



Learning-Teaching Autonomy in Accelerating Academic Literacy Development

Ursula McGowan¹ ¹School of Education, The University of Adelaide Corresponding author email address: <u>ursula.mcgowan@adelaide.edu.au</u>

A peer reviewed short paper for a presentation at the International conference on Models of Engaged Learning and Teaching (I-MELT) in Adelaide, 11-13 December 2017. Available from www.imelt.edu.au

Abstract

Research in the area of supporting students' academic literacy development has pointed to the inadequacy of generic approaches delivered as remedial support services, and called instead for the integration of the teaching and learning of academic literacy into discipline content courses. Successful models tended to involve collaboration between discipline and communication specialists. However, collaboration is resourceintensive and therefore unlikely to be sustainable unless mechanisms are in place that provide for progress from initial dependence on the adviser's expertise towards learner and teacher autonomy. Two frameworks based on Models of Engaged Learning and Teaching (MELT) were designed for achieving this. The first uses the pentagon arrangement of the MELT facets to visualise the conceptual basis for a self-help tool for students to use for Accelerating Academic Literacy Development (AALD). The second, ALTA (Academic Learner and Teacher Autonomy) presents the MELT facets as a continuum of increasing learner-teacher autonomy. The ALTA framework is applied in my research to trace evidence of a STEM discipline lecturer's autonomy in taking ownership of the collaboratively designed and implemented AALD pedagogy.

Introduction: Context and the Use of MELT

In the current context of internationalisation of higher education, the continuing development of students' academic language during their undergraduate studies has become a crucial issue for Australian universities (McGowan, 2008). International students with an overall entry-level English language score of 6 on the International English Language Testing Service (IELTS) scale are expected to be able to communicate effectively in familiar contexts:

IELTS 6: Competent user: Has generally effective command of the language despite some inaccuracies, inappropriacies and misunderstandings. Can use and understand fairly complex language, particularly in familiar situations (IELTS 2015 p.3)

However, within the unfamiliar context of study at an Australian university, international students must, in the first instance, continue to develop their own oral and written English fluency. This requires extending their basic vocabulary, and their confidence, by participating in conversations with proficient speakers of English and also by reading and practising their general English writing skills. In addition, they must develop not only the language and conventions of 'academic literacy' that apply broadly across the higher education culture of research, but also the specialist terminology and language patterns commonly used within the discipline of their study. The ability to read and use discipline-specific language and conventions in their writing is crucial for students in building their knowledge, and also for demonstrating their learning in written assignments (Rose & Martin, 2012; Coffin & Donohue, 2014; Wingate, 2015). In this respect, non-native speakers of English are not alone.

Native speakers of English also experience discipline-specific language and conventions as a *new language* when they begin their university studies. They too need to learn to understand and use previously unfamiliar specialist language and conventions, including citing and referencing conventions that characterise written work in the university's research environment. Furthermore, as students move from one subject, or one discipline, to another, both native and non-native speakers of English are likely to encounter a confusion of different approaches to language use and writing conventions. All students need to add to their understanding of basic academic literacy in order to conform to demands of different 'literacies' they encounter during their undergraduate studies (Lea and Street, 1998; Cope and Kalantzis, 2000; Tribble & Wingate, 2013). Mastery of literacy is also vital for all students in the precipitous tasks of achieving academic integrity and avoiding inadvertent plagiarism in their written work (Vardi, 2012; McGowan, 2008) and, over time to 'legitimate' full membership of their discipline (Maton et al., 2015).

Traditional provisions of extra-curricular study skills support services for university students (Chanock, 2011a) have been widely challenged in the 21st century. Remedial support services have been found to be inequitable and ineffective (Dunworth, 2010; Wingate, 2006, 2015). On the one hand, they failed to reach many of those who needed help, and learners who did access such services were not necessarily empowered with the ability to develop autonomously. While Australian Academic Language and Learning (ALL) advisers have helped many individuals in one-to-one consultations, group workshops and collaborative work with academics, most insistent efforts to replace remediation have been spearheaded by ALL advisers and researchers themselves (Chanock, 2011b).

The concept of full curriculum integration was based on the premise that the most effective teachers of discipline-specific literacy would be the discipline academics themselves, in collaboration with academic

I-MELT, 11-13 December 2017



language and learning specialists (Arkoudis, 2014; Hunter & Tse, 2013; Wingate et al., 2011). However, the possibilities of acceptance, implementation and long-term adoption of curriculum-integrated literacy development programs have been impeded by multiple factors (Hunter & Tse, 2011). Barriers have ranged from on-going costs of collaboration in curriculum design and teaching, to resistance by academics as well as students, who fear that time spent on language must decrease their engagement with content.

This paper outlines a learning and teaching approach I have designed to address the language-content dichotomy. It is based on the Systemic Functional Linguistics (SFL) theory that posits language as an integral 'constituent' of content knowledge building (Halliday 1993; Halliday and Martin 1993; Cope & Kalantzis, 1993; Martin, 1993; Rose & Martin, 2012; Coffin & Donohue, 2014; Maton et al., 2015; Wingate, 2015). This approach is presented as a simple self-help tool for *accelerating academic literacy development* (AALD) that demonstrates how the reading of academic texts could serve students simultaneously for learning discipline *content* on the one hand and the *language* for writing assignments on the other (McGowan, 2005; Rose and Martin, 2012). The AALD *tool* was teamed with an AALD *pedagogy* designed to foster *academic learner-teacher autonomy* (ALTA). The tool and the pedagogy are conceptualised in two frameworks (pp7-8 below) adapted from Models of Engaged Learning and Teaching (MELT).

The first, AALD for the individual learner's academic literacy development, is modelled on the MELT Pentagon (RSD website 2017). The second, ALTA (Academic Learner and Teacher Autonomy) is an adaptation of the MELT Matrix structure (Willison et al., 2017) that presents the MELT facets as a continuum of increasing learner-teacher autonomy.

Practice and Theory Gap

While there is increasing evidence in the literature of successful collaborative efforts in embedding or integrating academic literacy, such programs have tended to be *rich and complex*, but have also been resource intensive, and dependent on specific champions with personal qualities of motivation, expertise, energy and persuasive powers. Such programs have been prone to being abandoned when the energy or funding runs out (Arkoudis, 2014).

There is a dearth of literature that emphasises practical *language learning strategies* that may be easily learnt by students, and *pedagogies* that are capable of being adopted and applied independently by discipline specialists following an initial collaboration with an academic literacy adviser. To promote sustainability, there is a need for the development and evaluations of strategies that explicitly target the



development of teacher autonomy in curriculum integration, are both simple and intuitive, and able to reinforce the curriculum subject matter rather than divert from it (Arkoudis, 2014:11).

Approach: Learner-Teacher Autonomy

The AALD *tool* is my own adaptation of SFL-based genre pedagogy (Cope & Kalantzis, 1993; Martin, 2009; Martin & Rose, 2012; Tribble & Wingate, 2013). It is both simple and intuitive for students to grasp and to apply in their written work. It fosters learner autonomy, as it has the potential to be re-applied in any other context where written work is required, from different assignment genres in the same content area, to other academic disciplines, and beyond, to the workplace.

The accompanying AALD *pedagogy* draws on active learning strategies for learning by discovery. It was collaboratively designed, combining my specialisation in language pedagogy with a lecturer's expertise in learning and teaching within a STEM discipline. The ALTA framework captures the learning progress of both students and discipline lecturers from their initial *dependence* on guidance and collaboration, to self-confidence and eventual autonomy, where students adapt the use of the AALD tool to wider contexts, and staff adopt - and adapt - the AALD pedagogy to suit different courses and the levels of their students' academic literacy development.

My current research goal is to identify possibilities and challenges for the sustained implementation of the AALD in a STEM discipline of an Australian university.

The AALD tool

For a literacy intervention to be accepted by students, it must fill a need within their study, be simple enough to be learnt quickly, and effective enough to reward their engagement with it. Therefore, the AALD method was developed as a minimalist tool that foregrounds language in use rather than grammatical rules. Thus, the AALD mirrors the natural language acquisition of mother tongue development (Hasan & Perrett, 1994, p.308 ff) but benefits from linguistic insights gained by the learner through performing genre analysis.

The AALD tool, as demonstrated in the MELT framework, puts language at the centre of learning, where the principle of the MELT facet of 'communicating' is stated as 'a dialogue':

'When **reading** we relate new content to our existing knowledge to form new views. We also learn to apply the discipline's 'common language' for communicating our knowledge in **writing**.'



The other five facets are arranged around this centre, and outline how the learning of discipline-specific language and literacy takes place through a cycle of 'finding', 'evaluating, 'organising', 'synthesising' and 're-using' language. This can help a student accelerate the intuitive absorption of a language, by deliberately but discerningly adding a harvest of words and phrases to their stock of vocabulary. Similarly, learners can 'harvest' academically valued sentence structures for use in their existing range of grammatically sound expressions; and they can also learn from the model of the whole document how the specific genre of an evidence-based paper is typically structured in their current field of study.

The AALD is a simplified, self-help genre analysis methodology. It does not expect students to know the *naming* of different genres, but simply shows how to imitate them. In this way, students learn through immersion, while at the same time being conscious of doing so, and also of their own power to speed up the process by 'harvesting' (McGowan 2005, 2008). It is not a difficult process to learn. However, it is only likely to be accepted by a majority of students if the rewards include meaningful assessment outcomes, linked to explicit teaching and academic performance expectations that indicate a level of value placed on the achievement of academic literacy by the lecturer, the overall course, and in the long run, the institution.

The AALD Pedagogy

Similarly, for academics to accept a pedagogy for the integration of literacy into the teaching of their discipline content, the approach needs to address a compelling learning objective, be simple enough to implement and show rewards for effort expended.

Principles underlying the pedagogy are that the literacy intervention is:

- assessed
- therefore taught
- therefore a teaching objective for literacy learning outcomes, and
- therefore an integral part of the curriculum.

As the AALD draws on the theory of language as integral to the learning of content, the reward for the discipline lecturer would be when students' engagement with accelerating their academic literacy did in fact contribute to better discipline content learning outcomes.



Research Methodology: A Case Study

The case to be examined began with my original collaboration (in 2011) with a STEM discipline lecturer who asked for assistance in integrating the AALD approach into the curriculum of her 2nd year class of 25 students (Amos & McGowan, 2012). The integrated academic literacy focus was retained by the discipline lecturer for successive 2nd year cohorts for three further years. The subsequent handover of the course in 2015 to a second STEM lecturer, a colleague within the same discipline, enabled my case study to be expanded to include a second generation of curriculum integration.

The two MELT frameworks, AALD and ALTA, have been providing guidance to my descriptions and interpretations of the nature and levels of autonomy developed, within their specific contexts, by teachers and learners involved in my study. Thus, the frameworks are contributing to a 'thick' description (Guba and Lincoln, 1989 p.241) for interpreting both *advantages* to be gained, and *challenges* to be taken into account in possible future curriculum development that integrates the AALD approach, whether across year levels, or within a whole department, school, faculty, or even university-wide.

Interim Progress

A major focus for my study is the question of acceptance by academics of a literacy focus as part of their discipline content curriculum. My research is a work in progress. It began with documentation in 2014 of the first STEM lecturer's third year of independently integrating the AALD, and, in the following year, its acceptance and continuation by the second STEM lecturer. Enrolments in the 2nd year STEM course in those two years were between 50 and 60 students. At this stage, interview data from the two STEM academics contain indicators of self-reliance by both academics in taking ownership of the AALD pedagogy, while survey information from a broader range of faculty-based academics suggests that while there is acknowledgment of a need for academic literacy development, there is also reluctance to cede time from their schedule of content 'delivery' to make space for an explicit language focus within curricula.

Where to from Here?

The AALD relies on inducting students into a method for reading academic journal articles, and to use these as models to develop their own academic writing. My tentative prediction is that if this innovation were to be adopted and sustained, it could assist in addressing some major issues for higher education today.

I-MELT, 11-13 December 2017



By focussing on the 'how', rather than on the 'what' of evidence-based writing, the AALD tool and pedagogy are potentially able to support the production of appropriately written academic assignments, and thereby also to reduce the incidence of students' inadvertent plagiarism (McGowan, 2005, 2008; Vardi, 2012). As the AALD approach is demonstrably a transferable learning strategy, it should also be capable of independent deployment by students across other disciplines and in the workplace. It could therefore address both student content learning issues and reported employer dissatisfaction with graduate employees' written communication skills (Birrell, 2006; Arkoudis et al., 2014).

With academic communication as one of the six key facets of the research skill development (RSD) framework, my proposed prediction complements evaluation findings by Willison (2012: 905) that explicit engagement with research skills development during certain undergraduate courses had been found 'useful' for other subjects studied, and 'especially for employment'.

However, the question of what it would take for students to become autonomous users of the AALD tool will require a longer-term study of implementations of the AALD learning and teaching approach.



References

- Amos, K., & McGowan, U. (2012). Integrating academic reading and writing skills development with core content in science and engineering. *Journal of Learning Development in Higher Education 4* (Special Edition: Developing writing in STEM disciplines), 1-24. Accessed 26/09/2017 at http://www.aldinhe.ac.uk/ojs/index.php?journal=jldhe_
- Arkoudis, S. (2014). Integrating English language communication skills into disciplinary curricula: options and strategies. OLT Fellowship Final Report. Accessed 12/8/2017 at <u>http://melbourne-cshe.unimelb.edu.au/research/research-projects</u>
- Arkoudis, S., Baik, C., Bexley, E. & Doughney, L. (2014). English Language Proficiency and Employability Framework for Australian higher education institutions. Accessed 12/8/2017 at <u>http://melbourne-</u> <u>cshe.unimelb.edu.au/research/research-projects/teaching/english-language-proficiency-and-</u> <u>employability-framework</u>
- Birrell, B. (2006). Implications of low English standards among overseas students at Australian universities. *People and Place*, 14(4), 53-64.
- Coffin, C., & Donohue, J. (2014). A language as social semiotic based approach to teaching and learning in higher education. *Language Learning 68* (Special Issue 1), 255-286.
- Cope, B., & Kalantzis, M. (1993). Introduction. How a genre approach to literacy can inform the way writing is taught. In: B. Cope & M. Kalantzis (Eds.), *The powers of literacy: A genre approach to teaching writing* (pp. 1-21). London: Falmer Press.
- Cope, B., & Kalantzis, M. (2000). A multiliteracies pedagogy. In B. Cope, & M. Kalantzis (Eds.), *Multiliteracies. Literacy learning and the design of social futures* (pp. 239-248). Melbourne: Macmillan.
- Chanock, K. (2011a). A historical literature review of Australian publications in the field of Academic Language and Learning in the 1980s: Themes, schemes, and schisms: Part One. *Journal of Academic Language and Learning*, *5*(1), A36-A58.
- Chanock, K. (2011b). A historical literature review of Australian publications in the field of Academic Language and Learning in the 1980s: Themes, schemes, and schisms: Part Two. *Journal of Academic Language and Learning*, *5*(1), A59-A87.
- Dunworth, K. (2010). Clothing the emperor: Addressing the issue of English language proficiency in Australian Universities. *Australian Universities' Review 52*(2), 5-10. Accessed 08/08/17 at <u>http://www.aur.org.au</u>.

Hasan, R., & Perret, G. (1994). Learning to function in the other tongue. A systemic functional perspective



on second language teaching. In J. Webster (Ed.), (2011). *Language and education. Learning and teaching in society* (pp. 288-335). London: Equinox.

- Halliday, M.A.K. (1993). Towards a language-based theory of learning. *Linguistics and Education 5*(2), 93-116.
- Halliday, M.A.K. and Martin, J. R. (1993). *Writing Science. Literacy and discursive power*. London: Falmer Press.
- Hunter, K., & Tse, H. (2013). Student perceptions of embedded writing programs taught by disciplinary academics. *Journal of Academic Language and Learning (7)*2, A95-A105.
- IELTS Guide-for-Teachers (2015). Accessed 10/08/2017 at <u>https://www.ielts.org/-</u> /media/publications/.../ielts-guide-for-teachers-2015-uk.ashx
- Lea, M., & Street, B. (1998). Student writing in higher education: an academic literacies approach. *Studies in Higher Education 23*(2), 157-172.
- Guba, E. G., & Lincoln, Y. S. (1989). Fourth generation evaluation. Newbury Park, CA.: Sage.
- Martin J. R. (2009). Genre and language learning: A social semiotic perspective. *Linguistics and Education* (20)1. 10–21.
- Maton, K., Hood, S., & Shay, S. (Eds.), (2015). *Knowledge-building: Educational studies in Legitimation Code Theory*. London: Routledge.
- McGowan, U. (2005). Does educational integrity mean teaching students NOT to 'use their own words'? International Journal for Educational Integrity 1(1). Accessed 20/9/2017 at <u>https://www.ojs.unisa.edu.au/index.php/IJEI/article/view/16</u>
- McGowan, U. (2008) International Students: A conceptual framework for dealing with unintentional plagiarism. In: Tim S. Roberts (Ed.), *Student Plagiarism in an Online World: Problems and Solutions*. Information Science Reference (pp. 92-107). Hershey, New York: IGI Global.
- Rose, D., & Martin J. R. (2012). *Learning to write, reading to learn. Genre, knowledge and pedagogy in the Sydney School*. Sheffield, UK: Equinox.
- RSD Website (2017). Research Skill Development for Curriculum Design and Assessment. Accessed 26/9/2017 at http://www.adelaide.edu.au/rsd/
- Tribble, C., & Wingate, U. (2013). From text to corpus A genre-based approach to academic literacy instruction. *System*, *41*(2), 307-321.
- Vardi, I. (2012). Developing students' referencing skills: A matter of plagiarism, punishment and morality or of learning to write critically?. *Higher Education Research & Development*, *31*(6), 921-930.



Wingate, U. (2006). Doing away with study skills. *Teaching in Higher Education, 11*(4), 457–465.

Wingate, U. (2015). Academic literacy and student diversity: The case for inclusive practice. Multilingual Matters (Vol. 42). Accessed 15/01/2016 at http://ebookcentral.proquest.com/lib/adelaide/detail.action?docID=2000150

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A

- case study. Active Learning in Higher Education, 12(1), 69-81.
- Willison, J. (2012). When academics integrate research skill development in the curriculum, Higher Education Research & Development, 31(6), 905-919. Accessed 19/09/2017 at <u>http://dx.doi.org/10.1080/07294360.2012.658760</u>
- Willison, J., Sabir, F., & Thomas, J. (2017). Shifting dimensions of autonomy in students' research and employment. Higher Education Research & Development, 36(2), 430-44. Accessed 15/09/2017 at <u>http://dx.doi.org/10.1080/07294360.2016.1178216</u>.

I-MELT, 11-13 December 2017







Ursula McGowan 2017

ACCELERATING ACADEMIC LITERACY DEVELOPMENT 'When in doubt, return to the centre'



AALD is an adaptation of the MELT (Models of Engaged Learning & Teaching) pentagon <u>www.melt.edu.au</u>, designed to capture the active learning of a process for Accelerating Academic Literacy Development by Ursula McGowan August 2017. Contact <u>ursula.mcgowan@adelaide.edu.au</u>





ALTA (Academic Learning-Teaching Autonomy) Framework

for the Learning and Teaching of Accelerating Academic Literacy development (AALD)

	Novice learner Follow		Self-directed learner		Learner-Teacher	
			Improvise		Initiate	
Facets	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Prescribed learning	Bounded learning	Scaffolded learning	Self-actuated learning	Open learning	Discipline building
	Dependent learner		Self-directed learner		Autonomous learner	
Embark & clarify Find & Generate	 responds to prompts and questions engages in closed learning tasks, class activities 	 chooses from a range of available tasks collects and records required information/data from sources, based on structured guidelines receives feedback from mentor / teacher 	generates questions/aims/ hypotheses framed within structured guidelines collects and records self- selected information/ data, seeking feedback from mentor / collaborator / teacher	generates questions/aims/ hypotheses based on experience, expertise and literature collects and applies information in knowledge building, collaborating with mentor / peers	 as self-directed teacher Identifies gaps in knowledge development and articulates learning- teaching development initiatives 	 taking a leadership role in educational practice and research articulates directions for innovations and/ or research that expand or direct the field of knowledge
Evaluate & Reflect Organise & Manage Analyse & Synthesise	- applies prescribed criteria and structure -interprets given information, synthesises knowledge into prescribed formats	- evaluates, reflects & manages information, and synthesises ideas, - recognising new perspectives within structured guidelines	- evaluates, reflects & manages information, and synthesises ideas to - seeks feedback from mentor / collaborator / teacher	- evaluates reflects & manages information using criteria developed in collaboration with mentor / peers.	 evaluates information using self-generated criteria based on experience, expertise and the literature. 	-generates new learning objectives & processes to satisfy identified needs - and for ideas, practices or interpretations to be implemented by others.
Communicate & Apply	 uses prescribed genre (reading, discussion) to develop and demonstrate understanding from a specified perspective 	 begins to use discipline- specific language and genres (reading, writing, discussion) - applies new information and demonstrates emerging understanding 	 develops discipline- specific language and genres (reading, writing, discussion) applies scholarly understanding -to a different context. 	 uses discipline-specific language and genres (reading, writing, discussion) innovatively applies scholarly knowledge to multiple contexts. 	- changes the conversation within the discipline/field through publicly- available communication of knowledge.	- changes the direction of the conversation across disciplines/ fields.

ALTA is an adaptation of MELT (Models of Engaged Learning & Teaching) www.melt.edu.au by Ursula McGowan, ursula.mcgowan@adelaide.edu.au August 2017.

Terminology is based on RSD7: A conceptual framework for the explicit, coherent, incremental and cyclic development of the skills associated with researching. © Willison & O'Regan, August 2008/October 2015