Feedback literacy in writing research and teaching: Advancing L2 WCF research agendas

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A B S T R A C T

Research on corrective feedback (CF) has developed from its original focus on identifying which type of CF is most effective for developing L2 language learners' grammatical accuracy to focusing on how learners use CF. Underpinning this is the assumption that learners know what to do with CF when they receive it. The concept of "feedback literacy" challenges this assumption. Carless and Boud (2018), define feedback literacy as "the understandings, capacities and dispositions needed to make sense of information and use it to enhance work or learning strategies" (p. 1316). Our intention in this paper is to reflect on the manner in which theoretical and empirical work on feedback literacy can contribute to advancing L2 written corrective feedback (WCF) research agendas. Central in our proposal is the partially under-researched aspect of *experience* in terms of the L2 writers' educational background experience, particularly experience with L1 and L2 writing. We further argue that how learners were taught L1 writing and how the L1 educational culture/ society values writing can impact on how learners approach L2 writing tasks and accompanying feedback. Implications of this inclusive view of the learner for future research and pedagogy is discussed.

1. Introduction

With teachers spending long hours providing feedback on first and second language (L1, L2) student writing, it is understandable that they might want evidence that these long hours are not for naught, and that the time and energy invested in students this way provides gains in learning. Yet, research shown that student writers do not seem to benefit from this pedagogy as consistently or profitably as might be expected (Bitchener, 2017). L2 writing studies have investigated a wide variety of factors which are hypothesised to impact on the effectiveness of written corrective feedback (WCF), including types of tasks given; types of feedback provided; medium of feedback provision; timing of feedback provision; and individual differences in processing and making use of feedback (see Kang & Han, 2021; Roca de Larios & Coyle, 2021 for reviews). More recently, theoretical and empirical research has underscored the relevance of paying greater attention to L2 writer's own engagement with the feedback provided on their writing, which has resulted in two recent attempts at feedback processing model building (Bitchener, 2019; Leow, 2020).

Importantly in this context, and related to student writing, Carless and Boud (2018) assert that the primary barrier to feedback being useful is student writers' (low) levels of feedback literacy, viewed as "an understanding of what feedback is and how it can be managed effectively; capacities and dispositions to make productive use of feedback; and appreciation of the roles of teachers and

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themselves in these processes" (Carless & Boud, 2018, p. 1316). Despite abundant research on WCF (as advanced above), one aspect of WCF that has been partly ignored in the research and is likely responsible for the inconclusive findings could be learners' feedback literacy. This could be in part due to the fact that the concept of feedback literacy is relatively new and conflicting ideas about it are apparent in the L1 writing research. Thus, in a recent review of scholarship on feedback literacy, Nieminen and Carless (in press) identify three ways feedback literacy has been conceptualised: as skills and capabilities; as socialisation; and as a set of literacies. Whilst discussing this conceptual discrepancy and potential implications for research is beyond the scope of the current paper, it is acknowledged that these are key conceptual issues the field will need to resolve. Rather, in this paper our ultimate aim is to explore the way in which research on feedback literacy can inform future research agendas on WCF in L2 writing, focusing particularly on the engagement dimension of Chong's (2021) model of feedback literacy, a model developed through a synthesis of earlier models and chosen for focus here for its comprehensive approach, to be more fully discussed in the next section. Accordingly, in the rest of the paper we will synthesise key theoretical positions and empirical work in feedback literacy research, as well as L2 WCF research targeting writer-related factors. On the basis of this dual analysis, we will suggest specific ways of moving L2 WCF research forward.

2. Feedback literacy: theoretical and empirical developments

Feedback literacy has developed from a history of questioning status quo practices in literacy education, called *New Literacy Studies (NLS)* (Gee, 1996; Street, 1997). NLS view (L1) literacy as a social practice in contrast to the popular idea of literacy as 'a few mechanistic skills' to be formally taught and learnt (Street, 1997, p. 53). The core tenet of NLS was the relevance of acknowledging the literacies that learners had developed in their communities, and to use these as points of reference for developing other literacies needed in educational settings. For example, instead of rejecting 'non-standard' varieties of English, teachers might lead discussions about making purposeful decisions regarding the use one variety or another in any given situation.

From NLS, the idea of *academic literacies* developed, with an emphasis on the impact of institutions and of the discourse, power, and social identities on what is expected of students. In this view, academic literacies 'involve a variety of communicative practices, including genres, fields and disciplines' (Lea & Street, 1998, p. 159). Highlighting the effects of discipline, the authors suggest that 'elements of successful student writing are in essence related to particular ways of constructing the world and not to a set of generic writing skills…' (Lea & Street, 1998, p. 163). Thus, it is possible that a student who is performing poorly could have strong mastery of subject content but lack understanding of how knowledge needs to be demonstrated in that particular discipline. When the researchers asked lecturers to describe problems with student writing, they mentioned problems with *structure* and *argument*. Yet, the researchers noted that interpretations of these terms are not universal across fields or even among instructors within a given field. Thus, it was argued that a more useful approach would be to shift the focus of feedback away 'from [such] surface features of "literacy" to deeper features of epistemology and of authority' (Lea & Street, 1998, p. 167) in order to make explicit for student writers how knowledge is demonstrated and shared in their field.

Continuing the focus on students' experiences to feedback on academic work, Sutton (2012) proposed the idea of feedback literacy, which has been developed by Carless and Boud and colleagues (Carless, 2022; Carless & Winstone, 2023; Hoo, Deneen, & Boud, 2022; Molloy, Boud, & Henderson, 2020; Yan & Carless, 2022; Malecka, Boud, & Carless, 2022). Although Carless and Boud's (2018) definition of feedback literacy ("an understanding of what feedback is and how it can be managed effectively; capacities and dispositions to make productive use of feedback; and appreciation of the roles of teachers and themselves in these processes" (Carless & Boud, 2018, p. 1316)) is student centred, feedback literacy can be extended to teachers' understanding of the concept as well. Thus, teacher feedback literacy is defined as 'the knowledge, expertise and dispositions to design feedback processes in ways which enable student uptake of feedback and seed the development of student feedback literacy' (Carless & Winstone, 2023, p. 153). Carless and Winstone (2023) and Lee (2021) both identify three dimensions of teacher feedback literacy. Lee (2021) centres hers around three key actions teachers must take: (i) provide formative assessment/ feedback; (ii) provide support to learners in using feedback; and (iii) develop teaching competence.

Carless and Winstone (2023) similarly identify in their theoretical paper three dimensions of teacher feedback literacy, namely:

- The design dimension: assessments and feedback are organised in a way that creates an explicit sequence of work, e.g. building on past feedback; the active involvement of students in the feedback process; the provision of feedback before final marks are awarded; the use of technology to encourage student engagement with feedback
- The relational dimension: the human dimension of feedback delivery, ensuring that it is honest but delivered sensitively; developing trust and cooperation between students and teachers; making use of technological advantages for feedback provision, such as using audio or video to provide nuance
- The pragmatic dimension: being aware of the various functions of feedback and the implications of these; being aware of how writing styles in one's own field differ from that of other fields; maximising the benefits technology can offer; balancing 'teacher workload devoted to feedback with what is useful to students' (p. 7).

Teachers are interested in developing their own feedback pedagogical practices (I. Lee, 2019). To this end, teacher feedback literacy training can be offered (Noble et al., 2020), which may result in teachers being better equipped to understand and develop students' feedback literacy (Han & Xu, 2020). Continued research will allow these ideas to be tested and refined and prompt a body of empirical evidence to be built, as we further discuss in the conclusion.

From the perspective of learner feedback literacy, the idea that multiple factors impact on the effectiveness of feedback is not new theoretically or empirically. Cognitive, social, and affective factors impacting feedback effectiveness have been acknowledged (Xu &

Carless, 2017; Yang & Carless, 2013), and the claim is that students need to be able to apply all three, a combination of abilities that is sometimes referred to as *readiness* (Han & Xu, 2020; Li & Han, 2022). However, identifying, defining, and measuring readiness is not straightforward. For instance, Molloy, Boud, and Henderson (Molloy et al., 2020) identify a list of 31 behaviours which they view as exhibiting feedback literacy. They classify these into seven groups: 1) Commits to feedback as improvement; 2) Appreciates feedback as an active process; 3) Elicits information to improve learning; 4) Processes feedback information; 5) Acknowledges and works with emotions; 6) Acknowledges feedback as a reciprocal process; 7) Enacts outcomes of processing of feedback information. Although this list was created not through observation but through discussion with participants, there is recent empirical evidence showing that some students may exhibit these behaviours in practice (Hoo et al., 2022; Wei et al., 2021).

Carless and Boud (2018) propose a model of feedback literacy comprising three factors, which impact on each other and on the ability of learners to take action. The first is appreciating feedback, such as understanding what it is and why it is provided. For example, if learners conceive of feedback as unidirectional information to be given from teacher to student, then they might miss the need for action on their part (McLean et al., 2015). The second factor Carless and Boud identify is students' judgments about feedback, such as actively making judgments about one's own work and the work of others. Whilst this is something that teachers learn through experience and training, the ability to evaluate the quality of work may be underdeveloped in learners (Tai et al., 2018). The third factor is managing affect, such as handling emotions; strong negative reactions to feedback can impact on learners' ability to take in the feedback and apply it usefully (Tian & Lowe, 2013).

In another model of feedback literacy, Yu and Liu (2021) draw on the work of Hayes and colleagues (e.g. Flower & Hayes, 1981; Hayes, 2012) to propose a complementary model of feedback literacy that focuses on identifying actions and knowledge which contribute to the development of feedback literacy for academic writing, such as planning writing, translating from the plan into action, reviewing the text, and enhancing the writing using feedback from teachers and/ or peers. A strength of this model is the emphasis on the need for action on the student's part, although students might not take such action (Winstone et al., 2017), and the model does not account for the reasons for action or lack of action.

Models such as those proposed by Carless and Boud (2018) and by Yu and Liu (2021) highlight actions, attitudes, and processes which can contribute to, or perhaps are even necessary for, the development of feedback literacy. However, when considering the conceptualisation of feedback literacy, academics should be mindful that feedback literacy stems from a tradition of considering the whole learner and how their prior and current experiences impact on and contribute to learning. The omission of this whole-learner view might risk reducing literacy to a 'set of mechanistic skills' (Street, 1997, p. 53). The models referred to are unable to explain why some students might appreciate feedback and be able to review their work in light of it whilst others seem to struggle to engage with and benefit from feedback. A model of feedback literacy needs to explain what is underlying students' abilities to take action and to hold attitudes which have been identified as contributing to successful use of feedback. As an advancement in this direction, Chong (2021) proposes a model of feedback literacy which uses three dimensions in the conceptualisation of the learner as a complex being in a complex environment. This model having been developed through a synthesis of earlier models, is chosen for focus here for its comprehensive approach to explaining feedback literacy. The three dimensions highlight factors which can contribute to language learners' current levels of feedback literacy. These are the Engagement dimension, the Contextual dimension, and the Individual dimension, and each of these three dimensions is composed of four factors. Incidentally, the "engagement dimension" has been central in L2 WCF studies (see review in Roca de Larios & Coyle, 2021), as discussed next.

Chong (2021) describes each of these in detail, but a summary is provided here. At the centre of the model is the Engagement dimension, drawn from Carless and Boud's (2018) model. In the case of L2 writing studies, WCF engagement has recently been considered a more inclusive concept than feedback processing, which, whilst related, is 'that part of engagement mainly related to the depth and quality of cognitive effort involved in detecting, analyzing and understanding the feedback' (Roca de Larios & Coyle, 2021, p. 82). Engagement, on the other hand, can be thought of as 'how learners process, use, and react' to feedback (Han, 2019, p. 288). From a classroom perspective, *engagement* seems intuitive, but it is a complex construct and its application in research requires caution, as it is "widely misused and overgeneralized' (Azevedo, 2015, p. 84). For example, what visibly and reliably demonstrates engagement, and how can this be measured? Chong (2021) addresses this question by defining the Engagement dimension with three types of engagement, broadly recognised in the L1 and L2 literature are *cognitive, behavioural,* and *affective* (Ellis, 2010; Fredricks et al., 2004). Four learner actions are classified within these types of engagement in Chong's model: understanding feedback (cognitive), managing affect (affective), making judgments (cognitive), and taking action (behavioural).

Next, in the Contextual dimension, the model makes explicit that three factors can impact on learner levels of engagement with feedback: where the learners are; what they are learning; and who they are surrounded by. The Contextual dimension focuses on the learner's current learning situation and has four factors: interpersonal relationships in the context; the text itself; instructional context; and the sociocultural context. Interpersonal relationships refer to the student's relationship with the teacher, and presumably with other students as well. The text is the student's piece of writing with feedback and how feedback has been delivered on it.

Instructional context refers to the curriculum, the materials used in teaching, and the teacher; here, 'teacher' seems to mean teaching skill rather than relationship. The sociocultural context acknowledges that the roles learners and teachers take in the classroom can differ from classroom to classroom, and thus is also a possible variable.

The third and final part of Chong's model is the Individual dimension, including learners' beliefs, goals, experience, and abilities, i. e., their beliefs about feedback, its purposes and usefulness; their goals; their experience with feedback; and their academic abilities in the subject being studied.

A strength of Chong's model is that it provides explicit consideration of how the learners' engagement with feedback (in the 'Engagement dimension') is impacted on by factors along two other dimensions: contextual and individual factors. Visually, the model connects the various components to emphasise the interdependency of these. Learners' goals, for example, might be impacted on by

learners' beliefs as well as by the interpersonal relationships the student has in the classroom; these, in turn, can impact on the student's ability to manage affect or take action, for example, in the Engagement dimension. Contextual factors have been investigated in L2 research on feedback effectiveness: instructional setting, types of texts being written, and sociocultural/ interpersonal factors, such as the level of trust established between learner and teacher (e.g. Han, 2019; Lee & Schallert, 2008). Similarly, learner-related variables, such as those within the Individual Dimension, have also been investigated with consideration to their impact on feedback effectiveness, including learner beliefs, goals, and abilities (Han, 2017; Han & Hyland, 2015; Waller & Papi, 2017) as well as cognitive variables, both working memory (S. Li & Roshan, 2019), and language aptitude (e.g. Benson & DeKeyser, 2019; Ishikawa & Suzuki, 2023; Stefanou & Révész, 2015), a point we shall come back to in the next two sections.

The next section will review key cognitive, affective, and demographic variables which have been identified in research as impacting on L2 learners' writing and use of WCF. When learners are more feedback literate, they may be better equipped to engage with WCF, which could lead to improved learning outcomes.

3. Variables influencing what learners do with WCF

L2 writing researchers have sought to identify learner-related variables that might explain the complexities of learners' actions with feedback, which, in turn, may be indicative of learners' levels of feedback literacy (Chong, 2021). This understanding of learner-related variables can help in creating a fuller understanding of learning writing and in improving the teaching of writing. This section provides an analysis of key contextual and individual variables influencing actions learners take with WCF which have been targeted in WCF research (see also Ahmadian & Vasylets, 2021; Manchón & Sanz, 2023b, 2023a; Papi, 2021; Papi et al., 2022 for a fuller discussion of the synthesis presented here).

3.1. Cognitive variables

The cognitive variables that have featured in WCF research are aptitude and working memory, with greater attention being paid to the former in empirical research.

Aptitude is a complex, multi-dimensional construct consisting in well-known conceptualizations of phonetic coding ability, language analytic ability, and memory (Carroll, 1990; Li, 2018). As noted by Kormos in her pioneering discussion of individual differences and L2 writing (Kormos, 2012); See also (Granena, 2023; Kormos, 2023; Li, 2019), conceptualizations of aptitude have evolved. It is suggested that different cognitive skills may benefit learners differently throughout the various stages of language acquisition, and that learners may find certain types of learning activities and teaching methods more advantageous than others, although these preferences may change throughout the learning process (Skehan, 2002). Along the same lines, in their recent review of IDs in the domain of L2 writing, Ahmadian and Vasylets (2021) view aptitude "as a constellation of different abilities", which, they contend, "mediate and moderate virtually all aspects of L2 acquisition and processing, including L2 writing performance and written corrective feedback processing and use" (p. 140). Regarding aptitude and writing, in her seminal position paper on the role of individual differences on L2 writing, Kormos (2012) predicted that aptitude might be more fully implicated in those composing processes more directly concerned with linguistic processing and that require access to linguistic resources. Therefore, she argued, "the stages of writing where high aptitude learners might be advantaged are most likely to be the translation and reviewing phases" (p. 396), adding that "learners with different aptitude profiles might benefit to varying degrees from different kinds of feedback on their writing" (p. 396).

Some empirical studies have indeed provided evidence of the implication of some components of aptitude in how L2 writers benefit from feedback. For instance, Benson and DeKeyser's (2019) findings suggest that some forms of feedback might be more or less effective depending on a learner's language analytic ability (LAA), a component of language aptitude defined as 'the capacity to infer rules of language and make linguistic generalisations or extrapolations' (Skehan, 1998, p. 204). In Benson and DeKeyser's study, direct feedback was more effective for learners with greater LAA, whilst learners with lower LAA benefitted more from metalinguistic feedback. These observed effects could be the result of learners' aptitude prompting deeper engagement with feedback. Learners with higher LAA abilities were also observed to benefit from the provision of direct corrections and metalinguistic direct corrections in Sheen's (2007) and Shintani and Ellis's (2015) studies (but see Stefanou & Révész, 2015 for different effects), with the observed benefits being even more significant in the metalinguistic condition in Sheen's work. In short, whilst these studies do not focus on the relationship between aptitude and engagement with feedback (but, rather, with the effects of feedback on revised texts), they provide the basis for a predicted role of aptitude in how learners engage with and make use of feedback. In fact, aptitude is part of the range of moderating individual differences (together with working memory and affective individual differences) predicted in Bitchener's (Bitchener, 2019) recent model of WCF processing and use. The same applies to Kormos's (2023) "Task-Mediated Cognitive Model of L2 Writing and Writing to Learn", whose full analysis is beyond the scope of the current paper.

Another cognitive variable which may impact on learner engagement with CF is working memory (WM), defined as 'the temporary storage and manipulation of information that is assumed to be necessary for a wide range of complex cognitive activities' (Baddeley, 2003, p. 189). It has also been argued to be a component of aptitude (see Granena, 2023; Kormos, 2013, 2023). Two components highly relevant to language acquisition are complex working memory and phonological short term memory (Baddeley, 2003; Révész, 2012). The phonological loop, or phonological short-term memory, consists of a phonological store for briefly storing verbal information in phonological code, and an articulatory rehearsal process for translating non-auditory material into phonological form and keeping the memory of a trace active (Révész, 2012). WM has been posited to play a key role in L1 writing (see Olive, 2012, 2022) and in L2 writing (Kormos, 2012, 2023; Li, 2022, 2023). In the case of L1 writing, WM involvement is seen as central in models of writing (e.g. Hayes, 1996; Kellogg, 1996, 2001) in recognition of the fact that WM is "the place where writing processes are activated and

coordinated and where the writer's representation of the text is constructed. [It is] the cognitive space where operations of the writing process take place" (Olive, 2012, p. 485). Based on these arguments, L2 writing processes have also been thought to be influenced by WM. Thus, Kormos (2012) argued that WM may be implicated in key writing processes, including problem-solving processes intended to "overcome organisational and linguistic problems experienced while composing", and "how students learn from various types of feedback" (pp. 397–398). To date, research on WM effects has focused primarily on writing itself, with research investigating how WM capacity influences the nature and distribution of writing processes, as well as WM effects on the characteristics of the text produced (for comprehensive reviews, see Ahmadian & Vasylets, 2021; Kormos, 2023; Li, 2023; Papi et al., 2021).

Perhaps surprisingly, there is very little research on WCF and WM. Although WM may impact on learners' use of feedback (Y. Kim et al., 2015), evidence for the precise role of WM in the effectiveness of corrective feedback is not straightforward for L1 writers (Nowbakht & Olive, 2021) or for L2 writers. For instance, focusing on corrections of passive voice in the English L2 writing of Persian L1 university students (n = 100) in Iran, results in Li and Roshan (2019) indicate that WM may impact differently depending on how the feedback is provided (direct or metalinguistic) and on whether revisions are required. The researchers contend that the impact of working memory depends on whether there is a need for deep cognitive processing or not. Kang (2022) adds to the evidence of differing effects of WM by demonstrating with Korean L1 university students writing in English L2 (n = 67) that the effectiveness of models as feedback can also be mediated by WM. They found that learners with high complex working memory capacity were able to process various aspects of the L2 more efficiently and incorporate the information into their improved drafts, resulting in greater improvement on the posttests. These two studies offer conflicting results for the role of phonological short-term memory, which Kang suggests may be the result of differences in the type of feedback provided. Thus, using models, which may have resulted in participants working to keep words and phrases from the models in their memories.

It is unclear why there are so few studies investigating the relationship between WM and WCF; possibly it is a result of the difficulty of using the concept in practice. As a result of struggles to apply WM models to practical issues, newer, finer-grain models of working memory, such as Wen's (2016) *Integrated conceptual framework for WM in SLA research* have been introduced. Theoretically, it would seem this might aid in untangling the effects of WM on various WCF processes, but the impact of this is not yet clear. It is possible that WM facilitates engagement with some types of feedback in some situations more than others, as seen above in Li and Roshan's (2019) study. As emphasised by Ahmadian and Vasylets (2021), researchers need to take into account and isolate effects of variables mediating WM, such as L2 proficiency. Manchón and Sanz (2023a) emphasise the crucial consideration of how taxing the task is for ascertaining working memory effects, which in the case of WCF would mean how cognitive complex is the self- or other-initiated learner's engagement with the feedback provided on their writing. Empirically, this means that complex designs in which interaction of variables are investigated in the way to proceed because, as Ahmadian and Vasylets (2021) remind us, 'taking into account the potential interactions between the relevant variables would increase ecological validity and allow for a more nuanced understanding of the role of cognitive abilities' (p. 149).

3.2. Affective/conative variables

Affective variables impact directly on learner engagement with feedback. Non-cognitive aspects of L2 writing have received insufficient attention in research (as discussed in Papi, 2021), but there is support for the impact of such factors on learning generally and on L2 writing and feedback engagement specifically. For example, learners' goals have been seen to impact on their engagement with feedback (Zheng et al., 2023), and learners who have a growth mindset (that is, a belief that one can increase one's abilities) may place a greater value on feedback, which could prompt them to seek out and attend to feedback (Papi et al., 2020; J. Xu, 2022). A related concept is self-efficacy, or the belief in one's ability to complete a particular activity (Bandura, 1977). Students with higher self-efficacy might experience a positive effect, firstly believing themselves capable of success and then being successful (Hsieh & Kang, 2010). In writing studies, there is evidence that writing self-efficacy can significantly predict writing performance (Prat-Sala & Redford, 2010, 2012) and influence students' self- regulation and their perceptions of and engagement with written feedback (Ekholm et al., 2015; Gan et al., 2021; Tsao, 2021).

It seems likely that all these factors could impact on motivation, which itself has been shown to impact positively on learner engagement with feedback (DePasque & Tricomi, 2015; Tsao et al., 2021). Problematically for research, it can be challenging to isolate motivation from other related factors, such as self-efficacy and agency (Hattie et al., 2020). This discussion has highlighted the complex, inter-related nature of variables impacting on learners and learning and highlights the need for a research focus on the whole learner.

3.3. Demographic variables

Demographic variables are included in WCF research and will be key to models of feedback literacy. Such factors impacting on engagement with WCF could include learners' maturity and social and academic cultures. Cognitive maturity might influence feedback preferences, as students with fewer years of learning experience reported their preference for more direct feedback (Blair & McGinty, 2013), but even if the feedback is direct, students can still struggle to use it effectively (Orsmond & Merry, 2011). Cognitive maturity can also impact on students' ability to value (appreciate) and engage with and, thus, benefit from, feedback (Williams & Kane, 2009). It seems logical that feedback literacy would develop with experience, and thus it might be seen that more experienced learners tend to have higher levels of feedback literacy.

'Culture' can refer to the culture of one's upbringing and education as well as to academic culture, i.e. field of study. Learners whose educational cultures provide different kinds of feedback can initially struggle to adapt to use it effectively it when studying in, for

example, UK higher educational institutions (Tian & Lowe, 2013; Wang & Li, 2021). Fields of expertise also form their own cultures which can influence how important writing is considered, what is considered good writing and about the role and types of feedback used (Gu, 2002; Hyland, 2008; Rao & Liu, 2011; Wong & Nunan, 2011). Thus, feedback literacy could perhaps be influenced by the social and educational contexts in which they were raised as well as by the academic culture in which learners have been inducted.

As this section has shown, research has investigated a wide range of complex factors, and their inter-relations, which may impact on learners' ability to learn from and apply feedback beneficially. However, it is not yet understood which learner-related variables are key contributors to learners' levels of feedback literacy or whether all relevant factors have been identified. The next section discusses these issues and proposes how L2 writing research can be moved forward.

4. Moving L2 writing research forward

The previous section discussed key variables highlighted in research as impacting on learners' engagement with and use of feedback. However, these variables have generally not been examined in conjunction with learners' educational and L2 writing experiences. If researchers and teachers are to understand how L2 users engage with the feedback provided on their writing and the effectiveness of feedback, it is important to consider the learning experiences learners bring with them and make them central in feedback literacy studies; that is, the learning environments that have shaped learners feedback literacy must be included in investigations of how learners engage with and use feedback. Along these lines, this section highlights two key considerations for future studies of feedback literacy in L2 writing: a) further developing the concept of engagement, and b) further developing existing models which explain not just feedback literacy behaviours but also factors contributing to whether learners can carry out these behaviours; examples of existing work in this area are Bitchener (2019) and Leow (2020). We will also argue that L1 writing experience is a relevant factor for which, whilst frequently overlooked in research, there is evidence to suggest it is necessary for understanding learners' use of feedback and their feedback literacy.

Firstly, as the concept of engagement continues to be applied in research, definitions, measures, and operationalisations need to be established in order to answer key questions surrounding its application in research. For example, if learners apply a correction in later writing (Li & Vuono, 2019), is that considered as evidence of *engagement*? How consistently does the correct form need to appear before it can be considered as evidence of engagement? If there is behavioural engagement which does not result in increased accuracy, as seen in Zheng and Yu (2018), is this still considered as the result of engagement? How can engagement be studied separately when there are a variety of factors which can mediate engagement, as in Han (2019)? Establishing answers to these questions will facilitate future research with the construct of engagement.

Secondly, as discussed here, CF effectiveness can be impacted on by a wide range of learner-related, feedback-related variables, and feedback processing task conditions, which need to be accounted for in any comprehensive model of L2 feedback literacy explicit how these variables can impact. Existing models of feedback literacy provide a starting point for this; for example, Chong (2021) model highlights three inter- related dimensions, as explained in Section 2, namely the Engagement dimension, Contextual dimension, and Individual dimension. The constructs included in models of feedback literacy need to be refined through research, and models need to be tested in a variety of contexts with a variety of learners in order to contribute to our understanding of learners' 'capacities and dispositions to make productive use of feedback' (Carless & Boud, 2018, p. 1316). For example, and at the risk of compromising its parsimony (as noted by one of the reviewers), a comprehensive model will need to explain equally well the feedback literacy of someone who is keen to learn the language as well as that of someone who is satisfied merely to pass a required course or learn a bit as a hobby. It will need to explain the feedback literacy of learners coming from different educational contexts: ones which emphasise, and ones which de-emphasise the importance of writing in the curriculum. The importance of writing is influenced by culture, so in educational cultures where skills other than writing are prioritised, students may logically attend more to those skills than to writing (Boggs, 2019; Rinnert & Kobayashi, 2009; Williams, 2017). The need to balance parsimony with inclusiveness is a delicate one, seen in discussions of other highly complex constructs, such as motivation (Hattie et al., 2020). It is possible that, as with motivation, the process of developing and testing models allows for clearer understanding of when and how they can be used; this increased understanding might then permit complex models to be later refined (Hattie et al., 2020).

The learner variables considered in existing models, while a most relevant starting point, need to be further developed and refined in their application to L2 writing. For example, when considering learner experiences, we would argue that successful models of feedback literacy must also explicitly consider not only L2 but also L1 writing experience of learners. Whilst higher educational institutions in some contexts might place a high valuation on academic writing skill, such as the UK, this focus on academic writing is not universal (Reichelt, 2009). We would therefore like to propose that when considering learner writing experience, this needs to be expanded to include learners' prior educational experiences writing in their L1 as well as their L2. Results of studies using structural equation modelling indicate that L1 writing experience has a significant impact on L2 writing and that this impact of L1 writing experience is greater than even L2 proficiency and affective variables (Kim & Pae, 2021), so without experience, learners have limited opportunity to develop their feedback literacy. As data on prior writing experience and feedback seem not to be gathered in WCF research, it seems researchers assume that learners have experience in L2 and/ or L1 writing and receiving feedback, but when participants are asked about these experiences, they often report that this is not the case. For instance, EFL university participants in China reported that despite more than a decade of English instruction, their experience with L2 process writing and feedback was minimal (Han & Xu, 2020). The low levels of experience extend to L2 writing as well; of 109 university EFL participants in South Korea, 77 % reported that they had little or no experience with L1 writing and receiving feedback, and that when they were asked to write, feedback was not given beyond a numerical score (Hattie et al., 2020).

If there has been low emphasis on writing and feedback in L2 writers' L1 education, these writers could place a lower value on both

writing and feedback, which could in turn result in lower levels of feedback literacy. Adult EFL learners in Iran negatively evaluated their L1 writing experiences, explaining that they had been asked to do very little L1 writing in their education, and that L1 writing instruction focused mainly on grammar rules and vocabulary (Saeli & Cheng, 2019). The researchers found that this perception of writing was carried over into L2 writing, with learners emphasising their perception of the needlessness of L2 writing and, in contrast, the usefulness of developing L2 speaking skills. In a review of education in East Asia, Williams (2017) notes that in areas where standardised testing is the primary method of evaluation, this skill (rightly) takes precedence over writing, a finding supported by participants in Boggs (2019). Regardless, learners whose L1/L2 writing experiences have been limited can develop their writing skills through instruction (see Rinnert & Kobayashi, 2009).

If knowledge of student feedback literacy is to be of use to L2 writing teachers and researchers, there is need for a practical way to gather information about how learners' individual differences impact on their current feedback literacy. For example, scales of feedback literacy will need to include information that will indicate the learners' past educational experiences and experience with writing and with feedback, both in L1 and in L2. If learners have not had opportunities in their past educational experiences to develop feedback literacy, then time may need to be spent working on this skill in the classroom or teachers may need to adapt their pedagogy accordingly. Further developing models of feedback literacy will aid teachers and researchers in gathering information which will provide an understanding of the roles writing and feedback have had in learners' prior experiences.

5. Conclusion

In this article we have argued for the need to consider how engagement can be defined and measured, and for the need for further development of feedback literacy models. We have noted the importance of considering learners' educational and L1 writing (as well as L2) experiences and the potential of these to impact on what learners do with feedback given them in their current context. Learners come to classrooms and research studies with their own history in education, and we have argued that it is important to consider how these histories impact on learners' L2 writing and ability to understand and apply feedback that is provided. This is so because learners' educational backgrounds can influence their current levels of feedback literacy, which, in turn, can influence L2 writers' ability to make use of feedback for L2 development.

For teachers to be able to help their students develop their feedback literacy, it would be most relevant that teachers have high levels of feedback literacy themselves. Drawing on previous research, Boud and Dawson (2021) identify 19 specific actions and examples of actions implemented with teachers with high levels of literacy, such as *Planning feedback*; *Developing colleagues' feedback practices*; *Intentionally prompting student action*; and *Identifying and responding to student needs*. With high levels of feedback literacy themselves, teachers are better equipped to understand student feedback literacy and how it can be developed. For example, what teachers consider to be 'feedback' and what they view as the purpose of feedback differs from person to person, and these perceptions influence how the teachers approach the provision of feedback to learners. Creating opportunities for even informal 'teachers' room' discussions on these topics can make perceptions of feedback explicit, thereby creating opportunities for reflection and development ((Chan & Luo, 2022). Teachers might also come to the understanding that teacher and student feedback literacies are tightly interwoven, thereby equipping teachers to work in cooperation with students to each develop the relevant literacies (Tai et al., 2023).

There is currently more theoretical than empirical work on feedback literacy generally, likely due to the newly developed status of the concept. Going forward, WCF researchers need to consider learners' educational backgrounds explicitly, collecting data about L1 and L2 writing and feedback experiences as a matter of course, and considering this when interpreting the results of findings. These considerations are necessary for advancing WCF research, but they are also relevant to the classroom.

Teachers who have developed their own feedback literacy and who are equipped themselves with knowledge of their learners' past experiences are in a much better position to guide learners explicitly through the process of developing their feedback literacy.

In short, feedback literacy appears as a theoretically-, empirically-, and pedagogically-relevant concept to be part of disciplinary discussions on how L2 writers engage with and benefit from the feedback provided on their writing. A key point when advancing research agendas in this direction is to acknowledge that the range of individual differences purported to influence L2 writers' use of feedback ought to be expanded in order to include past experience as well as what feedback literacy skills L2 writers develop out of current experience. In this sense, there is room for future work on how teachers' feedback literacy contributes to the development of students' feedback literacy. Finally, future research on learning, teaching, and assessing L2 writing ought to refine the variables which have already been included in models of feedback literacy and identify new ones. There is also need for the development of measures and scales of feedback literacy, both for research and for classroom purposes. Finally, whilst there is evidence for the relevance of feedback literacy to L2 writing, methods for the development of feedback literacy and the impact of feedback literacy on the application of feedback needs to be investigated.

This paper is intended as a first step in making feedback literacy more central in L2 writing research. It is hoped that the ideas presented can spark future developments that can eventually lead to adding an additional piece in our understanding of the complex phenomenon of L2 writers' differential engagement with and benefit from the feedback provided on their writing.

Declaration of Competing Interest

None.

Data availability

No data was used for the research described in the article.

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