



Using interpersonal meaning making resources to build relationships and improve engagement in online teacher professional learning

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Abstract

As professional learning and development (PLD) for teachers moves online, it is increasingly important to consider what constitutes effective provision. While models of effective PLD abound, online PLD faces challenges to participant engagement. In particular, the critical need to build and maintain relationships in professional learning is complicated by the geographic and temporal distribution of online participants as well as the nuances of the technology in use. We argue that online PLD occurs in collaborative text-spaces within learning management systems, social media spaces and their attendant learning objects such as forums. As such, persistent challenges to engagement in online PLD may be met by considering the language-based interpersonal affordances of these text-spaces. We employ a small-scale corpus study and appraisal analysis to demonstrate the value of Systemic Functional Linguistics in addressing the challenges of online learning, particularly how the meaning making resources of the interpersonal metafunction can be used to improve participant engagement.

Keywords Online · Professional learning · Teachers · Engagement · Interpersonal language · Systemic functional linguistics

Introduction

Teacher professional learning and development (PLD) has enjoyed rapid growth in the online world. While online offerings are sometimes the only viable PLD opportunities for rural and remote teachers, the pivot from face-to-face to online PLD during COVID-19 expanded the availability of many PLD offerings to teachers of all

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geographical persuasions (Bragg et al., 2021). Online learning may be described as ‘teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organisation’ (Moore & Kearsley, 2012, p. 2). Thus, online PLD for teachers is professional learning and development delivered at least in part using Internet-based platforms from webinars, teleconferences, massive open online courses (MOOCs) and not-so-massive closed online courses, to communities of classroom practitioners (Australian Institute for Teaching and School Leadership [AITSL] and The Innovation Unit, 2014). Positive interactions and relationship cultivation are vital to successful PLD (Edwards-Groves et al., 2016; Prestridge & Tondeur, 2015), and there are fine examples of online PLD that manage interactions effectively (e.g., Wyatt-Smith et al., 2008).

Engagement, or ‘involvement and active participation in learning activities’ (Cole & Chan, 1994, p. 259), is important for all learning and key to successful teacher online PLD (Bragg et al., 2021). Online participant engagement is enhanced through affordances such as personalised learning materials and collaborative opportunities (Bragg et al., 2021). Further, synchronous, synergetic and constructive dialogue promote real-time team decision-making and community building through participants’ active contribution (Herbert et al., 2016; Prestridge & Tondeur, 2015). On the other hand, synchronous communication can limit flexibility of online PLD offerings, which can negatively impact on engagement. Variation in engagement has also been linked, for example, to the credibility and authenticity of the instructor (Harper-Hill et al., 2022), and engagement issues persist (Herbert et al., 2016; Masters et al., 2012; Qian et al., 2018; Vivian et al., 2014). To address this challenge, we propose moving beyond thinking about PLD in online spaces, to thinking about online PLD as *enacted* collaborations between facilitators and participants in ‘text-spaces’ (Adlington & Feez, 2019). This is one way that issues of engagement may be further explored.

In this article, first we discuss effective professional learning, and how issues of engagement in online PLD may be met with relationship-oriented solutions based on the understanding that online PLD is a collaborative, co-authored endeavour. Then, we introduce the theoretical framework of Systemic Functional Linguistics (Halliday, 1994). To demonstrate its value in understanding and improving online text-spaces, we draw upon a small-scale corpus study using appraisal analysis of the online unit, ED123. We focus on how language is used to enact interpersonal relations in online PLD, and how the language choices made by the facilitator impact participant engagement. Finally, we discuss future directions in research from a text-spaces perspective.

Effective online PLD: Engagement, relationships and collaborative text-spaces

Effective PLD for teachers may be characterised in many ways; however, the Australian Charter for the Professional Learning of Teachers and School Leaders (Australian Institute for Teaching and School Leadership [AITSL], 2012) is a useful summary. It asserts effective PLD incorporates three pillars—*relevance*, *future*

focus, and *collaboration*—which are applicable to online offerings (see, for example, Quinn et al., 2020). These pillars are well established as tenets of effective PLD; the Charter builds on and incorporates international scholarship including from elsewhere in the Asia–Pacific region (Timperley et al., 2007), and the pillars are found in similar frameworks used in other countries including the United Kingdom (Department for Education, 2016), United States (Darling-Hammond et al., 2017; Every Student Succeeds Act (2015)), and New Zealand (New Zealand Ministry of Education, 2016).

While the three pillars are necessary for quality online PLD for teachers, they are perhaps not sufficient, as challenges prevail in establishing and maintaining engagement. For instance, massive open online courses (MOOCs) are purposely free, accessible at any time, and available to unlimited numbers of participants (Vivian et al., 2014), making them attractive to busy professionals such as teachers. One example is a MOOC that supported teachers in implementing the Digital Technologies curriculum in the Australian context (Vivian et al., 2014). In terms of effectiveness, the MOOC aligned with all three pillars of the AITSL Charter in its design. The MOOC was *collaborative*, connecting teachers with experts and each other. It also ensured *relevance* by including participants in the design process, and by addressing the urgent imperative to implement new curriculum. Further, the MOOC included elements of *future focus*, developing in participants adaptive skills and methods for innovating (although, owing to the course’s informal nature, development may have fallen short of meeting AITSL’s (2012) definition of future focus as including inquiry into practice). However, while the MOOC was available to all Australian primary school teachers (124,000+ teachers at the time), it attracted only 1378 participants. Of these, 438 participants did not engage beyond enrolment, and only 99 completed the course (Vivian et al., 2014). In other words, even when online learning spaces, such as this MOOC, enshrine pillars of effective online learning, engagement can still be lacklustre.

Challenges to online participant engagement may be understood in terms of relationship. While some engagement challenges are less relationship oriented, including a lack of participant disposition to online learning (AITSL and the Innovation Unit, 2014) and participant preference (Panizzon, 2016), other challenges are more relationship oriented. For instance, geographic and temporal dispersal of participants impede social presence (Smith & Sivo, 2012), participant interaction, collaboration, and personalisation (Powell & Bodur, 2019). Relationship cultivation is key to overcoming time and space in online environments and is therefore fundamental to the ongoing engagement of participants. However, in online PLD spaces, the resources normally relied upon to establish social presence and develop relationships, such as body language and facial expression, are limited (Bhatti & Teevno, 2021). As a result, facilitators must be cognisant and deliberate in their interactions to build relationships (Prestridge & Tondeur, 2015).

Relationship building interactions in online PLD transpire via socially oriented technologies, including Learning Management Systems (such as *Moodle* and *Blackboard*), social media (such as *Facebook*, *YouTube*, blogs and wikis), mobile phone apps, e-portfolios and personal websites (such as *Wix* and *Weebly*) (Quinn et al., 2016). Such technologies exploit meaning making resources ranging from

text-based posts and comments in online forums to interactive live video streaming in *Facebook* (e.g., Madrigal & Mannan, 2020). Together, these technologies foster a ‘participatory culture’ (Jenkins et al., 2006) within which posts, video, and comments constitute ‘techno-social practices’ (Gillen & Merchant, 2013, p. 48) involving PLD facilitators and participants. For instance, the content authored by a facilitator and shared in an online forum expands when participants add comments. Both consuming and constructing online texts in this way are interpersonal endeavours (Zappavigna, 2012) and may be understood as co-authored, collaborative undertakings in online *text-spaces* (Adlington & Feez, 2019). For online PLD, both participants and facilitators work together as co-authors to create the materials of the online PLD text-space.

Reframing online PLD in this new way—as collaborative, co-authored enaction of text-spaces—opens the door to approaching the persistent problem of engagement in online PLD with a novel theoretical solution. Here, we leverage a theory of language, Systemic Functional Linguistics (SFL), and the work of Systemic Functional linguists, who strive to understand both how people use language in everyday life for social purposes, and ‘the quality of texts; why a text means what it does, and why it is valued as it is’ (Halliday, 1994, p. xxix). Systemic Functional Linguistics has been used to understand how meaning is made in online texts and spaces (Adlington & Feez, 2019; Gillen & Merchant, 2013), and in online learning (Coffin, 2016; Zhao, 2011), indicating the applicability of SFL to online text-spaces for professional learning.

Understanding online professional learning text-spaces with systemic functional linguistics

Systemic Functional Linguistics is a theory of language founded on the idea that language is a *social semiotic* (Halliday, 1985). While some linguistic traditions focus on cognitive processes, for Systemic Functional linguists, language is not used by people to ‘...exchange sounds with each other, nor even to exchange words or sentences...’, but to ‘... interact in order to make meanings’ (Eggins, 2004, p. 11). Texts are instances of social exchange, and social exchange is always realised through text that makes use of language and/or other meaning making resources such as image, gesture and movement (Ngo et al., 2022). The fundamental connection between human interactions and language (and other resources) is used to explain how effective exchanges and texts work for different social purposes in different contexts. This makes SFL an ideal theory with which to explore interactions and engagement in online PLD.

Systemic Functional linguists see all communication as *dialogic*; that is, ‘... to speak or write is always to reveal the influence of, refer to, or to take up in some way, what has been said/written before [by others], and simultaneously to anticipate the responses of actual, potential or imagined readers/listeners’ (Martin & White, 2005, p. 92). This holds true for the text-spaces of online PLD. Online PLD abounds with dialogic exchanges, some of which are seemingly one-way. For example, an online PLD facilitator directs participants to read an article. The facilitator is not

conversing with participants about the article, but still anticipates a response—perhaps that participants will read the article and build their knowledge. Other exchanges are more overtly dialogic. For instance, a participant posts to a forum a question about an assignment and expects the facilitator to respond with an answer.

Systemic Functional Linguistics distinguishes between three types of meaning (or metafunctions) made in all texts: ideational, meanings about the world and our experience; interpersonal, meanings we use to interact with others and build relationships; and textual, meanings we use to organise texts so that they are cohesive and coherent (Halliday & Matthiessen, 2014). All three metafunctions are present in all texts and interaction. However, when using SFL to find solutions to specific problems, it is helpful to focus on one of the metafunctions. For instance, Djonov (2008) proposed that website navigation may be improved (or impaired) by thinking about hyperlinks from the perspective of the *textual* metafunction; this metafunction was salient as hyperlinks are used to organise ideas. Focusing on the *ideational* metafunction, Adlington (2019) described how blog authors use tags to summarise or extend upon ideas in posts, and how teachers can use this knowledge to meet the demands of the English curriculum. Finally, Shrestha's (2022) analysis of the *interpersonal* metafunction explained how assessment feedback might be improved by focusing on evaluating academic writing, instead of evaluating the students. Most salient to engagement in online PLD is the interpersonal metafunction, as it pertains to participant-participant and facilitator-participant interactions that are critical to engagement.

Improving engagement with language choices: The interpersonal metafunction

The SFL perspective on interpersonal meanings views all instances of communication as showing how the author feels about things, and their aspiration for '... the responses of actual, potential or imagined readers/listeners' (Martin & White, 2005, p. 92). Regardless of whether an instance of communication is more one-way (e.g., a speech) or more interactive (e.g., a conversation), it is the author's language choices that show their feelings and their anticipated audience response, or *stance*. These choices build relationships of affiliation and solidarity—a sense of belonging and desire to maintain connection with the group—between interactants (Martin & White, 2005). According to SFL, the language resources for conveying stance include ATTITUDE, ENGAGEMENT and GRADUATION (Martin & White, 2005). In teacher online PLD, these language resources used by facilitators influence participant response; as such, we argue facilitators can make choices that promote greater levels of engagement. For instance, to increase engagement with ideas, facilitators might include rhetorical questions in learning activities, rather than presenting a single idea as a bold assertion, and thus the only valid option. Here, the rhetorical question would open up the dialogic space for alternative ideas, whereas the bold assertion would shut it down (Martin & White, 2005). Indeed, greater levels of engagement are apparent in the case study below, in which new language choices were made in successive iterations of an online teacher training unit.

Method

To elucidate the relationship between participant engagement and facilitator language choices, analysis was conducted on announcements posted in an online unit, ED123. ED123 is a unit aimed at both pre-service and in-service teachers who are training (or re-training) in secondary social science. Communications from the facilitator address all students, irrespective of the cohort to which they belong.

ED123 was selected for two reasons. First, it showed significant improvement in unit engagement analytics over three iterations (2020, 2021 & 2022). However, it is important to note that student engagement may have also been negatively and/or positively influenced by other factors, most notably the COVID-19 pandemic in 2020 and 2021. For instance, during this time, some students experienced increased workloads and parental responsibilities while others experienced decreased workloads owing to furlough. Both of these conditions may have impacted on engagement. Second, the facilitator deliberately addressed engagement in the second and third iterations as an area of weakness identified in the first iteration. The facilitator addressed engagement by changing how she communicated in fora such as unit announcements.

The study was underpinned by the Self-Study of Teacher Educator Practice (S-STEP) research paradigm, a 'systematic inquiry into practice whereby teacher educators gather data, examine practice and reflect on ways that their teaching and research impacts their own, and their students' learning' (Brandenburgh & McDonough, 2019, p. 3). While self-study may involve the collection of data from students, and thus formally address ethical issues inherent in human research, self-study researchers take a different ethical pathway when data is solely generated by and collected from the researcher. Acting ethically as a self-studier means focusing on principles of do no harm to self. In particular, respect for persons and security of well-being must be maintained, sensitive findings must be managed, and attention must be paid to the power structures between self and others peripherally involved in the study, including critical friends (Brandenburgh & McDonough, 2019). In the present study, data were generated by the self-studying ED123 facilitator, one of the co-authors of this paper. Data were retrospectively collected and analysed, and findings were disseminated in collaboration with the remaining co-authors as critical friends. To adhere to ethical principles, data were screened to remove any real or perceived references to individual students. In addition, analysis and interpretation of the results was first completed as a confidential partnership between the self-studier and one critical friend with care taken to ensure the ongoing well-being of the self-studier in the event of sensitive findings about her practice being revealed. Following this, analysis and findings were shared with the rest of the team.

For the study, announcements written by the facilitator to participants at the beginning and end of most teaching weeks was collected from the unit iterations, totalling a small-scale corpus of 36 posts. In contrast to a large-scale corpus, a small-scale corpus allows for the manual coding and analysis necessary to

determine the effect of evaluative language use across individual texts (Bednarek, 2009). A small-scale corpus is large enough that patterns emerge upon analysis and can reveal changes in language use over time.

The corpus was analysed to determine how the language changed over the three iterations of ED123, aligning with improved participant engagement. First, analysis of evaluative language was undertaken using Martin and White's (2005) appraisal framework. Posts were searched for segments (words or phrases) of language that were coded as instances of ATTITUDE, ENGAGEMENT or GRADUATION, and sub-types of each (Martin & White, 2005). Following this, a single post was selected for in-depth appraisal analysis of the ways in which evaluative language choices impact on engagement. Analysis of this type is often performed on individual texts (Bednarek, 2009), and the post was chosen as it was typical of announcements in the final sub-corpus and incorporated all three evaluative language types. In reporting results, most of the content of this post—content that did *not* include evaluative resources—was removed for brevity.

Results

Corpus-wide analysis

The corpus was divided according to the three yearly iterations of ED123. Table 1 includes the number of posts in each sub-corpus—the number of beginning and ending weekly posts per year—as well as the frequency of instances of ATTITUDE, ENGAGEMENT or GRADUATION across each sub-corpus. The number of segments per 1000 words captures the frequency with which each language type occurs and is used to compare sub-corpora across the three years. Using segments per 1000 words accounts for variation in number and length of posts in each iteration of the unit.

The language of ATTITUDE is used to express feelings felt by ourselves and others, and communicate our assessments of human behaviour and objects (Martin & White, 2005). For example, the facilitator used the phrase *I'm very **impressed*** to express her feeling of pleasure. She used the phrase *the video will share some **important** tips* to communicate her assessment of the video tips, and used the phrase *you have **done well*** to communicate her assessment of the behaviour of students. GRADUATION is used to upscale or downscale expressions of ATTITUDE (Martin

Table 1 Usage frequency of ATTITUDE, GRADUATION and ENGAGEMENT language resources over time

	2020	2021	2022
Number of posts analysed	10	19	17
ATTITUDE segments per 1000 words across the sub-corpus	34.3	29	23.3
GRADUATION segments per 1000 words across the sub-corpus	20.2	14.8	10.5
ENGAGEMENT segments per 1000 words across the sub-corpus	14.7	12.6	14.2

& White, 2005). For instance, the facilitator upscaled her expression of pleasure by stating she was *very* impressed. Finally, ENGAGEMENT is used to Expand or Contract the dialogic space for alternative opinions (Martin & White, 2005). For example, consider the facilitator's phrase *contribute to the discussion when you can*. If the facilitator simply directed students to *contribute to discussion boards*, there was no space for an alternative. However, by adding *when you can*, the facilitator entertained the possibility of participants contributing later or even not contributing at all.

The usage frequency of ATTITUDINAL and GRADUATION resources reduced significantly over time—a 32% and 48% reduction between 2020 and 2022. At the same time, the deployment of ENGAGEMENT resources remained steady (Fig. 1).

Considering the sub-types of ATTITUDE (the ways in which ATTITUDINAL resources are used) provides further insight into this change. Table 2 shows the sub-types of ATTITUDE in each sub-corpora; *Affect* (expressions of feelings), *Judgement* (evaluations of people and their behaviour) and *Appreciation* (evaluations of objects and phenomena or aesthetic qualities of people) (Martin & White, 2005). It also shows the rates of usage (/1000 words) and the usage of each sub-type as a percentage of total ATTITUDINAL segments.

While Affect was the most frequently deployed language type in 2020, by 2022 it was the least frequently deployed. Indeed, Affect frequency reduced the most significantly;—57% between 2020 and 2022. Further, as a proportion of overall instances of ATTITUDE, Affect reduced from 39.3% of instances in 2020, to 24.2% in 2022 (Fig. 2), while Appreciation increased slightly (7.3%) (Table 2). However, this uptick in frequency of Appreciation amounted to a significant increase in its proportion of overall ATTITUDE, shifting from 31.8% to 49.5% of all instances in 2022 (Fig. 2). Interestingly, while the frequency of expressions of Judgement reduced by 40% between 2020 and 2022, as a proportion of ATTITUDINAL expressions Judgement remained steady (Fig. 2).

In practice, this change in ATTITUDE occurred as the facilitator used less language to express her own feelings over time, for example, *I hope ...*, which is an

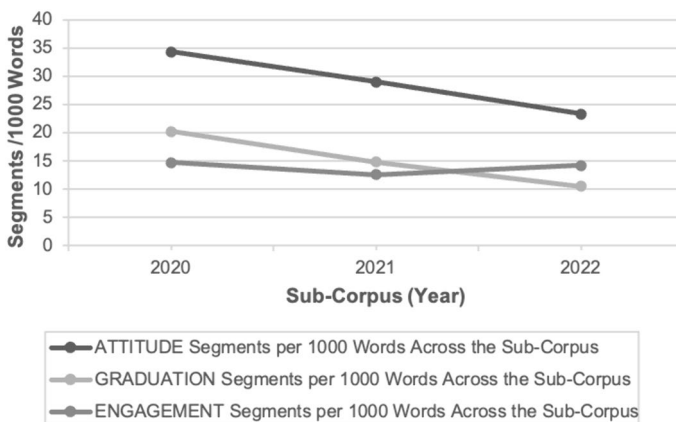


Fig. 1 Usage Frequency of ATTITUDE, GRADUATION and ENGAGEMENT language resources over time

Table 2 Frequency of ATTITUDE type over time

ATTITUDE type	2020		2021		2022		Example—coded segment bolded
	%*	/1000 words	%	/1000 words	%	/1000 words	
Affect	39.3	13.5	29.8	8.8	24.2	5.7	I'm very impressed ...
Judgement	29	9.9	29	8.6	25.3	6	... you have done well ...
Appreciation	31.8	10.9	39.5	11.7	49.5	11.7	... some important tips...

*%= percentage of total instances of ATTITUDE

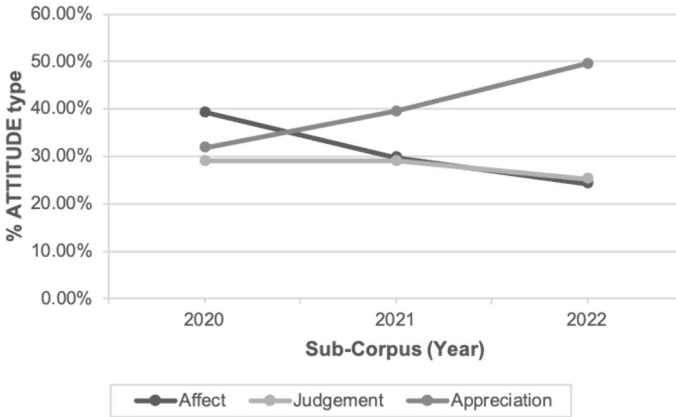


Fig. 2 Proportion (%) of attitude type over time

expression of the facilitator’s feeling of desire (note that 89.4% of instances of Affect across the corpus referred to the feelings of the facilitator, not participants). At the same time the facilitator used more language for Appreciating objects such as assignments, e.g., *the last assignment requires more planning*, and phenomena such as the weekend, e.g., *Have a fantastic weekend*. This shift corresponded with the increased positive engagement analytics over the three years of the study.

While the deployment of ENGAGEMENT resources remained steady over the three years (Fig. 1), there was a marked shift in sub-types. Not to be confused with the notion of *participant engagement* in online learning, authors use ENGAGEMENT resources to ‘... adopt a stance towards the value positions being referenced by the text with respect to those they address’ (Martin & White, 2005, p. 92) and *Expand* or *Contract* the dialogic space for expression of alternative positions. The frequency of Expansion and Contraction over the three years is shown in Table 3.

The dominant sub-type deployed as a percentage of overall ENGAGEMENT switched between 2020 and 2022. While Contracting accounted for 60% of all instances of ENGAGEMENT in 2020, it dropped to 40% in 2022, complementing the upward trend in Expanding. These overall trends are indicated in Fig. 3.

Table 3 Frequency of ENGAGEMENT type over time

ENGAGEMENT type	2020		2021		2022		Example – coded segment <i>italicised</i>
	%*	/1000 Words	%	/1000 Words	%	/1000 Words	
Contract	60	8.8	57.7	7.2	39	5.5	The readings are ... heavy, <i>but</i> ... important
Expand	40	5.9	42.3	5.3	61	8.6	Please contribute ... <i>when you can</i>

*% of total instances of ENGAGEMENT

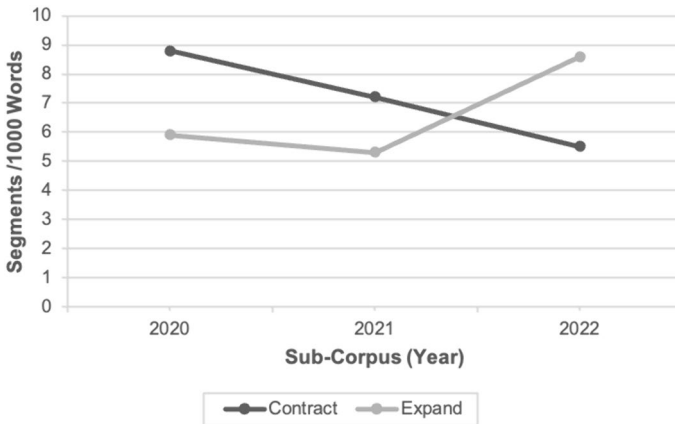


Fig. 3 Frequency (segments per 1000 words) of ENGAGEMENT type over time

In other words, the facilitator moved from using the language of ENGAGEMENT in 2020 mostly to reduce the space for alternative viewpoints, to using ENGAGEMENT mostly to increase the space for alternatives in 2022, for instance (ENGAGEMENT resources italicised):

2020 The readings are a bit heavy, *but* they are very important

2022 ... continue to contribute to the discussion boards *when you can*.

Increasing the space for alternative viewpoints, in this case the views of participants who may need extra time to contribute, presents the original proposition as 'but one of a range of possible positions' (Martin & White, 2005, p. 98) and thus legitimises the thoughts and experiences of others. In the case of ED123, the increase of ENGAGEMENT resources that Expand the dialogic space was associated with increased participant engagement in the unit.

A feature of both ATTITUDE and ENGAGEMENT is that these meanings are *gradable*. GRADUATION is used to convey stronger or weaker alliance with the evaluative stance being advanced (Martin & White, 2005), and *Force* evaluates phenomena by communicating degrees of intensity or amount. In the Table 4 example of Force, the facilitator evaluates changes as being significant. Adding the word

Table 4 Frequency of GRADUATION type over time

GRADUATION type	2020		2021		2022		Example—coded segment <u>underlined</u>
	%*	/1000 Words	%	/1000 Words	%	/1000 Words	
Force	100	20.2	100	14.8	97.6	10.3	The changes are <u>quite</u> significant ...
Focus	0	0	0	0	2.4	0.3	.. this <u>gentle</u> request ...

*% of total instances of GRADUATION

quite upscales (increases) the intensity of the evaluation. *Focus* is used to scale phenomena that are not prototypically scalable, such as a request, which is the only instance of *Focus* in the corpus (Table 4). Here, the facilitator's request is down-scaled with the addition of *gentle*.

The reduction in GRADUATION over time corresponds with the reduction in ATTITUDINAL resources, seen in Fig. 2. In other words, the facilitator continued to upscale (increase intensity) and down-scale (decrease intensity) ATTITUDE at the same rate, but ATTITUDE itself was expressed less frequently.

The corpus analysis articulated the broad change in facilitator language over time associated with increased participant engagement in ED123. The in-depth analysis of the post below explains how language choices at the post level facilitate this type of change.

In-depth appraisal analysis

Appraisal analysis of the following texts explains how the authorial choices of the facilitator influenced participant responses, associated with increased participant engagement (Fig. 4).

Text 1 is a post from the final iteration of ED123. Text 2 is contrived and used for illustrative purposes below; it is based on Text 1, but ATTITUDINAL resources are removed, except for in the greeting and valediction. Text 1 is compared with Text 2 to demonstrate how the language of the interpersonal metafunction impacts on meaning; both texts include the same ideas (ideational metafunction) in the same order (textual metafunction). However, Text 1 uses more ATTITUDINAL language (interpersonal metafunction) to achieve additional social goals; building rapport with participants, and establishing what is valued or, in other words, that which the group's social bonding and solidarity is based upon. The language choices positively evaluate participants and their actions to develop an interpersonal relationship between the facilitator and participants, and to improve engagement.

Text 1 includes all three ATTITUDINAL resource types—Affect, Judgement and Appreciation. Affect encodes feelings experienced by individuals, categorised as expressing un/happiness (happiness or unhappiness), dis/inclination, in/

Text 1		Text 2	
<i>Greeting</i>	Good afternoon,	<i>Greeting</i>	Good afternoon,
<i>Clause #1</i>	I hope you have all had a productive week.	<i>Clause #1</i>	The halfway point in the unit is almost here.
<i>Clause #2</i>	We are now almost at the halfway point in the unit.	<i>Clause #2</i>	Tasks:
<i>Clause #3a</i>	Please continue to contribute on the discussion board		- post to the discussion board
<i>Clause #3b</i>	when you can.	<i>Clause #3</i>	- contribute to the word walls
<i>Clause #4</i>	I am especially looking forward to seeing more contributions on the word walls.	<i>Valediction</i>	Have a good weekend
<i>Valediction</i>	Have a fantastic weekend	<i>Clause #4</i>	
<i>Clause #5a</i>			
<i>Clause #5b</i>	and keep up the great work!		

Fig. 4 Text 1—Weekly announcement post; Text 2—Post with most attitudinal resources removed

security or dis/satisfaction (Martin & White, 2005). In Clauses #1 and #4, the facilitator expressed positive Affect (feeling), in both cases *inclination*, or the desire (following Bednarek, 2008, p. 154) that participants were productive (in bold):

I **hope** (Affect: inclination) you have all had a productive week.

I am especially **looking forward to** (Affect: inclination) seeing more contributions on the word wall.

Both expressions told participants the facilitator would be positively Affected by their behaviours, which built rapport between facilitator and participants. In addition, the facilitator set up productivity and online contribution as desirable. In contrast, Text 2 does not use Affective resources. Indeed, most of Text 2 simply states what is required, with limited use of ATTITUDINAL resources of any kind and therefore limited opportunity to build the rapport that fosters interaction and engagement.

The language of Judgement ‘... deals with ATTITUDES towards behaviour, which we admire, criticise, raise or condemn’ (Martin & White, 2005, p. 42) in terms of social esteem (normality, capacity and tenacity) and social sanction (veracity and propriety). By expressing ATTITUDE, we communicate the behaviours we value and our expectation that others should value the same. The facilitator used language to express positive Judgement about participants’ behaviours in Clause #1 and again in Clause #5b:

I hope you all had a **productive** (Judgement: tenacity) week
and keep up the great work (Judgement: tenacity)!

In both instances, the facilitator valued behaviours associated with *tenacity* as positive for online learning. Further, the facilitator positioned productivity as a value shared by *all* members of the online learning community; thus, all participants should be productive to maintain solidarity with other participants.

Expressions of Judgement are sometimes difficult to distinguish from those of Appreciation. While Judgements evaluate human behaviour, Appreciation evaluates phenomena. The phenomenon evaluated in Clause #1 is the week (as ‘productive’). However, in this instance, human behaviour was inherent in the phenomenon being evaluated (Martin & White, 2005); the week could only be productive if participants were productive. So, the evaluation of the week implied a positive Judgement of participant behaviour. Further, Clause #1 mentioned both participants (‘you’) and facilitator (‘I’), emphasising the *participants’* productivity. These language choices thus combined focused the message as positive Judgement of participant behaviour, albeit via the conduit of a productive week.

Both the greetings of Texts 1 and 2 and the Text 2 valediction used the word ‘good’ to Appreciate temporal phenomena – the *quality* of the afternoon and the weekend:

Text 1 and 2 greeting **Good** (Appreciation: quality) afternoon,

Text 2 valediction Have a **good** (Appreciation: quality) weekend.

Further, Text 1 deployed Appreciation twice in the valediction:

Have a **fantastic** (Appreciation: quality) weekend and keep up the **great** (Appreciation: quality) work!

The first three instances may be understood as acts of politeness as a social value (Henningesen, 2017). However, the facilitator expressed Appreciation of the weekend differently in the Text 1 valediction, and included Appreciation of participant work; these are examples of GRADUATION and are discussed below.

ENGAGEMENT resources communicate the degree of author commitment towards a stance and Expand or Contract the dialogic space for alternative positions (Martin & White, 2005). The facilitator's language choices Expanded the dialogic space in Text 1, Clauses #3a and #3b (*italicised*):

Please continue to contribute on the discussion board *when you can* (Expand: entertain).

Including the contingency, *when you can*, presented the original proposition as 'but one of a range of possible positions' (Martin & White, 2005, p. 98). Here, the facilitator *entertains* the possibility that participants might be at different stages of completing this task. Legitimising this variation encouraged engagement in two ways. First, some participants may have already met the expectation of contribution and thus achieved solidarity with the group. Second, participants who had not yet contributed could still do so without social penalty; in other words, late contributors still maintained solidarity but could strengthen solidarity by contributing at a later time.

To crystallise the value of this approach, consider the alternative whereby interpersonal resources are not used and the text simply states what participants need to do (Text 2, Clauses #2 and 3):

Tasks post to the discussion board—contribute to the word walls.

These statements are 'bare assertions' (Martin & White, 2005, p. 98), which do not allow for differing viewpoints or alternatives. Certainly, the statements above tell participants what to do; however, the assertions ordain the (contrived) facilitator's stance as the only stance, which increases the interpersonal distance between the facilitator and participants and thus decreases the solidarity felt by participants. On the other hand, by using Expansion in Text 1 Clauses #3a and #3b, the facilitator confirmed the behaviours she values and acknowledged that participants might not yet be ready or able to display them (and that this is okay). Further, the language choice reduced the interpersonal space between the facilitator and participants by setting up a sense of community (of participants at different stages) rather than individuality, and signalled to participants what they needed to do to strengthen their individual bonds with the group. Arguably, choices like these made across the latter semi-corpora contributed to improving participant engagement in ED123.

GRADUATION is used to convey stronger or weaker alliance with the evaluative stance being advanced, as seen in Text 1. In Clause #4 the facilitator used Force (underlined below) to express stronger alignment with the value proposition she advanced regarding online contributions:

I am especially (Force: intensification) looking forward to seeing more (Force: quantification) contributions on the word walls.

First, the facilitator upscaled her position on participant contributions to the word walls by including the modifier, *especially*, to intensify her original expression of Affect. Then, the facilitator upscaled her expectation of participant contributions by quantifying the valued behaviour—making *more* contributions. In contrast, removing the GRADUATION modifiers results in a weaker evaluative stance (Text 2, Clause #3):

- contribute to the word wall

The facilitator also upscaled evaluations in the Text 1 valediction Clauses #5 and #5a:

Have a **fantastic** (Appreciation: quality; Force: intensification) weekend and keep up the **great** (Appreciation: quality; Force: intensification) work!

The facilitator expressed positive Appreciation about both the week ahead and participant work, and upscaled this evaluative position by using graded core words—‘fantastic’ and ‘great’ instead of ‘good’. The exclamation mark further upscaled the evaluation (Martin & White, 2005). Building on the previous text of the post, the facilitator set up and amplified her commitment to the shared value and expectation of a weekend that would include positive outcomes for online study. By increasing the level at which ATTITUDE is expressed, authors come across as ‘... maximally committed to the value position being advanced and hence as strongly aligning the reader into that value position’ (Martin & White, 2005, p. 152). Here, the facilitator expressed her strong commitment to the values of tenacity and hard work and thus participant engagement in online learning, and she aligned the participants as valuing the same. In response, participants had to engage to maintain solidarity with the group.

Discussion and conclusion

Focusing on the interpersonal metafunction within the Systemic Functional Linguistics theoretical framework (Halliday, 1994), the language choices of a facilitator enact the interpersonal relations between the facilitator and participants, as seen in the Text 1 analysis. The positive evaluations of participants and their actions develop the interpersonal relationship between the facilitator and participant, and work to improve participant engagement. When evaluations are reduced or absent, the interpersonal distance is greater between facilitator and participants, so engagement is harder to achieve. Over the duration of an online offering, the deployment

of evaluative language in particular ways can impact whether participants withdraw from online learning or stay enrolled, and whether those participants who stay feel engaged and connected. In the case of ED123, the main differences in facilitator communication were as follows. First, the facilitator's expressions of her own emotions (Affect) were significantly reduced in iterations 2 and 3, and replaced with Appreciation, in particular the evaluation of learning resources and activities. Second, the dialogic space in which the facilitator interacted with participants was more open over time to alternative viewpoints, for example, by acknowledging participants may work under varying time constraints. However, what is unclear from the data is if there are 'sweet spots', for instance, in usage frequency of different language resources, or a particular balance of resources that results in optimal engagement. Certainly, the improved engagement associated with significantly reduced deployment of Affect implies this is an area for continued investigation.

We subscribe to the view that all instances of text enact interpersonal relations between the author and reader, and speaker and listener (Martin & White, 2005). Text 1 and 2 analyses involved the interactions between the facilitator as author and participants as assumed readers. However, in online text-spaces, the facilitator and participants may also co-author and collaborate in a more material sense, as is the case in forums where facilitators and participants comment on each other's posts. These interactions also enact interpersonal relations and provide an additional layer of opportunity to build and maintain relations. Future research directions, therefore, include the analysis of facilitator-participant and participant-participant post and comment interactions, and how both facilitators and participants might be guided in attending to language choices that improve engagement. Analysis of participant engagement analytics alongside language choices may illuminate the impact of such choices on quantitative datapoints, such as rates of activity participation and completion. In this way, we can determine best practice in language use by facilitators and the kinds of learning activities that enhance participant engagement.

The texts analysed in depth are just two examples of evaluative resources in action, and Text 2 was contrived to highlight the effect of language choices that enact interpersonal meanings. Further, Text 1 included resoundingly positive evaluations, which begs several questions; is there a place for, or value in, negative ATTITUDE in some facilitator posts? Can ATTITUDE be too positive to be taken seriously? Also, is there a need for some degree of interpersonal distance between facilitators and participants for facilitators to maintain an air of professionalism and credibility? To give an extreme example, a facilitator who said she was 'overcome with elation' or 'heard the heavens open with the singing of angels' (or some other hyperbolic expression of positive Affect) when participants introduced themselves on a forum would, arguably, be difficult to take seriously. The balance between encouragement and over-enthusiasm in engaging participants is another area for future investigation.

Engagement of teachers in online PLD is a persistent issue, and effective online PLD faces many challenges including those pertaining to context, technology, and learning design. However, a common factor inherent in challenges is the relationships between participants and facilitators. Building strong relationships is critical to the success of all PLD, but achieving this in online PLD is complicated by the geographical and temporal distance between interlocutors. One way in which persistent

issues may be solved is to think about them in new ways, and to this end we have argued that online PLD may be fruitfully understood as co-authored undertakings in online text-spaces, whereby participants and facilitators work together to create the content, experiences, and relationships of online PLD. Here, judiciously constructed learning activities by facilitators could support endeavours. For instance, carefully crafted probing questions aimed to elicit particular responses from participants (e.g., responses with high use of interpersonal language) may enhance relationships and engagement. By focusing on text, we have demonstrated the applicability of Systemic Functional Linguistics to inform effective and engaging online PLD practices.

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Declarations

Ethical approval This study did not require formal ethics approval.

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