UNIVERSITY OF LONDON

CENTRE FOR DISTANCE EDUCATION
Research and innovation in flexible and distance teaching and learning

Student Learning Hours and Learning Strategies Project: Final Report

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30 December 2020

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Executive Summary

The Student Learning Hours and learning Strategies study was commissioned to:

1. Investigate how students engage with different types of UoLW content and learning activities, both solo and collaborative, and thereby to
2. Support discussion on ways of enhancing programme design and operation to maximise opportunities for student success.

Data were collected from students undertaking four programmes: BSc. Computer Science ('CS'), the MBA, PG Laws ('PGL') and Professional Accountancy ('PA').

Data collection methods were:

1. An online survey (645 respondents)
2. Self-completed learning diaries (7 respondents)
3. Student interviews (7 respondents).

Principal findings include:

1. Wide variation in study times within and between programmes, both above and below programme teams' expectations/recommendations .
2. Overall, respondents are fairly evenly split between those who think they spend enough time studying (54%) and those who think they do not spend enough (40%). However, many say that family and work demands reduce the time available for study below levels they are comfortable with.
3. Student self-reported study behaviours vary widely in style and effectiveness.
4. Study guidance provided is followed to some extent by most respondents.
5. Students who follow the study guidance closely tend to spend longer studying than is expected by the programme team.
6. Learning content is reported to help learning more than do learning activities, and individual learning activities are reported to help learning much more than collaborative learning activities.
7. The four programmes covered by this study are satisfactory, or more than satisfactory, for students who are experienced, sophisticated, learners, but the evidence from learning diaries is that not all students have appropriate learning strategies.

Introduction

The Student Learning Hours and Learning Strategies study was commissioned by Sam Brenton, Director of Education, Innovation and Development at the University of London.

Aims

To investigate how students engage with different types of UoLW content and learning activities, both solo and collaborative, and thereby to support discussion on ways of enhancing programme design and operation to maximise opportunities for student success.

Previous research[1] confirms what might be expected, namely that the more distance learning students engage with their courses, the better their academic achievement tends to be. Engagement is defined here as both the amount of time learners spend on tasks, and the extent to which they are active learners, willing to take part in learning activities.

This study reports on how UoLW students allocate their study time and effort to the various activities and opportunities provided by courses. It also examines how students study on UoLW programmes including how students actually engage with the materials, learning activities and each other.

Research questions

We know little about how and why students allocate their time and effort in UoLW programmes, and how their allocation of time and effort relates to their interests and their learning. We seek, through this work, partially to close this knowledge gap. With this in mind, the study addresses three specific research questions:

RQ1. How do student study hours and study patterns compare with programme team expectations?

RQ2. How and why do students engage with different types of content and learning activity?

RQ3. What role does peer interaction play in student learning?

Methods

Students' self-perceptions of their learning behaviours were collected via:

[1] Mehmet Firat , Aylin Ozturk, İhsan Guneş , Esra Colak , Melda Beyaz & Koksal Buyuk. (2019). How e-learning engagement time affects academic achievement in e-learning environments. A large-scale study of open and distance learners. *Open Praxis*, vol. 11 issue 2, April–June 2019, pp. 129–141 DOI: https://doi.org/10.5944/openpraxis.11.2.920

1. Online survey across a range of programmes and subject types

2. Sample of Learning Diaries from volunteer students

3. Remote interviews of volunteer students (via videoconference)

Deliverables

The study generated a number of interim reports:

- Analysis of student study hours
- Analysis of student responses to study guidance
- Preferences for learning activities and resources/content
- Analysis of student Learning Diaries
- Analysis of student feedback on each of the four individual programmes

This final report draws together strands from each of these different aspects to address the three research questions:

RQ1. How do student study hours and study patterns compare with programme team expectations?

RQ2. How and why do students engage with different types of content and learning activity?

RQ3. What role does peer interaction play in student learning?

Results

The survey response rate was just under 10% overall and thus can be regarded as reasonably representative of the student populations on the selected programmes:

Programme	Population	Survey sample	% response rate
Professional Accountancy	2362	199	8.4
Computer Science	1318	136	10.3
MBA	952	146	15.3

PG Laws	1908	164	8.6
Total	6540	645	9.9

While the numbers of learning diaries and interviews conducted are far too small to have a chance of being representative, they offer insights into the behaviours and views described in the survey.

We return now to the three research questions to see what the student data tell us about each.

RQ1. How do student study hours and study patterns compare with programme team expectations?

Study hours

There are considerable variations in the amount of time respondents spend studying their programmes each week. Some of this variation can be explained by intended differences in the amount of study time for different programmes and by modes of study (PT/FT). The following table shows the range of study hours reported by programme with expected hours highlighted in white, while pink and green indicate hours above and below programme team expectations respectively.

	< 5 hours	**5-8 hours**	**9-12 hours**	**13-16 hours**	**> 16 hours**
PG Laws **10-12**	33 (20.1%)	51 (31.1%)	41 (25%)	22 (13.4%)	17 (10.4%)
PA **12-15**	13 (6.6%)	49 (24.9%)	50 (25.4%)	46 (23.4%)	39 (19.8%)
MBA **6-7**	12 (8.8%)	55 (40.4%)	41 (30.1%)	16 (11.8%)	12 (8.8%)
CS **5-8**	20 (13.7%)	35 (24%)	35 (24%)	29 (19.9%)	27 (18.5%)

From this it can be seen that some programmes seem to require more than the recommended level of study time on average, although it has to be emphasised that within individual programmes there is also considerable variation in reported study times. Overall, respondents are fairly evenly split between those who think they spend enough time studying (54%) and those who think they do not spend enough (40%). (Only a small minority (5%) think they spend too long.) But there is a frequently voiced concern about the amount of time required to study the programmes effectively, summed up succinctly by the student comment:

> "Too much material to go through. Not enough time."

Life commitments have a big impact on student study hours, with many reporting on the way family and work demands reduce the time available for study below levels they are comfortable with.

Study patterns

Most of the survey respondents reported following programme study guidance at least sometimes and nearly half said they followed it 'Quite a lot', except in the case of CS, where the most popular option was adherence only 'sometimes'. And generally, most (78%) respondents found the guidance 'clear enough', except in the case of CS, where only 59% of respondents found the guidance 'clear enough'. Following study guidance affects the amount of study time, but not always positively. Those who follow study guidance closely tend to spend longer studying than expected by the programme teams. Not surprisingly, those who do not follow the study guidance at all tend to spend less time studying than expected by the programme teams.

The most common reasons given for following guidance were:

• **Helpfulness of the guidance for time management**. 28 respondents across all programmes who followed the guidance either 'completely' or 'quite a lot' used the guidance to manage their time and stay on track. In contrast, in the comments of respondents who followed the guidance either 'sometimes' or 'not at all', 8 negative comments about this aspect were noted. 10 respondents who found the guidance 'not clear enough' noted that their personal study times differed from the study time estimations provided.

• **Result-oriented considerations**. 22 respondents across all programmes who followed the guidance either 'completely' or 'quite a lot' believed that adherence would lead to better academic performance.

The principal reason cited for **not** following guidance was:

• **Personal circumstances**. Across all programmes, 102 respondents who did not follow the guidance 'completely' noted personal limitations, such as a lack of time whether generally or due to work commitments. This was not noted in the comments of respondents who followed the guidance 'completely'.

Student study patterns, as reported via learning diaries, vary considerably. Some diaries exhibited lack of effective self-performance monitoring and review; absence of forward planning or judgement about where to focus effort; and no evidence of conscious knowledge construction through note taking, connection making, theory application, exploratory learning. In contrast with these, other diaries included evidence of effective learning strategies, including active note taking; lots of practise and connection making; strategic assessment of amount of effort required for each component based on relevance, duplication, comprehension; exploratory learning; application of theory and self-directed research; seeking tutor and peer support and using external resources to supplement programme material; strong engagement with collaborative group exercises; meta-awareness: engaged in self dialogue regarding progress including monitoring, reflection, revisions and forward planning.

Learning competence as revealed by the diaries does not appear to be associated with particular programmes. There was no consistent relationship between either weaker or stronger study behaviours and any particular programmes in this study.

There is some evidence to suggest that students who adopt a regular study discipline (studying at around the same time each day and for approximately the same amount of time) tend to exhibit more positive study behaviours, while those with irregular study patterns (in terms of both timing and duration of study sessions) tend to exhibit weaker study behaviours. While regular study sessions do not in themselves explain more effective study behaviours it may be that having a regular study discipline is an important aspect of having a more strategic and self-aware approach to study in as much as it helps with planning, goal setting, time management and progress monitoring.

There is also some tentative evidence in support of the hypothesis that learning strategy evolves over time. However, the time periods reported on by the diaries are not the same (although they do overlap at the beginning) and crucially they are too short to allow firm conclusions about the possibility that student learning behaviour evolves positively with experience.

There are insufficient data to shed light on any possible differences or similarities in learning behaviour between students studying via a Recognised Teaching Centre and independent students.

RQ2. How and why do students engage with different types of content and learning activity?

How do students engage with different types of content and learning activity?

Survey respondents were asked to rank different programme components in terms of "how much they have helped you to learn".

Students find all the various types of content and learning activities in their programmes helpful to some degree. The proportion of positive comments - extremely helpful or quite helpful - where a response on helpfulness was provided, was in the range from 69-76%. However, the variances in responses between programmes are considerable. For example, previous examination questions were rated the most highly (1) by MBA students and the lowest (11) by PAC students.

The learning activities and resources fall into three distinct bands of helpfulness – High, Medium and Low.

	Helpfulness rank in -	**Computer Science**	**PG Laws**	**MBA**	**PA**	**Total "Extremely or quite helpful"**	**Over-all Rank**
Content or Process	**Learning activities and resources**						
C	**2 Essential readings such as VLE content, online books or articles, other web sites, PDFs, etc.**	3	2	3	1	538	1

C	**10 Previous exam questions**	5	1	1	11	457	2
C	**3 Further readings recommended at the end of each topic**	8=	3	7=	2	438	3
P	**5 Self-assessment exercises**	2	5	7=	6=	433	4
P	**6 Reflective exercises**	6	6	2	8	415	5
C	**1 Videos within the course**	4	8	4	6=	401	6=
?	**9 Orientation materials (e.g. study skills, careers modules)**	10	7	5	5	401	6=
P	**4 Multiple choice questions**	1	10	9	3=	383	8
?	**7 Case studies**	8=	4	11	3=	364	9
P	**11 Peer collaboration outside of the VLE (e.g. self-**	7	11	10	9	285	10

	organised social media groups)						
P	**8 Discussion forums**	11	9	6	10	261	11

Overall, we see here a strong preference for content over process. Content such as readings is reported to help learning more than do more active learning components such as multiple choice questions, and individual learning activities much more than collaborative learning activities. A surprising exception is video, which was ranked only 6 out of 11. It is widely believed that 'students like video'. That is not borne out in these data.

Why do students engage with different types of content and learning differently?

Interviewee comments about further readings, case studies and, in particular, course videos help to explain this picture. Further readings are avoided because of lack of time, case studies are regarded as just something additional to read without clear purpose or advantage and videos are regarded as too short to provide sufficiently substantial content. So the most important content is perceived as text books (where provided) and essential readings. In this context the online library is highly valued as an up-to-date and easy-to-search source for these.

Individual learning activities such as self-assessment exercises, reflective exercises and multiple choice questions are appreciated by some students as valuable learning and performance monitoring tools, but this study suggests that many UoL students may not perceive clearly enough how learning activities can help them in these ways.

Similarly, results from this study suggest that a significant body of students do not appreciate how dialogue and collaboration assist the process of sense-making and knowledge construction. To some extent the problem with discussion fora is self-reinforcing: according to our respondents, poor attendance, slow response times and inappropriate dialogue deter more experienced learners from participating, which in turn reduces the quality of discussion found there. Peer collaboration is not regarded highly because students do not understand how it can help them achieve their primary learning outcomes of better understanding of modules and preparation for exams.

RQ3. What role does peer interaction play in student learning?

Student rankings of discussion fora and peer collaboration activities outside the VLE indicate that overall they regard these as the least helpful of all course components. There is some variation across different programmes but nevertheless peer interaction is not ranked within the top half of helpful components on any programme in this study.

Typical survey respondent comments about peer interaction are:

· Not easy to collaborate online

· -Collaboration with other students is inexistent. Forums are useless tools for this purpose. -

· [T]he collaboration with other students is closer to zero.

· After more than 1 year it is still difficult for me to interact with the […] other students […]

· I was not able to collaborate as much as proposed.

· There is not much collaboration with other students. Unlike face to face lectures, interaction with other students is limited to forums and not many students participate in the forum.

Explanations offered by survey respondents for this view about peer interaction cluster around five main themes:

- **VLE Functional issues:** Respondents explained that the VLE makes it difficult to communicate with small groups of peers (it is only possible to message via fora or private messages). They also report that it is difficult to save useful content from forum discussions and to get notification about specific replies.

- **Responsiveness:** Respondents reported time delays to responses because of time zone differences and different students participating in different modules with different study schedules. Respondents also observed that many students do not contribute to forums and thus students who do are missing out on important viewpoints across the world.

- **Group organisation:** Respondents commented that groups are not always properly formalised and that this is important especially for those courses that insist on groups working together because it is not easy for a student to find a group on their own.

- **Inappropriate or unhelpful behaviour:** Respondents explained that students are not always nice to each other in self-moderated channels and forum discussions are too unfocussed.

- **Interactivity:** Respondents commented that webinar meetings are too much one-way instead of two way.

Conclusions

Although there are considerable variations between programmes, in responses and in issues raised, nevertheless a fairly clear overall picture emerges from this study about how UoLW students are studying.

- Students often find the amount of material to be studied is more than they expected. For many, the amount of time it takes to work through the material is a significant challenge in the face of other demands on their time.

- Study behaviours revealed by the learning diaries vary considerably from quite weak to very strong. Weaker study patterns focus in not very organised ways on reading and memorising content. Stronger patterns display greater awareness of requirements, personal progress, planning, strategic allocation of resources and personal knowledge construction.

- The very clear extent to which online survey respondents ranked the usefulness of content above learning activities and peer interaction suggests that there are issues with the extent to which a majority of students understand the nature of learning and the requirements of the programmes they are studying.

The size of the survey question sample (10% of the population) suggests that conclusions derived from the survey covering the length of time studied and perceptions of the helpfulness of different course components are probably reliable. More qualitative findings concerning the details of student study behaviour and motivations are less reliable because they are based on very small numbers of student learning diaries and interviews. More research is needed to investigate these latter findings.

Discussion topics suggested by these findings:

1. How might students' understanding and skills in learning be scaffolded to support deeper approaches to learning within the recommended study times for modules?
2. To what extent should module learning outcomes explicitly include development and enhancement of students' learning strategies and skills?
3. How could the benefits of undertaking specific learning activities be more effectively communicated?
4. Do we wish to enhance students' willingness and ability to engage with peers more effectively and if so how can this be achieved within the constraints UoLW programmes face ?