

## PAPERLESS ASSIGNMENTS AND CHALLENGES INVOLVED: VOICE OF DISTANCE LEARNERS

**Muhammad Haseeb UL HASSAN**

ORCID:0009-0001-9733-8213

Faculty of Education  
Allama Iqbal Open University  
Islamabad, PAKISTAN

**Dr. Zafar IQBAL**

ORCID:0000-0003-3323-229X

Faculty of Education  
Allama Iqbal Open University  
Islamabad, PAKISTAN

**Received:** 28/05/2023 **Accepted:** 12/02/2024

### ABSTRACT

The study was planned to explore the challenges faced by distance learners during paperless assignment process. This initiative was introduced a couple of years ago at a distance learning university in Pakistan. Target population comprised on distance learners of M. Phil Education and MBA (col) sessions 2017 to 2019 programs running online through Learning Management System (LMS). Total Population Sampling (TPS) technique was followed and all distance learners of both programs were engaged. It was mixed-method research comprising both structured and open-ended information. The instruments employed were two questionnaires: one on Likert Scale and the other was open-ended. The reliability coefficient was 0.71, and the open-ended questionnaire was validated through six subject experts. The structured questionnaire was sent to all 563 students and in response 132 students filled out the online questionnaire. Quantitative data was analyzed through descriptive statistics while qualitative data was analyzed through NVivo software. The main problems highlighted were study material relevance and late delivery, understanding and processing of paperless assignments, access and skills of ICT, financial constraints, evaluation of paperless assignments, and instructors' feedback. Students suggested that textbooks should be revised and delivered in time, connectivity issues should be resolved, free internet packages should be introduced, LMS training should be conducted, in time feedback in descriptive form by instructors must be provided to the distance learners.

**Keywords:** Paperless assignments, distance learners, learning management system, problems and challenges.

### INTRODUCTION

Multiple challenges emerged during Covid-19 including lack of financial resources, unemployment, scarcity of face-to-face interaction which bound human life and forced them to do more struggle but with less resources. All walks of life were affected with a variety of challenges, especially children had to stay at their houses and their education was restrained at campuses. In this situation the universities started to think about alternative means of education like online open distance learning programs. The open distance learning platforms were not new but already existed which provide opportunity to distance learners to learn at their own pace from anywhere, any time with little resources and physical presence. It includes tutorial sessions, workshops, assignments, quizzes, midterm and final term exams, personal online contacts etc. to facilitate distance learners. In recent times, emerging technologies have opened new avenues of communication and replacing traditional means. Now distance learners and instructors have different options to take online sessions through mobiles, computers, laptops, tablets etc. The constant internet facility with

proper bandwidths required to avail educational experience at online platform in distance education. This sudden change was a huge challenge to arrange all activities at online platform like E-learning, E-workshop, E-Assessment and E-assignment or paperless assignment.

The literature revealed that distance learners have better options of learning in this digital era through paperless classrooms. Such initiatives lead towards open schools with no walls and boundaries, more flexible in nature with increased access especially to marginalized and disadvantaged areas. Moreover, this rapid advancement opens new trends in education like developing a green environment replacing paper-based assignments with paper less assignments (Watfa & Audi 2017). Some digital and electronic tools readily available to prepare paperless assignments without caring for certain space and time (Igwela & Nsirim, 2018, Dhawan, 2020). Distance learners have better access to resources and increase their learning through paperless (soft copy) textbooks, audios, videos and recorded online lectures. In addition to this, open education resources are freely and readily available to get benefit of these. They can save and secure their assignments in soft form at different online stores like google docs and other free web spaces (Wahyuni, Fitriati & Maharani, 2019). It is easy to upload and share their paperless assignments to the instructors through different platforms like Learning Management Systems (LMS) (Aabha & Bani, 2015). The assessment of these paperless assignments is also very simple without paper and pencil (Slowinski, 2000). The instructor's feedback is possible in real time through technology (Baby & Saeed, 2020; Omehia & Nsirim, 2022; Technopedia, 2021). The use of these devices may help to motivate distance learners and enhance their active participation in the learning process (Ferguson, 2017) and restrain intentional delays in the assignment submission (Nordby, Klingsieck, & Svartdal, 2017; Lin, 2016).

The initiative is highly significant for distance learners, but a prompt and emergent paperless strategy is not an easy task to implement, especially through technologies when it changes on every passing day (Thimbleby, 2019). Moreover, the acceptance of these changes is also an issue as the environment refrains and employs its potential to hamper such changes. The quality and accuracy of work can be reduced due to the pressure associated with completing assignments on a short timeline (Kim & Seo, 2015). The distance learner's circumstances are different as most of them are working, bearing families, variety of engagements, and moreover official demands. Their motivation also fluctuates during the enrolment process due to some situational factors, such as financial problems, family distress, employment status, etc. (Newhouse & Cerniak, 2016). Some distance learners feel that their instructors are inflexible with deadlines and not supportive of the additional responsibilities that are faced by them (Dumais, Rizzuto, Cleary & Dowden, 2013). Lin argues that female learners facing additional barriers due to multiple roles and insufficient social and family support (2016) to complete their studies. The study material provided for reading is outdated and scarcely relevant content is available to meet the demand of assignment questions. Moreover, the delivery of books through correspondence is banned and textbooks are uploaded on the online platform which are hardly accessible due to variety of local contextual problems like; frequently electric short fall, non-availability of internet connectivity or required bandwidth to connect and skills required.

The students' skills are insufficient to work on paperless assignments as it is an emergent initiative with little support, training and transition period to meet the challenges. The fixing of a new system had a natural resistance among distance learners who were familiar with course assignment through correspondence. Moreover, the sudden shift and without having experience of such a large-scale implementation also augmented undetected happenings which took days to fix the issue. In addition, the country like Pakistan where socio-economic condition of a common man is poor and hardly affordable to get enroll or continue their education. Now the dream of getting education is dependent on access to online environment which require some gadgets like android mobile, laptop or tablet etc. which is not in the reach of all candidates. Anyhow, if they manage such a facility in one way or the other, even then they are unable to use these devices. They need certain training to become familiar with these devices and understand how to use them. The preparation of assignments in soft form creates many challenges for distance learners is one aspect while they face different issues related to assessment of these assignments. The assessment criteria given for assessment is hardly met by the instructors during online assessment. The feedback required to improve their assignment is not provided to the learners and they were not aware of their mistakes and how to improve their assignments.

The literature on the topic is scarce as prior to these mainly correspondence based assignments in hard form were mainly practiced. The emergent trends of technology transform the whole teaching and learning system and things are changing with unpredicted speed. This prompt change definitely made unexpected change in all fields. Summarizing, distance learners faced common challenges are non-availability of textbooks, problem in searching appropriate material for Paperless assignment (Kai, 2004-07), time management, lengthy assignments which demands plenty of time to respond the assignment questions. Mostly learners considered assignment preparation as a burden owing to same deadline of submission for all subjects registered in a semester. The provision of internet facilities, availability of equipment and skills also create a big challenge. In spite of all these issues this initiative is the need of the today era and there is need to explore these challenges being faced by the distance learners to address them.

The key purpose of distance learning institutes was to increase access to marginalized individuals living in remote areas with little or no access to education. The aim of this study is to identify the nature of problems being faced by the distance learners in their perspectives and level of magnitude to find viable means to address those problems. Moreover, the key challenges highlighted by the distance learners were further explored through interview of the participants. This study was a step forward to identify challenges and underlying reasons of these challenges to ensure quality education to individuals with less resources especially living in less privileged areas. As every individual has equal right to get education without any discrimination of region, creed or age and gender. However, it could be only possible through identifying their problems and underlying reasons which might provide solutions to address those problems on the basis of empirical data. The context of the study was based on distance learners of an Institute of distance learning in situated in the Islamabad Capital Territory which had target to provide education to the students living at remote places and with little facilities. The abovementioned objectives were addressed through following research questions.

## RESEARCH QUESTIONS

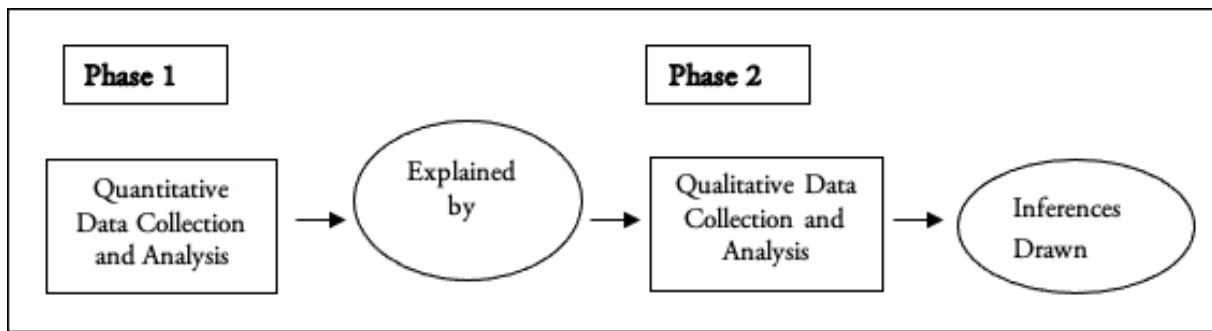
The following questions were made to target the scope of the study.

1. What challenges were faced by the distance learners;
  - i. in identifying material for preparation of paperless assignments?
  - ii. in having access to online resources?
  - iii. about evaluation of their paperless assignments?
2. What are the underlying reasons for key problems reported by distance learners?

## RESEARCH METHODS

Mix method approach was employed to conduct this study as it provides us good inferences and safe to be biased from a single method (Teddlie & Tashakkari, 2009). The explanatory sequential mixed method was based on quantitative data first collected through survey method in the form of google docs. This data provided us a general image of the problem like a piece of a puzzle (Ivankova, Creswell, & Stick, 2006). The data were analyzed and descriptive statistics clearly showed us factors with high magnitude which provided us a base for further probing of these factors to unpack the underlying reasons of high mean scores. The underlying description of these factors was qualitatively needed to unpack the situation which was sought through an open-ended questionnaire. The interpretation of this qualitative data explains the image in detail, like to combine the pieces of a puzzle and shows the complete image (Subedi, 2016).

The data were collected into two phases. The first phase was based on quantitative data followed by qualitative data as shown in figure 1. The design of the study was justified as explanatory sequential mix method (Creswell, 2014).



**Figure 1.** Explanatory Sequential Design (Creswell, 2014)

## CONTEXT OF THE STUDY

The study was conducted in an Open Distance Learning University situated in the Islamabad Capital Territory, Pakistan. It was established in 1974 to cater to the educational needs of masses living in remote areas with marginalized opportunities of access. The university was well established and attracted a huge number of students, especially at undergraduate level. The masses living in remote areas, having little access to formal education, working individuals, individuals with little financial opportunities were the main clientele of this university. Mostly students were at their jobs and were continuing education alongside their work. Some were living in remote areas with lack of resources can be stated as disadvantaged segment of the society. In hilly areas and some remote places even, electric supply was not frequently available. Likewise, the internet facility was also not available at some places or with proper bandwidth was not available to run the internet facility without interruption. Some students, especially at postgraduate level, were well established being working individuals in public or private organizations. The university initiated some steps to improve their teaching and learning process including a learning management system (LMS). It was a novel and emergent initiative for distance learners to continue their education.

## PARTICIPANTS OF RESEARCH

The students of Master of Philosophy (M. Phil) in Education and Master's in Business Administration (MBA), who were using LMS taken as participant of the study. Both programs were the same level of education. These students were enrolled in the same year (2017) and their session was also completed in the same year (2019). At the time of their enrollment, paperless assignments were introduced for the first time in both programs. However, they have to submit first time paperless assignments rather than handwritten assignments in hard form through correspondence. This initiative created unrest among distance learners due to changes in the assignment preparation, process and evaluation. The students were facing many problems of different nature in the process of paperless assignment and raising their voices at different forums. The researcher was also part of one of these programs and realized the gravity of this issue. The students enrolled at that time genuinely felt this problem and raised their voices on the problem. So, the researcher determines the scope of the study to identify problems faced by the distance learners on paperless assignments irrespective of their discipline of the study or any other perspective. However, the emerging initiative was unique in nature and all programs shifted to LMS were included in the study to get maximum empirical data on the problem. It was decided to find the experience of distance learners on different levels of this new initiative like process, development of paperless assignment and evaluation to probe the underlying reasons of this unrest among distance learners. The assumptions to take these participants were both programs are same in other perspectives like, level of education, year of schooling and experience of paperless assignment initiative. However, there is no question to find comparisons and differences among two groups considering them independent variant groups, but they are assumed similar on the topic under the study.

## INSTRUMENTS OF THE STUDY

There were two types of data collection instruments: quantitative and qualitative. The first tool was a structured closed ended questionnaire based on a 3-point Likert Scale. The scoring was like, 3= Agreed; 2=Some extent agreed and 1= Not agreed. This questionnaire was developed on readings related to paperless assignments. The literature highlighted challenges in paperless assignment at three different levels; some problems occurred before the paperless assignment process (preparation of assignments), during the process and after the process (evaluation of paperless assignment) which were faced by the distance learners. The questionnaire was based on 6 main factors followed by 26 subsequent questions. The questionnaire was developed on Google Docs which was easy to conduct and sought experiences of distance learners regarding paperless assignments online. The detail of questionnaire employed with sample statements to have an idea of statements and total number of statements against each factor is given in table 1.

**Table 1.** Detail of Questionnaire Employed for Fiding Challenges of Paperless Assignments

Levels	Factors	Sample Statements	Number of statements
Problems before preparing Paperless assignments	Study material	You receive your study material in time	6
	Vague questions	Questions made unnecessarily ambiguous	4
Problems occur during Paperless assignments	Challenges of ICT	You need training to compose paperless assignment	6
	Financial issues	Internet cost for study is easily payable for you	2
Problems occur After Paperless assignments	Evaluation Problems	You are satisfied with assessment criteria of your assignment	4
	Instructors Feedback	Your instructors give feedback right after assessing your paperless assignment	4

The second tool was based on qualitative data pertaining to 9 open ended questions to get underlying reasons behind high rated factors by the distance learners. It was necessary to explore underlying reasons mentioned by distance learners about the problems related to the process of paperless assignments. The blank space was provided below each question to distance learners for giving their responses to open-ended questions. These were open and extended responses by the distance learners to extract underlying reasons for their challenges faced during the paperless assignments.

The questionnaire was sent through google doc to the distance learners to understand their perception regarding paperless initiative taken by the university for the first time. This nature of the problem is dealt with through employing such a method in most of the researches as highlighted in the literature (Keith & Sue, 2009; Akhter & Ali, 2016; Jumani, Malik & Akram, 2018; Musingafi, Mapuranga Chiwanza & Zebon, 2015; Datt, & Singh, 2021; Ahmed, Salah, & Rana, 2020; & Cubukcu, & Akturk, 2020).

## RELIABILITY AND VALIDATION

The questionnaire was piloted on the distance learners of same programs, but they were not included as participants of the study. The reliability test was run to ensure consistency among different items of the questionnaire to measure underlying traits correctly. The reliability coefficient was found to be 0.71 which is an acceptable value (Cortina, 1993).

The open-ended questionnaire was validated by the six subject experts. The face validity and content validity were ensured through expert judgment. Some questions were modified in the light of their suggestions. Finally, the Content Validity Index (CVI) was calculated based on experts' responses. The CVI was calculated as .956 which was acceptable as per literature (Polit & Beck, 2006).

## DATA COLLECTION PROCEDURE

The personal information of participants was requested in black and white from the university authorities. After getting access to the data, the IDs of participants of both programs; MBA Commonwealth of Learning (COL) and M.Phil. Education were collected. A request was sent through Google Docs to the 563 participants of the study to fill out the questionnaire. A web link of the questionnaire was sent to all participants while 132 students returned filled questionnaires back to the researchers which was 23% response rate of the total participants of the study.

After the analysis of quantitative data, the qualitative open-ended questionnaire was developed and shared with those participants only who had already filled the quantitative tool. The tool was shared through Google Docs again to the participants. The response rate was better as 33 % of distance learners filled this open-ended questionnaire perhaps, they were interested to share their experiences which observed during the process of paperless assignment.

## RESULTS

The sequential explanatory study was initially based on quantitative data followed by qualitative data. The nature of the study demands that quantitative data might be analyzed first and then qualitative data to get answers to the questions of the study.

### Analysis of Quantitative Data

The analysis of the quantitative data presented in the following section indicates the total number of participants, mean and standard deviation.

**Table 2.** Challenges faced by distance learners related to study material

S#	Statements	N	Mean	SD
1.	You receive study material on time for paperless assignment preparation	132	2.36	.77
2.	Problem in reading of study material due to rough publishing	132	2.23	.83
3.	Receive clear guidelines with study guide for developing assignment	132	2.36	.81
4.	Receive schedule of assignment submission to submit them on time	132	2.55	.69
5.	Assignments should be sent to the students before workshops	132	2.87	.44
6.	The time given to complete Paperless assignment is enough	132	2.67	.61

Table 2 shows challenges related to study material faced by distance learners. Some students report that study material is received a bit late ( $X=2.36$ ,  $SD=.77$ ) which creates problems in developing paperless assignments. The delay in study material ultimately causes delay in their assignment preparation. However, they cannot complete their paperless assignment in time. Moreover, they reported that the publishing material of textbooks is not clear to the level ( $X=2.23$ ,  $SD=.83$ ) that provides support to the distance learners in reading and prepare their assignments in allocated time. The guideline proforma for helping in developing online assignments were not provided to the distance learners along with textbooks ( $X=2.36$ ,  $SD=.81$ ) which create hinderance in submitting assignments online intime. The schedule of assignment submission is shared on time with mean score ( $X=2.55$ ,  $SD=.69$ ) which indicates that scheduling is properly conveyed to the distance learners in time. Most of the distance learners ( $X=2.87$ ,  $SD=.44$ ) wanted those assignments should be sent to the students before workshops so that the students can discuss and get help from their instructors while attending study workshops. Some students reported that time given for assignment preparation is not enough to complete them ( $X=2.67$ ,  $SD=.61$ ). Overall, intime study material delivery to the students, proper publishing with clear writing format and font size, provision of guideline proforma, intime scheduling, assignment dissemination before workshops and appropriate time allocation to complete assignments can provide ease to the distance learners to submit paperless assignment and continue their study program.

**Table 3.** Challenges faced by distance learners in understanding of assignments

S#	Statements	N	Mean	SD
1.	Contact with instructor to understand questions to solve assignment	132	2.58	.67
2.	Some questions are made unnecessarily ambiguous/confusing	132	2.49	.76
3.	Frequently visit to the library to find study material to solve assignment	132	2.02	.81
4.	Take help from classmates in developing of Paperless assignments	132	2.67	.64

Table 3 shows results regarding challenges faced by distance learners in understanding of questions included in the assignment. Mostly distance learners ( $X=2.58$ ,  $SD=.67$ ) contact with the instructors to clarify their understanding about vague questions. It is worth mentioning notion that distance learners have intimacy with their instructors to clarify their misunderstandings in solving the paperless assignments. As many learners ( $X= 2.49$ ,  $SD=.76$ ) pointed out that questions posed in the assignments are confusing and demands clarification to understand and solve them. For getting assistance to solve assignments some students visit libraries ( $X=2.02$ ,  $SD=.81$ ) but such students are less in number as compared to other sources of getting support for clarification. Most students ( $X=2.67$ ,  $SD=.64$ ) share their problems with their classmates and get help in the development of their assignments. Perhaps they feel at ease and comfort to share their issues with fellows and understand their misconceptions accordingly. The use of libraries is least in practice by the distance learners which is alarming for open distance learning but alongside a positive point that student closely develop interaction mutually and discuss their confusions in understanding and development of paperless assignments.

**Table 4.** Problems faced by distance learners related to ICT

S#	Statements	N	Mean	SD
1.	Have internet facility at your home/office/place of work	132	2.53	.75
2.	Difficult to find relevant study material on the internet	132	2.63	.70
3.	Need training to browse on internet for material searching	132	2.61	.70
4.	Need training to use the Learning Management System (LMS)	132	2.69	.69
5.	Need MS word training to compose Paperless assignment	132	2.67	.68
6.	Facing problems in determining plagiarism of text material	132	2.66	.67

Table 4 shows results related to provision of Information and Communication Technology (ICT) facilities available as per opinion of distance learners. The role of ICT is very common in all walks of life especially in distance education when all teaching and learning processes are shifted to online platforms. In this situation some prerequisites are essential to continue your studies like provision of internet facility at living place or office so that learners can access his/her study portal and can work different tasks accordingly. But some students ( $X=2.53$ ,  $SD=.75$ ) do not have facility or partially have facility which create hindrances in their daily tasks especially preparation of paperless assignment and their submission. The availability of study material at the learning platform is reported by distance learners ( $X=2.63$ ,  $SD=.70$ ) as difficult to locate or meagerly available. These issues can be solved through training as mostly distance learners are of the view ( $X=2.61$ ,  $SD=.70$ ) that trainings should be given for internet browsing, use of Learning Management System ( $X=2.69$ ,  $SD=.69$ ) and use of MS word for typing and other basic functions ( $X=2.67$ ,  $SD=.68$ ). Moreover, in this era of internet facility and computer technology mostly distance learners get sources available in the form of text, use material in their assignments which is detected later as plagiarism. The distance learners want ( $X=2.66$ ,  $SD=.67$ ) access to the Turnitin software to check their assignments level of similarity index before submitting to the instructors at the online platform.

**Table 5.** Financial issues of distance learners related to Paperless assignment process

S#	Statements	N	Mean	SD
1.	Bearing internet cost for study is easily payable	132	2.11	.86
2.	Paperless assignment process is a cost-effective	132	2.31	.74

Table 5 shows results regarding financial issues, if any, faced by the distance learners during the assignment development process. The provision of facilities like constant supply of internet connection with proper bandwidth is essential for online access to the environment and start their work. But the facility of internet is costly and even not available at some locations of the country especially in remote areas. The learners are not satisfied as they have to pay a large amount of money to purchase wireless internet device or in some cases internet connection of some private company on high rates. In both cases they spend money and mostly learners ( $X=2.11$ ,  $SD=.86$ ) are not satisfied but scared of these payments. Paperless assignments are normally considered cost effective by the university administration but in the opinion of distance learners these are not alike for some students as reported ( $X=2.31$ ,  $SD=.74$ ) in the survey of this study.

**Table 6.** Problems faced by distance learners regarding evaluation of Paperless assignment

S#	Statements	N	Mean	SD
1.	Instructors provide guidelines to deal with the issue of plagiarism	132	2.05	.88
2.	You are satisfied with marking/assessment criteria at your university	132	2.54	.73
3.	Instructors return marked assignment to the distance learners in time	132	2.61	.66

Table 6 shows assessment of paperless assignment and magnitude of distance learners' challenges in this regard. The distance learners ( $X=2.05$ ,  $SD=.88$ ) are partially satisfied with the guidelines provided by the instructors to avoid plagiarism as they face this issue very commonly. The assessment process is also under criticism in academic circles especially in the light of distance learners ( $X=2.54$ ,  $SD=.73$ ). Some students report ( $X=2.56$ ,  $SD=.66$ ) that they did not receive instructor marked assignments in time to judge their mistakes and improve their learning.

**Table 7.** Problems faced by students regarding instructors' feedback

S#	Statements	N	Mean	SD
1.	Instructors provide feedback soon after assessment of Paperless assignment	132	2.35	.81
2.	Instructors feedback is constructive to the distance learners	132	2.25	.77
3.	Distance learners get feedback to improve Paperless assignment very late	132	2.83	.45
4.	Instructors take students feedback after the end of the workshop	132	2.70	.55

Table 7 shows distance learners' opinion about their challenges regarding instructor's feedback. Perhaps the learners meagerly get suitable feedback in descriptive form to improve their assignments which is the purpose of this activity. Some learners ( $X=2.35$ ,  $SD=.81$ ) do not receive marked assignments in time which create problems and develop uncertainty in the minds of distance learners. The constructive feedback provided to the distance learners is helpful for them at large. They can identify their mistakes, improve their readings, and can prepare assignments with more devotion and effort. Some students ( $M=2.25$ ,  $SD=.77$ ) are not satisfied with the feedback provided to them. In most of the cases, instructors provide feedback at the end ( $X=2.83$ ,  $SD=.45$ ) when all assignments are already submitted and no chance to get improvement in the development of assignment on the basis of feedback which is unfortunate. Distance learners receive instructors' attention during the workshops and their feedback is also sought ( $X=2.70$ ,  $SD=.55$ ) for the improvement of this activity.



## Analysis of Qualitative Data

The analysis of qualitative data was made through NVivo-11 software. The results against emerging themes naming; factors, sub-factors and respondent relevant excerpts are given in table 8.

**Table 8.** Nature of problems faced by distance learners during paperless assignment process

Factors	Sub-factors	Extracts from the learners' responses
Problems in Study Material and composing of assignment	Access and relevance	Books mostly delayed and did not arrive in time Books need password to access on the online platform Material is mostly irrelevant and outdated Books do not pertain content related to the assignment questions Need to simplify and link the study material with the course scope
	Issue of online connectivity	Network connectivity issues frequently create problems Remote systems do not accept the assignment often Link provided to submit assignment is not mostly opened Sometime connection dropped with LMS
	Issues of Composing	Typing is another issue for lengthy questions Composing is difficult, time consuming and expensive Typing is difficult part of paperless assignment
Problems related to ICT	Training required	Need MS Office training to make Paperless assignment Composing skills to make assignment needs training LMS is a little confusing so need training
	LMS related Issues	Window appearance of online system should be more user friendly Sometimes we were not sure that our assignment was uploaded or not Discussion board is major issue for distance learners
	Issues in Searching and reporting text	Data searching takes lot of time to find relevant information Access to many of research articles is not available which are relevant We are not receiving even plagiarism report after checking of assignment
	Cost of internet	Internet packages are going expensive day by day Many places where internet facility is not available Long travel to get access to internet for opening portal in specified areas
Support and Feedback	Issues in communication	Some tutors don't pick the call of distance learners often Tutors answer on the phone sometime not helpful for distance learners
	Understanding of assignment questions	Some questions given in the assignments are vague to understand Sometimes we don't find relevant material to respond in the books
	Issue of Time management	Typing text and other work on computer take too much time Only grading without remarks is not enough to understand their mistakes Descriptive feedback is necessary for distance learners but not provided
	Lack of Facilities	Sometimes electricity shortfall creates problems in remote areas Not availability of internet facility in some areas of mountains Digital facilities are lacking for distance learners
	Problems in Tutors Feedback	Instructors feedback is vital, but scarcely offered Some instructors don't provide tangible feedback for their understanding Lack of motivation at different stages of learning

Distance learners highlighted some important points regarding their experience during developing paperless assignments and challenges involved. Students' responses were sought against key factors where quantitative data was meaningful. The information provided by the distance learners was merged at different relevant places. Some of the respondents highlighted more than one issue in their descriptive response while some of them did not respond against some statements and only typed "Nil" in the given field or left it as empty.

### **Problems of Study Material**

There are range of problems related to study material mainly merged into two sub-themes access and relevance of text material. The respondents pointed out that study material is outdated, extra extended books while it should be based on relevant and concise material. Mostly books are misprinted and when scanned and uploaded at the portal it is very difficult to even read the text. There should be some colorful illustrations of important points to make it reader friendly. These all make textbooks boring and distance learners often avoid accessing these books. But in cases books are even not uploaded and distance learners could not purchase books from the open market as books are costly or even not available in the open market. The distance learners are mostly frustrated in such situations and quit their program of study. Moreover, the connectivity of the internet is another a big challenge. The learners living in remote areas often do not have access to the online portal and start their work. Sometime the link is down and LMS is not working. In addition to this, there is an electricity shortfall due to some reasons and electricity cannot be restored for long hours. Anyhow, the system is meagerly supportive to open and distance learners to continue their program of studies in a condition which is not user friendly and soothing to provide conducive environment. Distance learners previously prepared their assignments in black and white form and believed a big challenge to develop in soft form. They considered typing assignments as an extra burden on distance learners due to time consuming and more expenses involved activity.

### **Problems of ICT**

Distance learners pointed out some areas where they face problems like MS word office, composing skills, and uploading skills which should be addressed on preference through imparting relevant trainings. Searching for the relevant study material online is also often difficult for most of them and they need training for online searching and in use of LMS. The appearance of its window should be user-friendly. The platform should provide a conducive environment to distance learners. The assignments are minutely related to the textbooks designed for that course and students must search relevant text online which meagerly available, if available, not free access to that material. The online retrieved information when selected by the distance learners to include in the assignment showed similarity index beyond limit which create problems for the learners. There is a need to provide guidance and support for self-write up to the learners so that they can get insight and develop their skills of writing assignments without plagiarism. Many students cannot afford internet charges and they have no free internet facility to continue their study. Mostly students don't know how to type the text or have very slow typing speed which took too much time to compose the Paperless assignments. This initiative is significant, but students should provide training in formatting and referencing as per APA format. The chat feature among student tutors should be available at nighttime also.

### **Support and Feedback**

Distance learners pointed out many issues related to communication with the instructors. They often make calls at the time of need which are scarcely attended, or the information given is not relevant to the query. In such cases learners get frustrated due to the non-availability of material for reading and developing their assignment. The instructors should share some relevant links of books for learners' readings free of cost. Some journals should be freely accessible to the students for reading and other websites to enhance their access for reading. The instructors should provide links of free e-libraries with their distance learners, provision of free international books and membership of different learning forums should be freely available to distance learners. Moreover, frequent load shedding restraint distance learners especially who belong to rural areas of Pakistan to develop their paperless assignment intime. Internet availability issue, low income of learners to

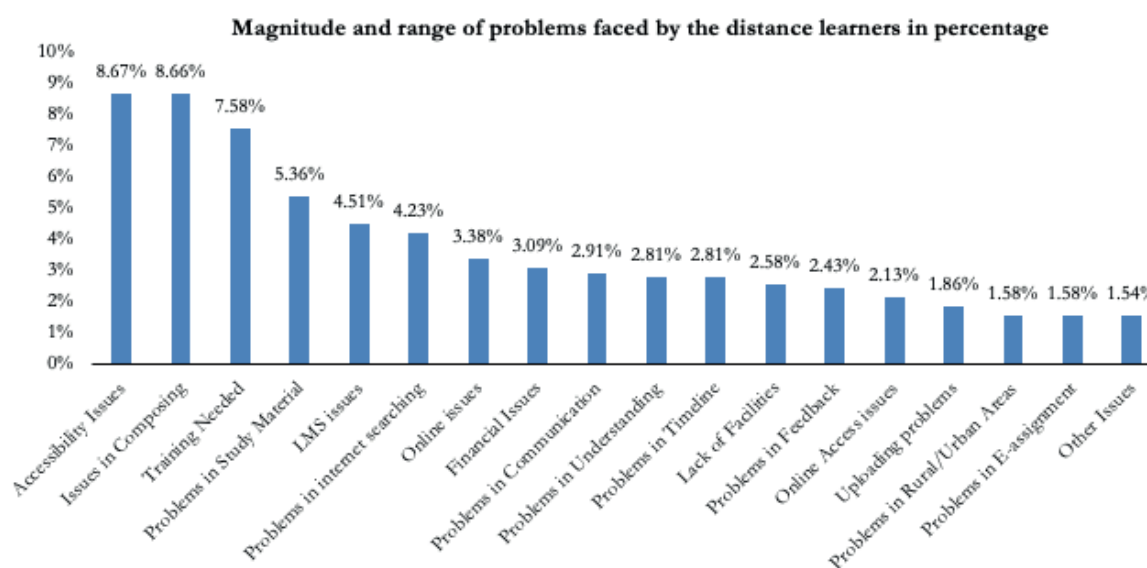
purchase device and monthly bills. In some areas the bandwidth required for smooth running of internet is scarcely available and learners face slow internet speed which create hinderance in the way of developing paperless assignments. As a result, mostly distance learners are unable to submit their assignments within the allocated time.

## Evaluation of Paperless Assignment

Distance learners often declare failure in Paperless assignment, and they have to take up their course again. This increased unrest among distance learners and they could not get a way to overcome this situation. They feel fee submission again as a burden for them, they are of the view that instructors should help and support to enhance their learning and compensate in their assignment through extra support and should save their time and money. The instructors only put marks on their assignments which meant nothing to understand and impossible to incorporate at the learner’s level. When the learners could not understand his mistakes, he was never able to improve it by overcoming his shortfalls. There should be more motivation from the instructor side through identifying their mistakes, providing guidelines and supporting material for their improvement. There is no marking criteria shared with the learners, no tangible feedback is provided to them. The quality of evaluating Paperless assignment is very low, marking criteria was hidden from students, lack of transparent marking, lack of motivation towards student’s work, marks are allocated without defined criteria which is often mislead to the assessment made. There are no rubrics designed for marking, guidelines about marking are not shared with the learners, instructors do not point out the mistakes with justifiable remarks for the learners. Learner to learner marking criteria varies, results are often delayed which creates unrest among distance learners.

There are many students who could not qualify their Paperless assignments, and they have to get admission as a fresh candidate in that subject. Distance learners are of the view that paperless assignments are the part of formative assessment, and it should be marked timely, and guidance should be provided to the distance learners promptly so that they can improve their learning in the light of suggestions made by the instructors.

The detail of all challenges faced by distance learners along with their magnitude in percentage is given in figure 1.3. It reflects the complete range of challenges being faced by distance learners during the process of paperless assignments. The data based on descriptive illustrations were coded in the NVivo software and merged against different themes generated from the data. These are mainly independent themes but some are overlapping.



**Figure 2.** Problems reported by the distance learners during paperless assignment process

Figure 2 shows the percentage of different problems occurrence in the whole process of paperless assignment. The major issue emerged accessibility with 8.67% magnitude as learners often face problems in connecting with the university server and sometime, they cannot upload their paperless assignment due to the slow internet connection. Majoring of learner's face difficulty in developing Paperless assignment with 8.66% of magnitude as stated by the distance learners. They face problems in typing extended assignments due to lack of typing speed and composing skills. These skills are basic requirements to develop a paperless assignment. Online searching and taking different supportive content from different resources demands computerized skills as large value 7.58% of respondents demands training of different computer related online skills. It includes training in using Learning Management System, MS Word and composing skills to develop paperless assignments.

Further different problems are highlighted like, problems related to study material (5.36), issues related to learning management systems (4.51%), problems of distance learners in online searching (4.23%), online issues (3.38%), financial issues (3.09%), problems in communication with instructor (2.91%), problems in understanding of questions including in the assignment (2.81%), problems in meeting timelines for assignment (2.81%) as it is time consuming job, lack of facilities to the distance learners (2.58%), problems in provision of feedback (2.43%) online access issues (2.13%) at LMS and e-books etc., problems in uploading assignments (1.86%), problems in remote areas (1.58%), problems in paper less assignment (1.58%) and some other miscellaneous problems (1.54%) like irrelevant questions in the assignment, high expectations of instructors from the learners are mainly reported by the distance learners.

## DISCUSSION

Paperless assignments are an important source of interaction between learners and instructors which lack in previously available correspondence-based mode of assignments (Akhter & Ali, 2016). In addition to this, the initiative is also significant in respect to protecting our environment and being part of the global green program (Yousufi, 2023). Mostly universities are using Learning Management System (LMS), Modular Object-oriented (Moodle) or Blackboard to complete the process of paperless assignment in distance learning programs especially after COVID 19 (Aabha & Bani 2015; Ahmed, Salah & Rana 2020). Students prepare their assignments with the help of different devices like computers, laptops and mobiles and submit through Learning Management System (LMS). The instructors have access to online submitted assignments, evaluate these assignments, and put their comments/feedback which are visible to the learners within no time. This is a smart process to complete assignments and get feedback from the instructors without unnecessary delays in corresponding assignments. Theoretically, it is a very smart, quick and cost-effective way of access and delivery but practically the user's experience is contrary to this or raises some practicable implications for practitioners (Haleem, Javaid, Qadri & Suman, 2022).

This initiative increased access to distance learners (Paul, & Jefferson, 2019) but emergent change resulted in the form of some critical challenges also. The provision of hardware equipment to distance learners is a big challenge (Musingafi, Mapuranga Chiwanza & Zebron, 2015), in addition to this lack of necessary skills required to use that equipment (Haleem, Javaid, Qadri & Suman, 2022). The provision of these all was meaningless if there was an electric shortfall or non-availability of internet facility/connectivity with appropriate bandwidth required for smooth working/running of internet. These all proved an extra financial burden on distance learners which led to a demand for financial support for equipment and internet service to join this platform. These extra expenses are proving as a barrier to get access to education for distance learners. There are some findings related to the quality of whole process like preparation of paperless assignments and their online submission, assessment mechanism and feedback effectiveness. These are challenging for distance learners as highlighted in the result section on self-reported questionnaire by them.

Distance learners face problems in finding answers to the questions given in the paperless assignments. Their foremost source to respond to questions are textbooks which scarcely pertain such information to prepare assignments covering demand of the instructors. Perhaps the level of questions posed in the assignments and text available in the textbooks are mismatched or not aligned. The books are outdated, and the content was not upgraded (Janet, Lesley & Ben, 2009). Moreover, the second source of problem was online searching to find literature to answer the questions, but distance learners were not proficient in searching techniques to find relevant material online. The findings highlighted that learners need training in browsing material

online (Pretorius, Podorova, Ford, Chowdhury, Bames & Viète, 2020). The instructors should provide extra help through specifying some web links, free digital libraries, audios and videos, free online journals, and variety of online readings to assist distance learners. Some questions in assignments demand a higher level of thinking which requires extensive readings to understand the question and respond accordingly. This is only possible by sharing relevant and latest readings with the learners at an online learning platform by the instructors which are meagerly provided (Jumani, Malik & Akram, 2018).

Some distance learners did not have typing skills and could not compose extended answers of assignments and have to pay huge amounts to the composers for this purpose. Ultimately, they felt a problem in making Paperless assignments due to depending on others to complete their tasks which create disturbance for them. The majority of students do not have personal computers/laptops to work on preparing assignments and they travel long to get access to this facility on payment. As a result of these all, the literature highlighted those paperless assignments are cost effective method but in this study the results are contrary (Barrot, Llenares & Rosario, 2021; Haleem, Javaid, Qadri & Suman, 2022). Some distance learners are not satisfied with the marking of paperless assignments as only scores in the form of numbers are provided by the instructors which had no meaning and guidance for learners to identify their mistakes. Feedback in descriptive form can guide learners about their weaknesses and they can make changes or learn for future improvements. Clear rubrics should be made for assessment which make students more strategic while searching their material and preparing of Paperless assignment (Pretorius, et al., 2020). Instructors detailed feedback is important for distance learners to enhance their motivation, boost their learning and enthusiasm towards learning (Barkley, 2010).

## CONCLUSIONS AND SUGGESTIONS

The key challenge faced by distance learners at first stage, before starting the paperless assignments were study material issues, outdated and non-readable material, lack of communication between distance learners and instructors, lack of required facilities, financial constraints to manage equipment and online connectivity. At second stage, some problems emerged during the process of paperless assignment like; problems in searching study material online, problems related to work on LMS, composing of paperless assignment, assessment related issues, especially instructors' non-productive feedback are main challenges of distance learners' online submission problems, lack of e-skills, internet issues, server connectivity issues etc. Lastly, some problems occur after the paperless assignment completion like; issues related to marking criteria of paperless assignment, plagiarism issues, non-productive feedback and network issues etc.

The challenges of Paperless assignments process are opening of new opportunities of learning for distance learners. It could be a significant source of learning through formative assessment of distance learners. Actually, this initiative is a tangible source of learning with new opportunities like enhancing computer skills, students online searching abilities, embedded motivation to manage timeline and time management for their students, improves students composing skills, and develop the habit of hardworking. This is a rigorous process which engages students in learning which is multi-faceted. During the developing process of paperless assignments students searched material online and download material and learn online searching techniques and abilities. They enhance their searching abilities from time to time. This hardworking routine developed confidence among distance learners, and they started to trust their abilities.

Some guidelines are provided/suggested for improvement of paperless assignment initiative:

1. Distance learners should provide free online access to different open educational resources to enhance their readability and equip them with better learning opportunities.
2. Necessary basic trainings should be provided to distance learners to get through at LMS followed by some video's recordings on different steps and processes of paperless assignments.
3. Free or cheap internet packages should be introduced for distance learners or establish facilities of such provisions at different centers of the university located in the whole country.
4. A platform for communication between learners and instructors should be provided so that learners can contact their instructors when and where they need any help.
5. The feedback should be clear and in descriptive form so that distance learners can identify their gaps in the assignments, incorporate their mistakes and can improve their learning.

## BIODATA and CONTACT ADDRESSES of AUTHORS



**Muhammad Haseeb UL HASSAN** is a graduate of Open and Distance Learning at Faculty of Education, Allama Iqbal Open University, Islamabad, Pakistan. Mr. gained his Master of Philosophy (MPhil) degree in Open and distance learning in December 2021. He also got a professional degree in Unani Medicine and Surgery from Islamabad Unani Tibbia college Rawalpindi. He is providing great service to the community by curing the patients since last many years. His academic interest areas are educational technology, online education, open and distance learning. He has some hobbies like photography, creative writing and gardening.

Muhammad Haseeb UL HASSAN

Distance Non-formal and Continuing Education (Graduate), Faculty of Education

Address: Allama Iqbal Open University, Postal Code 44310, H-8, Islamabad, Pakistan

Phone: + 051-9572396

E-mail: [artstylish@yahoo.com](mailto:artstylish@yahoo.com)



**Dr. Zafar IQBAL** is an Assistant Professor of Open and Distance Learning at Faculty of Education, Allama Iqbal Open University. Dr. Iqbal gained his Ph.D. in Educational Psychology in December 2011. His academic interest areas are learning environments, assessment and instructions, educational psychology, vocational education, Online education, education and technology, open and distance learning, AI tools and education, e-learning and use of internet in education. He has over 30 research articles published in national and international journals, 3 textbooks, 12 book chapters and other national manuals and academic activities, papers submitted to international meetings.

Zafar IQBAL

Distance Non-formal and Continuing Education, Faculty of Education

Address: Allama Iqbal Open University, Postal Code 44310, H-8, Islamabad, Pakistan

Phone: + 051-9572396

E-mail: [zafar.iqbal@aiou.edu.pk](mailto:zafar.iqbal@aiou.edu.pk)

## REFERENCES

- Aabha, C., & Bani, B. (2015). Learning Management System in Higher Education. *IJSTE - International Journal of Science Technology & Engineering*.
- Ahmed, A., Salah, A. & Rana, A. (2020). Prospects and Challenges of Learning Management Systems in Higher Education. *International Journal of Advanced Computer Science and Applications*, 11(12).
- Akhter, N., & Ali, A. (2016). Analysis of Assignments' Assessment for Distance Learners in Single Vs Dual Mode Institutions. *Bulletin of Education and Research*, 38(2), 15-35.
- Arney, Janna, Jones, Irma, Wolf, Angela. (2012). Going green: paperless technology and feedback from the classroom. *Journal of Sustainability and Green Business*, 19-27.
- Baby, K. T., & Amir, S. M (2020). Beyond the Classroom through the paperless mode. *International journal of linguistics, literature and translation (IJLLT)*.
- Barker, S., Fiedler, B., & Johnson, P. (2008). *Paperless assignments: Moving forward or marking time?* ascilite 2008 Melbourne. Australia: University of South Australia.
- Barkley, E. F. (2010). *Student Engagement Techniques: A Handbook for College Faculty*. United States of America: Jossey-Bass, A Wiley Imprint.

- Barrot, J.S., Llenares, I.I. & del Rosario, L.S. (2021). Students' online learning challenges during the pandemic and how they cope with them: The case of the Philippines. *Educ Inf Technol* **26**, 7321–7338. <https://doi.org/10.1007/s10639-021-10589-x>
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods approaches*. USA: SAGE Publications, Inc.
- Cubukcu, C., & Akturk, C. (2020). *The Rise of Distance Education during Covid-19 Pandemic and the Related Data Threats: A Study about Zoom*. Conference: Online International Conference of COVID-19 (CONCOVID) (pp. 127-143). Turkey: Gaziantep Islam Science and Technology University.
- Datt, D. G., & Singh, D. G. (2021). Learners' Satisfaction with the Website Performance of an Open and Distance Learning Institution: A Case Study. *International Review of Research in Open and Distributed Learning*, *22*(1).
- Dhawan, S. (2020). Online learning: a panacea in the time of covid-19 crisis. *Journal of Educational Technology Systems*, *49*(1), 5-22.
- Dumais, S. A., Rizzuto, T. E., Cleary, J., & Dowden, L. (2013). Stressors and supports for adult online learners: Comparing first-and continuing-generation college students. *American Journal of Distance Education*, *27*(2), 100–110.
- Ferguson, J. M. (2017). Middle school students' reactions to a 1: 1 iPad initiative and a paperless curriculum. *Education and Information Technologies*, *22*(3), 1149-1162.
- Haleem, A., Javaid, M., Qadri, M., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, (3), 275–285
- Hermawan, D., (2021). The rise of e-learning in covid-19 pandemic in private University: challenges and opportunities, *International Journal of Recent Educational Research (IJORER)*, *2*(1), 86-95.  
<https://www.tandfonline.com/doi/full/10.1080/87567550903263859?scroll=top&needAccess>
- Igwela, J.N.B., & Nsirim, O. (2018). Mobile social media as a facilitator of library services Delivery in Nigeria: A case study of Rivers State. *International Journal of Information Processing and Communication*, *6*(2), 346-355.
- Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods*, *18*(1), 3-20.
- Janet, O., Lesley, H & Ben, R. (2009). Learning From a Distance: The Experience of Remote Students. *Journal of Distance Education*. *23* (3), 53-74.
- Jumani, N.B., Malik, S. & Akram, H. (2018). Challenges and successes of blended learning in directorate of distance education, IIUI. *Pakistan Journal of Distance and Online Learning*, *4*(2), 143-156.
- Kai, C. (2004-07). *A Study on Paperless Assignments in Distance Education*. *Journal of Fujian Institute of Education*. Retrieved 07 14, 2019, from <http://en.cnki.com.cn/Articleen/CJFDTotal-FJXB20040701.htm>
- Keith, G. & Sue M.-G. (2009) Assignment submission, student behaviour and experience, *Engineering Education*, *4*:1, 16-28, DOI: 10.11120/ ened.2009.04010016
- Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, *82*, 26–33.
- Lin, X. (2016). Barriers and challenges of female adult students enrolled in higher education: A literature review. *Higher Education Studies*, *6*(2), 119–126.
- Musingafi, M. C., Mapuranga, B., Chiwanza, K., & Zebron, S. (2015). Challenges for Open and Distance learning (ODL) Students: Experiences from Students of the Zimbabwe Open University. *Journal of Education and Practice*, *6*(18).
- Newhouse, N. K., & Cerniak, J. (2016). Student success factors in graduate psychology professional programs. *Online Learning*, *20*(1), 70–91.

- Nordby, K., Klingsieck, K., & Svartdal, F. (2017). Do procrastination-friendly environments make students delay unnecessarily? *Social Psychology of Education: An International Journal*, 20(3), 491–512.
- Omehia, A., & Nsirim, O. (2022). *Computing Technologies and Paperless Classroom in Library Schools in Rivers Library Philosophy and Practice*. Digital Commons@University of Nebraska - Lincoln
- Paul, J., & Jefferson, F. (2019). A comparative Analysis of Student performance in an Online vs. Face to Face Environmental Science Course from 2009 to 2016. *Frontiers in Computer Science*, 1(7).
- Pretorius, D. L., Podorova, D. A., Ford, D. A., Chowdhury, D. R., Bames, D. M., & Viete, M. R. (2020). *Doing Assignments in Education*. Australia: Monash University.
- Shonfeld, Miri; Meishar-Tal, Hagit. (2017). The Voice Of Teachers In A Paperless Classroom. *Interdisciplinary Journal of E-skills and lifelong learning*, 13.
- Slowinski, J. (2000). If You Got IT Flaunt IT: Construction of a Paperless Classroom. *Web Net Journal*. April-June 2000.
- Subedi, D. (2016). Explanatory Sequential Mixed Method Design as the Third Research Community of Knowledge Claim. *American Journal of Educational Research*, 4(7), 570-577.
- Teddlie, & Tashakkari. (2009). *Foundations of mixed methods research: Integrating qualitative and quantitative approaches in social and behavioral sciences*. California: Sage Publication.
- Thimbleby, H. (2019). Three laws for Paperlessness. *Digital Health*, 5, 1–16. [Journals.sagepub.com/home/dhj](https://journals.sagepub.com/home/dhj)
- Yousufi, M. K. (2023). Exploring paperless working: A step towards low carbon footprint. *European Journal of Sustainable Development Research*, 7(4), em0228. <https://doi.org/10.29333/ejosdr/13410>
- Wahyuni, S., Fitriati, S. W., & Maharani, J.C. (2019). *Use of mobile learning applications to Support paperless classroom pedagogy*.
- Watfa, M. K., & Audi, D. (2017). Innovative virtual and collaborative teaching methodologies. *Behaviour & Information Technology*, 36(7), 663-673