important factor in developing and enhancing writing skills. Accounting and finance students, who are the subject of this study, typically assume that having good numeracy abilities guarantees a successful professional career (Riley and Simons, 2013). It is indeed unfortunate that many of them are unaware of the current expectations of the job market. Furthermore, Kavanagh and Drennan (2008) argue that accounting education has been overly focused on technical skills at the expense of soft skills and generic skills, including communication skills. Accounting educators now find themselves expected to develop not only the technical skills that industry requires, but also soft skills – and in particular written communication skills – which is why this study is important.

This study evaluates the value of a blended-learning approach and, in particular, the online platform used for improving written communication skills according to the dimensions of SRL. The most cited benefit of a blended-learning approach is based on the fact that it can cater to the needs of the individual learner, offering autonomy and flexibility, so that the student can choose her/his own study pace (Bernard et al., 2014; Chen, Wang and Chen, 2014; Means et al., 2013; Potter, 2015). The study evaluates how the student experience with the blended-learning approach improves confidence in personal writing skills in the context of the SRL dimensions. Thus, the aims of the current study are threefold: 1) to assess the SRL dimensions implicated in the blended learning strategy; 2) to examine the relationships between SRL dimensions and students’ performance; 3) to explore whether students’ perception of writing skills have been changed after the use of a blended-learning approach.

First, we examine the literature related to SRL and blended learning. After that, we provide the research context, methods and findings, before culminating with discussion and a conclusion.
2. Literature review

2.1 The writing communication as a self-regulated learning process

The conceptualisation of ‘writing as a process’ is drawn from the early cognitive model proposed by Flower and Hayes (1981). ‘Writing as a process’ is categorised into three phases: first, the generation and organisation of information (planning); second, the physical writing of the text; third, the revision of the written product. This model was developed further by theorists in terms of both research and pedagogy, incorporating the analysis and inclusion of ‘writing development in practice’ and the ‘social and political dimensions’ of the writing process (Kelly, Soundranayagam and Grief, 2004 offer a complete review of the literature on the topic).

The core concept of how students develop their writing competence (Eves-Bowden, 2001) focuses on learning activities that allow students to transition gradually from ‘knowledge telling’ to ‘knowledge transforming’, where there is a dynamic interaction between the students with essential writing skills and a reflective process (Luke, 2000). The findings of Moore and Morton (op.cit.) suggest that, for a business student, the main goal in the area of writing is not to achieve just an adequate level of the basic skills (i.e. a skills approach), but rather to use those skills in a dynamic process. Although Moore and Morton (op.cit.) acknowledge the existence of a written communication skills gap, they do not indicate ways to bridge that gap; this research will address that aspect.

Learning strategies suggest the need for developing student skills in planning, creation of ideas, self-evaluation, self-monitoring and reflection. Students should have an in-depth understanding of what they are writing about, determining whether or not the task has a purpose. To achieve this level of understanding, they may need to research further, so that they become more motivated about the content of the task and plan and organise their thoughts. Any learning strategy involving writing skills should therefore be based on a ‘student–centred strategy’, which will create the simultaneous interplay of learning approaches and SRL in the writing process (Lienenmann and Reid, 2008). Consequently, the role of the learner is a fundamental factor in the SRL strategies model (Efklides, 2011; Greene and Azevedo, 2010). When students set specific goals, according to a metacognitive awareness of their needs (Cao and Niefeld, 2007), then they can establish an effective study strategy (Schunk, 2005). Although the application of SRL is well documented in the educational context (Cassidy, 2011; Dresel et al., 2015; Broadbent, 2017), there is a gap in the area of writing capabilities, which this study sets out to address.

2.2 Blended-learning approach

During the last decade, technology has made it possible for universities to provide an individualised support system (Prinsloo and Van Rooyen, 2007). Furthermore, studies by Gonzalez-Gomez et al. (2016) and Westermann (2014) report that engaging in online activities can help students to develop essential skills. Blended learning is becoming an essential educational approach and embedding various aspects of e-learning into university programmes offers several benefits. Although it may be defined in a variety of ways (Driscoll and Carliner, 2005; Means et al., 2013), blended learning in the present study is defined as the adoption of educational web-based technology (e.g. a learning management system) for
the purpose of online learning, in combination with face-to-face tools and including direct instruction from educators.

It has been argued that, for the current generation of students, blended learning can be a good way of delivering academic programmes and improving students’ skills (Gonzalez-Gomez et al., 2016; Pellas and Kazandis, 2015). It has been suggested that, in blended learning courses, students achieve better results (Bernard et al., 2014; Gonzalez-Gomez et al., 2016; Ryan et al., 2016). Adapting support for basic knowledge and skills outside the classroom means the time spent together in lectures and tutorials can be focused on higher-level activities (Thornton and Yoong, 2011). The features of the blended-learning method can then expose the full impact of what SRL aims to achieve. In fact, as found by Warren et al. (2020), the blended-learning approach creates an environment in which students feel responsible for their learning, as autonomy and flexibility of method give them the opportunity to select their preferred study pace, as well as a place and time for learning that is suitable for them (Chen et al., 2014; Potter, 2015). Moreover, when blended learning allows students to set their own pace, this can increase satisfaction and reduce stress (Klein and Ware, 2003). In addition, this learning environment can aid self-efficacy by building students’ confidence as independent learners (Venkatesh, Croteau and Rabah, 2014). Ryan et al. (2016) therefore suggest a combination of online self-learning and classroom teaching to increase satisfaction and motivation in learning and improve results.

Love and Fry (2006), in their analysis of accounting students, found that the blended approach added value to the learning process. Furthermore, Basioudis and De Lange (2009) examined the impact of blended learning activities on the teaching and learning effectiveness of undergraduate accounting students and reported a positive impact on engagement and motivation. However, neither of these studies investigated a platform that can enhance students’ learning, nor any specific skills that students can develop. This study also addresses this aspect. Despite growing interest concerning the use and effect of blended learning, most of the literature investigates the effects of this strategy and students’ perception of it in technical modules (Warren et al., 2020). There is a gap in the literature in relation to examining the use of blended learning for different learning objectives, such as written communication skills.

2.3 Self-regulated learning and blended-learning strategies

According to the literature discussed so far, the approaches to both learning written communication skills and the blended-learning method are well documented. However, there remains a gap in terms of understanding how students use blended learning with regard to the dimensions of the SRL strategy. This study applies the SRL model described by Pintrich (2004), the metacognitive strategy and its main dimensions, in order to understand how the students’ confidence and performance function within a blended-learning environment (Means et al., 2009). Metacognitive strategies can help to regulate and control cognition to accomplish a goal and include such strategies as goal-setting, planning, self-monitoring, self-regulation, time management, and help-seeking (O’Hara, Bourner and Webber, 2004).

This study focuses on how the use of a dedicated online platform for writing skills, in combination with other learning activities, can help students to understand what they know, discover what they do not know, and address the gap (Cao and Nietfeld, 2007). The
combination of online learning technology with structure and the social aspects of face-to-face time can enrich students’ experience, providing an environment in which SRL dimensions can affect their performance by customising their learning process through self-monitoring and time management (Aldhafeeri, 2015).

3. Research context and method

3.1 Research context

There were several drivers for introducing technology-based resources within a blended approach in the year one programmes in the area of accounting and finance. Through feedback from educators, our observation of the difficulties observed on industrial placements and the employers’ emphasis upon the necessity of improving written communication skills, the programme team recognised the importance of developing those skills in particular. In this study, students who join accounting and finance programmes come from a diverse range of backgrounds, including having different qualifications and countries of origin. The students have distinct cohort needs, though a variety of support and a traditional teaching approach did not allow the teaching team to provide an individualised learning plan. It was found that the limited time provided in tutorials was often insufficient to develop good writing skills and the large cohorts made it impossible to provide individualised feedback and help. It is also important to note that, typically, accounting and finance educators are not trained to develop writing skills to the requisite extent. In addition, in-class activities in areas of accounting and finance consist largely of number-crunching exercises and data analysis, with, owing to the professional accreditation that is sought on these programmes, limited emphasis on developing writing skills. As part of a blended-learning approach, three online platforms were introduced: 1) MyWritingLab; 2) MyAccountingLab; 3) MyMathLab.

To address these issues and support students more effectively, the programme team searched for online resources to give students unrestricted access to interactive study materials and to provide opportunities to practise and obtain regular feedback. Although there are several possible solutions available, MyWritingLab, was our preferred option, because it allows you to customise the content to the specific needs of students. MyWritingLab is an online system intended to help students work on grammar, mechanics, writing and research skills. It allows students to practise persuasive, logical and effective writing. It starts with diagnostic pre-tests and allows students to assess their current level of writing skills, indicating the areas that they need to work on. It can be used to design individualised learning paths for each student and to support individual needs. In addition, students are able to access their grades and this encourages them to feel accountable for their academic success.

We introduced MyWritingLab to first-year accounting and finance students in 2014. From the twelve areas of study offered via the online platform, seven topics have been assigned to students as compulsory activities, carrying a thirty per cent weighting of the final summative assessment. We offer the rest of the topics to students on a formative basis. The following topics have also been selected as compulsory activities:

1. Types of academic writing
2. Writing in a UK academic context
3. Understanding the task
4. Planning and writing an assignment
5. Critical thinking in academic writing
6. Referencing
7. Academic writing: avoiding plagiarism and synthesising

The MyWritingLab learning tool is introduced to the students in term one, in the third teaching week. The assessments are assigned to students between November and the middle of February and are usually separated by three-week intervals. Students are able to complete diagnostic checks to evaluate the progress they have made. The lab provides students with unlimited practice and constant feedback, which is extremely beneficial for students.

3.2 Research method

We employed a mixed-methods research approach, the chief characteristics of which are that it provides an in-depth and systematic analysis of the research problem and minimises the intrinsic issues associated with purely qualitative and quantitative research methods. The participants in this study were students on three undergraduate programmes, all within the Accounting and Finance department who had completed a core module called Personal Professional Development (PPD). The group consisted of 164 students, and 34% (56) volunteered to be part of the project, all of whom had studied PPD together in 2017-18 (the study did not separate the students into the three programmes because they all study a common first year). A larger sample size would have improved the validity of the study.

3.3 Instruments and analysis

We designed a survey with closed and open questions as a way to obtain quantitative and qualitative data and investigate students’ behaviour. The survey was used to explore the students’ perceived use of an online lab after prolonged use. The first online survey link was sent in the first few weeks of the programme and the questions related to the MyWritingLab were emailed to students two-thirds of the way through the second teaching term. The timing of the second survey was based on the students’ completion of all five compulsory tests. The students were encouraged to participate in the survey and express their opinions, but this was not compulsory. From the survey, we were able to collect useful data relating to the students’ socio-cultural characteristics – e.g. gender, UK/non-UK, previous studies, work experience, experience of blended learning. The students’ answers were coded so that their responses were anonymised once all the data had been checked for accuracy. For the coding, each participant was allocated a number, so that the responses could be analysed and information from both surveys could be linked. Additionally, the performance of the participants was collected via the online platform and coded to anonymise the data. The data included details of performance, time spent using the platform, the number of assigned tasks completed and the number of tasks outstanding.

The time spent on using the platform, the number of assigned tasks completed and the number of tasks outstanding were selected as explicative variables associated with the main SRL dimensions applied in this specific blended-learning experience. The time spent in completing their tasks on the platform is a useful proxy for how the students managed their...
resources (time management); the number of assigned tasks completed was linked to the students’ self-regulating and planning ability, as were tasks outstanding and capacity for self-monitoring and goal-setting. Using these variables, we could test possible correlations among key SRL dimensions.

4. Findings and discussion

The collection of data from our survey and from the MyWritingLab platform allowed us to evaluate the different factors and dimensions of the online platform part of the blended-learning experience in the context of soft skills. The number of students who participated in both surveys was 56, of whom 53% were male and 47% female. Among this population, circa 36% of the cohort had previous job experience and 66% had previous experience with blended-learning method. The most relevant SRL dimensions in the use of a blended-learning strategy were investigated via closed questions and responses given in table 1.

Table 1: Students’ preference for using online resources

<table>
<thead>
<tr>
<th>Response</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>SA%</td>
<td>70.00%</td>
</tr>
<tr>
<td>A%</td>
<td>60.00%</td>
</tr>
<tr>
<td>N%</td>
<td>50.00%</td>
</tr>
<tr>
<td>D%</td>
<td>40.00%</td>
</tr>
<tr>
<td>SD%</td>
<td>30.00%</td>
</tr>
</tbody>
</table>

This question as reported in table 1 was used to assess the ‘self-regulated’ and ‘time-management’ dimensions that are considered essential to a successful blended-learning experience. Almost all the students agreed or strongly agreed that the flexibility of the blended-learning method enhanced their learning experience. This is in line with the findings of Warren et al. (2020) on the students’ appreciation of the flexibility of the learning and teaching activities. The SRL dimensions most relevant for the students are shown in tables 2 and 3.

1 Key: SA is strongly agree, A is agree, N is neither, D is disagree and SD is strongly disagree – all charts have the Y axis providing the % response and X axis providing the way in which the students responded.
The students suggested that the independent learning process (self-regulated and planning dimensions) played an important role in enhancing their experiences with the blended-learning approach. As for Chen et al. (2014) and Potter (2015), the option of using the platform from home helped them to manage their own time (for working or studying) more efficiently. From the data, it is evident that the students successfully applied their SRL strategies within their blended experience.

To investigate the specific feature of blended-learning methods that combine the independent learning experience with face-to-face activities, we tested the SRL dimensions in terms of how students sought help with the online platform, as shown in table 4. Since using MyWritingLab effectively can be challenging at the beginning, to blend the support can help to address student concerns. Once students establish some confidence with the platform, they can work independently and boost their SRL.

Table 4: Understanding of MyWritingLab
The results reveal how the interaction, engagement and assistance (help-seeking dimension) still play a significant role in the students’ experience. This result supports the successful application of a blended-learning strategy and, as Ryan et al. (2016) suggest, students still need a combination of online self-learning and classroom teaching to enhance their motivation and obtain satisfactory results.

Regarding the self-monitoring dimension, we used two questions (see tables 5 and 6) to determine whether the students had been able to monitor and evaluate their experience within the blended-learning approach. In MyWritingLab, students can check their grades at the end of the task and have feedback on their mistakes. Additionally, many of the tasks in their personalised study plan can be retaken in order to give students the opportunity to monitor their progress and evaluate their improvement in term of performance. Furthermore, they can monitor their progress in terms of academic writing (see table 6) based on the tasks related to ‘critical thinking’ and ‘academic writing’.

**Tables 5 and 6: Use of the online resources and the ability to monitor progress**

The students demonstrated a good level of control of their learning activities and were able to observe the improvements achieved in their writing skills while they were using MyWritingLab. With SRL, the students actively construct their knowledge and take responsibility for their performance. The data in this study suggests that students appreciate how the blended-learning online platform helps with confidence and time management. This is supported by the responses to the open questions in the survey, with students explaining that the online platform made the work “easy”, both in terms of flexibility and accessibility. This perception of the blended learning experience implies that the students were able to work with it ‘independently’. One of the answers, for example, pointed out this aspect clearly:

“The detailed practice questions followed by the test helped me to clarify how to improve grammar and the way I’ve been writing. I’m very confident after using MyWritingLab”

Moreover, it was interesting that a proportion of the students was finally able to realise how important written skills are for their academic success (identify an intrinsic goal-setting), as shown in the following answers:
“Gives me a bit more knowledge of the information I may not already be aware of.”

“Helps in understanding how to write an essay.”

“It taught me what critical thinking is, and I feel that I can apply that to my other respective courses.”

“It goes through some of the things that are necessary when doing coursework, e.g. referencing. It tells you the importance of referencing and the consequences of not using Harvard referencing and how it would affect your work”.

The results and the students’ discussions demonstrate how the new learning environment aids self-efficacy by building students’ confidence as independent learners (Venkatesh, Croteau and Rabah, 2014).

The analysis shows how the SRL dimensions play a significant role in the blended-learning approach, and this was reflected in the students’ performance, as shown in table 7. The average results achieved by the students on different tasks (modules) are provided in table 7. Students were tested on referencing, planning and writing an assignment, academic writing, critical thinking and types of academic writing, and their results have been used to examine their performance.

Table 7: Performance on different tasks within the online platform

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<th></th>
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<tr>
<td>65%</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
</tr>
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</table>

The use of SRL within a blended-learning environment helped the students to achieve good results (Bernard et al., 2014; Gonzalez-Gomez et al., 2016; Ryan et al., 2016). Coaching students through the importance of improving their writing skills in the face-to-face sessions and integrating this with an online platform that improved their confidence and gave them the flexibility to study when it suited them has worked in our programmes. Additionally, we tested the correlation between the performance and SRL dimensions collected from the online platform as reported in table 8.
Table 8: Performance analysis

<table>
<thead>
<tr>
<th></th>
<th>Performance</th>
<th>Time spent</th>
<th>Assigned as needs study</th>
<th>Still needs study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent</td>
<td>-0.004187192</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assigned as Needs study</td>
<td>0.059703294</td>
<td>-0.485091374</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Still needs study</td>
<td>0.06653368</td>
<td>-0.514849303</td>
<td>0.993809122</td>
<td>1</td>
</tr>
</tbody>
</table>

In table 8:
1) ‘Performance’ is the overall grade achieved by students in MyWritingLab.
2) ‘Time spent’ is a variable capturing the amount of time each student spent on the practice;
3) ‘Assigned as needs study’ includes the items to be studied by students according to their initial performance, that can vary in relation with the students’ personalised path created by MyWritingLab after the first assessment of students’ knowledge.
4) ‘Still needs study’ is the variable showing the items the students have not covered in their personalised learning path.

The data shows a correlation between the two SRL dimensions, ‘assigned as needs study’ and ‘still needs study’ (0.99). The positive correlation demonstrates how it is important for the students to have a clear understanding of their own writing skills, for with this they may set their goals and achieve commensurate improvement in their writing. Therefore, ‘still needs study’ is a is a good proxy for the level of self-regulated and self-monitoring dimensions of SRL. The negative relationship between ‘time spent’ and the other variables highlights that students with a higher preparation in terms of writing skills took less time to obtain a better performance level.

In accordance with McKenzie et al. (2013) and Ryan et al. (2016), this analysis shows that a combination of online self-learning and classroom teaching increases satisfaction and motivation for learning and also improves results. The tables reveal how the blended-learning experience has been able to influence the confidence of learners’ writing skills and develop independent learning. It is argued that independent learning is one of the most important dimensions and results of the SRL strategy, goal-setting and achievement and is at the core of the SRL experience. The data also supports the conclusion by Love and Fry (2006), in their analysis of accounting students, that students consider this learning strategy to be a value-adding exercise in their learning journey.
5. Conclusion

The findings of this study reveal that SRL dimensions play a significant role in the successful application of the blended-learning strategy. The effectiveness of the blended-learning approach in enhancing written communications skills among accounting students has been evident, suggesting that this approach would be useful for other programmes of a technical nature. Additionally, our findings offer a learning strategy to address the unresolved skills gap, affecting written communication within business schools (Boyce et al., 2001; Datar, Garvin and Cullen, 2010).

The study has relevant and practical implications for promoting the application of a blended-learning strategy using SRL. The analysis in this paper and the quotes from students support the idea that students applying SRL are able to set specific goals which relate to their metacognitive awareness of their needs (Cao and Nietfeld, 2007). In this learning approach, the students were able to establish an effective study strategy and evaluate when they needed to change their approach to meet their goals (Schunk, 2005). Additionally, our findings confirm how blended learning can be a successful strategy, permitting students to work autonomously and with a high level of flexibility, in keeping with findings by Chen et al. (2014) and Potter (2015). In particular, this study found that self-regulation and time management are key advantages to the blended approach. An interesting aspect of introducing the online platform was that students actively engaged in seeking help in the classroom, which strengthened the blended approach, which in turn improved the SRL. To strengthen the findings of this survey, we call for further studies in this area to increase the population size of those surveyed. Also, it would be useful for future studies, by means of the online platform, to capture students’ respective levels of ability with written communication at the beginning of the study.

Reference list


subject.’ *Computers & Education*, 58, 63-76. Available at:


Appendix

Questionnaire Blended learning and self-regulated learning dimension

1) I liked using online resources because I can complete work around my schedule.

   SA   A   N   D   SD

2) I was able to work more independently.

   SA   A   N   D   SD

3) I generally use MyWritingLab at home.

   SA   A   N   D   SD

4) With the help of the lecturer I understood how to use MyWritingLab effectively.

   SA   A   N   D   SD

5) Using online resources helped me building my confidence during my studies.

   SA   A   N   D   SD

6) I monitored my progress and I can see my improvements in writing in a more academic style.

   SA   A   N   D   SD