

How flexible do students prefer their learning to be?

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Abstract

The term ‘flexible learning’ has been used in the literature for decades in a rather general sense and has been closely associated with open and distance education. The notion of flexibility has been examined on various dimensions, such as admission criteria, students’ control of learning time, commitment, content and tasks. There has recently been a tendency to use the term in a more defined or technical sense. One research focus has revolved around course design for effective learning in relation to the learner and dimensions of flexibility.

This paper offers an updated review of the literature on the approaches to understanding flexible learning and the dimensions of flexibility involved. It also reports a preliminary study on distance learners’ preferences for flexibility in the courses in which they are engaged. In the study, a questionnaire was administered to 162 distance learners in Hong Kong to determine their preferred levels of flexibility on a range of dimensions. The results suggest that learners’ preferences vary across dimensions. Based on the findings, it is argued that the diversity of learners’ preferences and learning styles should be incorporated as an integral part of the mechanism for designing and reviewing study programmes.

Keywords: Flexible learning, flexible education, learner preferences, learner diversity

Introduction

The term ‘flexible learning’ has been used in the research literature for decades in a general sense, but there has recently been a tendency to use the term in a more defined and technical sense. Collis and Moonen (2002) argue that flexible learning is more than distance education, ‘with the key idea being learner choice in different aspects of the learning experience’ (p. 218).



Drawing on the idea of learner choices, Russell and Cumming (2011) point out that in flexible learning, ‘students should be able to choose how they will study their courses, and educators should be prepared to support students in their choices, and guide students to employ sound educational methods’ (p. 181). This further highlights that the education provider should be prepared for learner choices. In addition, Tucker and Morris (2012) note that delivery methods, a learner-centred approach, and the role of resource-based learning are key aspects or dimensions of flexibility, which also stresses the education providers’ role in facilitating learners’ choices.

Since choices vary from one learner to another, Demetriadis and Pombortsis (2007) believe flexible learning should provide learners with the opportunity for ‘personalizing the learning experience based on their needs and preference’ (p. 148). Also, Herat (2010) advocates ‘giving high priority to learner control’ (p. 362). In essence, the nature of ‘flexibility’ revolves around the learner: what choices are available and how do they affect their learning?

Given the importance of learner choice, understanding what alternatives they prefer should be a key to any proper design of flexible learning. There has, however, been little research on learner preferences, especially studies on distance learners’ preferences — and the research reported in this paper attempts to contribute to filling this gap. The following sections outline the key categories of flexibility, and relate them to aspects of learners’ needs. This paper then briefly explains the methodology, and reports and discusses the findings.

Flexibility and learner diversity

Flexible education has been discussed extensively in some regions — for example, the term has been firmly entrenched within Australian higher education discourse. Noting this, Tucker and Morris (2012) point out that ‘the term is a contested one imbued with a multiplicity of meanings ... there is no universally accepted definition of what is meant by flexible education’ (p. 1). Collis and Moonen (2002), as well as Tucker and Morris (2011), see five types of flexibility of learning, viz. flexibility related to time, content, entry requirement, instructional approach and resources, as well as delivery and logistics.

Based on their review of relevant studies, Bergamin, Ziska, and Groner (2009) identified 22 dimensions of flexibility grouped into seven categories, namely flexibility of time, space, methods, learning styles, content, organization and infrastructure and requirements. Through principal

component analysis, they confirmed three categories of flexibility, which include ‘flexibility of time’, ‘flexibility of teacher contact’ and ‘flexibility regarding the content’.

Despite the wide diversity of dimensions and types of learning flexibility, as Collis, and Moonen (2001) note, the notion of flexible learning is the core of learner choice in aspects of their learning experience. Envisaging a paradigm shift, they add that ‘a movement away from a situation in which key decisions about learning dimension are made in advance by the instructor or institution, towards a situation where the learner has a range of options from which to choose with respect to these key dimensions’ (p. 10). The orientation of learner choice implies that the provision of flexibility should revolve around the needs of learners.

Perrin (2010) points out that adult learners’ needs and characteristics are different from on-campus students, and that distance learners give priority to family, job, health and, lastly, education. To help learners cope with the tight schedules of different types of commitments and learning at the same time, flexibility of time and delivery is crucial.

While learners may be put into groups, due attention should be paid to the high diversity among individuals, in which learning styles are one major source of differences. As Palloff and Pratt (2003) hold, “underlying learning style research is the belief that students learn best when they approach knowledge in ways they trust... In other words, a ‘one size fits all’ approach will not work” (p. 31). Investigating the way learning varies across individuals, learning style theorists have suggested a matching hypothesis that ‘the learning styles of students should be linked to the teaching style of their tutor’ (Coffield, Moseley, Hall, & Ecclestone, 2004, p. 121). In a broader sense, Zhang (2007) interprets such style matches as ‘a situation in which teachers’ teaching styles meet the learning or personality needs of students.’ (p. 1873). In response to learners’ differences in learning styles and intelligence types, Kelly and Tangney (2006) suggested that ‘knowledge is processed and represented in different ways and that students prefer to use different types of resources in distinct ways’ (p. 385). These papers point to the importance of flexibility in instructional approach and content in response to different learners’ needs in relation to their learning styles.

Open learning emphasizes flexibility as one of the core values of being open. It commonly adopts an open entry approach by not requiring entry qualifications. As Olakulehin and Singh (2013) note, ‘open learning is a philosophic construct which refers to the general aim of democratising access to education and training’ (p. 32). It serves to widen access to higher

education and promote equality. The flexibility of entry requirement realizes the importance of equal opportunity in, and democratization of, education.

It is, however, not always the case that the more flexible the course, the more beneficial it is to student. Corbalan, Kester and van Merriënboer (2009) argue on empirical research grounds that flexibility has both beneficial and detrimental effects on learning. They further suggest that the detrimental effects of the ineffectiveness of learner control could be caused by:

1. a lack of perception of control when learners do not see the choices provided as sufficiently different from each other;
2. making suboptimal choices because learners are not aware what is best for their learning; and
3. a high cognitive load on learners' processing resources influenced by the amount of choice available.

(Corbalan, Kester& van Merriënboer, 2009, p. 290).

Furner, Mason, Mehta, Munyon, & Zinko (2009) also point out that individuals who prefer a less flexible learning environment may find flexible learning experience 'overwhelming, suffer information overload, become distracted, and also have a less effective learning experience' (p. 33). The optimal level of flexibility depends on individual learners, leading to the importance of the preferred level of flexibility to be estimated.

Methodology

This study aims to identify distance learners' preference for learning flexibility in different dimensions, and determine their perceived level of flexibility during their distance learning study. The participants were all distance learning students in the Open University of Hong Kong (OUHK). A questionnaire was developed by adapting the instruments from two related research studies: Tucker and Morris (2012), and Collis and Moonen (2002).

A total of 23 items were included in the questionnaire for dimensions of learning flexibility in five categories: time, content, entry requirement, instructional approach, and delivery. Students were asked to rate their preference and evaluation on each dimension of flexibility along a Likert scale from 1 (fixed) to 5 (flexible) as shown in Figure 1. The mean scores were calculated according to items as well as categories of learning flexibility. For a better elucidation of students' preferences in learning flexibility, they were asked for suggestions for improving the learning flexibility.

The questionnaire was completed by 162 distance learning students in the OUHK, with a roughly even split between males (53%) and females (47%). These students came from various study programmes: the major areas included business (35%), engineering (15.3%), and language (14.7%). Of the participants, 94.5% were employed (77.9% full-time, 16.6% part-time). Also, 56.4% were taking two courses, 20.8% one course or less, and 22.7% were doing three courses or more per semester.

Example:

Flexibility related to programme:

1. Time and date at which the programme starts and finishes

Evaluation 1 2 3 4 5

Preference 1 2 3 4 5

In this aspect, how flexible do you think the distance learning programme is now?

In this aspect, how flexible do you prefer the distance learning programme to be?

Figure 1 Questionnaire instructions for indicating levels of flexibility

Findings and discussion

Table 1 shows the mean scores of evaluation and preference on the five categories of learning flexibility. For all five categories, the preference scores were slightly higher than the medium rate of 3, reflecting that students did not give a high preference to all categories of learning flexibility. In addition, their evaluation scores on the flexibility provided in their study programmes were always inferior to what they preferred. The results of pair-sample t-tests showed significant difference between students' preference and evaluation on every aspect of learning flexibility, suggesting that they would prefer a higher flexibility in their studies, especially on delivery (mean scores of difference 0.69).

Table 1 Mean scores of the flexibility categories

Category	Mean Score		
	Evaluation	Preference	Pair Difference
Flexibility of Time	2.95	3.46	0.51*
Flexibility of Content	2.96	3.45	0.49*
Flexibility of Entry Requirement	3.17	3.51	0.34*
Flexibility of Instructional Approach	2.94	3.44	0.49*
Flexibility of Delivery	2.92	3.62	0.69*

*The mean score is significant at the .001 level (2-tailed)

To gauge statistically the divergence between students' preference and their perceived level in each category of flexibility, the mean scores of preference, evaluation, as well as pair difference for each flexibility dimension were also computed. The results are shown in Table 2.

Table 2 Mean scores of the questionnaire items

Question Items	Mean Score		
	Evaluation	Preference	Pair Difference
<u>Flexibility of Time</u>			
1. Time and date at which the programme starts and finishes	2.77	3.32	0.549
8. Time and date at which the course starts and finishes	3.02	3.45	0.447
17. Length of time for interactions during lessons	2.93	3.47	0.537
2. Pace of learning in a programme	3.00	3.04	0.395
9. Pace of learning in a course	2.99	3.44	0.460
10. Examination dates and assignment deadlines	2.94	3.68	0.745
<u>Flexibility of Content</u>			
3. Topics covered in the programme	2.94	3.52	0.565
4. Sequence of courses to complete in the programme	2.99	3.43	0.460
11. Learning sequence of units of the course	3.04	3.47	0.438
15. Amount of learning activities	2.93	3.50	0.584
5. Level of difficulty of programme content	2.96	3.36	0.403
12. The weighting of assignments and examination in the overall course results	2.95	3.36	0.416
6. Extent to which the programme content emphasizes theories or practicality	2.88	3.50	0.631
<u>Flexibility of Entry Requirement</u>			
7. Admission requirements of the programme	3.25	3.54	0.294
13. Admission requirements of the course	3.10	3.48	0.385
<u>Flexibility of Instructional Approach</u>			
14. Course learning structure (Such as: individual; group)	3.07	3.55	0.478

18. Choices of learning resources (e.g. course material, supplement)	2.88	3.44	0.568
16. Language used in class	2.91	3.34	0.438
<u>Flexibility of Delivery</u>			
21. Sources of learning support available when facing difficulties (e.g. tutors, peers, course coordinators)	2.93	3.65	0.733
22. Times available for support (e.g. consultation from tutors; tutorials)	2.88	3.59	0.710
23. Places where learning support is available	2.85	3.68	0.833
19. Study location	2.93	3.49	0.556
20. Channels to obtain programme or course information (e.g. tutorial lessons, OLE)	3.08	3.67	0.599

Bold figures: preference (>3.5), difference (>0.5)

Regarding delivery, as shown in Table 2, the mean scores of the pair difference for all five dimensions are larger than 0.5. This suggests that students preferred a higher flexibility in this category than what was provided. Especially for the items 21, 22 and 23, students wished to have more sources of learning support for flexible learning.

As regards time flexibility, among the six dimensions, higher mean scores of pair differences were found for item 10 on flexibility for examination dates and assignment deadlines (0.745), starting and finishing time, date of the programme (0.549), and the length of time for interactions during the lessons (0.537). Though students in their distance programmes were required to complete assignments and examinations as scheduled, they preferred more flexibility on the dates to submit assignments and sit the examinations. Besides, students wished to have a more flexible length of time for interactions during the lessons. As shown in Table 3, when requested to suggest improvement measures on learning flexibility related to time, some students responded that the discussion period in the lessons should be extended.

Table 3 Extracts from the students's suggestions for improving learning flexibility

Category	Students' Suggestions
Flexibility of delivery	- 'Tutors should provide more consultation. Also, it would be better to provide more support for writing assignments or understanding course contents.' - 'I wish more teaching staff would reply to our comments on the online discussion board' - 'Provide more tutorials or other means to assist for our study.'
Flexibility of time	- 'I hope that there would be more flexibility with the dates of examination, especially during the New Year period. I find it very inconvenient to change my schedules to suit the dates of the examinations.' - 'I wish to have a longer period of time in the lessons for discussion.'
Flexibility of content	- 'It would be good if activities are added to consolidate the team learning.' - 'I hope that the number of compulsory courses can be reduced so that it is more flexible for students to choose the courses in the programme.' - 'It would be better to increase the number of the elective courses.'
Flexibility of instructional approach	- 'The number of reference resources for learning should be increased, especially the number of past paper questions and suggested solutions.' - 'The lessons can be recorded and uploaded to the online learning platform so that students can view them anytime.'

Regarding contents and instructional approach, though the mean scores of difference were relatively low compared to other categories, students' expectation of higher flexibility was evident in some dimensions (0.565 for item 3, 0.631 for item 6, and 0.584 for item 15). Students preferred a higher flexibility for what they were to learn in the programme, especially the topics covered and the extent to which the contents emphasized theories or practicality. The findings match well with what students suggested for improving flexibility of content. As shown in Table 3, students wished to have more elective courses and activities in their learning for higher flexibility of content. On the instructional approach, they preferred more choices of learning resources, with the mean scores of pair difference of 0.568.

Tucker and Morris (2012) administered their flexibility questionnaire to 78 Australia students to gauge their desired level of flexibility in learning, and

found that flexibility of delivery was the only category with a rating above 3. In this study, all categories' ratings were above 3. It appears that Hong Kong students in this study had generally a preference for higher flexibility than those in Tucker and Morris's study. Yet, the results are not surprising: besides cultural diversity, the differences could have been caused by dissimilar study modes. Participants in Tucker and Morris's research were part-time on-campus students, while the Hong Kong students were distance learners. Not being campus bound, their expectations of flexibility could be higher.

The results suggest that it is wrong to assume students simply prefer to have maximum flexibility. On the contrary, learners were well aware that there was an optimal level of flexibility. In both Tucker and Morris (2012) and the present study, students did not express preference for just the maximum flexibility in their studies.

Conclusion

The notion of learning flexibility highlights the importance of choices available to learners. The provision of appropriate choices for learners according to their needs and preferences is central to flexible learning. Since learner choices could be highly diverse, it is essential that, in designing study programmes, their views are taken into consideration. This paper has reported a survey on the evaluation and preferences of university distance learners.

The results showed that the students preferred a higher level of flexibility than was provided, especially in the areas of availability of sources for supporting their learning, assignment deadlines and examination dates. These responses should be taken into consideration by programme administrators and course designers.

It is worth noting that learners generally have some optimal level of flexibility in mind regarding their learning, rather than naïvely assuming that the more flexible it is, the better it is. This echoes what Corbalan et al. (2009) and Furner et al. (2009) stress: merely increasing flexibility by offering more choices does not necessarily make the study programme more beneficial to students.

As Sadler-Smith and Smith (2004) note, accounting for individual differences in styles and preferences is vital for effective provision of flexible learning. Following up this study, further studies could be carried out on other learner groups for comparative purposes and the development

of a more complete picture of learner preferences for flexibility. Learners' evaluation and preference for flexibility could differ from those of course designers, as well as instructors. Future studies should be encouraged to examine the similarities and differences in these three groups.

With the increasing adoption of assistive technologies to facilitate learning (Goldrick, Stevens & Christensen, 2014) and the growing emphasis on providing environments conducive to learning (Brand-Gruwel, Kester, Kicken, & Kirschner, 2014), flexible learning is attracting increasing interest and attention. To a large extent, flexibility (such as choices in study time, contents, and the delivery mode of teaching) has been made available and enhanced through technology, and future studies should attempt to explore how educational technology could effectively facilitate study programmes' accommodation of learners' diversity.

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