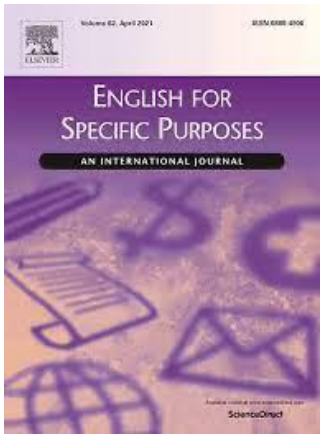

Exploring the socio-contextual nature of workplace writing: towards preparing learners for the complexities of English L2 writing in the workplace

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Abstract

The effectiveness of preparing English language learners for workplace technical writing in various fields (e.g. engineering, business), has been widely contested by both social learning theories and research investigating university-workplace transition of novice employees. In this paper, we present a needs analysis conducted in the workplace that addressed socio-contextual elements with the understanding that the complexity of workplace writing needs for English L2 learners is always changing. In doing so, we provide new evidence for the argument that socio-contextual elements need to be embraced to improve preparedness. Taking a social perspective of writing, this qualitative study explores the situated nature of workplace writing experienced by vocational college graduates. Semi-structured interviews were conducted with 12 vocational college graduates and four line managers at five private sector companies in Oman over a period of eight months. Additionally, 29 of the graduates' workplace texts were analysed. Data reveal that socio-contextual elements strongly influence writing practices surrounding the text. By highlighting this key contextual element, we suggest that to better equip learners for workplace writing, ESP course designers need to address the text-context relationship and contextualised nature of written genres.

Keywords

ESP writing, workplace L2 writing, socio-contextual elements, needs analysis

1. Introduction

With globalisation and increased communication speed rapidly evolving the corporate world, especially in countries such as Oman where internationalisation (i.e. 'Englishisation') is being promoted in both the corporate and education sectors, there have been fundamental changes to the communication practices and professional literacies required in the workplace. These rapid changes are placing profound demands on novice employees as well as on the ESP courses aiming to prepare learners for faster, more efficient workplace writing. The effectiveness of preparing learners for workplace writing has been widely contested by social learning theories and previous research on university-workplace transition of novice employees (Anson & Forsberg, 1990; Dias et al., 1999; Freedman et al., 1994). This is due to the situated nature of writing and noted difference between academic and professional contexts. Since university English L2 programs cannot prepare learners for the demands of workplace writing in situ, conducting a needs analysis to identify learners' knowledge gaps is the typical approach to deciding the content in an ESP course.

However, because the transfer of writing skills from college to the workplace is a complex phenomenon, it has been argued that needs analysis approaches, which heavily rely on linguistic analysis and gap-filling approaches, may not sufficiently account for such complexities (Bremner, 2018). Such needs analysis approaches tend to assume that preparedness for workplace writing involves the transfer of skills wholly and easily from the

classroom to the workplace. In this paper, we argue that such approaches to needs analysis can, in fact, be used to effectively prepare learners for workplace writing if the approaches embrace the complexities of workplace writing. With data collected in the workplace, we argue that the role of college English L2 programs in their capacity to prepare learners for the demands of workplace writing can be much more effective by basing the curriculum on the complexities of workplace communication.

Speculations surrounding the preparation of learners for workplace writing forms the main argument of this paper, which maintains that needs analysis approaches—characterised as filling the 'gap' of what an ESP syllabus 'lacks' (Brown, 2016)—can be effective for examining written communication in the workplace if used to identify how its complex and contextualised nature changes over time. This perspective is underpinned by the argument that writing and context are mutually constitutive as accounted for through social constructionism theory and Rhetorical Genre Studies (Bawarshi & Reiff, 2010). The perspective also benefits from genre activity systems workplace research (e.g. Winsor, 1999 – particularly relevant in its focus on engineers). In other words, writing does not occur in a vacuum or a single time and place; rather, it is shaped by the beliefs and values of the discourse community in which it occurs, which change over time. In the same vein, writing is seen to influence the community in which it is produced (Bazerman, 1988; Bhatia, 1999).
In this study, contextual factors and their impact on a technical college engineer alumni's writing practices at private sector companies in Oman are investigated. Although the phenomenon of preparing learners for workplace writing has been widely examined in previous studies, the socio-contextual and complex nature of workplace writing has rarely been tackled in such studies (see Jasso-Aguilar, 1999; Lung, 2014). Thus, this paper contributes empirically to the body of knowledge regarding preparing learners for workplace writing.

2. Literature review

Preparing learners for workplace writing is most often investigated in empirical studies, especially in the field of ESP and professional communication, based on needs analysis. However, the ongoing debate concerning the university's role in preparing learners for workplace writing demands has resulted in various studies with rather different stances and approaches to needs analysis. In our review of the literature, we explore this debate to highlight the importance of investigating socio-contextual elements of workplace writing needs.

2.1 An evolution of approaches to investigating preparing learners for workplace writing

Some empirical studies, characterised as 'closing-the-gap' studies (e.g. Pinelli et al., 1995; Reave, 2004), sought to provide the writing skills needed in the workplace and are mostly based on needs analysis approaches that look for gaps to be addressed in the classroom. These studies were based on the assumption that such skills, when taught in the classroom, can be transferred to the workplace. While these studies were valuable for gaining insights as to what is required in the workplace, around the same time other researchers recognised that they fail to capture the complexities of the situated nature of workplace writing and are easily criticised by genre and situated learning theorists.

Responding to this criticism, researchers went beyond gap-closing investigations to understand the role education can play in learners' preparedness for workplace writing in light of genre and social learning theories. Many of these studies, which focused on university-workplace transition and learners' socialisation processes (e.g. Anson & Forsberg, 1990; Dias

& Paré, 2000; Freedman & Adam, 2000), held a pessimistic view of the role of the college in preparing learners for workplace writing due to the insoluble disparity between these two contexts.

However, other researchers (e.g. Artemeva, 2009; Brent, 2011) could see value in teaching workplace communication outside its local context. While these researchers agreed and acknowledged that genre knowledge cannot be transferred wholly from one context to another, they contend that genre knowledge can be at least transformed, re-situated or reapplied in another context under certain circumstances. A similarly less pessimistic approach embracing social factors was adopted by ethnographic workplace needs-analysis studies often conducted in hospital, hotel, and other workplace settings (e.g., Jasso-Aguilar, 1999; Shi, Corcos, & Storey, 2001). These studies were part of a wave of humanising research in EAP and ESP, along with the work of Benesch (1999, 2001) who eloquently argued for the need to completely rethink the EAP/ESP approach to needs analysis in her work on 'rights analysis'.

Finally, one stance, that does not take a closing-the-gap approach to understand how to prepare learners for workplace writing, instead extending the research on social influences, has come to prominence more recently. It maintains that to prepare learners for workplace writing, it is insufficient to teach the formal conventions of a genre. Instead, it is vital to practice and raise students' awareness of the many aspects that surround the construction of a text, such as collaborative processes, context-specific practices, values and norms, in a particular discourse community due to the situated and complex nature of workplace writing (Andre & Schneider, 2004; Moore & Morton, 2017), and go *beyond the text* (Bremner, 2018). Like the earlier ethnographic workplace needs-analysis studies, this research points toward the need to address a more in-depth, holistic approach to understanding such a complex phenomenon of workplace writing preparedness. It makes targeted suggestions for improved ESP curriculum by continuing a tradition of needs analysis for ESP that addresses the socio-contextual (i.e. workplace practices) nature of workplace writing, informed by genre studies.

2.2 Increased focus on socially-situated writing context

Research has shown that workplace writing is context-based and workplace context affects the written discourse of the members belonging to it (e.g. Bremner, 2012). Similarly, a fundamental precept underpinning social constructionism stipulates that writing is both contextually-constrained and context creating (Candlin & Hyland, 1999; McKinley, 2015). Additionally, an argument that accounts for the nature of workplace genres is in Millers' (1984, p. 151) seminal work, in which she described genre as "typified rhetorical action." According to Miller, genres are responses to recurrent situations occurring in a particular social context.

This view of genre indicates how genres are bound to the context and evolve from social needs and exigencies (Bhatia, 2014); a view also taken by Bremner (2012) who argues that writing cannot be separated from the context in which it takes place. For instance, in his case study of tracking the socialization of a Chinese intern in a Public Relations company in Hong Kong, Bremner (2012) found that the intern's written discourse changed remarkably over the three months of the internship due to the socialization and immersion in the discourse culture; which demonstrates the context-bound nature of workplace writing. Because transitioning from one context to another is difficult, as Berkenkotter, Huckin, and Ackerman (1991) suggest, writers should be cognizant of the fact that workplace writing reflects and shapes the organisational context and is influenced by the environmental factors surrounding its construction. Likewise, they should be aware of various canons, values and traditions of the workplace (Ledwell-Brown, 2000).

Thus, to understand the dynamics of writing, writing should be examined as a social action that shapes and is shaped by the context surrounding it and its beliefs and values (Bazerman

& Prior, 2003). It is essential, therefore, to consider the context while researching writing in the workplace. Context does not merely refer to a physical place, but it refers to "all of the nonlinguistic and nontextual elements that contribute to the situation in which reading and writing are accomplished" (Johns, 1997, p. 27). Socio-contextual elements are the customs, lives and principles that characterise a society. In this study, socio-contextual elements refer to the broader contextual (e.g. 'international' workplace) and social processes and practices (e.g. using professional L2 English) surrounding the production of a text and shaping the writing practices (e.g. collaborative writing) of the alumni. Additionally, context has been viewed broadly to include both *rhetorical situation* and *context of situation*, "in which the former includes purpose, audience and occasion and the latter the sociocultural context" (Samraj, 2002, p. 164).

Although some contextual elements have been touched upon in previous university-workplace transition research, the focus has been mostly on highlighting the differences between college and workplace writing or on obtaining simplistic perceptions of the elements in a form of 'needs' to inform the writing instruction. Yet, this kind of contextual approach to explore workplace writing to prepare learners for it has not been attempted in any documented studies. Therefore, while continuing a needs analysis tradition, this study responds to Bremner's (2018) call for investigations which go beyond the text level to explore the contextual factors to understand why workplace writers write the way they do to enrich our understanding of preparing learners for workplace writing.

2.3 The importance of addressing complexity and how it changes over time in needs analysis for teaching ESP writing

It is logical that a needs analysis would be conducted to identify the necessities, essentials and prerequisites students need "before moving on" (Brown, 2016, p. 16). The concept of a needs analysis is particularly relevant to ESP teaching because it concerns the needs not only of the students, but also of their future employers (Brown, 2016). Conducted systematically, incorporating micro (individual), meso (institutional or workplace) and macro (society) levels, a needs analysis can serve to inform a fully comprehensive ESP curriculum (Huhta et al., 2013). However, the sufficiency of conducting a needs analysis only with 'pre-service' students, without considering the always-in-flux changes to workplace writing complexity when they are in the workplace, is questionable. Conducting needs analysis solely with students has been contested as students are not appropriately positioned to really understand what is needed until entering the workplace (Lung, 2014; Serafini et al., 2015), and it is limited by the decontextualized use of language in the classroom environment (Bartlett, 2005).

To date, few, if any, needs analysis studies on workplace writing have been conducted to investigate complexity and how it changes in the actual workplace. Therefore, this study, while continuing a needs analysis tradition, amplifies the voices of the alumni having experienced both college and workplace writing as well as the voices of their employers. In so doing, we argue that the alumni and their line managers are well positioned to clarify the complexities and contextual elements shaping workplace writing—which is the main focus of this study. Also, professional stakeholders are best positioned to clarify workplace writing requirements and graduates' preparedness for them while students or new graduates who have not yet joined the workplace can only anticipate what is required in the workplace (cf. Knoch et al., 2016).

In the Omani context, where the labour market has expressed frustration at graduates' communication skills that have been described as 'poor', researchers found in a recent study that teachers placed great importance on needs analysis but understanding about conducting a needs analysis was unclear and inconsistent (Ali & Salih, 2013). And in an unpublished

internal report entitled “Summary of the needs analysis studies done by the PFACC” (Al-Lawati, 2013), the kind of needs analysis conducted in Omani ESP were found to mainly focus on identifying skills used in the target situation. However, the study is outdated and deployed a single method: an online survey questionnaire. The questionnaire was in a form of a list of 33 skills for which participants were required to select the most important ones to focus on in two courses, and an open-ended question asking them to name any other skills.

Also, it focused on investigating the perceptions of a single stakeholder (academic faculty) regarding the skills which should be taught in post-foundation courses. It did not incorporate views of stakeholders from the workplace nor did it deploy other methods/approaches to conduct the needs analysis. Hence, a social approach is required to address complexity in needs analysis. The finding from Ali and Salih (2013) points toward the need to clarify a more holistic understanding and implementation of needs analysis that goes beyond a focus on the ‘right’ language, as might be identified for a classroom context, and addresses larger contextual concerns.

2.4 Research questions

The research questions that guided this study are:

1. How do socio-contextual elements shape the workplace writing practices of college alumni?
2. How can addressing workplace writing complexity inform pedagogical practices for ESP writing?

3. Methodology

The study sought to explore how context shapes the writing practices of college alumni as self-reported by the alumni themselves, triangulated with their line managers’ perceptions, who are professional members of the workplace and with textual analysis of alumni’s workplace written samples.

3.1 Research context and participants

This fully qualitative research was conducted in Oman at five different private sector companies (one telecommunications company and four oil and gas companies) where English is used as the official means of communications. The participants were 12 Higher College of Technology (HCT) engineer alumni (main participants) and four line managers (secondary participants to support and validate the data from the main participants). As Table 1 shows, the engineer alumni participants vary in terms of their educational degree and specific engineering specialisations. They also belong to various sectors and have a range of years of experience: ‘new alumni’ are those with 1-3 years of experience, and ‘experienced alumni’ are those with 6-9 years of experience. These alumni studied ‘Technical Writing’ courses in which students are taught various workplace writing genres. These courses are part of the ESP program developed at the college. They can be described as adopting a ‘common core’ ESP approach designed for students from various disciplines. The title ‘line manager’ is used to refer to those managers who were interacting with HCT engineer alumni as their team leaders, supervisors or managers (see Table 2).

Table 1. Profile of HCT engineer alumni participants

Number of alumni participants	12 (9 male & 3 female)
Education	8 undergraduate degree 4 higher diploma[1]
Specific engineering specialisation	2 telecommunications engineers 2 oil & gas engineers 5 mechanical engineers 2 civil engineers 1 computer engineer
Years of experience	7 new alumni 5 experienced alumni

Table 2. Profile of line managers

Number of managers	4
Post level	1 head of section 2 team leaders 1 supervisor
Sector	2 telecommunications 2 oil & gas

3.2 Data collection methods, procedures and analysis

To investigate the contextual factors shaping alumni's workplace writing, the study adopted a multi-perspective approach (Paltridge, 2020) by conducting semi-structured interviews which were triangulated with text analysis of workplace written samples.

3.2.1 Semi-structured interviews

Two sets of interviews were prepared: one for the alumni and the other for the managers. The interview questions used for the alumni were largely adapted from Schneider and Andre (2005), which resembles the line of investigation of the current study—college preparation for workplace writing. Additionally, since the focus of this study is specifically on exploring the contextual factors shaping workplace writing, questions related to pre-determined contextual elements, such as audience, purpose and collaborative writing were added.

Participants were asked to choose their language of preference for the interview. Most participants chose to converse in English, although a few code-switched between Arabic and English when words or explanations were better or more efficient in Arabic. The average duration of an interview was around 45 minutes (the longest ones exceeded an hour). The interviews were audio-recorded and transcribed for analysis. The interview excerpts incorporated throughout the paper were taken verbatim from participants' discourse, including grammatical and lexical errors and excluding transcription punctuation conventions.

3.2.2 Written workplace documents

Actual workplace writing was used as a secondary source of data. Written samples of the alumni were collected to provide textual evidence for understanding the shaping by social/contextual elements of the alumni's workplace writing practices, particularly for supporting the themes emerging from the interview data. For instance, interview responses illustrating alumni tailoring their writing to cater for various readerships was complemented

with analysis of reports written for internal and external audiences (Rose, McKinley & Briggs Baffoe-Djan, 2020).

After each interview, the alumni participants were requested to share some of their workplace written texts. They were advised not to share highly confidential texts and were assured that the texts would be solely used for the study. Some samples were collected later in the analysis process upon contacting one of the participants via email. The total number of the samples submitted by the alumni was 29 (see Table 3). Any confidential data including names of people or organisations were redacted. Then the samples were sent to the respective participants to discard any confidential data.

Table 3. Types and number of analysed texts

Text type	Number
Email	10 (5 of them were part of chains)
Incident reports	4
Lab report	1
Daily report	7
Monthly report	2
Drilling programme	1
Forms	3
Process document	1

3.2.3 Data analysis

To analyse the data, thematic analysis (i.e. pattern-led categorisation of content) was used to identify patterns of meaning across the dataset in relation to the RQs. Since the study was already guided by established concepts in the literature pertaining to contextual elements shaping workplace writing, such as audience, purpose, and collaborative writing, and intended to explore other contextual elements specific to the context of the study, both 'theory-driven' and 'data-driven' thematic analysis was used throughout the analysis (Selvi, 2020). The identified concepts not only informed the interview guide, but also guided the initial coding process. The combination of both bottom-up and top-down approaches allowed for more flexibility to incorporate and focus on desired themes and at the same time did not obstruct participants' voices, allowing the data to speak for itself.

The analysis procedure was as follows: interview data were analysed for salient emergent themes pertaining to the contextual elements shaping alumni's workplace writing practices. In addition, textual evidence from the written texts obtained from the alumni were integrated to support the themes identified from the interview data. Both alumni and line managers' perspectives were integrated to illustrate these elements.

Having distinct but interrelating contextual elements led to viewing context at two levels: micro and macro. Therefore, a broader conceptualisation of context was used to include both rhetorical situation and context of situation (Rabbi & Canagarajah, 2017; Samraj, 2002). While the former embraces the contextual elements directly shaping a written text such as audience, the latter refers to the broader contextual and social processes and practices surrounding the production of a text and shaping the writing practices of the alumni, such as collaborative writing. The former has a visible manifestation in the written texts, whereas the latter influence the overall practices and are not necessarily exhibited through the textual analysis.

In this paper, we focus on the socio-contextual elements of the two identified overarching themes to highlight the importance of these elements that extend the more common needs analysis approaches that tend to focus only on the rhetorical elements. They are:

- collaborative/individual writing,
- the workplace physical environment, and
- work experience: new vs. experienced alumni

4. Findings

To specifically address the complexities of workplace writing, the findings provided here are those concerning only the socio-contextual elements, and not the rhetorical elements. They are presented in consideration of the three themes.

4.1 Collaborative/ individual writing

The findings revealed that collaborative writing in the given workplace takes various forms. While a traditional and direct form of collaborative writing, where group members physically and directly interact with each other to produce a final product of writing, was reported to occasionally occur, mostly other indirect forms of collaborative writing, where input is provided from various sources, whether people, departments or other documents are practiced. For instance, an experienced alumnus reported that "*We write it individually, but everyone is putting his input; it was reviewed."*

The conceptualisation of collaborative writing embraced in this study is broad and entails all the activities and written or spoken communication surrounding the creation of a text (Bremner et al., 2014). It largely involves communicating with various people and departments and referring to other documents as a source of input.

Collaborative writing influences the process the alumni go about in constructing a text. Some alumni mentioned that they would sometimes need to communicate with other people within or outside the organisation to obtain the necessary content of their document. In fact, the type of the document determines whether input from other sources is needed or not. Reports and business cases may require input from other sources, as commented by one of the experienced alumna when asked whether she gets the information for her writing from different sources, *"it depends on the document, for example, if I am writing "Business Case", I am getting information from venders, websites and people opinions; If I am writing e-mail usually it is my feedback."* This is consistent with one manager's opinion when he stated that *"he [engineer employee] can't write anything on his own except for email maybe."* However, sometimes even the content of email might be obtained from others, for instance, another experienced alumnus would ask his manager for the content and purpose of writing an email on his behalf, hence, the manager would be indirectly contributing to the formation of the email.

Further, sometimes information should be provided by other departments as the issue is related to them, as an experienced alumna stated, *"…from different department, for example ... because I am working in transmission section if it is related to our problem, I have the information, but sometimes it is related to another department …"*

Another form of collaborative writing shaping alumni's writing practices and manifested in alumni's emails is intertextuality, which refers to texts' direct or indirect relationships with other texts (Bhatia, 2014). These other texts serve as source information, thus, shape the way a text is written. Texts may be drawn on implicitly to write a text, for instance, one new alumnus remarked that he would need quality control report and inspection report in order to write his daily report. Likewise, a line manager mentioned that previous emails also serve as source of information for writing a report, "*The report contains facts so first, for example, he [the engineer*

writer] should take that facts from emails records; from his understanding…so there are many sources." While this seems to refer to an indirect relationship with other texts, texts can also be referred to directly and explicitly (*referential* intertextuality). For instance, an experienced alumna said that she would explicitly refer to the recommendations in previous incident reports to notify recipients of similar repetitive incidents. *Referential* intertextuality is also evident in alumni's emails, but referring to oral communications, such as, *'As we discussed earlier,' 'As per our discussion…,' and 'As discussed in the phone.'* Hence, written as well as spoken discourse influence the construction of new texts (Cheng & Mok, 2008), as depicted by one line manager:

> *Discussions with administration about a particular topic can serve as input for him [engineer writer] to write about, hence, there are many sources of information for writing, and they could be written documents and oral discussions besides his own ideas…*

In addition, *generic intertextuality*, which refers to drawing on previous texts which have been produced in response to similar situations, also seems to shape some alumni's writing practices. *Generic intertextuality* is evident in templates which some alumni draw on. For instance, callout emails mentioned by one new alumnus is a standard form in which he would need to change the date and job description every recurrent situation. This is also pointed to by a line manager:

> *For example, if there is a fault in a technical system, they should always be recorded and documented. So, he [the alumnus] can look at the faults and the actions taken to overcome it… and write about it in his own language.*

Intertextuality is also manifested in the chains of correspondences analysed as the alumni were engaged in dialogues with various parties regarding a particular issue, such as planning for a well drilling and solving a problem. This is related to *functional intertextuality*, which refers to a text influenced by other texts in the system (Devitt, 1991), as the alumni's writing is shaped by the interconnected interaction as they respond to various issues. Another example could be, as mentioned by a new alumnus, relying on the company's online system which provides guidelines and procedures of writing various emails. These texts could impact the generic, rhetorical, or linguistic choices the writer would make, in agreement with Bremner (2008, p. 308), who explained, "This shaping influence [of intertextuality] can be seen in a range of situations, with varying degrees of impact."

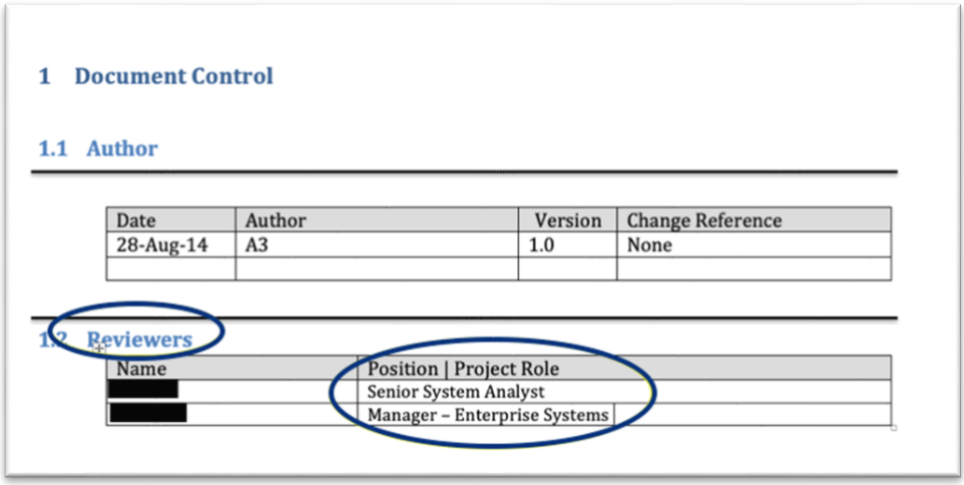
Apart from obtaining input from other people and intertextuality, another form of collaborative writing impacting alumni's writing practices is shift handovers and rotations. For instance, an experienced alumna reported that after her shift is over, the next person in the shift should continue writing updates about the fault. Likewise, when asked to clarify how writing is done collaboratively in the workplace, one manager stated:

> *Ah, for example, … we work in… rotation so there is one person who starts the report and then … his back to back continues the report, and then they send it to someone else in town who reads the report do the proof checking if there is anything.*

Such form of collaborative writing resembles the sequential model of collaborative writing in which each team member upon completing his task passes the document to the next member to contribute to the document with his part of writing (Gimenez & Thondhlana, 2012). The quote also signifies not only rotations, but also reviewing as another form of collaborative writing mentioned by two new and two experienced alumni and one line manager. For example, reviewing is done by colleagues, as one experienced alumna reported, *"I have to write it share it with team leader (Name removed) to review it … and then…if it is ok we have*

to send it to the customer and for the management and for different departments." Reviewing is also corroborated by one of the analysed texts which is a user manual written by an experienced alumna and reviewed by two of her senior colleagues, as illustrated in Figure 1:

Figure 1. Evidence of reviewing in a user manual



1 Document Control

1.1 Author

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1.2 Reviewers

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[redacted]	Manager – Enterprise Systems

4.2 The workplace environment: Field vs. office writing practices

The data revealed that the nature of the physical environment seems to influence the alumni's writing practices. Of the 12 participants, five are field-based, five are office-based, and two had both field and office experience. Engineers working in the field are given fewer writing duties than those based in the office due to the technically-oriented nature of field work, as explained by a new alumnus:

> *… because see we are Well[2] Engineer in the field and we have Well Engineer in Muscat* [Oman's capital city]*; there in field more technical by visibility by checking and only write little reports, but here in Muscat your work in papers and documents.*

This suggests that more technical work is required in the field than paperwork. Also, not much writing skills are expected from those engineers working in the field as more technical skills are required, as commented by at least one line manager:

> *… not necessarily all engineers will be good at writing reports because some of the engineers are working in the field they're doing physical work…When it comes to the reports, maybe he will use the communications or writing skills in emails… but even though that communication is not necessary also to be like high level writing skills... It will be like some simple very simple emails …*

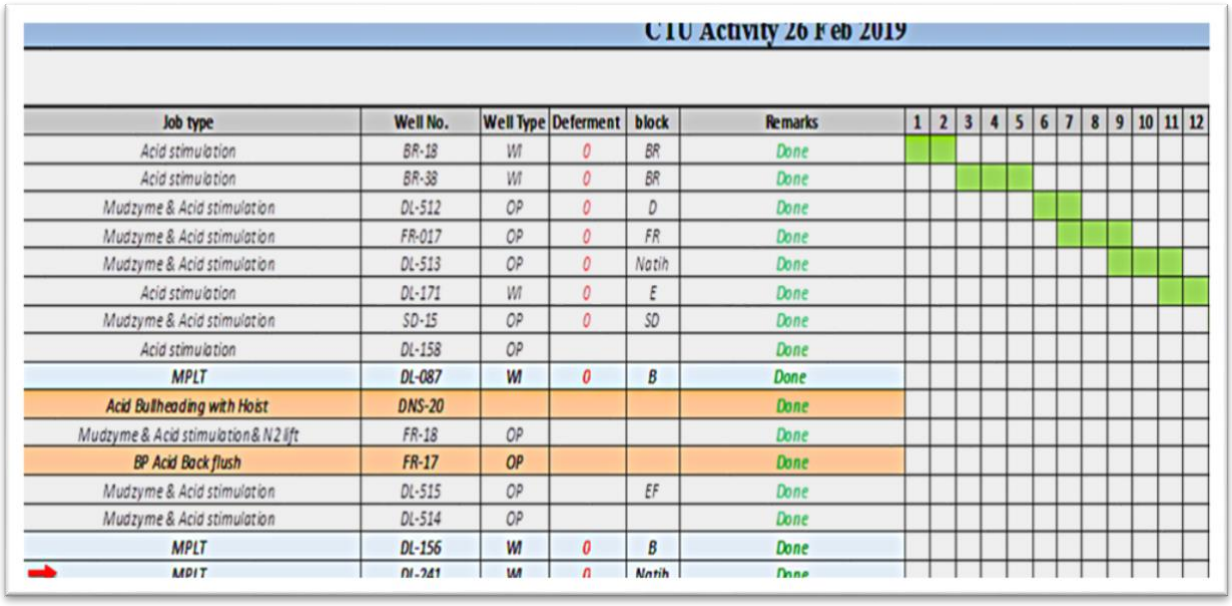
In the same vein, some field engineers mentioned that they would write only simple emails and brief reports, communicating verbally most of the time. It may be due to the urgency of accomplishing physical work or due to the nature of the field environment which is usually in remote areas, such as desert or refineries, which do not necessarily conform to the conventions and protocols of office work, as described by an alumnus who experienced both field and office environments:

> *… and I need you to understand the field culture. Field culture is a way different than head office culture. The field culture they have like job to be execute and then go to sleep, here no you [maintain] formality you have to justify.*

So, the nature of environment itself influences the writing practices of the engineers and their line managers' expectations. Furthermore, even the process of writing is affected by the nature of work environment. To illustrate, due to the technical nature of the field work, one new alumnus stated that he would do note-taking and rough writing at the site and the actual writing and typing would take place in the office. Moreover, the nature of field work requires limited amount of writing, as commented by a new alumnus, *"…only two sentences… just very short: the time with the specific job… for example, SS I want you to come there in rig site tomorrow at 3 or 4 pm."* This is also reflected on the daily site reports submitted by another new alumnus, which includes a pre-set form filled in with brief notes of site operations. In contrast, some office-based experienced alumni were noted to produce elaborated documents and to do substantial amount of writing and, as another experienced alumna emphasised that she would do a lot of writing *"compared to the technical [job]."*

The monthly report written by one of the alumni—who deals with field operations—to record well drilling operation activities in the oil field is written in a form of Gantt chart (see Figure 2 below), which requires minimal writing pertaining to job type, well number, well type and remarks. Furthermore, a well operation daily report and a daily network performance report submitted by a petroleum engineer and telecommunications engineer are found to include numerical and technical data with charts and graphs and formulae, but require a limited amount of writing.

Figure 2. Monthly report Gantt chart



CTU Activity 26 Feb 2019

Job type	Well No.	Well Type	Deferment	block	Remarks	1	2	3	4	5	6	7	8	9	10	11	12
Acid stimulation	BR-18	WI	0	BR	Done												
Acid stimulation	BR-38	WI	0	BR	Done												
Mudzyme & Acid stimulation	DL-512	OP	0	D	Done												
Mudzyme & Acid stimulation	FR-017	OP	0	FR	Done												
Mudzyme & Acid stimulation	DL-513	OP	0	Natih	Done												
Acid stimulation	DL-171	WI	0	E	Done												
Mudzyme & Acid stimulation	SD-15	OP	0	SD	Done												
Acid stimulation	DL-158	OP			Done												
MPLT	DL-087	WI	0	B	Done												
Acid Bullheading with Hoist	DNS-20				Done												
Mudzyme & Acid stimulation & N2 lift	FR-18	OP			Done												
BP Acid Back flush	FR-17	OP			Done												
Mudzyme & Acid stimulation	DL-515	OP		EF	Done												
Mudzyme & Acid stimulation	DL-514	OP			Done												
MPLT	DL-156	WI	0	B	Done												
MPLT	DL-241	WI	0	Natih	Done												

In short, the nature of the workplace environment seems to influence the kind of writing experiences the alumni would have. Those working in the field do a limited amount of writing and produce brief texts compared to those based in the office as the field work is more concerned with accomplishing the technical work without paying more attention to paperwork formalities dominating the office work environment. Future research could explore the differences between these types of workers concerning how their physical location (field or office, or both) might influence their writing development.

The physical environment element seems to overlap with the socio-contextual element of level of experience (see 4.3). This overlap is evident as most novice alumni in this study are field engineers. Therefore, some of their writing practices may be shaped by the interplay of both of these elements. For instance, the pre-set template with notes reporting daily operations provided by A10 takes this form not only because field engineers are expected to do brief reporting but also due to the alumnus being a novice. This was also confirmed by asking A10 follow up questions after analysing his written sample.

4.3. Work experience: New vs. experienced alumni

The data revealed that the level of work experience impacted the alumni's writing practices in terms of the amount and complexity of writing tasks assigned by their managers, and the feedback and guidance they received from senior colleagues.

Generally, the data revealed that a fewer writing responsibilities are given to new graduates, such as writing brief emails and short reports. A6, who is a new alumnus, reported that he would mainly send callouts, one-line reports, but more sophisticated emails are sent by his supervisors, as he described:

> *…he sends it because he is above me and he sends it because you know I'm petroleum engineer and I have only now 2 years in XX (company's name is removed), so I just send the callouts and if there is anything happens related to me.*

Apart from one- line reports and daily reports, new alumni may use templates or pre-set format of email or report previously written by others to which they just make a few amendments. For instance, when writing callouts, A6 would use the same given format with a few amendments, as commented, "*Yes, when we send a callout, it's as a standard form we just change the date and job description"* (new alumnus). Likewise, the daily report submitted by A10, a new alumnus, is a pre-set form which he would fill in manually with notes regarding the condition of the Block Valve Station (BVS) he is in charge of, as shown in Figure 3 below.

Furthermore, writing demands get more complicated as the years of employment increase, starting from simple one line reporting moving to writing standards and full long technical reports writing, as commented by a line manager:

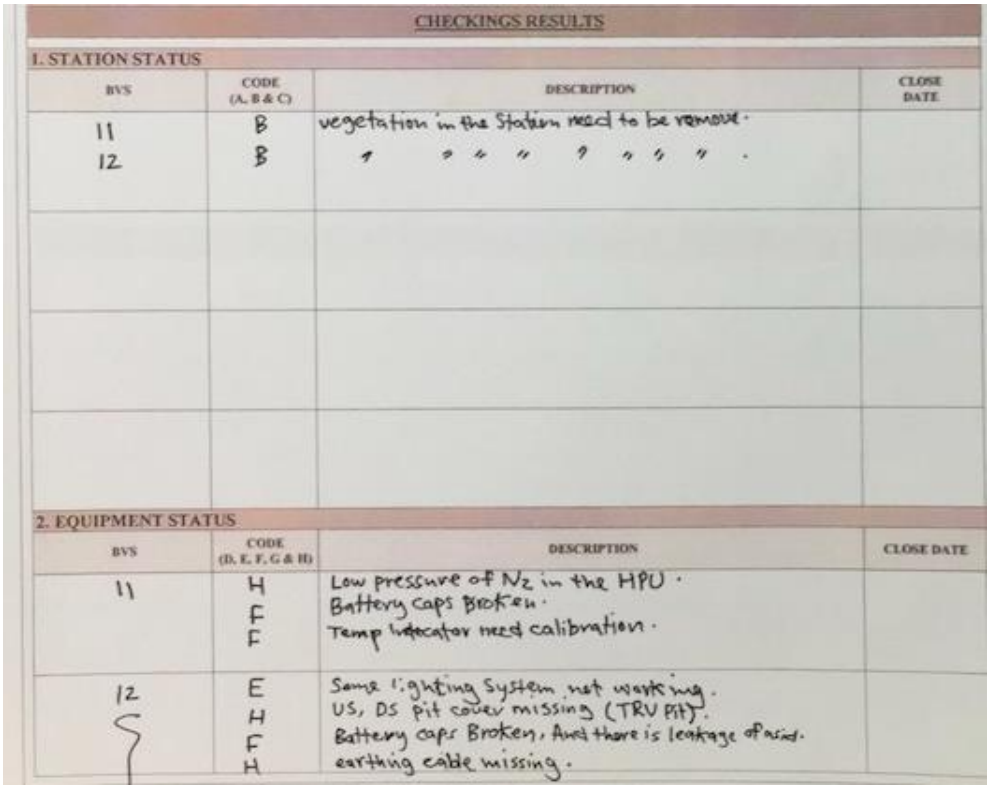
> *They write what they did in the last 24 hours what operations took place, but it's mainly abbreviations it's a one line report it's not a full report like the technical report that we know. For that stage but at later stage there is a lot of report writing we have lots of standards updates and people get involved in that but that is after 8 years of working in XX (company's name is removed).*

After becoming legitimate participants of a community of practice, the engineers are not only expected to deal with more complicated genres and writing tasks, but they may also be asked to create new templates from scratch as reported by an experienced alumna:

> …we used to write and send to my team leader who would assist us until we understood how to write [reports], and we created our own template of the current incident report which wasn't there before…

Additionally, providing guidance and feedback on new graduates' writing does occur in the workplace as a few alumni stated that they would receive feedback when they were newcomers, *"at the beginning they [supervisors] gave us feedback"* (experienced alumna).

Figure 1. An example of a pre-set template a newcomer would use



CHECKINGS RESULTS

1. STATION STATUS

BVS	CODE (A, B & C)	DESCRIPTION	CLOSE DATE
11	B	vegetation in the Station need to be remove.	
12	B	" " " " " " " " .	

2. EQUIPMENT STATUS

BVS	CODE (D, E, F, G & H)	DESCRIPTION	CLOSE DATE
11	H	Low pressure of N_2 in the HPU.	
	F	Battery caps Broken.	
	F	Temp indicator need calibration.	
12	E	Some lighting System not working.	
	H	US, DS pit cover missing (TRU Pit).	
	F	Battery caps Broken, And there is leakage of acid.	
	H	earthing cable missing.	

Likewise, the four line managers also stated that they provide feedback and guidance to the newcomers through various approaches, such as in a friendly and informal way, or formally through suggesting English courses. It is mainly done to induct the new graduates into the required professional writing standard until they become independent writers. Such feedback is mostly concerned with linguistic aspects such as spelling, grammar, preciseness and tone, as illustrated by these responses:

> *… she [the manager] was correcting some words… because … one of my difficulties is that I was repeating same words, so she asked to use synonyms…then even for correcting the spellings she asked me to review it, read it carefully, then send it… (experienced alumna)*

> *… sometimes I do some mistakes talking aggressively with the managers sometimes some of my friends say or the manager himself call me ' this is not the way how you write (experienced alumnus)*

However, this is not the case for many of the new alumni who denied receiving any feedback from their supervisors on their writing. With the exception of a few fortunate alumni who received coaching from their supervisors regarding writing, most new alumni reported that they did not experience any proper guidance or feedback on their writing. In the absence of feedback and guidance, some newcomers would either initiate it or depend on themselves in accomplishing a writing task. To illustrate, one new alumnus commented that he would sometimes seek his boss's help when writing, "*No, but sometimes I ask for help can you check, is it correct or not, but I get it as other side of opinion not as you check my writing."* This suggests that managers may be too busy or reluctant to provide any comments or directions on writing unless they are asked by the employees themselves to do so.

5. Discussion and Conclusion

This study set out to problematise the issue of preparing learners for workplace writing, with research questions designed to target the significance of socio-contextual elements in workplace writing (RQ1), and to consider how addressing the complexity of workplace writing through a needs analysis can inform ESP pedagogy (RQ2). Led by these questions, the study investigated how the socially situated nature of writing (i.e. socio-contextual elements) have shaped alumni's workplace writing practices by interviewing college alumni and their managers and analysing workplace written texts. This study showed that it is not about *what* language they need but *how to use* language in socially constructed spaces in the workplace.

The socio-contextual elements identified in this study—namely collaborative writing, the workplace physical environment, and level of work experience —denote that workplace writing is too complex to be explored only by identifying textual or linguistic needs (West, 1998). For instance, it was noted in this study that collaborative writing takes various forms in the given context, and it may not be as simple as viewed by the conventional direct form of collaborative writing, echoed by Ede and Lunsford (1990, pp. 15-16) as "any writing done in collaboration with one or more persons." Instead, other indirect forms of collaborative writing were reported to take place, characterised as indirect and covert forms of collaborative writing. The collaborative workplace writing in this study was found to be comprised of culling input from other people or departments, as well as different types of intertextuality (Bremner, 2008; Bremner & Costley, 2018), which generally entails drawing on other texts. These forms shape the practices the alumni are involved in while constructing a text.

To explain further, though actual writing was done individually, the alumni and their line managers reported that the input for a text is usually obtained from different sources, such as other employees or departments; a process that involves following up and communicating with others through email or phone calls. The acquired input could be in a form of information, opinion, assistance with language or technological tools, or seeking higher management's approval of technical content. Similar kinds of collaboration have also been observed in previous studies. For instance, Jones (2007) found that technical communicators involved in his study frequently engaged in this form of collaboration when they interact with other people to provide/obtain content or monitor/get monitored. The findings of how collaborative writing influences the writing practices of the alumni in the current study provide valuable implications for ESP practitioners in general, and Technical Writing courses developers at HCT in particular. These implications take into consideration the complexities and realities of the nature of collaborative writing enacted in the workplace.

The findings also reveal that the physical work environment influences the amount and complexity of writing required by those working in oil fields and in office-based environment. The writing duties of those in the field are confined to short emails or brief reporting notes, rather than detailed reports written in the office. Such writing practices are influenced by the environmental constraints which can be accounted for through the notion of organisational culture (Schein, 2010) which novices entering a new organisation are expected to read. An organisation's physical environment represents an artefact in the organisational culture, and the field and office environments can be seen as sub-cultures with different values and norms within the same organisational culture. Although this artefact does not directly shape the written text, it impacts on the processes and discursive practices surrounding the construction of the text. Being able to decipher the culture of a specific organisation is essential for learners joining the workplace. The findings in this study further support the argument that ESP writing courses need to raise learners' awareness regarding the notion of organisational culture, and to clarify how this shapes written genres.

The level of work experience is another element which shapes alumni's workplace writing. The allocation of writing tasks according to the level of experience has also been reported in previous studies (Anderson, 1985; Beaufort, 2000). However, what this study is concerned about is that the level of experience contributes to the writing practices and to understand why the alumni write the way they do. For instance, all the novices reported that they do limited writing with extensive use of templates, while the experienced alumni stated that they get involved in writing complicated and detailed various kinds of genres. Additionally, the feedback practices the alumni engaged in when they joined the workplace as novices constitute the discursive practices surrounding the construction of a text which may not be directly manifested in the text but does certainly play a role in shaping it. For instance, a few alumni mentioned receiving feedback regarding different writing aspects, such as content, format, and language, so this input will eventually shape the final product. The influence of feedback on shaping the final version of the text was also elucidated by Pogner (2003) who investigated the interactive process of producing a text written by Danish consultant engineers through analysing the writers' comments and revisions of the text.

These findings have fundamental implications for the alumni, writing teachers and line managers. The level of work experience which involves socialisation process requires an active role on the part of the graduates who should initiate feedback and guidance from their senior colleagues. However, given that feedback could be a way of inducting the novices (Ledwell-Brown, 2000), there seems to be lack of awareness on the part of the alumni and some line managers regarding this method of induction, and this could account for alumni's perceived lack of preparedness and struggle with understanding the rhetorical demands of workplace writing. Continuing a needs analysis tradition to explore the contextual elements shaping writing has yielded this social aspect (i.e. socialisation process) of workplace writing which can holistically inform ESP pedagogical practices. Thus, learners should be taught how to go about acquiring the workplace specific knowledge after moving to the professional context, such as establishing a comfortable relationship with their mentors (Freedman & Adam, 2000); seeking out templates or soliciting comments on their writing from supervisors and colleagues (Schneider & Andre, 2005); and not simply overlook learning opportunities in the new context, as Freedman and Adam (1996) maintained that students joining the workplace "not only need to learn new genres of discourse but they also need to learn new ways to learn such genres" (1996, p. 424). Most importantly, learners should be made aware that learning to write is an ongoing process which starts in the university but continues after joining the workplace (Ledwell-Brown, 2000). Additionally, the findings also imply that the line managers should play an active role in inducting the newcomers in order to facilitate their socialisation into the new discourse community.

To conclude, the identified socio-contextual elements shape workplace writing and entail complexities that go beyond the text level. The findings of the study imply that ESP pedagogy should emphasise this complex and socially situated nature of written genres, and how they change over time, rather than only focusing on teaching explicit linguistic features of textual genres. Future studies can continue the needs analysis tradition while embracing this social view of writing and exploring other socio-contextual elements shaping writing.

Notes

[1] In the Omani educational system, undergraduate degrees include any post-secondary degree up to the level of a bachelor's degree. A 'higher diploma' is a type of undergraduate degree which students at HCT obtain after spending 3 years in any offered program.

[2] The participant's use of 'well' in this transcript excerpt is not a discourse marker. Here, the participant is referring to 'Well Engineers', those who deal with well drilling at the oil company.

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