

Constructing an academic skills toolkit for embedding academic practices

Pamela Thomas

London South Bank University, UK

Nazmin Khanom

London South Bank University, UK

Adebisi Adelaja

London South Bank University, UK

Mohamed Mehbali

London South Bank University, UK

Simon Lambe

London South Bank University, UK

Abstract

This case study explores the successes and challenges experienced while creating the Academic Skills Toolkit¹ for use by academic staff at London South Bank University (LSBU). Based on similar initiatives at Queen Mary University of London (McConlogue, Mitchell and Peake, 2012), the University of Derby (2021) and the University of Huddersfield (Hill and Tinker, 2013), LSBU's toolkit is a database of formative academic skills activities which are available for academic staff to adapt and deliver during lectures and seminars. The case study opens by explaining LSBU's institutional context, including our Curriculum Framework, and the Centre for Research Informed Teaching's (CRIT) role in supporting various features: employability, embedded learning development, pedagogy, inclusivity and assessment. The case study also discusses LSBU's student profile, namely that we have a large proportion of students from non-traditional academic backgrounds. As such, the toolkit's activities have been designed to enhance students' criticality, analysis and confidence in their academic writing in a more general sense. The toolkit is freely available to the public on the internet. The link for this will be given to staff at other institutions at networking events. For the purposes of our institution our team can advise

¹ Academic Skills Toolkit (AST) formerly known as Learning Development Toolkit (LDT)

on its implementation by discussing ways to tailor activities to a given session with individual academics. The toolkit has five key areas: critical thinking development, quantitative analysis development, reading development, reflective development and writing development. The case study describes the elements within the toolkit and explains how it was developed, tested and revised to enhance its usability. It discusses the difficulties faced with building the toolkit within LSBU's existing IT framework and outlines how we ultimately succeeded in generating a comprehensive database of tasks to support student learning.

Keywords: academic skills toolkit; academic skills; embedded learning development; academic staff; teaching and learning; activities.

Introduction

Over the past two decades, many higher education (HE) institutions have experienced an increase in numbers of non-traditional students, yet scholars have suggested that traditional teaching and assessment methods continue to be implemented without considering the changes in the student body (Wingate, 2006; Wingate 2007; Bailey, 2010; Leese, 2010; Kaur, Norman and Nordin, 2017). Non-traditional is an umbrella term that refers to students who come from a family background that does not include experience in HE as well as students with identifiers from a lower social class or who are categorised as minority groups (Chao, Laing and Robinson, 2005; Elmes, 2015; Mowat, 2015). These groups have complex characteristics which overlap with marginalised groups (Mowat, 2015) such as students with disabilities and students who face any form of social exclusion. It includes care givers and care leavers, although statistics show they represent a small percentage of the student body, and the amount is thought to be higher than this in reality (Office for Students, 2021). Furthermore, there has been scrutiny on government's accountability in regard to inclusive practice for learners with disabilities (Shaw, 2021). Within this paper, we are unable to discuss each characteristic and the challenges they face as it is a multifaceted issue and, for this reason, we will discuss non-traditional students in general terms, taking different minority groups into consideration within our discussions.

Previously, non-traditional students were often viewed as 'lacking' and HE institutions employed a deficit model (Wingate, 2006) of instruction (Wilkins and Burke, 2015). Consequently, academic practices were often viewed by core teaching staff as something that should be taught separate to the programme itself (Bailey, 2010). This view is problematic as it detaches content from the writing and is not conducive to inclusive learning as it does not recognise the different levels of academic skills amongst a given cohort. More recently, there has been a wealth of research that advocates the breadth of diversity and strengths such as experiential knowledge that non-traditional learners contribute to HE (McCall, Western and Petrakis, 2020).

London South Bank University's (LSBU) Academic Skills Toolkit (AST) is a response to the university's staff and students' learning and development needs, as outlined in the university's corporate vision to transform lives, communities, businesses and society through applied education and insight (LSBU, 2020). Initially it was part of our 2018-2020 Educational Strategy, 'Helping students to grow', to embed our Educational Framework (EF). More recently this has been developed into the institutional Curriculum Framework 2021, providing a set of key principles which informs curriculum design and the student experience primarily for undergraduate and some postgraduate programmes. The distinct characteristics of the university's Educational Framework and curriculum framework approach encompasses: Employability, Embedding Learning Development, Pedagogy, Inclusivity and Assessment. One key focus for our team as learning developers is embedding learning development into course curricula for all undergraduate students to scaffold their learning (Vygotsky, 1978; Wingate, Andon and Cogo, 2011). The development of the toolkit was borne out of the frustration of repetitive requests from academic staff and students' study skills support. In 2015, a two-year project where the learning development team piloted embedded learning development led to increased first attempt pass rates.

The rationale behind the construction and development

The toolkit is a resource built by learning developers to support academic staff in developing students' academic practices, such as academic writing, reading and critical thinking, as well as quantitative analysis and reflective writing. It includes a range of formative activities that can be used in appropriate settings such as lectures and seminars.

The toolkit contains multiple resources and activities with instructions and guidance for academics to teach independently to their students. Each activity has been designed to be taught as part of a module at various stages. The toolkit is underpinned by concepts of teaching and learning that are research-informed and is guided by pedagogical themes and development areas that overlap with the literature (Wingate 2006; Wingate, 2007; Bailey, 2010; Ashton-Hay and Doncaster, 2021) and is consistent with academic skills in HE. Wingate (2006) presents a dichotomy where generic skills training is referred to as a 'bolt-on' approach and embedded practice, known as a 'built-in' approach (favoured by Wingate), is content focused.

The built-in model develops learning within the subject and discipline and employs a long-term holistic approach (Boud and Falchikov, 2006; Wingate, 2006). Discipline specific discourse is used to support students to enculturate within their discipline in line with institutional principles and, therefore, assists students' academic socialisation (Lea and Street, 2006; Street, 2009).

Embedding learning development is a key priority for learning developers in the Centre for Research Informed Teaching (CRIT) and over the last five years the team has been able to evidence our impact across the seven schools in the university (Thomas and Mehbali, 2017). As a result of our success working with targeted low performing modules that had pass rates of <60% there was an impact in a number of schools: Sports Science went from 43% to 72%, Built Environment from 56% to 90%, Health and Social Care from 30% to 90%. This supported the team to pursue scaling up our embedded support which has led to the construction of the toolkit. The principle of the toolkit is to work as a practical guide for academic staff in teaching students academic practices in which reading, writing and critical thinking are central. Our research informed toolkit is based on learning developers' experiences of activities that have worked well in previous sessions that we have individually delivered and co-taught.

In UK HE institutions there are several challenges that our students face. For instance, they often have difficulty in building analysis which results in opinionated or descriptive writing (Guba and Lincoln, 1994; Hendry, Armstrong and Bromberger, 2012; Hendry, 2016). Students are found to be more receptive when they can observe a clear link between the teaching concepts and their assessment criteria (Biggs and Tang, 2007; Kinesh and Knight, 2013; Biggs and Tang, 2015). The fundamental principles within Biggs

and Tang's (2007) concept of constructive alignment are meaning-making and learner constructed knowledge with learning that is linked closely to the programme outcomes and assessment criteria (Kinesh and Knight, 2013). For this reason, many of the activities in the toolkit require the academic to refer to the assessment criteria when teaching the various academic skills.

The toolkit encompasses some aspects of data analysis in the form of quantitative research methods to identify any pattern, association or relationship between datasets or the comparison of samples. Statistics allow us to perform hypothesis testing, ultimately leading to the acceptance or rejection of the assertion or research question posed at the start. The ability to process, manage and draw tangible significance from a dataset is becoming increasingly important for any industry or business. Given the rapid growth of the competitive global economy, the UK needs to meet the increasing demand for people equipped with valuable quantitative skills. Bean's (2016) report on UK economic statistics highlighted the need for the Office for National Statistics to increase its analytical capability.

Universities play an essential part in the data agenda and a key role in overcoming its challenges (Schulz, 2008). Matthews et al.'s 2016 study evaluated the implementation of quantitative skills in life science degree programmes at several universities in Australia. The authors performed thorough analysis of the curriculum development for quantitative skills underpinned by discipline-specific research and general theories of curriculum design. The study revealed wavering levels of embedding quantitative skills on the various programmes, showing there is room for improvement across the different years to support students better. In particular, the ability to support students transferring their maths skills for their discipline needed attention. It was highlighted that a hybrid model which seeks opportunities to embed and scaffold students' quantitative skills over the programme is valuable to enhance support.

Thus, it is essential to review quantitative skills provision, considering the numerous skills that graduates will need to succeed in a range of industries. It is vital to consider embedding quantitative skills in HE. Harris (2011, 2016) assessed quantitative methods and statistics at degree level and observed the demand for developing quantitative skills within education, social sciences, business, applied science, health and social care and engineering. Harris (2011) concluded that feeding this appetite for quantitative skills can

be demanding, yet also highly rewarding owing to its role in preparing students for employment. Moreover, a report by the Royal Geography Society (2013) demonstrated the importance of student interest and engagement in data and its need to encourage this from school into university. Data literacy is crucial to the outlook of competitive business in all disciplines; having these skills cultivated at university will make students more employable.

The journey of the 'Toolkit Club'

Our journey to develop the toolkit started with numerous requests from the seven academic schools across LSBU. Through discussions, the LD team noticed that we were receiving multiple identical requests, from essay writing and critical thinking through to technical lab reports and drugs calculations. As additional requests came in, with the team already co-teaching, co-creating curricula and delivering embedded sessions across the university, we were able to categorise the requests and began to record the types of sessions that were most requested (see Appendix 1). This led to a small pilot project to develop a range of class-based formative activities for our academic colleagues. As dedicated time was required to devise and develop our resources and to keep the project on track, we held weekly meetings referred to as the "Toolkit Club".

Clark and Sousa (2018) discuss the balance between being creative and disciplined to complete tasks of this nature. During Toolkit Club sessions, we paired up to develop and adapt existing resources which had previously been used for teaching. All these resources were discussed, debated if necessary and reviewed accordingly. Once a range of activities had been created we realised that they needed to be tested and set about scheduling sessions with our departmental colleagues who would be our 'Critical Friends'. We also scheduled a series of CPD Workshops for our academic colleagues from the schools.

Critical Friends and CPD workshops

Our first Critical Friends workshop was held in December 2019 and was extended to the rest of CRIT, which included Academic Development, Digitally Enhanced Learning and the Academic Quality Assurance Team, and was followed up with the Continuing Professional

Development (CPD) sessions with our academic colleagues in December 2020. All sessions were delivered via MS Teams.

These sessions brought to our attention the need to revise the following:

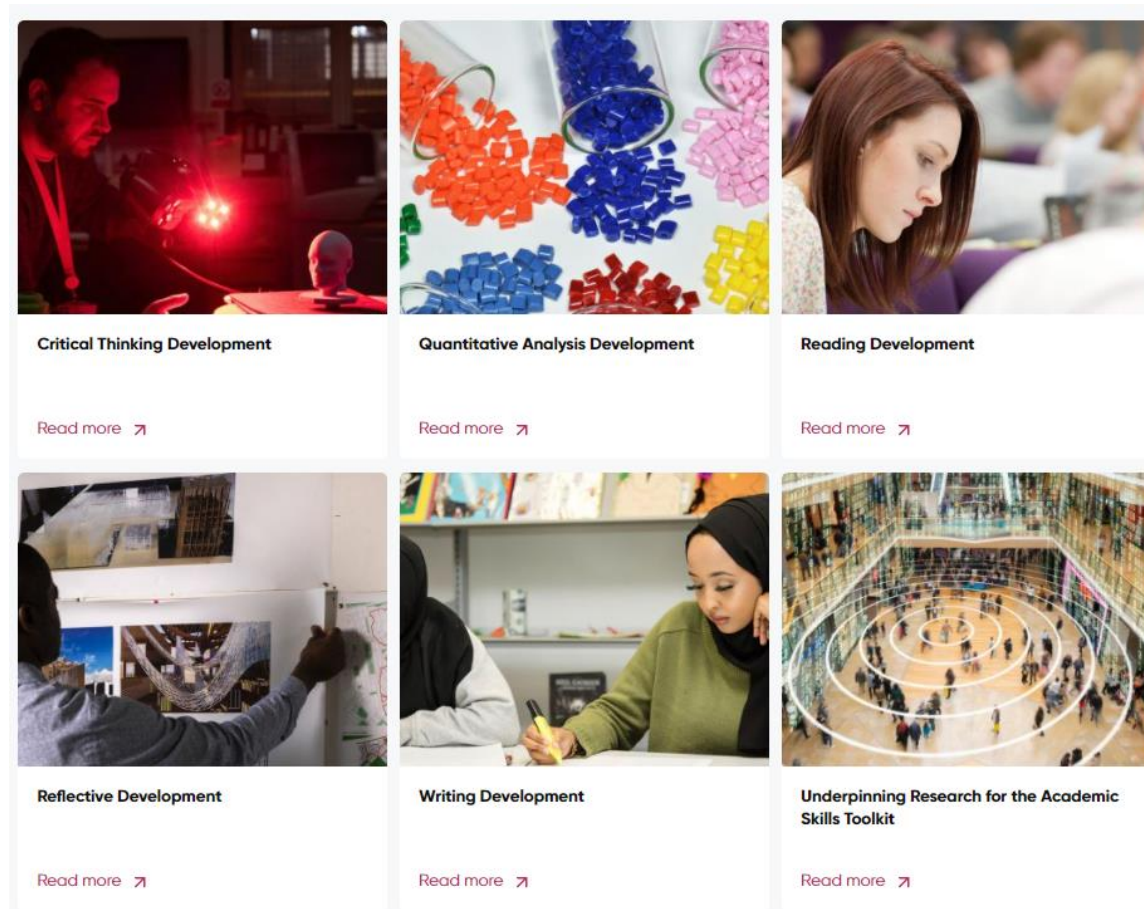
- a) Style and design of the template (see Appendix 1).
- b) Language and purpose of the activities reviewed (see Appendix 2).
- c) Range of activities and additional activities needed to support all academics across the Schools (see Appendix 3).

The CPD sessions delivered to our academic colleagues highlighted the activities that had to be redesigned or redeveloped and directed us to produce additional activities. Here are feedback comments from the session:

- ‘This is excellent and will support staff and students’ (Director of Education and Student Experience, the Institute of Health and Social Care Team).
- ‘Thank you, great resources’ (Associate Professor, The School of Law and Social Sciences).
- ‘This is a great initiative – very keen to see how we can create uptake’ (*PVC Academic Framework*).

Project planning and site design

Following analysis surrounding the need for the toolkit, general project management principles related to design for learning (Lynch and Roecker, 2007) were employed to construct a plan for implementation. Firstly, feedback from meetings held with colleagues from Digital Enhanced Learning (DEL) and ICT served to clarify design, accessibility, and portability objectives regarding what would be feasible for a project of this nature. Secondly, although none of the team had undertaken any formal training in site design, there was an awareness of usability being a fundamental consideration when planning a website (Elkins and Pinder, 2017). Working within the constraints of the existing infrastructure, our intention overall was to avoid overuse of text by including visuals where appropriate to produce a distinctive and user-friendly interface for the project.

Image 1. Screen shot of the toolkit homepage.

As shown in Image 1 (a screen shot of the toolkit home page), the toolkit is mapped under the following themes: Critical Thinking Development, Quantitative Analysis Development, Reading Development, Reflective Development and Writing Development. The section entitled Underpinning Research for the Academic Skills Toolkit provides research informed discussion to support pedagogy related to the academic practices demonstrated in the activities. The toolkit employs scaffolding (Vygotsky, 1978) so students can link their prior learning and skills with the increased expectation.

Projects and Dissertations Supervisor Resources originally designed a standalone Moodle Virtual Learning Environment (VLE) site, further extending the toolkit offering. The toolkit is designed to be accessible on all platforms and devices. Each toolkit activity has a summary sheet in the form of a Microsoft Word file documenting instructions on how to use the resource (see Image 2 as an example). Microsoft Word was chosen as the file format for the summary sheet owing to its proliferation, familiarity, and ease of editing. Associated teaching resources are stored with their activities in folders on OneDrive.

Image 2. Screenshot of the summary sheet from a Literature Reviews activity (Setting through to Outcome).

Literature Reviews 1: Definition and Purpose	
Setting:	Seminar
Level:	Level 6
Activity duration:	20-30 minutes
Guidance:	This leads onto <i>Literature Reviews 2: Planning and Approach</i>
Additional resources:	<i>Literature Reviews: Definition and Purpose worksheet</i>
Outcomes: students should be able to	
<ul style="list-style-type: none"> • define the key ideas of a literature review • discuss the features of a literature review • explore the purpose of a literature review in line with the module assessment criteria 	

Image 3. Screenshot of the summary sheet from a Literature Reviews activity (Pre-task preparation and Steps).

Pre-task preparation:

- Read through the corresponding *Literature Reviews: Definition and Purpose worksheet*
- Ask students to write some preliminary notes regarding their ideas for research ideas

Optional:

- Set-up a Mentimeter word cloud activity for the initial task with the question, 'What are the key ideas of a literature review?'
- Construct a Padlet to collate ideas discussed in the session

Steps to implement the activity:

- 1) Ask students to either contribute to a word cloud (if using Mentimeter) or to share their ideas regarding what they think are the key features or ideas of a literature review. Students can use section 1 of the *Literature Reviews 1: Definition and Purpose* worksheet to complete this.

Challenges regarding generic resources and access

The influence of discipline in shaping teaching and learning content cannot be underestimated (Stark, 2000; Young, 2010). The toolkit consists of generic activities and resources that can be adapted by academics to make them discipline specific and link with respective modules. The main challenge was to avoid ambiguity and jargon so that the toolkit activities were coherent and complete to a point so academics did not need to spend excessive time planning the implementation of these. For this reason, we regularly assist course teams to contextualise content for their specific discipline and assessment.

Feedback generated from team teaching and collaboration is utilised to differentiate toolkit resources for multidisciplinary use.

Additionally, a growing number of educational projects of a similar nature to the toolkit are freely available, meaning that they are accessible to those both internal and external to an institution (Beetham and Sharpe, 2013). Queen Mary's innovative *Thinking Writing* resource (McConlogue, Mitchell and Peake, 2012) and PReSS, the University of Derby's Blog-based recipe cards developed to address the attainment gap (University of Derby, 2021) are just two examples of successful open access repositories. Initially our toolkit was limited to LSBU staff use only, however, more recently it has become open access as it was recognised that practice-sharing and collaboration are central to the team's collegiate approach both internally and with other institutions. The toolkit is now firmly established on LSBU's external facing web platform (see Appendix 4).

Conclusion

Construction of the Academic Skills Toolkit has not come about without its challenges. However, the success of the project is testament to our advocacy for high quality, research-informed practice that enabled us to develop an inclusive multidisciplinary teaching and learning resource for all levels. Currently, use of the Toolkit's precise activities is supporting academics to build knowledge and confidence across modules and courses, resulting in an improved student experience.

The toolkit is freely available on the LSBU website so that all can benefit from our collegiate approach to learning, teaching and assessment. Collegiality is often central to the success of projects of this nature, whether it be through collaboration with members of our team when constructing activities (Toolkit Club), working with departmental colleagues during "Critical Friends" sessions or whilst utilising activities team teaching in a classroom setting. External to LSBU, we presented the challenges and success of the Toolkit at ALDinHE symposia at their annual conference in April 2021 to support benchmarking and peer reviewing. This has allowed us to develop the toolkit further, so it is more comprehensive and easily adaptable for academics and module team members.

Moving forward, we will continue to assess the toolkit to monitor its effectiveness. Learning developers at the LSBU are continuing to work with their respective schools to pilot the activities and ensure that academics feel supported to independently take an embedded approach to academic skills on their modules. We are working on several initiatives with a programme level approach which will equate to forthcoming research. In the meantime, we will continue to collate feedback from different perspectives to maintain critical rigour.

References

- Ashton-Hay, S. and Doncaster, N. (2021) 'Student success and retention: what's academic skills got to do with it?', *Journal of Academic Language & Learning*, 15(1), pp.102-116.
- Bailey, R. (2010) 'The role and efficacy of generic learning and study support: what is the experience and perspective of academic teaching staff?', *Journal of Learning Development in Higher Education*, Issue 2, February, pp.1-14.
<https://doi.org/10.47408/jldhe.v0i2.57>.
- Bean, C. (2016) 'Independent review of UK economic statistics: final report', 11 March. Available at: <https://www.gov.uk/government/publications/independent-review-of-uk-economic-statistics-final-report> (Accessed: 1 September 2021).
- Beetham, H. and Sharpe, R. (2013) *Rethinking pedagogy for a digital age: designing for 21st century learning*. 2nd edn. Abingdon: Routledge.
- Biggs, J. and Tang, C. (2007) *Using constructive alignment in outcomes-based teaching and learning teaching for quality learning at university*. 3rd edn. Maidenhead: Open University Press.
- Biggs, J. and Tang, C. (2015) 'Constructive alignment: an outcomes-based approach to teaching anatomy', in Chan, L. K. and Pawlina, W. (eds) *Teaching anatomy: a practical guide*. Switzerland: Springer International Publishing, pp.31-38.

- Boud, D. and Falchikov, N. (2006) 'Aligning assessment with long-term learning', *Assessment & Evaluation in Higher Education*, 31(4), pp.399-413. <https://doi.org/10.1080/02602930600679050>.
- Chao, K., Laing, C. and Robinson, A. (2005) 'Managing the expectations of non-traditional students: a process of negotiation', *Journal of Further and Higher Education*, 29(2), pp.169-179. <https://doi.org/10.1080/03098770500103572>.
- Clark, A. and Sousa, B. (2018) *How to be a happy academic*. London: Sage Publications.
- Elkins, D. and Pinder, D. (2017) *E-learning uncovered: Adobe Captivate 2017*. St. Augustine: E-Learning Uncovered Inc.
- Elmes, T. (2015) 'Higher education admissions success: what is the value of cultural capital?', *Higher Education Research Network Journal*, 9, pp.11-20.
- Guba, E. G. and Lincoln, Y. S. (1994) 'Competing paradigms in qualitative research', in Denzin, N. K. and Lincoln, Y. S. (eds.) *Handbook of qualitative research*. London: Sage, pp.105-117.
- Harris, R. (2016) *Quantitative geography: the basics*. London: Sage.
- Harris, R. and Jarvis, C. (2011) *Statistics for geography and environmental science*. Hoboken, NJ: Prentice Hall.
- Hendry, G. D., Armstrong, S. and Bromberger, N. (2012) 'Implementing standards-based assessment effectively: incorporating discussion of exemplars into classroom teaching', *Assessment & Evaluation in Higher Education*, 37(2), pp.149-161. <https://doi.org/10.1080/02602938.2010.515014>.
- Hendry, G. D., White, P. and Herbert, C. (2016) 'Providing exemplar-based 'feedforward' before an assessment: the role of teacher explanation', *Active Learning in Higher Education*, 17(2), pp.99-109. <https://doi.org/10.1177%2F1469787416637479>.

- Hill, P. and Tinker, A. (2013) 'Integrating learning development into the student experience', *Journal of Learning Development in Higher Education*, Issue 5, March, pp.1-18. <https://doi.org/10.47408/jldhe.v0i5.172>.
- Kaur, A., Noman, M. and Nordin, H. (2017) 'Inclusive assessment for linguistically diverse learners in higher education', *Assessment and Learning in Higher Education*, 42(5), pp.756-771. <https://doi.org/10.1080/02602938.2016.1187250>.
- Kinesh, S. and Knight, D. (2013) *Assessment @ Bond*. Queensland: Office of Learning and Teaching, Bond University.
- Lea, M. R. and Street, B. V. (2006) 'The "academic literacies" model: theory and applications', *Theory into Practice*, 45(4), pp.368-377. https://doi.org/10.1207/s15430421tip4504_11.
- Leese, M. (2010) 'Bridging the gap: supporting student transitions into higher education', *Journal of Further and Higher Education*, 34(2), pp.239-251. <https://doi.org/10.1080/03098771003695494>.
- London South Bank University (2020) *Our mission, vision and values*. Available at: <https://www.lsbu.ac.uk/about-us/mission-vision-values> (Accessed: 1 September 2021).
- Lynch, M. M. and Roecker, J. (2007) *Project managing e-learning: a handbook for successful design, delivery and management*. Abingdon: Routledge.
- Matthews, K., Belward, S., Coady, C., Rylands, L. and Simbag, V. (2016) 'Curriculum development for quantitative skills in degree programs', *Higher Education Research and Development*, 35(3), pp.545-559. <https://doi.org/10.1080/07294360.2015.1107875>.
- McCall, D., Western, D. and Petrakis, M. (2020) 'Opportunities for change: what factors influence non-traditional students to enrol into higher education', *Australian Journal of Adult Education*, 60(1), pp.91-112.

- McConlogue, T., Mitchell, S. and Peake, K. (2012) 'Thinking writing at Queen Mary, University of London', in Thaiss, C., Bräuer, G., Carlino, P., Ganobcsik-Williams, L. and Sinha, A. (eds) *Writing programs worldwide: profiles of academic writing in many places*. Colorado: The WAC Clearinghouse, pp.203-211.
- Mowat, J. G. (2015) 'Towards a new conceptualisation of marginalisation', *European Educational Research Journal*, 14(5), pp.454-476.
<https://doi.org/10.1177%2F1474904115589864>.
- Office for Students (2021) *Consistency needed: care experienced students and higher education*. Available at:
<https://www.officeforstudents.org.uk/publications/consistency-needed-care-experienced-students-and-higher-education> (Accessed: 25 February 2022).
- Royal Geography Society (2013) *RGS-IBG Social and Cultural Geography Research Group. Annual Report*. Available at: [SCGRG2013reportfinal.pdf](#) (Accessed: 27 June 2022).
- Schulz, B. (2008) 'The importance of soft skills: education beyond academic knowledge', *NAWA Journal of Language and Communication*, 2, pp.146-154.
- Shaw, A. (2021) 'Inclusion of disabled higher education students: why are we not there yet?', *International Journal of Inclusive Education*, pp.1-19.
<https://doi.org/10.1080/13603116.2021.1968514>.
- Stark, J. S. (2000) 'Planning introductory college courses: content, context and form', *Instructional Science*, 28, pp.413-438. <https://doi.org/10.1023/A:1026516231429>.
- Street, B. (2009) "'Hidden" features of academic paper writing', *Working Paper in Educational Linguistics*, 24(1), pp.1-17.
- Thomas, P. and Mehbali, M. (2017) 'Embedding learning development in the curriculum: how, where and why?', *London and Southeast Regional ALDinHE Symposium*. St Georges University, London, December 2017.

University of Derby (2021) *PReSS (Practical Recipes for Student Success)*. Available at: <https://uodpress.wordpress.com/> (Accessed: 25 September 2021).

Vygotsky, L.S. (1978) *Mind in society: the development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Wilkins, A. and Burke, P. J. (2015) 'Widening participation in higher education: the role of professional and social class identities and commitments', *British Journal of Sociology of Education*, 36(5), pp.434-452.

Wingate, U. (2006) 'Doing away with "study skills"', *Teaching in Higher Education*, 11(4), pp.457-469. <https://doi.org/10.1080/13562510600874268>.

Wingate, U. (2007) 'A framework for transition: supporting "learning to learn" in higher education', *Higher Education Quarterly*, 61(3), pp.391-405. <https://doi.org/10.1111/j.1468-2273.2007.00361.x>.

Wingate, U., Andon, N. and Cogo, A. (2011) 'Embedding academic writing instruction into subject teaching: a case study', *Active learning in Higher Education*, 12(1), pp.69-81. <https://doi.org/10.1177%2F1469787410387814>.

Young, P. (2010) 'Generic or discipline specific? An exploration of the significance of discipline-specific issues in researching and developing teaching and learning in higher education', *Innovations in Education and Teaching International*, 47(1), pp.115-24. <https://doi.org/10.1080/14703290903525887>.

Appendix 1

Critical Friends workshop

Template of activities before workshop.

Improving Writing: Paragraphs	
Purpose:	To introduce students to an approach to creating a simple paragraph structure and to review examples in small groups or pairs.
Activity Type:	<ul style="list-style-type: none"> Seminar Suitable for all levels
Activity Time:	30 minutes to one hour depending on text(s)
Outcomes:	<ul style="list-style-type: none"> Develop students' oral skills Enhance students' ability to provide reasoning. Implement an approach to support students improve their academic writing in line with disciplinary knowledge.
Pre-task preparation:	<ul style="list-style-type: none"> Select appropriate paragraphs (from previous student work or journal articles) to adapt this activity to your discipline (one sample per 2 to 3 students) You will need to modify some of these paragraphs so they are missing the topic sentence (examples are available in the additional support section) This could be part of a discussion of a concept (e.g. social justice, diversity, equality)
Steps to implement the toolkit:	<ol style="list-style-type: none"> 1) Divide students in to small groups, according to the number of paragraph samples available (ideally one sample per 2 to 3 students) 2) Ask each group to discuss a given disciplinary concept (e.g. social justice, diversity, equality) for around 5 minutes 3) Begin to explain the structure of an ideal academic paragraph (using object) 4) Explain that topic sentences are extremely important because they provide direction and purpose within a paragraph and an argument more generally 5) Show the students an example of a paragraph that has had its topic sentence removed 6) Allow the students some time to identify the topic of the paragraph 7) Then show the students the complete paragraph. 8) Show the students a second example, again without the topic sentence
Additional Support:	See guide to 'paragraph construction' i.e. topic sentence, supporting sentence, conclusion (see object) and activities

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Template of activities after workshop.

Paragraphs	
Setting:	Seminar
Level:	Levels 3-4
Activity duration:	25 minutes
Guidance:	See 'Paragraph Construction Information Sheet' for elements of paragraph construction/exercises
Additional resources:	Paragraph Construction Information Sheet
Outcomes:	<ul style="list-style-type: none"> To enhance students' ability to provide reasoning to support an argument To implement an approach to support students to improve their academic writing development in line with disciplinary knowledge
Pre-task preparation:	<ul style="list-style-type: none"> Select appropriate paragraphs of roughly 300 to 500 words (from previous student work or journal articles) to adapt the activity to your discipline (one per 2/3 students) Provide examples with and without a topic sentence (see 'Paragraph Construction Information Sheet') Can be part of a discussion of a concept (e.g. social justice, diversity, equality ...)
Steps to implement the activity:	<ol style="list-style-type: none"> 1) In group of 2/3 for five minutes, ask students to discuss a given disciplinary concept related to their discipline (e.g. solar energy, organic vegetables, social media, social justice). 2) Explain the structure of an ideal academic paragraph using the first section in the 'Paragraph Construction Support Sheet'. Make specific reference that topic sentences are extremely important for providing direction and purpose. 3) Show the students an example of a paragraph that has had its topic sentence removed. Allow the students some time to identify the topic and then show the students the complete paragraph. 4) Repeat the process to show the students a second example without the topic sentence. 5) This time, once they have identified the topic, ask them to suggest at least one topic sentence (This can be done in pairs or groups). 6) You can ask students to feedback to the group or ask the groups to swap paragraphs with another group to discuss strengths and weaknesses. <p>Extension activities:</p> <p>For a homework task, an introduction to review in a next session or for a future assessment task, ask students to write a paragraph about a disciplinary concept that they were discussing at the start of the session or a past session. Make sure the concept is not the same as the one given in the previous examples.</p>

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Appendix 2

Examples of critical friends workshop feedback

- Perhaps move 'Additional Support' higher up, under 'Activity Type' so the associated materials are more prominent.

- What is a 'gist question'?

- Some toolkits have quite complex elements buried in the steps. Some might need expanding ('Critical Reading')

- Overall 'editorial' voice?

(purpose section) is unclear → didn't always match the content of the toolkit

Need to be specific to talk to the lect

Statistical Problem-solving Cycle

Purpose:	To introduce the statistical problem-solving cycle, known as the PCAI-cycle, a practical approach that students can follow to complete their statistical investigation or quantitative methods research project.		
Activity Type:	Seminar	Activity Time:	40 - 50 minutes
	Levels 4 - 7		

Outcomes:

- Should be able to list the four phases of the statistical problem-solving cycle.
- Should be able to describe some phases of the statistical problem-solving cycle.
- Should be able to follow these four phases to complete their statistical investigation project.

Pre-task preparation:

- Find out in the literature and from the internet the definition of the statistical problem-solving cycle, also known as PCAI-cycle.
- Represent graphically this cycle.

Steps to implement the toolkit:

- 1) Divide students into small groups providing at least two definitions of PCAI-cycle.
- 2) Leave students working together completing their diagrams by sharing information.
- 3) Get students to describe all four stages. → to who?
- 4) Ask students to apply the first phase to their individual project.
- 5) Conduct open discussion allowing students to justify their topic choice and the aim of their project.

Extension activity: More able students can either move to the next phase or help their peers.

Additional Support:

- *You may look at a published research paper including statistical investigation, to identify the four phases.
- ** Ensure students able to follow the methodology.

Handwritten notes:
 Is this a necessary activity? → What to do? Should be put down in a really simple diagram? (CR)
 LINK
 Do you need to provide definitions or for lecturers (CR)
 Would be useful to provide some prompt Q's for lecturers (CR)
 What is the next phase? (CR)

Guidance for the tutor:

In order to carry out a research project or a statistical inquiry, students often need to follow the statistical problem-solving cycle, or PCAI-cycle.

Encourage students to discuss and comment the diagram below.

Appendix 3

List of activities: first draft of completed activities

Critical Thinking	Quantitative Analysis
Annotated Bibliographies- Assessing Sources	Data Analysis
Annotated Bibliographies- Implementing	
Effective Examples	Data Collection
Introducing a Critical Appraisal Tool	Descriptive Statistics
	Introduction to Quantitative Research
Introducing Source Credibility	Methods
What is Socratic Questioning	Introduction to Statistics
	Questionnaire Design
Reading	Introduction to the Normal Distribution
	Calculating Probabilities with the Normal
Implementing Jigsaw Reading	Distribution
Introduction to Promoting Analytical Reading	Exploration of the Central Limit Theorem
Close Reading	Introduction to One-Sample t-Tests
Writing	Reflection
Constructing a Mock Report in Class	Reflective Models
Business Report Writing Practice	Strategic Questioning for Critical Reflection
Notetaking for Assessment - Business Reports	
Differences Between Essays and Business	
Reports	
Improving Writing - Formal vs Informal Writing	
Improving Writing - Aligning Structure with the	
Assignment Brief	
Improving Writing - Paragraphs	
Summary Writing	
What is a Literature Review	
Report Writing 1 - Language and Purpose	
Report Writing 2 - How to Structure a Report	

Revised List of Activities

Critical Thinking

Case Study

Qualitative Analysis

Visual Analysis

Theory to Practice for ACI (Praxis)

Evidence Based Practice

Arguments

Reflection

Blog

Understanding Feedback

Miscellaneous

Simplifying the Presentation of

Assessment Brief

Apprenticeships

Quantitative Analysis

Data Commentary

Writing

Writing in your own words

Writing an Abstract L6 and PG

Mindmanager for essays

Functions of Writing: 1) Compare and Contrast

Functions of Writing: 2) Discursive Writing

Functions of Writing: 3) Argumentative writing

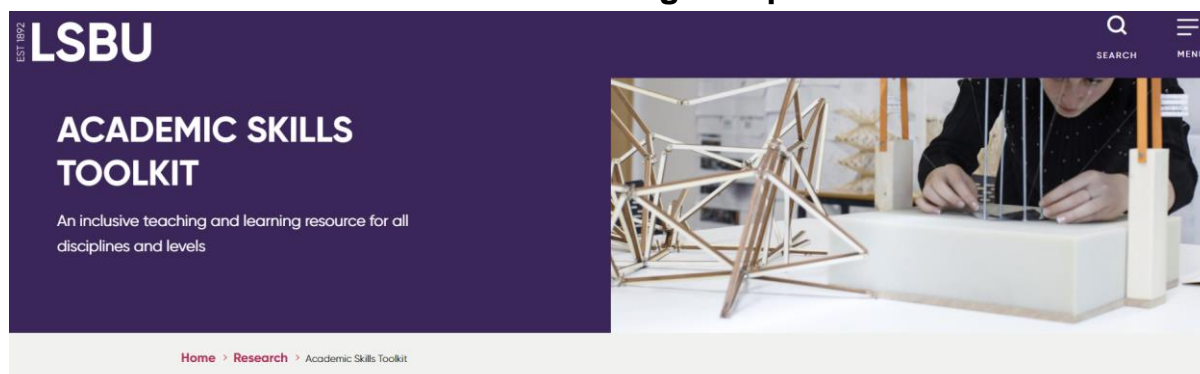
Posters

Reading

Notetaking

Appendix 4

Academic Skills Toolkit – external facing web platform



Welcome to CRIT's Academic Skills Toolkit!

Developed for academic staff, the Toolkit contains activities that you can include in your classes to help scaffold the development of your students' academic practices. They have been created by CRIT's learning developers and have been tried and tested in the classes we teach. Our aim is to share our most effective activities with you so that you can contextualise them to your students' discipline and current learning.

In this section

Research degrees
Research Centres and Groups

[Academic Skills Toolkit | London South Bank University \(lsbu.ac.uk\)](https://lsbu.ac.uk)

Author details

Pamela Thomas is a Learning Developer in the Centre for Research Informed Teaching at London South Bank University, a Senior Fellow of AdvanceHE and Associate Member of the Institute of Leadership and Management. She is responsible for embedding learning development in course curricula using an academic literacy approach to support student writers to navigate and negotiate their way through the academic writing process within their subject-specific discipline.

Nazmin Khanom is a Learning Developer in the Centre for Research Informed Teaching at London South Bank University. She is a Fellow of AdvanceHE, a MA in Applied Linguistics and English Language Teaching and most recently achieved a second MA in Academic Practice in Higher Education. She has been teaching in further and higher education for over 15 years and specialises in the implementation of embedded academic skills and curriculum development in the Institute of Health and Social Care.

Adebisi Adelaja is a Learning Developer in the Centre for Research Informed Teaching at London South Bank University. She is a Fellow of the Higher Education Academy, a member of the Association for Learning Technology and the Institute of Leadership and Management. Her 17 years' experience of teaching in further and higher education has involved facilitating students from a variety of subject disciplines to become independent learners. Adebisi's current research interests include examination of how far computerised forms of learning support critical thinking.

Mohamed Mehbali is a Learning Developer in the Centre for Research Informed Teaching at London South Bank University (LSBU). He is a Senior Fellow of AdvanceHE. He is accredited as the Professional Development Lead by the National Centre for Excellence in the teaching of Mathematics (NCTEM), is a Member of Sigma Network for Excellence in Mathematics and Statistics Support and a Member of the Institute of Mathematics. Since 2015, he leads the Maths and Statistics support provision at LSBU in numeracy skills to nursing students, maths to engineering students and data analysis across all programs.

Simon Lambe is an Associate Learning Developer within the Centre for Research Informed Teaching at London South Bank University. He is a Senior Fellow of Advance

HE, an Associate Fellow of the Institute of Historical Research and an Associate Fellow of the Royal Historical Society. Professionally, he has used his expertise to support students in higher education to enhance their writing and academic skills. He has also worked extensively with academic staff on developing teaching quality and curricula across the university. He is particularly interested in peer-assisted learning (PAL), learning technologies and learning and teaching theory and practice.