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Nick Pilcher & Kendall Richards

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Evaluating 'Study Skills': *what's* the context?

Nick Pilcher [a] and Kendall Richards [b]

[a]The Business School, Craiglockhart Campus, Edinburgh, UK; [b]School of Computing, Edinburgh Napier University, Edinburgh, UK

ABSTRACT

Study Skills in any guise are integral to Higher Education worldwide, existing to help student success. Some argue generic or bolt-on Study Skills do not help with success, others that embedded Study Skills do, but no-one advocates actually evaluating Study Skills in a context of success defined as helping with student educational gain and attainment in their specific subjects. Instead, many evaluate them in arguably inappropriate contexts of a silo or bubble of Study Skills such as attendance or perceived improvements in Study Skills. Indeed, when Study Skills are found effective for success, they are often embedded or delivered in the subject context, but it is not suggested they actually be evaluated in that context. We outline what we consider to be inappropriate contexts for evaluation, and appropriate ones, and outline theory from thinkers such as Mikhail Bakhtin regarding the key role of context and discuss key issues of definitions, silos, and decontextualised metrics. We suggest Study Skills be evaluated by asking: '*What's* the context? to make them effective in helping aim for student success. We suggest ways to do this, such as through student module evaluations, module reports, or objective student analysis by a third party.

KEYWORDS

Study skills; impact; evaluation; context

Introduction

This article argues Study Skills in any guise should be evaluated and measured in and by the context (cf. Wittgenstein 1953; Bakhtin 1981, 1986; Vygotsky 1962). It is widely claimed it exists to help with success, defined here as helping with student educational gain and attainment in specific subjects. To do this, we argue that asking the question '*What's* the context?' when evaluating Study Skills is key for their evaluation and design. Although similar to asking '*What* exactly are you measuring?', the question '*What's* the context?' inevitably helps overcome any dislocation (Allan and Clarke 2007) between Study Skills and the specific context they are taught

CONTACT Nick Pilcher N.Pilcher@napier.ac.uk

in, making their evaluation and design more valid. Over many years of teaching Study Skills to help support student success, defined here as being educational gain or attainment, we have found that success is determined by the context the Study Skills are delivered in. We argue here it is the specific context of their delivery that any approach claiming to promote studentsuccess needs to be evaluated in for validity.

Although much literature (eg Cho and Trent 2006) discusses validity, it is generally accepted validity involves measuring something in a context of what it claims to do (Bell and Waters 2014; Williamson and Johanson 2017). Specifically, whether the design of the research can provide credible conclusions or whether data '*do* measure or characterise what the authors claim, and that interpretations *do* follow from them' (Sapsford and Jupp 2006, 1). Higher Education (HE) institutions worldwide have Study Skills, also known as Academic Skills, Academic Support, and Academic Literacies. Universities often claim such support exists 'to help you succeed in your studies' (Loughborough University 2023) and invariably is advertised using the word 'success' (e.g. UKCISA 2024; NTU 2024; Essex 2024; Birkbeck 2024; Bristol 2024; MMU 2024).

Yet, what constitutes success in a Higher Education (HE) context is much debated and highly varied in definition. Recent literature suggests marketised and massified HE systems such as the UK, define success as completion of a degree (Lowe 2024). Elsewhere, difficulties in establishing a suitable baseline for measuring educational gain (if this is equated to success) are highlighted as arising from having inadequate data (QAA n.d.). Other work shows how current definitions of success may be inadequate (Weatherton, Schussler, and Tanner 2021) or that success is simply different for everyone (Norton 2024); variable and muti-faceted, yet closely linked to well-being (Lipstein, Wong, and Hard 2023). In a German context and based on analysis of 12,000 students' data, grading, grade point averages, and graduating differ greatly in different subjects and faculties (Danilowicz-Gösele et al. 2017). Some work where students are interviewed finds that, for those interviewed, just surviving and keeping going constituted success, not passing or high academic grades (Matters 2019). Elsewhere, the wide range of what constitutes success is highlighted, as well as there being no definition for disabled students (Pais, Moriña Díez, and Morgado 2024). Some work highlights a 'dearth' of research into success (Nyström, Jackson, and Salminen Karlsson 2019) but critically, we argue, it notes that success is defined differently in different subject contexts of Law, Medicine and Engineering, as are, for example, what constitutes 'soft skills'. Thus, and notably, here, although Nyström, Jackson, and Salminen Karlsson (2019) found most students defined success as passing their degree, graduating, and securing a good job, inevitably these would require different

approaches in Law, Medicine, or Engineering, and require different soft skills. Where the importance of Academic Skills is considered amongst a range of different factors for student success they are found to rank sixth out of eight dimensions (Wong, DeWitt, and Chiu 2023) but, inevitably, this will differ as to the specific subject in which such skills are measured. In other words, the context where the skills are measured will inevitably impact on how they are perceived to impact on success. One recent literature review of the efficacy of Academic Skills concludes that the benefits of academic skills 'for student well-being, mental health, achievement and equity are clear' (de Henau 2024, 12) and for achievement, correlations between achievement and academic study skill attendance and embedding in subject classes is high. Yet, care must be taken with such studies, as although they may appear to show how embedding is successful, it is not clear precisely how embedded the Skills are or indeed whether correlation equals causation (discussed further below). We argue here that asking the question 'What's the context?' however, will help ascertain more precisely if the Skills taught effectively help success, and define this here as being educational gain and attainment.

This might seem a strange question to ask, after all, why *wouldn't* anyone want to evaluate Study Skills in the context of whether they help success in terms of educational gain and achievement? After all, given this is pivotal to what success Study Skills is claimed to help with, any evaluations in this context, if positive, would provide evidence of their efficacy. Yet, not only is this question not asked as far as we can see from studies we have consulted but the fact that it should be asked, for example through processes such as module evaluations, module reports, or longitudinal studies undertaken objectively by third parties, does not arise.

Rather, evaluations of Study Skills are often in what we would call inappropriate contexts such as attendance at Study Skills classes, student perceptions of whether, and how, their Study Skills have improved by attending Study Skills classes (e.g. Einfalt and Turley 2009), or even contexts of whether subject content lecturers can teach Study Skills effectively (Noakes 2020). We argue such contexts are inappropriate as they are in a silo or bubble of Study Skills and evaluate the Study Skills themselves, rather than their impact on educational gain or attainment. Further, although many underline the value of teaching Study Skills in contexts of student success, these studies are often in subject context silos or bubbles of, e.g. Law (Knox and Stone 2019) or Anatomy (Husmann and O'Loughlin 2019). Some studies attempt to correlate Study Skills with student success and, although some claim efficacy (e.g. Bailey et al. 2007, discussed below), they do not advocate Study Skills be evaluated in this context of success. To date, no one has asked the question '*What's* the context?' where Study Skills are being evaluated. We do this here, arguing throughout why the context of

success is key to do so, and arguing effective evaluation of skills provision does promote student success and can only benefit students in the long-run.

The remainder of this paper is structured as follows: we first consider two areas, one we argue shows the ineffectiveness of Study Skills when evaluated in inappropriate contexts such as attendance, perceived improvements in Study Skills, or when delivered in a generic or bolt-on type context. We argue these contexts are inappropriate because they focus on success in Study Skills directly rather than researching how Study Skills help with success in terms of educational gain and attainment. The second area shows Study Skills to be effective when delivered in the arguably appropriate context of helping student success in educational gain and attainment. This includes studies conducted in subject silos such as Law, Engineering or Anatomy and shows Study Skills effective in these contexts, even if it does not ask the question '*What's* the context?' when evaluating Study Skills. We then consider underpinning theory on the importance of context from Bakhtin (1981, 1986) and others. We relate this theory to the two contexts of what we have argued as being inappropriate and appropriate contexts for evaluating Study Skills. We then focus on three key issues: definitions (i.e. differing understandings of key terms); silos (or research undertaken without communication); and reliance on decontextualised metrics (which can show a false picture). We suggest anchoring any evaluation of Study Skills in, for example, Module Reports, Module Evaluations, longitudinal analyses, to evaluate them in an appropriate context of success in educational gain and attainment. We argue that asking '*What's* the context?' of their evaluation overcomes these three issues and, critically, enhances the validity and efficacy of any form of Study Skills for success, regardless of what they are called.

The ineffectiveness of study skills when evaluated in inappropriate contexts

Contexts are often referred to in claims made about Study Skills but many contexts are dislocated from the ones where Study Skills would work most effectively. Some champion generic Study Skills, 'motivated by the belief that there are skills which all graduates should possess, and which would be applicable to a wide range of tasks and contexts beyond the university setting' (Gilbert et al. 2004, 375 cf. Entwistle 1960; Mason 2019). Most argue, however, that Study Skills should be embedded in the subject context (e.g. Wingate 2006), not taught in a generic context ('embed' can mean many things, as we discuss below, but can be determined by asking '*What's* the context?'). Some even argue the contexts of skills do not transfer (Hyland and Johnson 1998, cf. Simons et al. 2016), and that any Study Skills should be delivered (Hodgson, Varsavsky, and Matthews 2014) and

diagnostically determined (Zlatkin-Troitschanskaia et al. 2022) in specific subject contexts. Yet, although these studies *discuss* the context, they do not ask whether the Study Skills should be evaluated in a specific context, question whether that context is appropriate, or define that context. We argue this is key.

Indeed, when this is done, by asking the question '*What's* the context?' it becomes clear that many claim to evaluate Study Skills by what we argue are inappropriate contexts such as attendance; i.e. whether students attend Study Skills classes (Ashton-Hay and Doncaster 2021; Einfalt and Turley 2009; Green and Agosti 2011; Harris and Ashton 2011; Ma 2018; Maldoni 2018). Such contexts are inappropriate because they do not evaluate Study Skills by whether they help with success in educational gain and attainment. Rather, they evaluate by criteria and contexts directly related to the Study Skills themselves. Using a context of attendance for evaluation allows the claim that students do not attend because they do not appreciate the value of Study Skills: 'If they are not aware of the benefits of the services, it is necessary to make clear to them how services might be beneficial or to invite academic staff to review the services' (Ma 2018, A-7). Often, such studies claim (Einfalt and Turley 2009) or highlight (Ma 2018; Pryjmachuk et al. 2012) correlation rather than causation as providing a suitable context to measure the success of Study Skills and, although 'attendance' often correlates with success' (Kennelly, Maldoni, and Davies 2010), it is not clear that those attending Study Skills classes also attend subject courses, and vice versa. In the same way, for example, violent crime rates may be correlated with sales of cheese, which does not mean that one causes the other. Indeed, 'a correlation between variables . . . does not automatically mean . . . the change in one variable is the cause of the change in the values of the other variable' (Australia Bureau of statistics 2023, no page). Here, the context of evaluation is attendance, an inappropriate context to measure whether the Study Skills help with success in educational gain or attainment, as it only measures attendance at Study Skills classes, and assumes what is being attended is of value without evaluating it by its intended aim.

Evaluation is also done through the context of the value of Study Skills *for* Study Skills; whether students feel, for example, 'I understand what is meant by writing academically' (Einfalt and Turley 2009) after a Study Skills course. Such contexts involve evaluation of whether students know academic vocabulary but do not consider if such vocabulary is specific to individual subject contexts (cf. Pilcher and Richards 2016), nor mention any vocabulary interaction with subject contexts (e.g. Therova 2021). Other studies base Study Skills assessment materials on contexts of IELTS rubrics (Maldoni 2018) or generic Study Skills questions such as a post entry language assessment (PELA) entitled Measuring the Academic Skills of University Students or Measurement of English

Language Skills of University Students (Green and Agosti 2011). They do not evaluate in contexts of whether Study Skills help with success in educational gain or attainment. Comparatively, whilst Pryjmachuk et al. (2012) cite students found their Study Skills improved after a Study Skills course, 'some students found certain elements '"patronising", "a waste of time", "common knowledge" and were impatient at having to cover what they felt they already knew' (Pryjmachuk et al. 2012, 162). Here, contexts of evaluation are Study Skills contexts; students followed a course consisting of generic skills and wrote on decontextualised topics in 250 word length pieces. We argue such contexts inappropriate as they evaluate whether success improved Study Skills not in educational gain or attainment in subjects.

Sometimes, studies even evaluate Study Skills in contexts of seeing how well Study Skills are manifest in later subject based assignments, e.g. where subject essays of two students are textually analysed to assess subsequent understanding of Semantic Gravity taught on an English for Academic Purposes course (Munn 2021). Here, the context of evaluation is a Study Skills context, not a context of student success in educational gain or attainment. It is claimed that a project ' . . . also assesses the general effectiveness of the ESAP [English for Specific Academic Purposes] module in supporting students' learning transfer' (Munn 2021, 195); yet it does not evaluate these in a context of subject success by educational gain and attainment in the respective degree (here International Relations and Development).

In perhaps the purest examples of evaluating Study Skills in arguably inappropriate Study Skills contexts, some even evaluate Study Skills in contexts of whether specific subject lecturers can teach particular Study Skills. For example, Law lecturers' ability to teach Law students how to write in their specific subject is questioned through their lacking knowledge of Academic Literacies (Noakes 2020). Implicit to any such assumption is that language and approaches are the same, and that the 'skills transfer' (Noakes 2020, 95). Yet, one interviewee cited arguably accurately commented 'we're training them to be lawyers, we're lawyers and therefore we know' (Academic J, Law School 9) (cited in Noakes 2020, 9). Here, contexts of evaluation are different, one (the author) evaluated in an Academic Literacies context, another (the interviewee) in a Law context.

Arguably, asking the question '*What's* the context?' would meet with answers such as: the context is one of how well the Subject lecturers know about Academic Literacies, of how well students know Semantic Gravity, of how well they attend Study Skills classes or if and how they feel their Study Skills have improved. Yet these contexts we argue inappropriate as they do not evaluate the Study Skills by or in a context of student success in terms of educational gain and attainment in their degrees.

Conversely, where it is argued that contexts of teaching and evaluating Skills help with student success in terms of educational gain and attainment, these are often more appropriate contexts of specific subject contextualised skills. For example, one extensive review of what Skills Engineers need for university compiles an Engineering contextualised list of generic engineering competencies, concluding faculty members should teach these contextualised Engineering skills, and 'could also design individual courses around the principles pertaining to coordinating competencies as in engineering practice' (Passow and Passow 2017, 504). Often, such subject contextualised studies find Study Skills delivered in generic contexts inappropriate; for example, one study in an Engineering context notes 'a recent survey carried out by the University of Hull and involving Engineering students from five universities, less than 10% of students reported having found study skills teaching useful whereas 41% found it . . . of no use' (Pulko and Parikh 2003, 243). This study noted of generic skills context courses 'students [are] reluctant to attend and claiming [sic.] that the subject is irrelevant or that they have covered the material before' (Pulko and Parikh 2003, 243). Greater embedding of such soft skills into the subject context is advocated (cf. Wingate 2006) as opposed to having them delivered in a standalone context. Yet, as noted above, precisely what embed means varies greatly, it could be to have a standalone course as part of a module, or have a Study Skills 'specialist' come and talk about why Study Skills are important at the start of a module (arguably a common approach). Standalone courses are often argued useful for many reasons: firstly, change may be fast whereas curriculum change is slow, so they can quickly adapt. Secondly, many graduates ascend to careers outside their degree specialism, so skills should be transferable, and thirdly, focusing precisely on skills makes them easy to determine. However, in each case the context of student success is different; curriculum change may be slow but lecturers can still focus on changes in the subject before curriculum change, secondly, many argue skills are not transferable, and even if students ascend to a career different to their degree, they still need to succeed in their degree first; and even if a focus on skills makes them easier to identify, if they are decontextualised and removed from a context of how they help with success, such identification is irrelevant.

Indeed, this arguably explains why, where Study Skills are evaluated in a subject context, they are often found inappropriate. For example, there may be 'few statistically significant findings' when using 'The Learning Study Skills Inventory (LASSI) . . . to assess students' progress' (Urciuoli and Bluestone 2013, 397). Similarly, where results from a (subject context) Course Experience Questionnaire were compared with scores on an (Study Skills context) Approaches and Study Skills Inventory for Students, course experience (the subject context) was found to affect student approaches to

learning, 'the same model did not provide evidence for any indirect or mediator effect between course experience, approaches to learning and academic achievement' (Diseth et al. 2006, 156). Indeed, generic Study Skills context type scales and models are often found inappropriate to measure success in educational gain and attainment. For example, when using the Visual; Aural; Read/write; Kinaesthetic (VARK) learning style model to measure student success studying anatomy (Husmann and O'Loughlin 2019). Here, 67% of students used anatomy specific study strategies for anatomy degrees 'that were inconsistent with their highest scoring VARK category'; students who did use a VARK strategy performed no different from those who did not; 'no specific VARK ctegories were associated with improved outcomes in A215: Basic Human Anatomy' (Husmann and O'Loughlin 2019, 15). Notably, specific VARK study strategies correlated negatively with final outcomes, 'while use of provided notes and virtual microscope were found to have positive relationships with final grades' (Husmann and O'Loughlin 2019, 15). Here, asking the question '*What's* the context?' would meet with the answer 'a context of measuring the students VARK skills', not a context whether the Study Skills led to success in educational gain and attainment in anatomy, and that such a context is inappropriate as it found the Study Skills ineffective.

Notably, when the value of a separately contextualised Study Skills module is based on student evaluation, results can show a Study Skills context considered inappropriate. Allan and Clarke (2007, 69) found student feedback on a 'Learning for Success' module covering IT and Study Skills, admittedly in what they describe as an atypical response, confident mature students, traditional students with recent educational experience, and some others perceived generic skills of little use or relevance. They noted 'the dislocation between the development of these skills and the context in which they are applied appears to preclude their effective development; suggesting that the embedding of these skills within subject modules over a three-year program might be efficacious' (Allan and Clarke 2007, 3).

Also, precisely because the context is not considered and the question '*What's* the context?' not asked, some work equates correlation with causation to claim Study Skills impacts on success arguably takes place in a subject context; even if it does not explicitly note doing so. For example, a study into a 'Skills Plus' programme for Nursing students noted 'results showed that all students who attended at least one workshop improved their academic grade in their next assignment' (Bailey et al. 2007, 77). Further, qualitative data showed students felt more confident with referencing skills and information literacy in this Nursing context because of following 'Skills Plus'. It is therefore concluded that 'evaluating the impact of this intervention has provided the evidence to demonstrate the value of this additional support' (Bailey et al. 2007, 77). Notably, although measurements are stated

as being of Study Skills, these are taught in a specific subject context, even if this is not stated explicitly, one student saying they 'enjoyed the test to find out how much I know on study skills' (Bailey et al. 2007, 82). Arguably, when this Nursing student used the phrase 'Study Skills' they were referring to them in a Nursing context. In addition, comments on course usefulness were related to subject contextualised abilities: 'I find quality stuff now instead of just finding random anything and hoping that it's going to be OK' (Bailey et al. 2007, 82). Here, asking '*What's* the context?' would, we argue, meet with the answer, the subject of Nursing and searching for Nursing texts.

Thus, asking '*What's* the context?' when evaluating Study Skills helps focus explicitly on precisely what is being measured, how, and often by whom. Doing this shows generic type Study Skills contexts often considered little value: the context of attendance measures precisely that: attendance, not student success; contexts of measuring Study Skills performance measures Study Skills performance, not student success; evaluating contexts of whether Study Skills transfer evaluates whether they transfer, not student success. Asking 'What's the context?' of the evaluation of a law subject lecturer's knowledge of Academic Literacies, evaluates the Law lecturer's knowledge of Academic Literacies, not Law. Here then, asking the question 'What's the context?' means the Study Skills are evaluated by whether they actually help with what they are claimed to help with: success in terms of educational gain and attainment. It also shows which contexts are inappropriate ones to evaluate Study Skills. Conversely, not asking this question allows for claims to be made that students do not know the value of Study Skills because they do not attend, or that subject lecturers cannot teach Academic Literacies because they only know about their subject. This directly circumvents the issue of whether the Study Skills are of any value for what they claim to help with: success in student gain and educational attainment, and allows claims to be made that inappropriate contexts are actually appropriate ones.

The effectiveness of study skills when evaluated in appropriate contexts

Considering the details underpinning the specific context can help reveal what is actually being evaluated and, importantly, whether the Study skills are being taught in an appropriate context of success in terms of student gain and educational attainment. We argue that asking '*What's* the context?' helps reveal this. For example, although many studies explicitly state they measure Study Skills they arguably do so in appropriate contexts: one related to a specific subject and success in educational gain and attainment. Indeed, although Campitelli, Page, and Quach (2019)'s work is entitled

'measuring the effectiveness of academic skills' they outline a project where students produced a specific *subject* essay draft which was commented on by *subject* experts; students then submitted final drafts based on this *subject specific feedback*. Student feedback was, for example, that tutorials 'helped me understand the requirements of the written essay task' or 'helped me with the structure and organisation of the written essay task'. Here, asking '*What's* the context?' arguably meets with the answer: the context is student success in educational gain and attainment in their subjects, and here was perceived helpful by the students.

In another study (Maldoni 2018, 106) which measured Study Skills by what is argued above to be an inappropriate dimension of attendance and retention, was on a course taught by both 'a discipline specialist and an academic language and literacy specialist'. Thus, value could have come from *either* specialist. In another study, engineering students used mind-maps, roundtable discussions and the employment of analogies, but this was successful as it was undertaken in an *Engineering* context (Chua, Yang, and Leo 2014). In Politics and International Relations, one intervention experimented with measuring the success 'of embedded study skills for first year undergraduate students on the course "Fundamentals of Politics and International Relations"' (Cook, Thompson, and Dias-Lopez 2019, 1). Yet, this course in embedded Study Skills focused on writing initial essay answers to questions in Politics, and feedback was from subject lecturers teaching the course. Thus, any Study Skills were actually considered in an appropriate context of success in educational gain and attainment. Here, the question '*What's* the context?' gives the answer: student success in their subject. Further, it would again help focus any evaluation and design of Study Skills on the context for student success.

In one study, when asked for the most important aspects of a course to help them, students gave 'review of lectures' over 70% usefulness, and Study Skills and Grammar only 5% (Baik and Greig 2009). Although student responses can be highly subjective, the huge difference here between considering the subject material useful and the Study Skills not is stark, and contrary to what was being investigated. Similarly, research into a course teaching subject specific content alongside Study Skills noted students evaluative feedback was that subject content was most helpful: 'regular attendees agreed that the programme had assisted them to understand management theories and concepts … preparation for assessment was a major feature of the evaluation responses and students cited the following reasons: more practical explanations of theories (real-life examples); clarifications of requirements of assignment questions; and the application of critical analysis to theories and concepts' (Kennelly, Maldoni, and Davies 2010, 65). Here again, though, Study Skills is argued key, even if students only attended when particular subject assessments were the focus (Kennelly,

Maldoni, and Davies 2010). Yet, the question '*What's* the context?' would arguably help identify what the appropriate context was, to improve Study Skills.

Often, student comments on Study Skills helping, invariably relate to contexts of success with subject support or assignments, and it is these contexts that are considered appropriate. For example; 'thank you for your help with my assignment as I got credit for assessment 3 and overall as well' or (112) 'thank you to the Academic Skills team for suggesting ways in which I can improve my essay with structure, spelling and gramma [sic]. And also explaining the Nursing formula for my maths exam' (111). Here, Academic Skills consisted of one-to-one appointments where students took along their assignments for comment, and as the second student quoted illustrates here, it was the subject context support that helped and was appropriate.

Other work argues appropriate contexts for teaching of any Skills are subject contexts (Kahu 2013; Kahu and Nelson 2018). For example in Engineering (Garcia et al. 2020; Hettiarachchi, Huertas, and Mor 2015; Idrus 2014; Topalli and Cagiltay 2018); Computer Science (Rorrer, Allen, and Zuo 2018); and Pharmacy (Svensberg et al. 2018). Study Skills may not be mentioned, rather it is Skills, but it is arguably Study Skills being delivered and taught in the subject context, which is what succeeds, and is therefore appropriate. In Anatomy, certain specific study strategies (i.e. Study Skills in an Anatomy context), 'such as use of the virtual microscope, were found to be positively correlated with final class grade' (Husmann and O'Loughlin 2019, 6). Similarly, in Computing, the phrase 'Study Skills' may be used in an article title but is defined as subject specific: 'In this research, study skills engagement involved studying regularly, keeping up with the course, making notes and putting in time' (Fabian et al. 2022, 1928). Also, in Law, employability skills are actually skills in the subject; in property law (Butler and Madhloom 2017) or, for example, where students are given 'an entirely skills focused' co-curricular module 'to provide students with a timetable opportunity to develop their employability skills in writing formal letters, giving professional presentations and answering competency-based questions' (Knox and Stone 2019, 94, cf. Friedland 1996; Easteel 2011). Again in Law, when 'facilitating skills transfer' is the subject of the title and the project is described as 'a collaborative writing centre intervention of undergraduate law students' the subject is clearly the context of support (Drennan and Keyser 2022). Indeed, the project was initiated 'to address law students' legal writing skills early on in their law degree' and impact 'showed a statistically significant improvement in the submissions of students who engaged fully in the various stages of the writing intervention' (Drennan and Keyser 2022, 1). This impact was however the result of drafting and redrafting 'a legal essay' (Drennan and Keyser 2022, 7).

Similarly, in Engineering, when Accreditation Board for Engineering and Technology (ABET) Skills are taught, the six ABET professional soft skills 'include communication, teamwork, and understanding ethics and professionalism' (Shuman, Besterfield-Sacre, and McGourty 2005, 41). The context considered appropriate is an Engineering context, for example, there being an 'important relationship between ethics and engineering design and the value of integrating the two within the curriculum' (Shuman, Besterfield-Sacre, and McGourty 2005, 45). All Skills are developed within an Engineering context, as to develop communication skills with a global connection focus 'requires international experience, global engineering course content, and a required cross-cultural course for engineers on global understanding' (Shuman, Besterfield-Sacre, and McGourty 2005, 46). In all these contexts, the terms 'Study Skills' or 'Skills' or 'strategies' are used but they all differ according to context, and the context is appropriate because it is situated in the subject and integrally connected with success in educational gain and attainment. Here again, asking the question '*What's* the context?' would meet with answers such as student academic success in 'Law' or 'Anatomy' or 'Engineering', and would better help evaluate the Study Skills delivered and their design to help with what they are claimed to help with: student success.

The importance of context

The above two sections are based on arguments about the importance of context and, at times, as outlined above, a context can be stated as being Study Skills but may be appropriate sometimes and at other times inappropriate. Outlining the importance of context and relating some of the underpinning theory around context helps explain why this is the case and how Study Skills can be aligned with appropriate contexts rather than being dislocated from them. The underpinning theory also helps focus any answers to the question 'What's the context?' more effectively. One lecturer in behavioural therapy encapsulates the importance of context to how any individual sees the world as follows: *'everything exists within context, nothing exists outwith context and we define what the context is and we change the viewpoint according to the context'* (cited in Richards and Pilcher 2020, 137). In other words; a) Context is of fundamental importance, b) Anything outside of a context is neutral and non-existent, c) We ourselves determine that context, and d) In turn, our viewpoint changes according to that context. The lecturer cited here was drawing on their experience of mental health and Cognitive Behavioural Therapy but their words align closely with the philosophy and theories that underpin precisely why it is key to evaluate (and to consider any evaluation of) Study Skills in the context of student success.

In terms of he importance of context, the philosophy of Mikhail Bakhtin (1981, 1986) is key. According to Bakhtin, words have three owners; the addresser; the addressee, and a neutral or non-contextualised owner – the dictionary (1986). In academic subject contexts, the neutral non-contextualised owner, the addresser and the addressee, may all use the same word but each possess a unique individual definition of that word according to their context. For example, the words 'essay' or 'report' (Richards and Pilcher 2019) 'describe' and 'critically evaluate' (Richards and Pilcher 2014) all differ according to subject context, and words such as 'empathy' mean very different things if the addresser is in a Nursing or a Design context (Pilcher and Richards 2016). Here, *until* content and words are put into their specific context they are neutral in meaning. As shown above, Study Skills means very different things to Engineers, to Lawyers, and to those delivering generic Study Skills classes. None are correct or incorrect, but in relation to how they relate to success in educational attainment and gain, the context will be appropriate or inappropriate. Asking the question '*What's* the context?' helps focus on precisely what is being delivered, whether it is in the subject of anatomy or whether it is one of attending Study Skills classes, thereby preventing the Study Skills from being dislocated from an appropriate context.

In other theory crucial to context, Ludwig Wittgenstein writes of the bricklayer's 'game' (1953) where bricklayers know and use many different terms for 'bricks', relating to material behaviour and how to handle them. These are fully understood by the addressee if they are themselves party to the 'game' of bricklaying, but will have little meaning if the addressee is outside this context. In the same way, terminology related to the Study Skills needed by a lawyer and by an engineer may be very different and understood only in the specific context of that subject, by specialists. Here, unless the context was that of the specific subject, it would arguably be inappropriate.

Context also applies at an ideological and psychological level. Voloshinov (1973), of the Bakhtin School, writes of underpinning sub-textual ideological and psychological elements as key to contextualised language use. This also applies to academic subjects; with elements being visual and philosophical for design (Richards and Pilcher 2018); grammatical and lexical for assessment tools such as the International English Language Testing System (Pilcher and Richards 2017); and related to hygiene and empathy for Nursing (Pilcher and Richards 2016). For Study Skills, it is everything that individual subjects do, but only at a surface level, because the words, the assessments, and the ideological and psychological elements are so unique in each subject context, unless the context is one of success in subject gain and educational attainment it cannot be an appropriate one. Here, asking 'What's the context?' helps focus any answers on the specific context.

Anything outside of a context is neutral and non-existent. People take neutral words and adapt them for their own contexts, so when in a restaurant someone asks for a 'cab' they may want a taxi, but the waiter may interpret the word 'cab' to mean 'Cabernet Sauvignon' and bring them a bottle of wine (Fecho 2011). We ourselves determine what that context is. Our viewpoint changes according to the context. A dictionary may contain the various meanings outlined here but they remain neutral until the word is actually used, or owned (Bakhtin 1981, 1986). As the bricklayer uses language in a certain way and certain context (Wittgenstein 1953), so too do a group of friends, an academic discipline, an assessment tool, or, we argue, a support system such as Study Skills. Here language is anything but objective (contra. Saussure 1959), representing so close an amalgam of language and thought that it is not possible to separate them (Vygotsky 1962). Rather, language is subjective and has underlying ideological and artistic elements (Voloshinov 1973), and the written word is merely the 'inert hardened crust' of previous language usage (Voloshinov 1973).

Ultimately, what this means for Study Skills, and any academic subject, is that context is critical: we define that context, and we adjust how we view content, objects, and language according to that specific context. If our context is a Nursing one, we will see 'critique' through a Nursing context lens, which is very different to how we see 'critique' through an Engineering context lens or, we argue, a Study Skills context lens. Here, each individual would see what they were doing as 'critique', but it would be very different in nature according to the context, and not necessarily appropriate for a *different* context. In the same way that a Nursing context 'critique' may not be useful for Engineering, so might a Study Skills context 'critique' not be useful for Engineering; and yet each individual would say they were doing 'critique' and, in their own context, they would be. Likewise, any 'Study Skills' defined and used in a Nursing context by a Nursing lecturer and students will differ from any 'Study Skills' in an Engineering context used by an Engineering lecturer, and any 'Study Skills' used by a Study Skills specialist: the context dictates everything. It is this conflation of different contextual meanings the theory helps dispel, ultimately making Study Skills better evaluated and suited to appropriate contexts and ultimately helping with student 'success' defined as educational gain and attainment.

Discussion: definitions; silos; metrics; suggestions for evaluating 'study skills'

Thus, subjects often initiate programmes to develop Study Skills but asking '*What's* the context?' shows that where these have positive impact it is not in a dislocated Study Skills context, but a context of success in the subject that is appropriate, such as legal writing skills for Law (Knox and Stone 2019) or

using a virtual microscope in Anatomy (Husmann and O'Loughlin 2019). Studies investigating whether students consider subject context Study Skills or those in separate or generic Study Skills context appropriate, show they think it is the former (Baik and Greig 2009), and that these are connected with their success. Asking 'What's the context?' and exploring the answer shows that when Study Skills are claimed to have a positive impact a context of Study Skills is considered inappropriate by students, but contexts helping with subject success, often delivered by or in conjunction with subject lecturers (Campitelli, Page, and Quach 2019; Cook, Thompson, and Dias-Lopez 2019) are considered appropriate.

Yet, where Study Skills are claimed valuable, they are often measured in inappropriate contexts dislocated from the subject they are intended to help with such as attendance; retention; or whether Study Skills improve students' Study Skills (Maldoni 2018; Munn 2021). Also, research that claims Study Skills *does* have an impact cites for support studies into aspects other than Study Skills are undertaken in arguably inappropriate contexts (e.g. Wallbank and Le Hen 2023) and many meta-analyses aiming to ascertain the success of Study Skills draw on studies in multiple contexts of both generic Study Skills and subject specific Study Skills (e.g. Corwin Visible Learning meta 2021; Kim et al. 2008) and thus cannot accurately ascertain what works to aid success. We argue there are principally three issues here: multiple definitions of the same terms; the continued existence of silos and of work being undertaken in them; and the use of decontextualised metrics to measure impact.

Firstly, multiple definitions: Study Skills are elusive to define and many definitions exist (Richards and Pilcher 2020). Definitions may relate to the 'what' of learning (Allan and Clarke 2007); to help with exams or grades (Bulent, Hakan, and Aydin 2015); to help find and understand information (Wolfe 2009) or other aspects (e.g. R. Bailey 2010; Durkin and Main 2002; Entwistle 1960). Moreover, many associated terms are defined differently, for example 'embedded' could be simply a Study Skills standalone session delivered as part of a module or simply entitled 'Study skills for Nurses' but containing similar aspects to generic courses such as sections on time management or technology (Mason-Whitehead and Mason 2007). Other Study Skills aspects are sub-categorised into specific areas such as 'academic writing'; 'presentations'; 'grammar'; 'referencing' (Cottrell 2019). As noted above, the idea of transferability of skills is often disputed (Hyland and Johnson 1998) and one we argue based on a misplaced assumption that language and words are universally applicable and understood (Richards and Pilcher 2019).

Yet, we argue the question 'What's the context?' overcomes any issues with definitions as Study Skills are evaluated by their context, and the answer can help pinpoint whether this context is appropriate, and helps

with student success. One study in biology rightly notes of data in the form of student perceptions in improvements 'we do not know from this data whether students are better at these skills or if they merely think they are better' (Brownell and Kloser 2015, 531). Whilst such work does not suggest such measurements be ignored, it does 'strongly advocate the addition of direct measures of students' competencies' (531). We therefore suggest any data gathered from student module evaluations be triangulated with other data to seek causation with student attainments and explore what contexts are most appropriate. A key theme in much literature is authenticity, often related to students' lived experiences (Stein, Isaacs, and Andrews 2004) and subjective in nature (Gulikers et al. 2008). It is nevertheless noted, 'it is imperative that students perceive their assessments as authentic' (Gulikers et al. 2008, 401). We argue that integrating and linking evaluations of Study Skills by success makes them authentic and provides an appropriate context for any definition. Indeed, asking '*What's* the context?' here of any evaluation of Study Skills, the answer would be: the context of student success, an appropriate one given their stated goal.

Secondly, regarding silos or bubbles of research taking place separately and rarely communicated outside of that bubble, can have adverse impacts as, 'silos lack engagement with one another and possess conflicting definitions of foundational terms' (Brown 2017, 42). Silos also relate to entrenchment as 'silos breed tribalism and a refusal to collaborate and share knowledge' (Gerstein and Friedman 2016, 111). Moreover, 'on the academic scene, siloism results in the department becoming more important than the survival of the organization' (Gerstein and Friedman 2016, 111). We argue such tendencies can be seen in, for example, evaluating Study Skills through inappropriate contexts such as attendance or by students' perceptions of their Study Skills abilities rather than their success. A Study Skills silo may lead to studies where, 'students were also asked to tick all the strategies they planned to use to improve their English language while at university' (Ashton-Hay, Wignell, and Evans 2016, A-8). Further, it may rationalise arguments that students do not attend Study Skills classes because they do not appreciate their value (Ma 2018), or that only Academic Literacies specialists can teach Law students to write Law essays, as Law Academics may not know how to teach Law students to write (Noakes 2020). Here any research dislocates Study Skills from the context they are intended to help with. Yet, concomitantly, there is also much research in silos (as outlined above) that shows Study Skills are effective in helping student success when taught in appropriate contexts of, e.g. Law, Engineering, Nursing, and Anatomy. Again, asking 'What's the context?' means any answer has to consider whether the context is an appropriate one of student success, or an inappropriate one of attendance, or perceptions of improvements in Study Skills.

Thirdly, the use of decontextualised metrics to measure impact. Much research maligns the use of metrics to measure and rationalise potentially inappropriate approaches (e.g. Torres and Renn 2021). In the above, this is arguably through the use of metrics in contexts such as attendance, retention, and also correlation rates of attendance with GPA increases. All such attempts to measure impact arguably involve decontextualised metrics to evaluate Study Skills, and underpin many meta-analyses claiming Study Skills have a positive impact (e.g. Corwin Visible Learning Meta 2021). Yet, these metrics are not so much *de*contextualised as in an inappropriate context, and such metrics can be easily placed in an appropriate context by evaluating the effectiveness of Study Skills by their relation to student success. Again underpinning such evaluations and assessments by asking 'What's the context?' helps target evaluations on the context of student success. Indeed, when measuring student success, many rely on Astin's (1991) model of Inputs – Environments – Outcomes Model. By questioning the alignment of an institution's outputs with its inputs, Astin was able to determine the quality of these inputs (York, Gibson, and Rankin 2015). Here, Study Skills could be evaluated through perceived impact on student success in contexts of student academic success. Where any evaluation is guided by the question 'What's the context?' Skills are evaluated in an appropriate context of their value for success, not in a stand-alone, bolt-on, generic or inappropriate context. For example, with science students, it is noted 'an important finding . . . is the prominent role played by practical laboratory classes in skills development' (Hodgson, Varsavsky, and Matthews 2014, 524). Here, scientific knowledge is described as a 'skill'. Notably, all such skills are science based, none are generic. Asking 'What's the context?' when evaluating Study Skills helps reveal the context of what is being assessed and whether this is an appropriate context to achieve the ultimate goal of what Study Skills claim to help: student success.

Conclusion

This article has argued Study Skills in any guise be evaluated in appropriate contexts of what they claim to help students with: success at university, and not in inappropriate contexts dislocated from this. The paper argues the simple way to do this is to undertake any evaluation guided by the question '*What's* the context?' Studies to date have evaluated Study Skills in inappropriate contexts of attendance; of whether Study Skills helps develop Study Skills, or whether specific Study Skills (e.g. Semantic Grammar) transfer into Subject Assignments. Further, many studies that evaluate Study Skills positively and show their positive impact on subject success actually accord the name 'Study Skills' to what is in fact an appropriate context of student success in their subjects. Asking the question of any study

'What's the context?' would both identify the context and show which contexts were appropriate and which were inappropriate.

Issues exist arising from context perspectives related to multiple definitions of Study Skills; of studies being undertaken in a silo, meaning it is unclear whether the evaluation of Study Skills is in an inappropriate or appropriate context; and of the use of decontextualised metrics to evaluate Study Skills. Yet, and as outlined above, context is everything and nothing exists outwith context. Consequently, every subject and every individual has their own understandings of phrases and words and Study Skills; they all claim to be doing critique and Study Skills and they all are, but a Nursing and Engineering critique and Study Skills critique are all very different. Context is everything. Yet, in Higher Education worldwide, the claim that Study Skills helps with success is a ubiquitous one, and although much evaluation is done in appropriate contexts, much is done in contexts that are often inappropriate and which evaluate Study skills dislocated from whether they help with the success context. Crucially, failure to consider the context means the status quo can only continue. We argue undertaking any evaluation of Study Skills by asking 'What's the context?' helps target any evaluation to consider the context and its appropriateness, and in turn helps future design of any Study Skills support to enable it to better achieve the claims made of it: to help all students attain success in educational gain and attainment in their subjects.

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ORCID

Nick Pilcher http://orcid.org/0000-0002-5093-9345
Kendall Richards http://orcid.org/0000-0002-2594-8135

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