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CAN A BLENDED LEARNING APPROACH ENHANCE STUDENTS' TRANSITION INTO HIGHER EDUCATION? A STUDY TO EXPLORE PERCEPTIONS, ENGAGEMENT AND PROGRESSION

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ABSTRACT: This paper is concerned with one programme's approach when using blended learning activities to support student transition into an English university. Its intention was to capture students' attention and curiosity whilst setting patterns for learning and study. The approach combined face-to-face sessions with on-line learning tasks. Research findings support the progress of students in regard to the level of attainment throughout the weekly tasks, although the students were initially challenged by the intensity of the use of ICT applications to support their learning. In conclusion this learning approach was found to be an effective method to support students during the initial weeks at university.

KEYWORDS: Blended learning, engagement, progression, transition, curriculum design.

1. **INTRODUCTION:** The start of any university programme of study is crucial. Students' attention and interest must be captured and patterns for learning and studying set. The majority of students in English universities still enter straight from school or college at 18 or 19 years old and the transition for students into higher education at this age is a key element of their experience in the first year (1). Barriers to transition can then be created if students perceive a mismatch between their own learning style and that which is required at university (2). According to authors from the Netherlands, this phase of their learning must therefore link and progress from where the students are starting from, as the better the fit between the two levels of education the more successful the students will be (3). However, students enter university at different stages in their own development and these first few weeks cannot be too difficult as this will scare some, yet not so easy as to create academic boredom (4). Research carried out in the USA suggests that the approaches taken at the beginning of the university journey must be designed with care as students need support and guidance and a curriculum that avoids the information overload effect often experienced during transition (5). The focus of this period of time should be about meaningful, contextualised and relevant experiences, which enable ownership of the learning processes and help develop social and collaborative learning practices (6). According to the Australian authors Taylor and Newton (7) courses should be designed to assist all students to engage effectively with their studies, irrespective of their personal situations and online tasks can be completed around other commitments. The approach taken in this study is designed to allow students to advance progressively and gain regular and supportive feedback from staff.

Pedagogical approaches to support the student learning experience are well documented throughout international literature [(8),(3),(9)]. Students are learning for unknown futures which require innovative curriculum and pedagogical changes (10) and learners need to have the know-how to learn effectively in this potentially changing educational climate (11). The face to face method, where teachers feed students information, may be seen by some as the only way learning takes place (11) and if there are new methods employed, then very often the students have to unlearn the old methods before moving forwards. Curriculum design of the first year of a degree programme therefore has to encompass many different facets to 'ensure early enculturation into successful learning at university' (8). Using a range of student and staff feedbacks on the current arrangements for student transition, a successful case was made to the programme team for a blended learning format to be part of the first 5 weeks for the new students. This paper explores the effect of re-designing the start of one university programme to incorporate a blended approach to learning investigating the engagement, progression and perceptions of a cohort of 134 first year students. Cook and Leckey (12) consider transition to be the 'greatest hurdle' in higher education and lack of engagement at this point can lead to academic underachievement (13). Enhancing transition is widely accepted as a strategy for improving retention and

success [(14), (15)] and the blended learning curriculum innovation was designed to enhance engagement and success and improve student retention.

2. BLENDED APPROACHES TO CURRICULUM DESIGN: Blended learning is described as an approach to learning and teaching which combines and aligns learning undertaken in face-to-face sessions with learning opportunities created online (16). It is an approach that, according to the Malaysian author Dzakiria (11), combines various methods of delivery media designed to complement each other and enhance the overall learning experience. The most common delivery approach to blended learning and the one adopted by this programme is the provision of online activities, or e-learning, that supplements the campus based programme (17). Blended learning has the potential to deliver the learning activities and 'support learners using a distance learning model' (18). The blended learning terminology, however, assumes it is a different approach and Allan (9) suggests that in the future it will generally be accepted that teaching and learning will always integrate a variety of experiences and activities. According to Garrison and Kanuka (19) blended learning is the integration of face-to-face and on-line, not just the addition of one medium to the existing dominant approach. MacDonald (20) suggests there are two approaches to e-learning, synchronous and asynchronous. Synchronous is lecturer led learning where all students are on-line together at the same time and asynchronous is self-paced (20), where students, often working within a time frame, decide when to complete the learning activities. In relation to this study the asynchronous approach was taken with the content structured around key subject themes. This approach was chosen to enable students to work at their own pace and within their own knowledge base ensuring that the entire cohort could engage with the materials. Students need to actively and critically engage in their learning instead of passively receiving knowledge (13) and it was hoped that the blended learning approaches will add to their experiences and set positive study habits for the future. However, this will not work for all students and one of the barriers to asynchronous learning is that individuals who are not self-motivated will put off the work, in addition to missing the interaction with others, as they are solo learning (21). This may be overcome by traditional elements of the programme and the interaction between the delivery mechanisms, the content and the learner. From an Australian perspective, Taylor and Newton (7) claim that the subject design process is crucial in the blended learning process and there are three criteria that frame this accessibility to learning experiences. Firstly, the content is educationally appropriate and meaningful; secondly, the material is accessible wherever the students are and thirdly, that the activities presented are of equal value.

This approach at curriculum design level does assume a familiarity and level of confidence in online learning. There may be an assumption that students are often perceived as being digital natives whereas it is not that clear cut, as many students are not prolific users of technology and it should not be taken for granted that this is their preference for learning (22). In their study, Taylor and Newton (7) claimed that 80% of students felt that they had adequate knowledge of the use of the software, however 20% were less than positive and often felt 'overwhelmed or alienated' by the technology resulting in isolation. There are also implications if the technology fails as this may affect the student's learning and add to their potential frustrations (9). Development activities may be needed to be built into the programme to ensure all students feel comfortable with the use of the technology and are not put off before they even start.

The design of the curriculum needs to ensure that the learning objectives engage students in their studies (7) and this can be a 'creative, messy and iterative process' (23). Blended learning programmes, are more challenging to design than traditional programmes (9) and are likely to bring together a wider range of people, resources and technologies. A barrier therefore is engaging all the necessary staff groups to enable the design, planning and subsequent delivery to work effectively. One way to enable this to happen is working in curriculum teams (7) which was the approach taken in this study. A smaller working group came together with the university's technology enhanced learning (TEL) team to experiment with the technology and design the structure of the blended learning tasks. The group trialled resources, activities and structure and worked together with current students to test out the approaches and the potential impact on learning. Staff have been considered as one of the barriers to blended learning (11) and the support from the technology specialist was vital in supporting the development of the processes. Taylor and Newton (7) claim that working in a curriculum team linked to technology support staff would make blended learning a shared experience. The major implication is the clarity of what and how a blended approach can be located in curriculum design. From a Norwegian perspective, Aasen (24) views staff collaboration, where experiences are shared, will lead to them sharing the same goal. Dzakiria (11) supports that students don't 'simply learn' but they learn from someone else; this stresses the importance of the lecturer's input. However, Aasen (24), highlights that when staff present a cooperative culture to blended learning it is 'most likely to succeed'.

The design for this programme based delivery mechanism was a development of the approaches to transition that had been undertaken by the team over a five year period (25). It was constructed around the key subject content that needed to be introduced to students during their first five weeks at university and this will be referred to in this paper as the themes. Each week had a different theme and the overall approach was a mix between face-to-face contact in the traditional manner of lectures and seminars alongside activities, tasks and assessments online. As part of

the face-to-face delivery each week the students had a chance to be involved in off-campus learning activities to support their learning. The use of real life situations and authentic material, according to Allan (9), assist students in making the online activity and the associated learning 'real' and one that should generate enthusiasm about the topic from a variety of perspectives.

Each week there were two aspects to the online materials, part A and part B which were set-up on the University's virtual learning environment (VLE) in a way that only allowed part B to be accessed once part A had been completed. For the first week that the students were at university both part A and B feedback to tasks was provided formatively to enable the individuals to acclimatise and to allow students to consider what it might mean to be a student. Time was built into the class activities to go through the online tasks to make sure the students could access the materials through the VLE and understood the structure. For the subsequent four weeks, part A was formative and was based around subject content, with typically four different activities to be undertaken (see Table I for an example). This was followed by part B which was the summative component and linked to an assessment in one of the modules. Part B tasks were completed through an online journal with personal tutors managing their groups, marking the work and providing weekly individual feedback and feed-forward.

Task Example	Content Information
1. Setting goals	Students to set two goals for the week, one academic and one personal.
2. Reviewing and analysing	Students to watch a video clip and identify the characteristics against a set of questions (200 words).
3. Summarising	Students to read the electronic chapters attached to Blackboard to produce a summary of the key ideas (3 key points).
4. Reviewing and delivering	Students to review a document and then plan and deliver an activity around this.

Table I : Example of blended learning activities

3. RESEARCH DESIGN: This study used a mixed methods approach to track students' progress and engagement through the first five weeks of their time at university to assess the benefits and pitfalls of a blended learning curriculum. The project had two phases of data collection: the first was quantitative and involved the collection of student summative grades for task B and an analysis of the level of engagement students showed in part A; the second phase was qualitative through the use of focus groups to explore the perceptions of the students in relation to their experiences of the blended learning approach to transition. Programme team members, who were not directly responsible for a group of first year students, were chosen to gather the face to face data, to reduce any possible bias.

The purpose of this study was to explore the students' interactions with the online learning element of the first five weeks of their course and addressed two research objectives:

- To track the level of engagement and progression in relation to the online tasks and activities over five weeks of the programme
- To explore the perceptions of the students about the blended approach to their learning

3.1 PARTICIPANTS: The whole cohort (n=134) was used as the sampling group (male 70%: female 30%) for the collection of data. All students were emailed and informed about the project and were asked for consent for their data to be used; all students accepted the request. Due to possible bias by the tutors, it was important the students were free to choose whether to be involved or not (26).

The course representatives from across the programme were invited to take part in the focus groups, 83% (n=10) of the overall sample agreed (male 60%: female 40%). The focus groups were facilitated by members of the team who did not teach this sample group to reduce researcher bias, although it is acknowledged that there was still a power relationship which could affect the students. All focus group participants signed consent forms and were given information about how to withdraw from the project.

3.2 DATA COLLECTION AND ANALYSIS: Quantitative data was collected between the second and fifth week of the first semester of the first year for the new intake of students. Each student was monitored for his engagement and progression of both part A and part B tasks. To measure progression, the summative marks for part B were collected over a four week period as week one was not allocated a mark (due to student acclimatisation). Additional specific

values were also monitored that included the percentage of students who engaged in 100% of the tasks and those that engaged in 90% or less over the assessed time-period (part A & B).

Criteria Engagement (Part A)	Week Number				
	1	2	3	4	5
Engagement in Part A	97%	99.23%	98.5%	96.27%	94%
Engagement in Part B	85%	88%	89.5%	87.3%	88.8%
Engagement in both part A and B tasks across the 5 weeks	100% (134 Students)				
Engagement in all sections for part A and B tasks across 5 weeks	77.6% (104 students)				
Engagement in 90% or less of part A and B tasks across 5 weeks	22.4% (30 students)				

Table II : Engagement figures for part A and B weekly learning tasks

In relation to the focus groups, the cohort was split into two groups and the students were invited to the relevant focus group. The questions were planned in advance to ensure both groups were asked about the same topics (26) to allow for comparison across the groups with each focus group lasting approximately 45 minutes. Dictaphones were used to record the information and these were subsequently transcribed verbatim. The information was then analysed and coded.

4. RESULTS AND DISCUSSION: The following section describes the qualitative and quantitative research results. The quantitative results are summarised in tables; the results are discussed as they are presented.

4.1 ENGAGEMENT WITH LEARNING: In relation to measuring engagement, the students' interaction, and completion of part A and B was used. Engagement of the part A tasks specifically describes the amount of students who interacted and attempted or completed tasks. In week one 97% of students interacted, attempted or completed tasks. By week five however the percentage of students completing the tasks within part A had decreased to 94%. Engagement in Part B tasks describes the completion of the tasks with a mark being achieved for that section. Interestingly, the level of engagement for part B in week one which was not marked formally shows that 85% of students completed and submitted the tasks in this section. This finding contradicts previous problems encountered during transition where it was thought that students only completed work if it was assessed. From week two onwards the completion rates for part B stayed constant, fluctuating slightly between 87.3% and 89.5%. Allan (2007) states that 'students will engage in online learning activities if they feel they are of benefit to them' and in this structure some students focused only where the marks were being awarded. One student commented 'I know some of my group did not put as much effort into part A as it was not being marked'.

In summary, the figures identified in table 2 suggest that overall 77.6% of the students engaged in 100% of both part A and part B tasks throughout the five week period with 22.4% engaging in 90% or less. The results show a very slight decrease in engagement of part A and a small increased engagement towards part B over the time period. One comment from the focus groups suggested that;

'The thing I don't like is ... part A ... you don't get marked or anything and then part B you get marked. But like a lot of people in my [group] have said, oh for part A you can just write whatever because they don't mark it.'

From a Malaysian perspective, Dzakiria (11) suggests feedback is a barrier towards the use of blended learning. Feedback and assessment need to be consistent and a timely approach used as students are in a culture where any task or learning activity that they are asked to do requires feedback at the very least and where possible they prefer a summative mark to be attached.

4.2 PROGRESSION OF LEARNING:

4.2.1 STUDENT PROGRESSION:

	Marks increased across the weeks	Marks remained the same across the weeks	Marks decreased across the weeks
Student cohort (n=134)	48.5% (n =65)	24.6% (n=33)	26.9% (n=36)
Students who engaged 100 % across all weeks (n=104)	51% (n=53)	20.2% (n=21)	28.8% (n=30)
Students who engaged in 90% or less across the weeks (n=30)	40% (n=12)	40% (n=12)	20% (n=6)

Table III : Percentage of students whose marks increased, stayed the same or decreased across the weeks.

Analysing progression of the student marks awarded would suggest that overall 48.5% of students showed progress in their marks over the assessed period, with 24.6% staying the same and 26.9 % showing a decrease in marks. The results were further analysed by sub dividing into students who engaged in 100% of tasks and those who engaged in 90% or less across the weeks. Of those students who engaged in all tasks, 51% showed progression in their marks compared to only 40% of students who engaged in 90% or less, see table III.

4.2.2 STUDENT ATTAINMENT: Table IV reports the analysis of the progression through classification bands. The results show positive progression in relation to the numbers of students who moved into a higher band over the four weeks, suggesting that they were making progress in their level of attainment. For example, those achieving 70% or higher increased from 10% to 19% and those achieving 40% or higher decreased from 19% to 6%. The focus groups reported that they felt the weekly feedback and feed-forward given by the staff was, on the whole, useful and supported their learning, however this was not always timely which caused some anxiety for students.

Student attainment for part B	Week Number			
	2	3	4	5
Achieving 70% or above	10.45%	11.2%	11.2%	18.66%
Achieving 60%	19.4%	23.88%	31.34%	33.58%
Achieving 50%	33.58%	35.07%	29.10%	19.40%
Achieving 40%	19.40%	12.69%	6%	6%
Achieving 30% or less	16.69%	17.1%	22.39%	20.9%

Table IV : Level of student attainment for part B.

4.3 STUDENT PERCEPTION OF BLENDED ONLINE LEARNING: When asked in the focus groups whether or not the beginning of the university experience was the ideal time to present the learning in a blended format, there were two different views. One group felt it best at the start as they were “*energised*” and had spent a “*long period of time in the summer without intellectual stimulation*” whilst another group felt that the “*first few weeks at university was manic and even getting to the university and campus was a challenge in itself*”. The latter group believed that the blended approach to learning would be better placed later in the semester as this would have better prepared them to improve the skills and thus increase the quality of their work.

The focus group results further suggest that students were initially challenged by the intensity of the use of ICT to support the weekly learning tasks, although they thought that it was positive that they had to engage very early on with the VLE. In addition to accessing new ICT applications, students also reported that they found the restrictions that had been set up, for example adaptive release and time deadlines, created pressure for them to submit tasks even when it was felt that tasks had not been completed to the best standard. There was an assumption by the programme team that students were ICT competent, however some students struggled *“it made you realise that some students are like whizz kids on the computer but there are some of us that are struggling to understand how to upload the work and navigate around blackboard.”* This aligns with the findings of the Australian authors Taylor and Newton (7) who found in their study that students often felt overwhelmed or isolated by the use of some technology. Taylor and Newton (7) feel that there is a need for practice sessions to ensure that students are briefed on the areas of study and this was highlighted as an issue in the programme offered and has been built in for future years. Technology failure is another issue that frustrates students (9) *“I feel there is a lot of stuff reliant on technology”* commented one student and this was the case when accessing information away from the campus was not always easy or reliable, thereby adding another layer of complexity. The students preferred a mixture of content *“one main reading and one video”*, commented one student, rather than lots of smaller readings and video clips, as they thought this would help keep their focus and interest. However they also commented that they found the use of videos far more interesting, therefore the order in which the tasks were uploaded made a difference to their understanding and motivation to complete them *“maybe we could watch the video, listen to the clip first and then read, it makes you think about it more.”* One of the benefits of the blended learning approach was helping the students to organise themselves *“I’ve always been slacker, I have become more organised, and it’s something that I’ve learned since I’ve been here. I’ve started to plan my Monday, Tuesday and Thursdays because I know it takes me longer to read so I’ve learned already that I might not be as good as I thought in preparing for university work.* It is important that a balance is achieved in enhancing the students’ experience and stretching their abilities, Tinto (5) emphasises the value of social and academic integration during transition so, though the blended learning approach was completed individually, many of the activities during each week were in groups.

5. CONCLUSION: The transition period when students enter higher education is crucial and a blended learning approach, with a mix of face to face and on-line activities, has been found to support individuals’ learning and enculturation during this time. Over the time period of adopting a blended learning approach on this programme there was a positive shift in terms of both student engagement and progression and it is recognised that this is a small sample of one cohort. Students progressed in their attainment for all aspects of the on-line learning, including their assessed marks. The results indicated that 100% of the students engaged at some time with the activities, with 77.6% engaging with all the tasks. The results showed an increase in grades over the 4 week period, particularly students moving from the 40-50% range to gaining over 60%. Having marks awarded for undertaking tasks seemed to help with the engagement as using Allan’s (9) words they could see the point of doing the work.

In relation to the function and process, although there were challenges the results do indicate that the on-liness of the work had merit. When asked how the online tasks had helped them to understand the programme, a student stated *‘I think they have been really good, they gave you an insight into what you want to do, and what are my choices,.....’* another added *‘I enjoyed it,.....it’s changed my perspective on what I wanted to do.....the good thing about it is learning from week 1’.* However it is acknowledged that there are issues concerning the students’ competence and confidence using the technology. We cannot just assume that our students are prolific users of technology and that we should not take for granted the practices and preferences of students in their learning (Holley and Oliver 2010). Overall in this study, some students had issues with the technology and needed more support to have been built into the programme. The students had mixed views on the timing of this type of activity and this is something that needs to be looked at in the future and explored further, using a wider group of student views.

6. WHAT NEXT: In relation to student engagement, the research team secured funding for a student partnership project from the university to progress this project. The students who had experienced this blended approach to transition became the change agents and supported the staff to adapt and develop materials for the next academic year. At the time of writing, this has not yet been delivered to evaluate this developmental stage. A final word from Moskal (27) who claims that success in blended learning does not come quickly; it is ‘achieved through continuous efforts over a span of several years.’

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