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We need to talk about AL: has academic literacies designed the pedagogy out of Learning Development?

Abstract

Academic literacies (AL) research has made significant contributions in both scope and depth to understandings of student writing and the meaning of literacy across higher education. It has been particularly impactful on thinking in Learning Development. However, researchers and practitioners both within and external to the AL movement have struggled to clarify the relationship between AL and pedagogy. English for Academic Purposes (EAP) researchers have highlighted the lack of a workable AL pedagogy, whilst AL researchers maintain that the model represents a design space or heuristic for thinking about practice in context, rather than a source of pedagogic prescriptions. In this theoretical discussion, we elaborate concerns with the structural coherence of the AL model, its social constructivist underpinnings and evidence base, and the impact of its ideological orientation on the pedagogy we derive from it. Underpinning these critiques is a suspicion that the social constructivist epistemology which AL uses to pinpoint weaknesses in the models of literacy/writing which it subsumes cannot generate a practical pedagogy. We argue that these structural and ideological tensions in the AL model help to explain confusion over its interpretation and implementation. We speculate that a singular focus on social constructivist derived theory, though well-intentioned, does more to reinforce a particular ideological commitment than to enhance student learning.

Introduction

Academic Literacies (AL) has been widely recognised for its significant influence on thinking about writing in a range of contexts related to learning and teaching in Higher Education (HE), including in Learning Development (LD). Lea and Street's (1998) paper on the subject is widely seen as seminal; a keyword search for AL returns 83 results in the *Journal of Learning Development in Higher Education* alone. The AL model presents a way to understand writing in universities via a 'three-level classification' of Study Skills (SS), Academic Socialisation (AS) and Academic

Literacies (AL) (Wrigglesworth, 2019, p.7). This classification brings together distinct views of writing development in HE, each carrying implications for how writing might be taught. Each layer in this hierarchical model contributes to the whole, ultimately creating transformative 'meaning/knowledge-making spaces' which can be used as a 'design space' (Lillis, 2019, pp.7-8) for pedagogy or even as a 'pedagogy for course design' (Lea, 2004, p.739).

Although the contribution of AL to LD issubstantial, some confusion remains around drawing implications for practice from the model, in particular for pedagogy (Lea, 2016, p.91; Hilsdon, Malone and Syska, 2019, p.35; Wingate and Tribble, 2012, pp.483-484; Lea, 2017). There have been attempts to clarify any ambiguity, elaborating the broadly social constructivist social theories which underpin AL (Lea, 2016; Lillis and Scott, 2007, p.11; Lillis and Tuck, 2016), and drawing out subsequent implications for its implementation (Lillis et al., 2015; Lillis, 2019; Wrigglesworth, 2019).

This paper explores research both within and external to the AL literature for possible explanations of this confusion. In their extensive review of the AL literature, Hilsdon, Malone and Syska (2019) note uncertainty around the relationship between component parts of the model. Other educational perspectives have gone beyond problems of interpretation, highlighting specific limitations of using a social constructivist approach to inform or design pedagogy. These limitations include concerns about the extent to which AL, as a social constructivist informed perspective, is 'knowledge blind' (Clarence and McKenna, 2017) because of its focus on social power relations (Maton, 2013a). More fundamental still are critiques of flaws in the broader social constructivist epistemology which, it is claimed, lead to ineffective pedagogical practices as evidenced in empirical research (Matthews, 2012; 2020).

This paper is divided into three main sections which explore concerns about:
1. The coherence of the AL model;
2. The hierarchical structure of the model;
3. The social constructivist epistemology and ideological commitments underpinning the model.

The paper ends with a discussion of possible ways to resolve apparent contradictions, potentially building on the insights which AL offers, whilst also focusing on designing effective pedagogy for LD.

1. Concerns about coherence in the Academic Literacies model: the constituent pieces do not seem to fit together

Academic Literacies research brings together three distinct, and seemingly conflicting, perspectives on student writing into a hierarchical relationship. It names the overall model after the top layer, then states an intention to 'encompass' or 'encapsulate' (Lea and Street, 1998, p.158) these components into a coherent whole. Though explanations and defences of this model have been made (Lillis and Tuck, 2016; Lillis, 2019; Wrigglesworth, 2019), some confusion around its intended use remains. We speculate that problems with the ideological coherence of the model's structure may be a factor in this confusion.

The details of the AL model have been discussed at length elsewhere (see Wrigglesworth, 2019 for a concise description). However, a very brief review is useful here (see Figure 1). Adapting Lillis and Tuck's (2016, p.32) 'three-part heuristic' summary, we have added a note on whether each element is designated as having a normative or transformative orientation in the model:

	Approach/model	Perspective on student writing	Orientation	Abbreviation in this paper
1.	Study skills	Decontextualised skills	Normative	SS
2.	Academic socialisation	More or less implicit academic socialisation into given genres and practices	Normative	AS
3.	Academic literacies	Situated, shifting and contested literacies	Transformative	AL

Table 1: A summary of the academic literacies model (adapted from Lillis and Tuck, 2016, p.32)

Layers 1 (Study Skills, SS) and 2 (Academic Socialisation, AS) at times receive fulsome criticism when viewed through an AL lens, principally for their normative perspectives which ignore aspects of context and institutional power dynamics. It is

claimed that these flawed SS and AS perspectives lead to a deficit view of student writing, an overgeneralised depiction of student characteristics, and unwarranted assumptions that writing is transparent (Lea and Street, 1998, pp.158-9). This lack of transparency manifests in the way terms such as 'essay', 'analysis', or 'critical' are not understood in the same way by everyone, but are treated (by subject lecturers) as if the meaning is stable and clear to all. AL, in contrast, uses a transformative orientation, entailing the need for negotiation and dialogue over 'specific and contested traditions of knowledge making' (Lillis and Scott, 2007, p.12). This involves questioning what constitutes 'appropriate or effective' language use, when seen as social literacy practices (within 'sites of [...] discourse and power' (Lea and Street, 1998, p.159). Although the AL model directs some distinct critiques at particular elements of the SS or AS approaches respectively, for the purposes of this article, the above provides a sufficient summary of critiques against the lower tiers of the AL model.

1.1. Conflicting normative and transformative orientations in the model

AL proponents stress that each layer 'successively encapsulates the other' (Lea and Street, 1998, p.158), with each having 'some value' but 'only an academic literacies approach fully supports a practices approach that is ideologically informed' (Wrigglesworth, 2019). At times, however, it is hard to see how an explicitly ideologically informed model works as a coherent whole when its component parts are ideologically opposed in their contrasting normative (SS, AS) and transformative (AL) orientations.

Fundamentally, the model characterises SS and AS normative approaches as instructing students 'you're doing it wrong – write like this', whereas AL's transformative orientation advises students that 'there is no wrong, don't let anyone tell you how to write'. For example, Badenhorst et al. (2015) claim that their AL-derived pedagogy 'allowed participants to see that there was no "wrong" way to write but rather there were choices about whether to conform' (p.101). Even where AL researchers recognise instances where 'normative approaches that involve inducting students into existing and available discourses are essential' (Paxton and Frith, 2015, p.156), the supposed 'transformative dimension' added by AL methods are not

unique to AL, and seem to lead to a normative target outcome. For example, Paxton and Frith (2015) emphasise ensuring shared understandings of key terms and working with students' prior learning. These techniques are, however, widely used outside of AL, including by Socrates in his dialogues which start by asking his interlocutors: 'what do you understand by X?' (Matthews, 2020, p.49). These dialogues typically lead towards a pre-determined (normative) outcome that Socrates has in mind; even if that destination is negatively defined. It is thus difficult to see how the opposing normative and transformative readings within the AL model can be reconciled in a hierarchical model;the component parts do not build on one another – they conflict. Individual elements of a coherent model are usually necessary but not sufficient, rather than necessary but *deficient.*

In the model's defence, Lillis (2019) points out that AL practitioners 'necessarily engage with normative practices as part of their/our daily work in academia' alongside more transformative explorations (p.7). A collection of case studies has been presented as an example of this 'normative meets transformative' work in practice (Lillis et al., 2015). However, it is not clear what in the 'critical thinking space' (Lillis, 2019) of the AL model guides this practice; for example in choosing or discerning between seemingly oppositional normative/transformative interventions in our teaching. Lillis and Scott (2007) have explained that an AL approach 'involves an interest in' normative questions but is simultaneously 'explicitly transformative rather than normative' (pp.12-13). This seems difficult to reconcile in both theory and practice, particularly as 'practitioner-researchers will define and work with the notion of transformation somewhat differently' (Lillis et al., 2015, p.8). In the same collection of case studies, Harrington (2015) describes AL's transformative approach as 'fundamentally a way of seeing and being' in which 'the normative has the potential to enable the transformative' (pp.12-13). As such, she cautions against 'set[ting] the "normative" against the "transformative", as has sometimes been implied' (Harrington, 2015, pp.12-13), presumably by critics of AL.. However, these orientations have been set in tension within the explicitly hierarchal model of AL, by proponents of AL , who themselves fiercely critique normative approaches as representative of 'exclusionary narratives of power and identity' (Harrington, 2015, p.12).

1.2. Drawing on Bakhtin for support

Some AL researchers have drawn upon the thinking of Russian literary theorist Bakhtin to facilitate this difficult move 'from critique to design' (Lillis, 2003). Wrigglesworth (2019, p.8) cites Lillis' (2006) work in suggesting the pedagogical use of 'descriptive' ('unquestioned … clear') and 'ideal' ('cloudy') forms of dialogue, as perhaps a way to bridge the gap between normative and transformative orientations. However, it is difficult to recognise the 'descriptive', monologic 'cultural claims' associated with (presumably non-AL) pedagogy and academic discourse as representing 'one ... voice, identity and authority' (Wrigglesworth, 2019, p.8). While different disciplinary discourses may have different perspectives on the existence of 'one truth' or 'many truths', it does not withstand scrutiny to characterise teaching and academic discourse as monologic across university settings. Lillis (2003) gives the example of an essay assignment as evidence of 'the more obvious monologue practices surrounding student academic writing' (p.199). In this characterisation of academic study and writing, the student is required to 'respond in accordance with the knowledge that has been authorised in lectures, seminars and course materials' (Lillis, 2003, p.199). This is a particular interpretation of such a process, and the evidence presented for it is equally open to alternative interpretation. In many disciplines it is common for lecturers to encourage students to read more widely than 'authorised' reading lists, seek challenges to established ideas in seminars and to include specific learning outcomes and grading criteria aimed at eliciting critical thinking from students.

Lillis (2003) highlights instances of lecturer comments, or lack thereof, on aspects of student work as evidence of attempts 'to impose one version of truth' (p.189). It is the case that lecturers (necessarily) make normative judgements about the articulation of knowledge claims in student essays – over types of source, specificity of language use, relevance of content, types of evidence, or strength of claims. However, there are justifications, based in the knowledge structures of particular discourses (Maton, 2013b), for weighting of particular forms of evidence and articulation over others. To characterise informed and purposeful use of discipline specific concepts and vocabulary as merely to 'ventriloquate or echo conversations across academic and disciplinary contexts' (Lillis, 2003, p.201) seems insensitive of the needs of a discipline and of students attempting to learn about it. Even where 'scholarly frameworks and writing conventions' are valued in a case study of AL informed

pedagogy, it is only as a 'form of power that can be appropriated and used' (Clughen and Connell, 2015, p.52), rather than as legitimate knowledge. There are, however, justifications for lecturers to question the manner in which students use personal experience (anecdotal evidence), emotions, or digressions of the kind Lillis highlights which are based on more than a flexing of academics' social power. As in any human endeavour, there are flaws and biases in implementation, but academic discourse includes a need to communicate knowledge in a process which recognises its own fallibility, and remains open to dialogue and contestation by design. The knowledge produced is explicitly acknowledged as provisional and partial.

The ideologically driven AL characterisation of academic discourse as 'one truth, voice, identity and authority' seems to be a straw man, and potentially indicative of its 'knowledge-blindness' (Maton, 2013a) to be discussed below. Returning to Lillis' recourse to Bakhtin, this 'knowledge-blindness' is understandable given that there are widely acknowledged 'vague claims' and 'persistent, structural ambiguities in Bakhtin's writing' (Hirschkop, 2021, p.153 and p.160). Indeed, Hirschkop (2021) traces starkly contrasting interpretations of the 'cult of Bakhtin' (p.160), enthusiastically taken up by religious, liberal and left-wing scholars and respectively implemented in opposing directions. These opposing interpretations and uses themselves serve as a refutation of the claim that academic discourse is dominated by 'one voice' and 'one truth', and challenges even the more nuanced characterisation of academic discourse as a 'monologic-dialectic' binary of 'progressive negation of one statement by another' (Lillis, 2003, p.199). As with the diverse interpretations of Bakhtin traced by Hirschkop (2021), it is similarly likely that for the AL researchers drawing on Bakhtin, '[t]he new world they glimpsed reflected the ideologies they brought with them' (p.152). This is not to dismiss Bakhtin's literary theory as a lens for examining academic writing, but to caution that '[s]uch insights cannot stand on their own ... they demand elaboration, sceptical analysis, testing against empirical material' (Hirschkop, 2021, p.160). Further, in considering use of AL as a design frame for their teaching, learning developers might consider the extent to which ideological claims and the implications of such AL informed thinking align with their own.

1.3. Normativity and transformation: tension or contradiction in the LD literature?

In addition to influences from other fields, potential confusion in engaging with the AL model on a practical level has been recognised within the LD literature. Reflecting on the development of AL, Lea (2016) concedes that 'it is indeed difficult and challenging to articulate the principles of academic literacies in guidance for students' (p.91). This difficulty 'may also be the case in teaching contexts that take place *within the limits of the curriculum in terms of time and space*' (Lea, 2016, p.91) [our italics] – which seemingly applies to virtually *all* teaching contexts, at least where LD support is embedded as per current best practice recommendations (Hilsdon, Malone and Syska, 2019). Further, in the conclusion of their innovative community sourced literature review of AL, Hilsdon, Malone and Syska (2019) recognise that 'the exact nature of the relationship between approaches (SS, AS, AL) has proved difficult to define, both in theory and in practice' (p.35). As evidence of these blurry distinctions, the same Hilsdon, Malone and Syska (2019) review attempts to illustrate the embedding of an AL approach in an Australian HE context. However, the quotation cited by the authors as an illustration outlines 'the need to frame language … as something specific to individual disciplines and in which learners need to become conversant if they are to gain membership of their respective communities of practice' (Murray and Muller, 2018, p.1350). This exemplifies an AS approach. In considering the 'converging space' of English for Academic Purposes (EAP) and AL, Lillis and Tuck (2016) caution researchers against assuming that EAP (by implication, a form of Academic Socialisation) and AL 'can straightforwardly be combined or their differences collapsed' (p.37). It is not clear here how the 'encompassing' of AS into the AL model achieved by AL researchers (see Section 1) is different from attempts to find synergies between EAP and AL in EAP research.

It seems there is a case to be made for some lack of clarity or coherence in the AL hierarchical model. A key aspect of this is the difficulty for lecturers or learning developers in how to deal with the tension between normative and transformative orientations, particularly given the difficulty of defining 'transformation' consistently (Lillis et al., 2015, p.8). In addressing the coherence of the AL model, hierarchy is used as a way to structure the elements, so it is to this idea of a pyramid model which the paper now turns.

2. *Resisting normativity through hierarchy?*

Though hierarchy can be useful in organising and relating complementary concepts (see Bloom's taxonomy, for example), its contribution to the ideological coherence of the AL model is less clear. In their seminal paper, Lea and Street (1998) state that in constructing and applying the AL model, they 'take a hierarchical view of the relationship between the three models, privileging the "academic literacies" approach' (p.158). The same point is repeated in theoretical reviews (Hilsdon, Malone and Syska, 2019) and practical case studies (Wrigglesworth, 2019). However, it seems contradictory that a model that strongly critiques normativity uses hierarchy as an organising principle. This choice of structure implies that hierarchical (therefore implicitly normative) thinking should guide the critical thinking, pedagogic choices and/or design work of the model's adherents.

Adding to this ideological tension is Lea's (2016) retrospective statement that 'we always argued that our three models of student writing were not hierarchical' (p.90). This directly contradicts the seminal and highly cited 1998 paper, and subsequent statements on 'the privileging of the academic literacies model' by Lea in 2017. In the 2016 work, Lea notes that the initial AL focus on institutional production and validation of knowledge had been supplanted by interest in 'the practices and experiences of individual students and their university teachers' (p.89). It is possible that this increased focus on student-teacher practices might be better served by a different configuration of model elements - perhaps a 'floating' conception of AL considerations to which educators can refer in the design of their interventions, courses and curricula. Unsettling AL from its dominant position in a hierarchical model might give educators theoretical room to implement the normative aspects of teaching, whilst tempering their plans within a 'critical thinking space' (Lillis, 2019) which they can use for reflection, but without the need to pay lip service to AL as privileged across disciplines and contexts.

This tension between hierarchy, normativity and transformation may be crucial in explaining misunderstandings and confusion around AL, but no easy solution is apparent. Both Lea (2016, p.90) and Lillis (2019, p.1) touch on this tension, referring to earlier work by Lillis and Scott (2007). Lea (2016) suggests that normative

elements are 'implicit' in transformative work (p.90), whilst Lillis (2019) mentions the necessity of 'straddling both normative and transformative orientations' (p.1). These caveats notwithstanding, the hierarchical AL model is vague on how to strike this delicate but essential balance, and so it is similarly difficult to see how AL's transformative approach might 'usefully draw on and engage with other approaches to writing' (Lillis, 2019, p.8).

These limitations suggest that further research and clarification might be helpful. As mentioned in Section 1.3 above, Lea (2016) recognises that providing guidance through an AL lens is tricky because 'the very act of fixing and reifying tends to appear normative despite the best intentions of the authors' (p.91). Though Lea is referring to fixing ideas in print, and without dialogue, this narrow interpretation of dialogue may not be the underlying problem. Contributing to the academic literature is itself a form of dialogue, and conversely making a verbal statement to a student can be seen as a form of reification. We would go further in stating that – regardless of the learning developer's intent – the act of providing guidance *is* unavoidably, definitionally to some extent, normative. To address this apparent sticking point, it may be helpful to examine the constructivist epistemology on which AL is based. In the next section we will consider the possibility that sometimes a 'constructivist epistemology undermines effective teaching' (Kotzee, 2010, p.177).

3. *Is AL's underlying social constructivist ethos stifling the development of effective LD pedagogy?*

This section discusses the possibility that the Social Constructivist (SC) lens through which AL sees the world (ontology) and how we can understand the world (epistemology) limits its ability to generate effective pedagogy, even if only as a 'design space' (Lillis, 2019). For this paper, we align with Shay's (2008) Packer and Goiceochea (2000) inspired reading of social constructivism as combining a 'socio-cultural strand which emphasises the situatedness of practice and the constructivist strand which emphasises the constructedness of knowledge' (p.596). This seems broad enough to capture the 'sources' of AL as set out in the appendix of Lea and Street (1998, p.172), especially the strong influence of New Literacy Studies which Street (2012) confirms is embedded in socially constructed epistemological principles. Lillis and Scott (2007, p.11) also cite Latour and Woolgar's (1986) work on

the sociology of knowledge as an influence on AL research. This is significant as this interpretation (which Latour later rejected) uses a 'strong' position on social constructivism in which '*there is no reality* independent of the words … used to apprehend it' (Latour and Woolgar, 1986, p.312) [our italics].

3.1. Academic Literacies as 'knowledge blind'?

As discussed in Section 2, AL researchers have grappled with how to 'teach a disciplinary form without inducting students into normative genres' (Hilsdon, Malone and Syska, 2019, p.22). Researchers in the sociology of education have explored ideas relevant to this tension, arguing that disciplinary forms of knowledge shape the ways in which such knowledge is communicated, in turn shaping the social conventions and practices which are a focus of AL. Indeed, Hilsdon, Malone and Syska (2019) cite Johnson, who explores ways to connect the AL focus on disciplinary practices with disciplinary forms of 'subject knowledge' (p.19). Johnson (as cited in Hilsdon, Malone and Syska, 2019) draws upon Maton's (2013a and 2013b) work, that is critical of social constructivism, as a potential way to understand discipline specific knowledge structures and achieve a 'balance of these two forms of knowledge' (p.22). It is this idea of the role of knowledge in LD theory and practice that forms the focus of this section.

Maton (2013a) challenges thinking in much current educational research – and in particular SC work – in claiming that SC is 'knowledge blind' (Maton, 2013a, p.9). He argues that the SC perspective deems knowledge as processes of knowing and relations between knowers, rather than as an object in itself. As a result, SC oriented studies struggle to focus on knowledge structures, by which we mean curricular content and how it is 'organised, sequenced, expressed, assessed, and valued' (Clarence and McKenna, 2017, p.39). Using SC perspectives therefore entails that 'knowledge as an object is obscured' (Maton, 2013a, p.9). Given the AL focus on 'meaning making' processes within the context of 'issues of identity and the institutional relationships of power and authority' (Lea and Street, 1998, p.157), this has clear implications for AL. Indeed, it seems AL is arguably illustrative of a theory in which 'knowledge is reduced to a reflection of social power' (Maton, 2013a, p.9). One consequence of this, Maton argues, is that education informed by such a view

'proceeds as if the nature of what is taught and learned has little relevance' (2013a, p.9).

A lack of attention to knowledge as described by Maton is a potential weakness in the AL model. Indeed, Clarence and McKenna (2017) highlight the fact that knowledge structures interact with 'socially situated and value-laden contexts such as academic disciplines' (p.39) but crucially are not reducible to these contexts. In fact, it seems that practices and knowledge structures co-construct one another and are 'always connected' (Maton and Moore, 2010, as cited in Clarence and McKenna, 2017, p. 39) in a dialectical manner. It is worth considering, then, the extent to which such potentially 'knowledge blind' approaches are effective in pedagogy.

3.2. Examining evidence on the effectiveness of AL informed pedagogy

To address concerns about the practical application of AL, case studies of AL-informed 'praxis' in 'pedagogy and curriculum design' have been produced (for example, see Lillis et al., 2015 and Wrigglesworth, 2019). These studies offer rich ethnographic, action research or case study based findings offering perspectives on specific contexts. The studies in Lillis et al. (2015), for example, focus on individual accounts of practice, 'perspectives on what constitutes transformative design' (p.17) and more reflective accounts from the field. Like Lea and Street's (1998) original study, these accounts provide rich descriptions of LD activity, but also are 'not based on a representative sample from which generalisations could be drawn' (p.160). As a result, to address concerns about the effectiveness of AL informed pedagogy raised in Section 3.3, it would be useful to have more generalisable evidence of the effectiveness of praxis generated by 'multiple research philosophies' of the kind called for by Fallin (2024, p.166).

3.3. Looking at wider research on the effectiveness of SC informed pedagogy

In place of such findings from AL itself, this section reviews some provocative evidence from wider fields of educational research, including science education and multi-media learning, which use both qualitative and quantitative methods. These

studies suggest weaknesses in pedagogical approaches informed by constructivist and social constructivist epistemology. This research is taken from other educational contexts, so is not offered as a direct refutation of AL informed work. It is instead offered to ensure that thinking in LD is informed by a wide range of available research which may enhance our practice.

The field of science education is a rich source of mixed methods research, and some substantial and longtiduinal studies are available. One might object that science education is not AL, but the essence of AL informed approaches is to be sensitive to context, and to avoid 'knowledge-blindness', we argue that contextual considerations need to include how disciplinary practices and disciplinary knowledge dialectically co-construct one another. The studies outlined below focus on constructivist pedagogy; an umbrella term for specific approaches including discovery learning, experiential learning, and problem/project/inquiry based learning. These approaches frequently emphasise SC elements of interaction and social knowledge construction, so seem somewhat comparable to AL influenced methods used in LD practice. Indeed, case studies of AL practice include various examples of exploratory and inquiry oriented techniques (Lillis et al., 2015), including explicitly 'experiential' pedagogy (Badenhorst et al., 2015, p.99).

Drawing on his philosophy of education perspective, Matthews (2020) makes some emphatic critiques. He first asserts that discovery learning 'is demonstrably a complete pedagogical failure as well as being philosophically naive' (Matthews, 2020, p.50). As support for its pedagogical weaknesses, he cites a 2004 study by Mayer which 'reviewed an extensive body of research on constructivist [mainly discovery] pedagogy and concluded that it did not work, and where it did work, it worked in virtue of departing from constructivist principles' (Mayer, 2004, as cited in Matthews, 2012, p.10). Matthews (2012) consolidates this argument with support from Kirschner, Sweller and Clark (2006) who claim '[a]fter a half-century of advocacy associated with instruction using minimal guidance, it appears that there is no body of research supporting the technique' (p.83). Education Studies researchers Kirschner, Sweller and Clark (2006) (thus Social Scientists closely aligned with proponents of AL, and not 'hard' scientists) found from their survey that across a variety of disciplines, 'strongly guided' (normative) approaches, such as those using worked

examples or process worksheets alongside tips and 'rules of thumb' provided by teachers, were more effective than minimally guided ones (p.80). The approaches found to be more effective in this research aligns far more closely with an AS, rather than an AL, orientation.

The Kirschner, Sweller and Clark (2006) and Mayer (2004) studies are thorough and wide-ranging surveys of empirical research, but are admittedly somewhat dated. However, more recent findings from advocates of constructivism also raise concerns about its effectiveness. Despite arguing from a pro-constructivist perspective, Boon, Orozco and Sivakumar's (2022) research into constructivist project-based learning found that 'the results of this educational approach are often below expectations' (p.2). These expectations relate to various educational goals, including development of students' 'higher-order thinking' (Boon, Orozco and Sivakumar, 2022, p.16), a concern relevant to AL and LD more broadly. The outcome of Boon, Orozco and Sivakumar's (2022) study proposes increased use of a SC notion of 'scaffolding' to reinvigorate these constructivist approaches. However, it would be easy for educators to read this as a call for a more 'strongly guided' approach as advocated in the non-constructivist findings of Kirschner, Sweller and Clark (2006), Mayer (2004) or Matthews (2012, 2020). Indeed, Sweller, Kirschner and Clark (2007) responded to commentaries on their 2006 research by arguing that the [then] 'more recent emphasis on "scaffolding" ... has been forced by evidence concerning the ineffectiveness of "pure" PBL [problem-based learning] and IL [inquiry learning] without scaffolding' (p.117). Similarly, in Perkins' (2006) cautious defence of constructivism as a 'toolkit rather than a credo' (p.34), he advocates a strikingly wide interpretation of the constructivist approach. Perkins' (2006) interpretation explicitly permits 'departing from constructivist principles' (p.34) to be effective, and so in fact aligns with Mayer's non-constructivist (2004) findings above. As evidence of this claim, Perkins (2006) grants that

> If a particular approach does not solve the [pedagogical] problem, try another – more structured, less structured, more discovery-oriented, less discovery oriented, *whatever works* [...]. Teaching by telling may work just fine (p.45). [our italics]

3.4. Constructivism as ideological commitment

Following Perkins' (2006) interest in what works, it is important to note that critics of constructivism nevertheless support student-centered approaches. Indeed, Matthews (2020) makes clear that learners' 'prior knowledge', 'understanding' and 'engagement' can also be priorities in non-constructivist pedagogy (p.61). Indeed, Matthews (2020) acknowledges an overall positive outcome of the dominance of constructivism in education in raising awareness among educators of the 'human dimension of science' and research (p.62). However, he emphasises that such insights are also features of some non-constructivist perspectives, including many which have existed since the time of Socrates. Indeed, Matthews (2020) concludes with the damning claim that 'everything good in constructivism has been long known, while most, if not everything novel is mistaken and misguided' (p.62). It is worth quoting Slezak (1994) at length here, who outlines the problematic implications of deriving a pedagogical approach from the analysis of social power relations (which is a fundamental aspect of an SC inspired AL):

> If beliefs are intrinsically the products of 'external; factors such as social causes and interests rather than 'internal' considerations of evidence and reason, then it is an illusion to imagine that education might serve to instill the capacity for critical thought [...] On these views the very distinction between education and indoctrination becomes otiose; ideas are merely ideology, and pedagogy is merely propaganda (Slezak, 1994, p.266 as cited in Matthews, 2020, p.60).

Even proponents of constructivism caution that 'often it comes across as more of an ideology than a methodology' (Perkins, 2006, p.34), simplistically serving 'to distinguish the good guys (constructivists) from the bad guys (traditionalists)' (Sjøberg, 2010, p.485). Critics like Matthews go further and speculate whether, in the face of contrary evidence, adherence to the notion of constructivism constitutes 'a statement of faith' (Matthews, 2020, p.52).

It is possible to argue, as Spiro and DeSchryver (2009, p.106) do, that evidence against the effectiveness of constructivist pedagogy is only relevant to science education – or at least to 'well-structured domains' such as certain aspects of maths or physics. They contrast these areas of study with 'ill-structured domains' like the

arts, social sciences or humanities which tend to be more 'indeterminate, inexact ...and in various ways, disorderly' (Spiro and DeSchryver, 2009, p.107). Spiro and DeSchryver (2009) claim, therefore, that constructivist pedagogy is valuable in 'ill-structured domains' as precise information with which to instruct students is not available in a context of such 'irregularity' (p.107). However, Kyun, Kalyuga and Sweller (2013) contend, using a study of worked examples in English Literature, that 'there is no evidence that learning and problem solving differ substantially depending on the learning domain' (p.389).

Interestingly, Kyun, Kalyuga and Sweller (2013) find that the effectiveness of using worked examples varies depending on the level of learner knowledge: 'Only low knowledge learners require worked examples. For higher knowledge learners, worked examples are unnecessary and, depending on levels of expertise, learners may gain more from solving problems' (p.401). This empirical evidence of 'the expertise reversal effect' (Kalyuga et al., 2003) might support adoption of an AL derived approach of questioning and contestation in cases where learners already have a strong level of competence. However, this seems to conflict directly with Lillis and Tuck's (2016) intended use of AL: 'What Ac Lits seeks to explicitly avoid is the idea that students first need to learn "the basics" and only then can be exposed to a pedagogy which leaves space for questioning and change' (p.34).

The implied claim that non-AL pedagogical approaches leave no room for questioning is not evidenced in Lillis and Tuck's 2016 article, and seems resonant of a straw man in which non-constructivist approaches 'are caricatured into a simplistic style, the vast majority [of critics of constructivism] would not endorse' (Krahenbuhl, 2016, p.100). It is not clear whether Lillis and Tuck support teaching of 'the basics', but they do explain that they do not want student questioning to be 'seen as a distraction'. They warn against creating conditions where questioning is 'infinitely postponed – or reserved only for those already admitted to academic 'inner circles' – and that the identities, knowledges and semiotic resources which student writers bring from outside the academy are gradually left behind, to the detriment of all' (Lillis and Tuck, 2016). The implied claim that, in taking non-AL approaches, students' ability to question will be 'left behind' is not directly supported with evidence or reference to other sources of evidence in that text, so, crucially for our argument, stands more as

an ideological commitment than a well-supported position in this case. Such evidence would be useful as Lillis and Tuck's scepticism of teaching 'the basics' seems to conflict with Kyun, Kalyuga and Sweller's (2013) findings. Indeed, the idea of using a pedagogy which is sensitive to learners' competence level (worked examples at low levels, more open problem-solving at higher levels) seems to support an AL aligned philosophy of encouraging students to 'generate rather than study externally presented answers' (Chen, Kalyuga and Sweller, 2016, p.159). However, research evidence only supports the more exploratory approach once learners reach an appropriate stage of development. Importantly, there is no stated restriction on students asking questions at any level in these expertise-sensitive approaches.

This analysis suggests challenges for AL: of escaping the seeming contradictions of teaching without knowledge, of saying 'don't be normative' without being normative, and of supporting an 'ideologically informed' approach (Wrigglesworth, 2019, p.7) with persuasive evidence.

4. Escaping the contradictions?

One can argue that research by the above critics of constructivism fixates on an AS type, normative commitment to 'the way things are done' in contrast to AL's privileging of an emancipatory orientation. However, this seems to ignore the role of knowledge in learning (as discussed above) and reiterates the hierarchical, normative contradiction within the model: students should do things any way they want – 'as long as it's the privileged AL way'. This is a difficult position which critical theorists such as Biesta (2017) acknowledge. For example, in Biesta's (2017) analysis of Freire's *Pedagogy of the Oppressed* (1968), he highlights the contradiction which creeps into emancipatory approaches, where in some ways 'Freire himself operates as a [conventional, normative] teacher, not only by telling (other) teachers what they should and should not do, but also by expressing strong claims about the allegedly true nature of human beings' (p.59).

However, in contrast to calls to attend to knowledge (see Maton, 2013a, 2013b), the alternative Biesta (2017) proposes involves a rejection of knowledge because 'knowledge is not the way of emancipation' (2017, p.66). Unfortunately, no guidelines are provided as to operationalising this insight as his thesis (derived from Rancière) is

not intended as a 'general theory of education ... or dynamics for instruction' (2017, p.63). This contrasts with more pragmatic perspectives which hold that 'education cannot get off the ground unless we grant teachers some sort of epistemic authority' (Pendlebury, 2005, as cited in Kotzee, 2010, p.182).

Perhaps a middle ground is possible, which retains AL's critical lens, but equally accounts for the role of knowledge in pedagogy. In a context where social constructivist informed ideas, such as AL, are influential, it is important to consider how ideological considerations influence *all* pedagogic models – including interrogating hierarchy and contradictions when theyoccur in AL. To reiterate, we the authors broadly align ourselves with the ethos of AL. We acknowledge Lillis' (2019) claim that AL was not originally intended to be a practical formula or prescription for pedagogy, and we believe it serves an important function in highlighting the workings of power dynamics in educational contexts. However, there are evidently challenges for learning developers in translating calls to 'work with' the AL model (Lillis et al., 2015, p.8) into practice, and questions remain about the effectiveness of approaches which do so.

In a context where constructivism at times operates as 'more of an ideology than a methodology' (Perkins, 2006, p.34), it is useful to note that strongly guided, yet student-centered teaching has been shown to be both possible and effective in other contexts (Matthews, 2020). Such approaches are possible without relying on a constructivist orientation in which a focus on power relations dominates by hierarchical design. Other ways of understanding the world and how we might learn and teach about it are available. A detailed discussion of them is beyond the scope of this paper, but it is worth considering the value of inferentialist or realist orientations to understanding and pedagogy. Inferentialism aims to balance the need for knowledge with interaction and so 'accommodate both cognitive and sociocultural perspectives on the phenomenon of learning' (Taylor, Noorloos and Bakker, 2017, p.771). Realist interpretations include those from scholars of science education (Matthews, 2020), the critical realism underpinning the work of Maton (2013a), or more nuanced understandings of 'construction' from actor-network theory (Latour, 2005). Latour, for example, has fundamentally changed his epistemological stance since his 1986 work with Woolgar on the sociology of knowledge. In his 2005 work he

rejects his earlier 'strong' SC position that 'reality is constituted through discourse' (Woolgar, 1986, p.312). Learning developers might wish to consider the extent to which this strong SC understanding of the world, which forms part of the foundation for AL thinking (Lillis and Scott, 2007, p.11), aligns with their own. We believe there are legitimate questions to ask in a context where, as Latour (2005) boldly claims, 'social theory has failed on science so radically that it's safe to postulate that it had always failed elsewhere as well' (p.94).

Conclusion

This theoretical analysis set out to elaborate our concerns with the structural coherence of the AL model, and to investigate apparent confusion over its relationship to pedagogy in LD. AL has rightly been influential in revealing how power dynamics impact student writing in institutions and how this might manifest in various written genres. However, we argue that the hierarchical structure of the model cannot resolve the tensions between its constituent, yet conflicting, normative and transformative orientations. We also express concern about the pedagogical limitations entailed by the 'knowledge blind' (Maton, 2013a, p.9) nature of AL and the social constructivist epistemology on which it is based. In the absence of extensive critical scrutiny of the link between constructivist thinking and pedagogical practice within the LD literature, we drew upon research from the wider educational literature to critique 'knowledge blind' pedagogical approaches, and the empirical evidence for their limitations in promoting learning. Finally, we highlighted the ideological dimension which may influence this adherence to constructivist thinking in education. Further research, might (like Clarence and McKenna, 2017) explore positive, student-centred contributions which realist, or critical realist informed, approaches could make to LD, and how these could be synthesised with the important social insights yielded from AL.

We anticipate that animated and evidence-based responses to these concerns can and will be made. However, we feel it is important to raise these points which, in our view, are under-researched in the learning and educational development literature. Even if we ultimately reject them based on stronger counter-evidence, the process of

doing so will consolidate our thinking and the effectiveness of our LD practices and evolving pedagogical approaches.

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