

Case study 1: Addressing diverse student needs through student self-evaluation and differentiated activities: an example from academic skills workshops

Sam Thomas, Learning Development Tutor, LLS, UON

Introduction

The establishment and continued success of learning development departments across UK universities is a good example of the ways in which higher education is adapting to the constantly changing context. As an increasing number of students enter higher education with a diverse range of prior experience, qualifications and circumstances, universities ensure that their needs are met through various means. A core strand of the University of Northampton's Strategic Plan is being 'super supportive' (University of Northampton, 2018) and the Learning Development team, as part of Library and Learning Services, is one of the support services offered to students as an effective way of addressing some of their needs in a super supportive way.

A central challenge for learning development tutors is to ensure that group teaching sessions are of benefit to all students. My experience of delivering led me to conclude that 'one size fits all' workshops rarely meet the need of all students: some don't receive enough support, some are already confident with the content and concepts and therefore disengage from the session, while others would benefit from support with developing a completely different skill from those on offer during the workshop. This issue is increasingly evident as student cohorts become more varied in their backgrounds, previous educational experiences and the range of competing priorities in their lives. Using pedagogical methods of differentiation to structure these sessions, based on students' own evaluation of their needs, would enable greater targeting of support and therefore enable more students to engage with and benefit from the sessions.

Context

This problem is of course pertinent across all education, but is a particularly challenging issue for those working in Learning Development. At the University of Northampton tutors are employed to support and develop the academic skills of students using a variety of methods, including one-to-one tutorials, group workshops and through online guidance (University of Northampton Library and Learning Services, 2020). Students can choose to attend tutorials as and when they need them in addition to group workshops which are usually embedded into module and programme timetables as part of the university Integrated Learning Support programme which ensures that most students will see a Learning Development Tutor for at least one session each academic year (ILT, 2019). This means that students across the University benefit from the expertise, and as independent learners they can control how much they engage with the service.

The problem explored here relates to embedded workshops: we make every effort to design sessions that enable students to develop skills that are relevant for their study and assessments as a group, but as they are usually one-off, standalone sessions, how can we ensure that all students will benefit from what we offer? The problems with this are twofold; not only are we unfamiliar with the students and their individual needs, but we also have to structure the learning and teaching in a way that meets the needs of all the students in one standalone session. If we are to ensure that each participant is able to take something of value from the workshop, then some form of differentiation is required.

Literature review

This literature review will consider the application of pedagogical approaches to differentiation in higher education generally, and by learning development professionals in particular, noting the reasons that it has

not been more widely adopted by these specialists. It will then explore the literature supporting the use of different methods of self-evaluation, the concept of student efficacy, and ideas about student choice in learning, all of which are central to the successful implementation of the teaching intervention.

Differentiation: theories and approaches

Differentiation as a concept in teaching has been discussed for more than twenty years. It originates from empirical evidence that individuals have different needs and preferences which should be acknowledged when planning teaching, to enable all to reach their full potential (Tomlinson *et al.*, 2003; Bondie *et al.*, 2019; Munro, 2012). As an early proponent of the method, Tomlinson describes her experience in the classroom thus:

“I was routinely teaching classes that had such diversity in them that I realized that if I just did one thing for all the students in the same way and at the same time, I was missing nearly everybody” (Wu, 2013, p.127).

Rather than relying on streaming or grouping of similar ability children, Tomlinson *et al.* (2003) sought to implement a system which “does not seek to label and segregate students, but rather to serve them effectively in heterogeneous classrooms that are responsive to their varied needs” (Wu, 2013, p. 127). A focus on the individual needs of students rather than the needs of the teacher or the classroom setting has roots in a number of pedagogical approaches, an understanding of which can help contextualise its effectiveness.

The most obvious theoretical link is with the work of Benjamin Bloom, whose work on taxonomies of learning helps not only to differentiate between different types of learning (cognitive, affective and psychomotor) but also gives a framework with which to differentiate within teaching, and to evaluate achievement (Aubrey and Riley, 2019). In addition, it could be argued that Vygotsky’s theory of learning through social activity has at its core ideas about differentiation; the teacher’s instruction and scaffolding should be adapted to the needs of the child, and therefore support their development in a way that is personal to them (Daniels, 2016; Aubrey and Riley, 2019).

Research has shown the positive benefits of differentiation in the classroom. It can increase student motivation and academic achievement for all students regardless of academic ability or additional needs (Huebner, 2010). Konstantinou-Katzi *et al.* (2013) agree that there are benefits to motivation, and in addition identify improved engagement of students in their study. Although much of the literature identifies positive attributes associated with differentiation, it is not easy to measure definitive outcomes from differentiated teaching, which means that much of the literature is focussed on the holistic benefits of student-led teaching and learning and the development of inclusive classrooms (Bondie *et al.*, 2019).

The concept of differentiation can encompass many aspects of education, however it focusses particularly on addressing the barriers that students face in achieving their fullest potential. A core motivation is to cater for the ‘academically diverse student population’, whereby students in one classroom can also represent a high variety of races, cultures, first languages and special educational needs (Tomlinson *et al.*, 2003). Alongside individual differences, institutionally entrenched bias that discriminates at gender, socio-economic or social class level can either drive or negate the effectiveness of differentiation (Berggren, 2008; Taylor, 2017). Acknowledging and planning to address the diverse range of internal and external factors that impact on how individual students learn is a complex task that poses a number of problems for teachers, for example in planning for and managing a range of needs in the classroom.

Differentiation and Higher Education

Despite being a well-established approach that is widely used in schools, differentiation has had less impact on higher education, despite the increasing diversification of student qualifications on entry, backgrounds and educational experiences, due in part to widening participation initiatives (HESA, 2019). The literature and recent research into differentiation identifies potential benefits of various methods of implementation, some drawbacks and negative implications, and indicates the potential for integrating this approach into a more inclusive teaching strategy at HE level.

Research into differentiation in higher education has explored both what it means at this level, and how it can be implemented. Santangelo and Tomlinson (2009) found that differentiation was appropriate to accommodate three different facets of student need: diverse learning preferences, a variety of interests and experiences, and differing personal responsibilities and circumstances. Valiandes *et al.* (2018) argue that as well as acknowledging this diversity of need, the preservation of collective identities through the concept of intercultural education should also be addressed. This means that not only are the individual needs of students understood and accommodated, but also that collective identities are supported, using a culturally responsive pedagogy (CRP) (Valiandes *et al.*, 2018). Combining approaches that use the diversity of the classroom as a key element of the pedagogy could be productive. Acknowledging that both the practitioner and the learner operate in a complex environment in which multiple factors have an impact on the ability to learn is an important factor in evaluating differentiation, both in terms of its inherent value, and the impact it has on learning.

There are criticisms and drawbacks to differentiation noted in the literature. Jackson and Evans (2017) suggest that there is an ethical issue in providing variant levels of instruction to students who have all paid for the 'same' educational experience; they also acknowledge that it is time-consuming and requires more input than traditional methods. This difficulty in implementation is also highlighted by Ashman (2015), who discusses the lack of evidence for the efficacy of differentiation in research studies. He concludes however by arguing for a pragmatic "differentiation-lite" approach, thereby accepting that some adaptation for the needs of students is required to maximise student learning.

Finally, the problematic concept of learning styles had been subsumed into discussion about differentiation (Tomlinson, 2010), but recent research has started to identify the effective elements of differentiation which are distinct from the learning styles approach. The shared concern about the format of teaching materials is the link between the two concepts, however the research makes clear that teachers should "resist the temptation to match instructional methods with students' preferred modalities" (Rock *et al.*, cited in Landrum and McDuffie, 2010, p.15): the concept of learning styles can do little to improve learning if other complexities around content and student experience are ignored. In addition, Cuevas' study of the research in learning styles concluded that there is no real evidence to support the theory, and that rather than concentrating on the format of materials, teachers should "treat each student as a unique individual without pigeonholing them into unfounded categories" (2015, p. 330). Differentiation methods seek to avoid categorising students, instead focussing on the individual rather than the proposed solution.

Learning Development: one size fits all?

Learning Development departments within UK universities are now a well established strategy to provide all students with support for developing their study and academic skills in a student-centred way (Hill and Tinker, 2013; ALDinHE, 2019). This approach has proved successful at the University of Northampton, with a well-established team providing support to students through a range of services, including embedded workshops provided as part of the Integrated Learner Support approach introduced in 2018 (ILT, 2019).

Embedding academic skills workshops into modules and programmes has been an ongoing ambition for many learning developers as there is plenty of evidence that standalone, one-off skills workshops have little impact and are not well attended by students (McWilliams and Allan, 2014). Arguments were made by earlier practitioners for a generic approach, including cost-effectiveness and the ability to generalise skills (McWilliams and Allan, 2014). The day-to-day pressures of teaching multiple sessions across many subject areas and the ability to easily re-use content have led to many learning development workshops being 'one size fits all', with little consideration for differentiation, even though they may be adapted for discipline or level (Hill and Tinkler, 2013). However, recommendations for a best practice approach to embedding academic skills into mainstream subject teaching include maintaining a student-centred focus, and using a variety of approaches depending on need (McWilliams and Allan, 2014), both of which are key drivers for using differentiation methods when teaching.

There are some examples of differentiation being used in a learning development context and an increasing recognition of its importance in this context. A recent symposium held by ALDinHE and Sigma Network highlighted some of the ways in which learning development tutors teaching both academic skills, and mathematics and statistics, were employing theories and methods of differentiation in their teaching, including differentiation of task, level and outcome, as well as learning support needs (Dettmer, 2019a; Petty, 2009). Examples include the use of different types of resources and scaffolding methods, and assessing student needs at the start of sessions. Some barriers to differentiation in this context include the lack of confidence of tutors to try new methods in one-shot teaching sessions, as well as not having the knowledge or experience of techniques that could be used to differentiate in these settings. Increasing tutors' knowledge and understanding of differentiation techniques, for example the setting of open tasks, could increase their openness to trying new methods with students (Dettmer, 2019b).

Student self-evaluation and the 'Philosophy of choice'

The process of identifying the opportunities for differentiation with students in higher education should involve the students themselves. The literature suggests that there is a positive learning gain from student self-analysis (Anthony and Garner, 2016) and this, coupled with the evidence underlying how students develop self-efficacy in writing by assessing their own skills (Pajares, 2003; Nielsen, 2019) suggests that self-evaluation would be an effective method of starting the process of differentiation in the workshop setting. In addition, there is literature to support the idea that in developing self-efficacy and independent study skills, students should have some element of control, or choice, over activities that form part of their studies (Lewis and Hayward, 2003). This therefore supports the idea that students not only self-evaluate as part of the learning process, but also choose which activities are appropriate to develop their own learning.

It can be seen therefore that research into differentiation in higher education is continuing: research already shows that it can be an effective strategy for engaging a diverse cohort of students with different needs experiences and expectations. One of the key issues is to identify what constitutes effective differentiation in the higher education context. Experimenting with tools and techniques to implement differentiation, whilst being mindful of intercultural education and CRP, could directly address the wide variation in needs of our students and provide the beginnings of a framework to support further research in this area.

The intervention

Based on the literature, the intervention was designed to explore whether it is possible to address the differing needs of students in developing specific academic skills, and sought to find out more about how a

method of providing multiple concurrent activities addressing a range of skill areas could be effectively facilitated and managed.

I chose to work with a group of students who were nearing the submission date of their first assignment for a first year business module. The cohort included students with a variety of prior qualifications, experiences, including a number of overseas students, and as such was a good example of the mixed nature of many groups that we teach. I expected students to already have a good understanding of the requirements of the assignment, but that they would need support with skills associated with completing the final assignment, including editing, proofreading and referencing, for example. As this is a large cohort there are five separate tutorial groups, which gave me the opportunity to repeat the sessions with different groups of students. In addition, a colleague delivered one of the workshops, so she was able to give me feedback about her experience of delivering this teaching intervention.

To facilitate the workshop (see Figure 1), I planned to ask students to complete a self-evaluation which identified which areas they were less confident in, and therefore which skills they needed to work on. This approach ties in with the literature on developing student self-efficacy through self-evaluation, and the learning gain from completing self-analyses (Pajares, 2003; Nielsen, 2019; Anthony and Garner, 2016). Based on the results of this evaluation, students were to then prioritise which activities to complete in the workshop, and then re-evaluate their confidence rating, enabling an element of choice in their learning (Anthony and Garner, 2016, Petty, [n.d.]). Students had a range of timed activities to choose from during the workshop, each of which was designed to support them with a particular academic skill, and it was anticipated that they would have time to complete two or three activities. Repeating the self-evaluation at the end of the session, was intended to assess whether confidence had improved, particularly in those skills areas that students had completed activities about. This could then feed into an action plan to complete activities after the session. The full session plan for the workshop, including links to resources, can be found in Appendix 1.

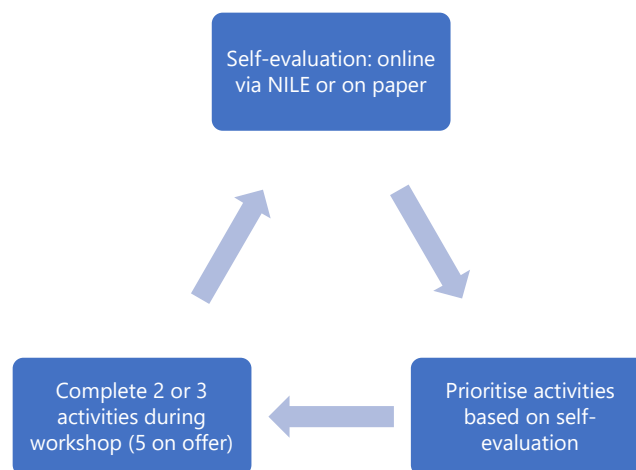


Figure 1: Structure of planned intervention

Self-evaluation

Student self-evaluation of skills was chosen as a way of enabling students to select relevant activities to complete during the workshop. Research has shown that people are not generally very good at accurately assessing their skills or knowledge, and often over-rate themselves on areas in which they have very little knowledge (Dunlosky and Rawson, 2012). However, using a self-evaluation is nevertheless a good way of reinforcing expectations for students, and encourages students to critically assess what they have done and

what they have left to do. As discussed earlier, despite the inaccuracy of student evaluation, it can have a positive impact on students' sense of control and choice over their learning, as well as actual learning gains (Anthony and Garner, 2016). It can also provide a baseline for assessing if the activities have had any impact on student development of skills by the end of the session.

Having explained the concept of the session, and the aims, students were asked to complete an online version of the self-evaluation (Appendix 2). There are five main topics covered by the self-evaluation, with two statements about each. Students rated either their confidence in the skill, or their progress in achieving the relevant learning outcome, using a Likert scale ranking from one to five, where one shows strong disagreement, and five indicates strong agreement with the statement. An online version of the self-assessment, using the Test option in NILE, was completed by students at the beginning of the session. The scores for each skill area were then automatically calculated by the system. By adding the scores together for each topic, they could identify which skills they had scored the lowest, and therefore which corresponding activities they should complete. I felt it was important for students to feel comfortable and not judged or assessed in any way, so I made it clear to them that I would not be viewing the results of the self-evaluations or using them in any way, and for this activity the numbers were solely for them to make a choice of activity.

Differentiated activities

Much of the literature on differentiation discusses the wider context in which students 'differ' and therefore need differing types or levels of support (Berggren, 2008; Taylor, 2017; Tomlinson *et al.*, 2003). In this intervention I deliberately chose to focus on only differentiating the content of the learning in the workshop to ensure that students could find something of value to them in the session, using theories and methods such as setting open tasks outlined by Petty in his 'differentiation mindmap' (Figure 2). The tasks were time-bound, and the outcomes not assessed, so the main focus of differentiation was the content of the tasks, which are those outlined in bold in the mindmap.

Differentiation: How to do it

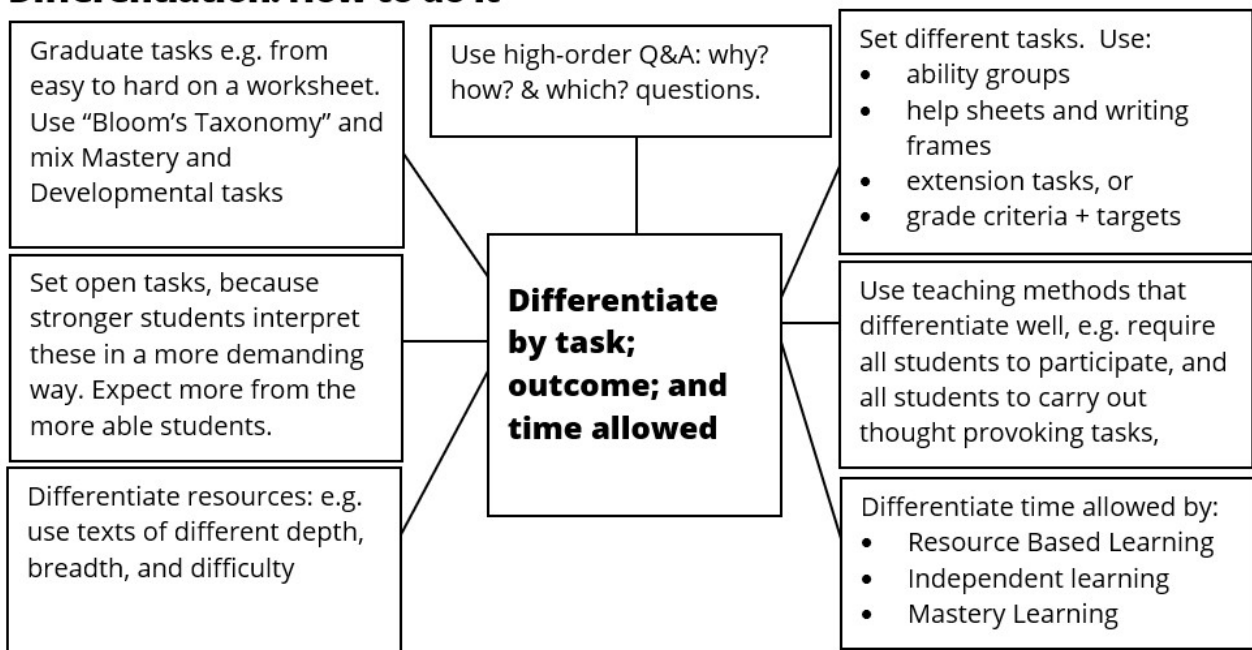


Figure 2: Extract from Differentiation mindmap (Petty, [n.d.]

Having identified the first activity, students would then move to the relevant 'station' (or table) in the classroom to find instructions and resources for that activity. They would then have around ten minutes to complete the activity, obtaining and giving support to others completing the same activity. There is evidence to suggest that working with or alongside peers as described by Vygotsky in his theories about scaffolding and the Zone of Proximal Development (ZPD) can be beneficial to students in the absence of direct teacher input, and that they would be able to co-construct meaning and answers by working together (Daniels, 2016).

The benefit of using this format is that students can practice independent learning in a supportive space, and are able to call on the knowledge and expertise of peers and tutors as and when they need it. Differentiating activities in this way enables students to focus on developing their knowledge and confidence in a skill that is relevant for them at that time.

Repeating the self-evaluation at the end of the session enables students (and potentially tutors) to assess what progress they have made, and identify areas for future development. This approach fits with a truly embedded approach to developing academic skills, whereby students are in control of their own learning, and have clearly signposted further opportunities to develop these skills as and when required.

Peer observation

Before the session, areas for observation were agreed between me and my observer: I wanted feedback on how effective my facilitation of the session was, and how effective the activities were in meeting the needs of the students, and my observer was interested in observing the logistics of managing concurrent activities, and how students engaged with the activities.

The session was run five times, for five different groups all studying the same module (the module is taught in this way to accommodate the number of students). The number of students present in each session varied between 4 and 11, with a total of 34 taking part from a total cohort of 105. The peer observation was arranged for the final session, which unfortunately had the smallest group of 4 students, and this low number had a substantial impact on the workshop. The workshop started as planned, albeit late as students were not on time. The explanation of the format worked well, and students were able to complete the self-evaluation effectively as I modelled the process, something I introduced after students in previous sessions had difficulty completing it without specific guidance. In this modelling, I showed each step of the process, making sure that students were following along on their own devices to complete the self-evaluation at the same time, which allowed them to assimilate the knowledge at a gradual pace (Hattie and Yates, 2013, p.73).

Issues also arose with my plan when it came to students completing the activities. Two of the students were fairly confident in their skills, and they chose to work on two different activities, as suggested by the results from their self-evaluations. They used the resources and I checked they understood the guidance, and they then worked independently in silence. The other two students were less confident and needed more support to start the activities. I had to give more directed support to enable them to understand the requirements of the activities, particularly as one had not been present at the beginning of the session. Immediately my plans for peer group support were not possible because of the small size of the group, and it was impossible to generate the usual 'buzz' of a workshop where students are working against the clock and then moving around the room to their next activity.

Evaluation

As there were repeated sessions I had the opportunity to test the intervention with a range of student groups, and also get feedback from a colleague who also facilitated one of the sessions. This meant that by the time I came to teach the final, peer observed session, I was fairly confident with the mechanics of the session and was able to make adaptations were necessary. There were two groups of eleven students (including that delivered by my colleague) and these two groups were definitely the most successful in terms of student engagement and apparent learning. This number of students was enough to get conversations going at each activity 'station' and enable peer support to occur.

In terms of the peer observation, it was hard to evaluate the success of the session based on this workshop as it didn't accurately represent what I was trying to achieve. However, I will use the feedback I received to revisit the content and guidance for the activities, as student engagement in the observed class seemed to depend on my being available to explain the activities – making the instructions clearer may positively impact on students' ability to self-direct themselves in completing the activities. Bondie *et al.* (2019) discuss at length the contested definition of differentiation, and the resulting variety in activities that are found in the classroom. Their suggestion of using the CARR model to reflect on and evaluate activities seems to be appropriate when considering the feedback from my peer observer and the student difficulties in the classroom (Figure 3). In addition, some of the activities were very similar in format, and student engagement could also be improved by varying the types and levels of activities available.

CARR Check Questions for Teacher Reflection

C	Clarity	Is this task clear to ALL students? Are the words understandable by all students? Are students expected to understand vocabulary that may be vague, have multiple meanings, or are in unfamiliar contexts?
A	Access	Could ALL students complete the task independently and feel capable?
R	Rigor	How much effort is required of different students? What would students find complex?
R	Relevance	Would ALL students find this task important, interesting, valuable, and/or useful?

Note. CARR = clarity, access, rigor, and relevance.

Figure 3: CARR model for reflecting on instructions for activities (Bondie et al., 2019)

Finally, my feedback included a reflection that Learning Development tutors “are sometimes at the mercy of the class tutor and how they choose to run their classrooms”. This really speaks to the heart of some of the issues we face in running one off, academic skills sessions. We have little knowledge of, or context about the students we are teaching, and this lack of knowledge impacts hugely on how effective our sessions can be. I have already noted the low attendance numbers for these sessions, the late arrivals (up to one hour late) and the difficulty some students had in engaging with the content. This lack of engagement can be explained by the fact that students had an assignment due for a different module in their programme on the same day of the observed workshop, making this workshop a low priority for many of them. Timing is of utmost importance when scheduling these academic skills sessions, as it can make a large difference to engagement, as demonstrated here.

Recommendations

The format of the sessions offered students the opportunity to focus on their specific needs, and as such is a method that I will use again in further sessions. Additionally, the use of self-evaluation is valuable for

students to understand the expectations about their work, and take initiative in identifying what they need to prioritise. However, the sessions were not completely successful for a number of reasons; building on these I propose the following recommendations:

Student numbers

The minimum number of students taking part in the workshop is important. Too few students and there is little in the way of peer support and discussion, too many and the facilitation of multiple activities would be difficult. The findings of this intervention would suggest that between 10-20 students is a manageable number. This calls for flexibility on the part of the tutor: if fewer students are expected to attend then differentiation has to occur using a format that does not benefit from peer support and interaction to the extent of this intervention.

Scaffolding activities

Instructions for activities need to be explicit and easy to follow. Some students struggled as there was a lack of direct instruction, or scaffolding, in the activities provided. Should I repeat the workshop I would improve the activities to make the guidance much more explicit, and reflect on these before and during implementation using the CARR model (Bondie *et al.*, 2019). In addition, modelling the process of completing the self-evaluation for the whole group had a beneficial effect and significantly speeded up the process for students who had not experienced the NILE test function before.

Be prepared for all scenarios

No assumptions should be made about how much of the assignment students have completed before the session. I was surprised that despite being due in 3 or 4 days, some of the students had not started the assignment, and very few had got to the editing stage. Many of these students had assignments due the day before this assignment, or even on the day of the workshop, and so, understandably were more concerned with completing and submitting these. This meant that some of the activities I had planned were not relevant for them, focussed as they were on editing and proofreading skills. Providing open tasks which allow for students to enter at whatever stage they are at would be one way of addressing this issue.

Effective liaison with colleagues

I was unaware of the students' conflicting timescales, and this had an impact on the effectiveness of the support we offered them. Working more closely with subject academics would enable us to have a better understanding of the context in which students are working, as well as any particular needs that should be accommodated in the design of workshop activities.

In conclusion, I think the literature shows that there are considerable benefits from using differentiation in the classroom, and this should also apply to learning development skills workshops. I would consider repeating this method of differentiating in class by task, however I would carefully structure the instructions given to students, potentially using more online resources such as video for example to model the activity, and seeking more information from the subject tutor about the specific needs of the students in the cohort. This session structure could be adapted to include levels of achievement or outcome by setting open tasks, and this would also make additional allowances to include students who had not completed as much work as others, for example. In addition, I would like to build on this work to incorporate further consideration of the external factors that impact on students' requirements in teaching and learning, such as diversity in interests, experiences and background. I will continue to explore how we, as learning development tutors, can balance the prevailing ethos to enculturate students to the University

as an institution, with a need to respond to student diversity which embraces that difference as a driver in developing more inclusive, appropriate teaching methods.

References

- ALDinHE (2019). Manifesto for Learning Development. *ALDinHE* [online]. Available from: <http://www.aldinhe.ac.uk/wp-content/uploads/2019/11/Learning-Development-Manifesto.pdf> [Accessed 8 January 2020].
- Anthony, S., and Garner, B. (2016). Teaching Soft Skills to Business Students: An Analysis of Multiple Pedagogical Methods. *Business and Professional Communication Quarterly* [online]. **79**(3), pp.360–370. Available from: <https://journals.sagepub.com/doi/10.1177/2329490616642247> [Accessed 8 January 2020].
- Ashman, G. (2015). Stand-out teaching – minus differentiation. *Times Educational Supplement*, 24 April [online]. <https://www.tes.com/news/stand-out-teaching-minus-differentiation-0> [Accessed 9 November 2019].
- Aubrey, K. and Riley, A. (2019). *Understanding and using educational theories* (2nd ed.) London: Sage.
- Berggren, C. (2008). Horizontal and vertical differentiation within Higher Education – gender and class perspectives. *Higher Education Quarterly* [online]. **62**(1/2), pp. 20-39. Available from: <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,shib&db=ehh&AN=31849291&site=ehost-live> [Accessed 6 January 2020].
- Bondie, R. S., Danhke, C. and Zusho, A. (2019). How does changing “One size fits all” to differentiated instruction affect teaching? *Review of Research in Education* [online]. **43**(1), pp. 336-362. Available from: <https://journals.sagepub.com/doi/full/10.3102/0091732X18821130> [Accessed 9 November 2019].
- Cuevas, J. (2015). Is learning styles-based instruction effective? A comprehensive analysis of recent research on learning styles. *Theory and Research in Education* [online]. **13**(3), pp. 308-333. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/1477878515606621> [Accessed 9 November 2019].
- Daniels, H. (2016). *Vygotsky and Pedagogy*. Abingdon: Taylor and Francis.
- Dettmer, J. (2019a). ALDinHE and sigma Network Symposium Monday 22nd July 2019. *YouTube* [online]. Available from: https://www.youtube.com/playlist?list=PLrK5f2HUKj_y3bLkQgOFS-puELQ6LbTsb [Accessed 8 January 2020].
- Dettmer, J. (2019b). 10 Differentiating teaching and learning for mixed ability groups – Anna Judd Yelland. *YouTube* [online]. Available from: <https://youtu.be/OudnKN3TiRk> [Accessed 8 January 2020].
- Dunlosky, J. and Rawson, K. A. (2012). Overconfidence produces underachievement: Inaccurate self evaluations undermine students’ learning and retention. *Learning and Instruction* [online]. **22**(4), pp. 271-280. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S0959475211000685> [Accessed 5 January 2020].
- Hattie, J. and Yates, G. C. R. (2013). *Visible Learning and the Science of How We Learn*. London: Routledge.
- HESA (2019). Widening participation summary: UK performance indicators 2017/18. *HESA* [online]. Available from: <https://www.hesa.ac.uk/news/07-02-2019/widening-participation-summary> [Accessed 10 November 2019].

- Hill, P., and Tinker, A. (2013). Integrating learning development into the student experience. *Journal of Learning Development in Higher Education* [online]. **5**. Available from: <https://journal.aldinhe.ac.uk/index.php/jldhe/article/view/172/125> [Accessed 11 January 2020].
- Huebner, T. A. (2010). What research says about differentiated learning. *Educational Leadership* [online]. **67**(5), pp. 79-81 [Accessed 8 January 2020].
- ILT (2019). Integrated Learner Support. *Institute of Learning and Teaching in Higher Education* [online]. Available from: <https://www.northampton.ac.uk/ilt/academic-development/integrated-learner-support/> [Accessed 8 January 2020].
- Jackson, N. and Evans, L. (2017). Self-reflections on differentiation: understanding how we teach in Higher Education. *Networks: an Online Journal for Teacher Research* [online]. **19**(1). Available from: <https://files.eric.ed.gov/fulltext/EJ1152402.pdf> [Accessed 9 November 2019].
- Konstantinou-Katzi, P., Tsolaki, E., Meletiou-Mavrotheris, M., and Koutselini, M. (2013). Differentiation of teaching and learning mathematics: An action research study in tertiary education. *International Journal of Mathematical Education in Science and Technology* [online]. **44**(3), pp. 332-349. Available from: <https://doi.org/10.1080/0020739X.2012.714491> [Accessed 11 January 2020].
- Landrum, T. J., and McDuffie, K. A. (2010) Learning styles in the age of differentiated instruction. *Exceptionality* [online]. **18**(1), pp. 6-17. Available from: <https://www.tandfonline.com/doi/full/10.1080/09362830903462441> [Accessed 9 November 2019].
- Lewis, L. and Hayward, P. A. (2003). Choice-based learning: Student reactions in an undergraduate organizational communication course. *Communication Education* [online]. **52**(2), pp. 148-156. Available from: <https://doi.org/10.1080/03634520302467> [Accessed 8 January 2020].
- McWilliams, R. and Allan, Q. (2014). Embedding Academic Literacy Skills: Towards a Best Practice Model. *Journal of University Teaching & Learning Practice* [online]. **11**(3). Available from: <http://ro.uow.edu.au/jutlp/vol11/iss3/8> [Accessed 8 January 2020].
- Munro, J. (2012). *Effective strategies for implementing differentiated instruction*. [online] Available at: http://research.acer.edu.au/cgi/viewcontent.cgi?article=1144&context=research_conference [Accessed 4 January 2020].
- Nielsen, K. (2019). Peer and self-assessment practices for writing across the curriculum: learner-differentiated effects on writing achievement. *Educational Review* [online]. 20 Dec 2019. Available from: <https://doi.org/10.1080/00131911.2019.1695104> [Accessed 11 January 2020].
- Pajares, F. (2003). Self-efficacy beliefs, motivation and achievement in writing: a review of the literature. *Reading & Writing Quarterly* [online]. **19**(2), pp. 139-158. Available from: <https://www.tandfonline.com/doi/abs/10.1080/10573560308222> [Accessed 8 January 2020].
- Petty, G. [n.d.] Differentiation: Differentiation mindmap. *Geoff Petty* [online]. Available from: <http://geoffpetty.com/training-materials/differentiation/> [Accessed 11 January 2020].
- Petty, G. (2009). *Teaching today: A practical guide* (4th ed.). Oxford: Oxford University Press.

Santangelo, T. and Tomlinson, C. A. (2009). Differentiated instruction in postsecondary environments: Benefits, challenges, and future directions. *International Journal of Teaching and Learning in Higher Education* [online]. **20**(3), pp. 307-323. Available from: [http://www.isetl.org/ijtlhe/pdf/IJTLHE20\(3\).pdf#page=5](http://www.isetl.org/ijtlhe/pdf/IJTLHE20(3).pdf#page=5) [Accessed 9 November 2019].

Taylor, S. (2017). Contested knowledge: a critical review of the concept of differentiation in teaching and learning. *Warwick Journal of Education – Transforming Teaching* [online]. **1**, pp. 55-68. Available from: <https://journals.warwick.ac.uk/index.php/wjett/article/view/44> [Accessed 7 January 2020].

Tomlinson, C. A., Brighton, C., Hertberg, H., Callahan, C., Moon, T., Brimijoin, K., Conover, L. and Reynolds, T. (2003). Differentiating instruction in response to student readiness, interest, and learning profile in academically diverse classrooms: A review of literature. *Journal for the Education of the Gifted* [online]. **27**(2-3), pp.119-145. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/016235320302700203> [Accessed 9 November 2019].

Tomlinson, C. A. (2010). Carol Ann Tomlinson on learning styles. *ASCD In Service* [online]. 15 June. Available from: <http://inservice.ascd.org/carol-ann-tomlinson-on-learning-styles/> [Accessed 9 November 2019].

University of Northampton (2018). *Strategic Plan 2015-2020* [online]. Available from: <https://www.northampton.ac.uk/wp-content/uploads/2015/10/Strategic-plan-2018.pdf> [Accessed 11 January 2020].

University of Northampton Library and Learning Services (2020). Study Support: Learning Development. *University of Northampton Library and Learning Services* [online]. Available from: <https://libguides.northampton.ac.uk/studysupport/learningdevelopment> [Accessed 11 January 2020].

Wu, E. H. (2013). The path leading to differentiation: An interview with Carol Tomlinson. *Journal of Advanced Academics* [online]. **24**(2), pp. 125-133. Available from: <https://journals.sagepub.com/doi/pdf/10.1177/1932202X13483472> [Accessed 4 January 2020].

Valiandes, S., Neophytou, L. & Hajisoteriou, C. (2018). Establishing a framework for blending intercultural education with differentiated instruction. *Intercultural Education* [online]. **29**(3), pp.379-398. Available from: <https://doi.org/10.1080/14675986.2018.1441706> [Accessed 11 January 2020].

Appendix 1: Workshop lesson plan

Title: Academic skills plan	
Date: December 2019	Duration: 1 hour
Tutor:	Group: Business level 4 students (5 groups)
Aims:	
<ul style="list-style-type: none"> To ensure students have met criteria in assignment brief, assignment due December 2019 	
Learning Outcomes addressed:	
d) Effectively communicate information in a structured and appropriate written format that demonstrates an awareness of the purpose, topic, context.	

<p>Equipment Required: Self-evaluation on NILE module site, laminated instruction cards, access to Padlet for students.</p> <p>Activity sheets and feedback form on my Onedrive site (link removed)</p>
<p>Considerations:</p>
<p>Classroom Layout: workshop</p>

Activities:

Activity: resources required	Timing	Outcomes – students will have...
<p>Students to complete the self-evaluation on their NILE site at (STD site, module activities, Term 1 Powerpoint and Calendar folder, it's at the bottom of the page.)</p> <p>There are 10 questions in the self-evaluation (same as those on the feedback form). They will get a score out of 10 for each question, so if they add together the 2 scores for each area, whichever has the lowest score should be the activity they start with.</p>	10 mins	<p>Evaluated their own skills in the relevant areas</p> <p>Identified which activities (prioritise 2 or 3) to complete during the workshop</p>
<p>Set out laminated cards on separate tables. Hand out feedback forms. Ask students to find the first activity they need to do.</p> <p>Each activity should take around 15 minutes, so start timing the first activity. I think they should be able to do 2 activities in the time. Support students as required.</p> <p>Activity resources for info (links to Padlet pages removed): Evaluating sources: Using sources: Referencing activity: Paragraphs and sentence structure activity: Academic language activity:</p>	20 mins	Completed the first activity
<p>Ask students to note on the feedback form which activity they completed. Move students onto the second activity and start timer. Support students as required.</p>	20 mins	Completed the second activity
<p>Ask students to note on the feedback form the second activity they completed. Ask them to complete the whole</p>	5 mins	Reflected on their learning, and assess if their skills have changed.

feedback form (they don't need to remember or refer to their scores from the online self-evaluation).		
Collect feedback forms. Thank students and ask if any questions, remind them of Learning Development services.		Opportunity to have specific questions answered.

Appendix 2: Self-evaluation questions

Academic skill area	Rating 1-5 1= strongly disagree 5= strongly agree	Score (add together scores a and b for each skill)
1. Evaluating sources – this activity was helpful		
1a. I have used at least five academic sources		
1b. I am confident that the sources I have used are appropriate and relevant		
2. Using sources – this activity was helpful		
2a. I have provided citations as evidence for all statements of fact, theories and research		
2b. I have used source information in a variety of ways, for example by quoting, summarising or paraphrasing		
3. Referencing - this activity was helpful		
3a. I have checked the in-text citations and reference list using the University of Northampton Harvard Guide		
3b. I have been able to find an appropriate referencing format for all of my references		
4. Structure - this activity was helpful		
4a. I have clear paragraphs that only cover one topic or idea		
4b. I have included citations in each paragraph except the conclusion		
5. Academic language - this activity was helpful		
5a. I am confident that my language is formal and clear		
5b. I have proof read my assignment and there are no spelling or grammar mistakes		