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Implementation and challenges of accreditation of prior experiential learning: admissions (APEL-A)

The assessors’ perspective

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Abstract

Purpose – The purpose of this paper is to highlight how accreditation of prior experiential learning (APEL) is implemented, the challenges faced by the APEL assessors while assessing candidates as well as to suggest recommendations for improving the APEL process.

Design/methodology/approach – This paper is written based on the critical reflection of two accreditation of prior experiential learning: admissions (APEL-A) assessors appointed from a Malaysian Qualifications Agency approved assessment centre. This process would add depth and breadth to the study based on the assessor’s experience.

Findings – The study identified five challenges in the implementation of APEL-A. They are limited literature and records of the existing practices, conceptualisation of the APEL process, complicated and time-consuming APEL process, standard of acceptance vary according to discipline and lack of continuous training for APEL assessors. The four recommendations for improvements are as follows: the need for transparent and clear guidelines, ensuring consistency in practices and fairness to those from conventional learning, integrating APEL as part of the institution’s academic policy and providing continuous training for all APEL assessors.

Originality/value – Until now, not much research has been done regarding its implementation in Malaysia. The number of learners enrolled through this form of assessment may be low but growing. The feedback on the implementation of the APEL-A assessment process would be greatly beneficial to the stakeholders involved in improving its implementation process. The highlighted challenges faced as well as the recommendations put forth may also be useful for the continuous improvement of the APEL-A assessment process. Relevant stakeholders would benefit from this study.

Keywords Malaysian Qualifications Agency, Accreditation of prior experiential learning, Open and distance education

Paper type Research paper

1. Introduction

The population of Malaysia roughly comprises 68.6 per cent ethnic Bumiputera (sons of the soil that includes Malays and the Malaysian Indigenous people), 23.4 per cent Chinese, 7 per cent Indian and 1 per cent others (Department of Statistics Malaysia, 2015). Within this multiracial, multicultural and multilingual composition, Malaysia aims to develop, especially in its human capital, to achieve Vision 2020 that would allow Malaysia to attain advanced nation status. In this final leg of Malaysia’s journey, one of the six strategic thrusts deliberated in the 11th Malaysia Plan (Economic Planning Unit, 2015) is to accelerate the development of human capital for an advanced nation through lifelong learning. To increase access to higher education to encourage lifelong learning, the Malaysian Government began by establishing private higher education institutions (HEIs) before...
introducing the Open Distance Learning (ODL) modes of study. The latest measure was the introduction of the newly approved alternative assessment by the Malaysian Ministry of Education and the Malaysian Qualifications Agency (MQA) known as accreditation of prior experiential learning (APEL) that allows learners to leverage on their working experience or prior experiential experience to enrol into tertiary education. This allows more learners from diverse backgrounds, conventional or otherwise, to enter into institutions of higher learning for professional development. Wawasan Open University (WOU) is one of National APEL Assessment Centres appointed by MQA.

APEL is divided into two categories, namely, APEL-A (admission) and APEL-C (credits). The APEL assessment methods are based on the adult learning theory, experiential learning theory and the Johari Window Concept (Kaprawi, 2011). For this study, we will be focussing on APEL-A in the master’s degree of studies. Although APEL-A is relatively new in its implementation, this study aims to shed light on the assessment methods for APEL-A that are implemented based on feedback from the APEL-A assessors to gauge if the theories meet its practice. The study will look into the challenges faced by APEL-A assessors during the evaluation process as well as the APEL-A assessors’ recommendation for improving the implementation process of APEL-A after experiencing it.

1.1 Background
Lifelong learning is defined as “learning engaged by everyone of the age of 15 and above except professional students” (Md Yunos, 2013, p. 21). The concept of recognising experiential learning is not new as it has long been introduced in the USA since the 1970s to promote lifelong learning (Kaur, 2007). Malaysia introduced the Enculturation of Lifelong Learning Plan 2011–2015 that aimed to increase the number of lifelong learners in Malaysia by up to 22.6m in 2020 or 65.9 per cent of the total population (Ministry of Higher Education Malaysia, 2011).

To promote lifelong learning through ODL, the Malaysian Ministry of Education and MQA initiated the open entry system in 2007 and later APEL in 2011 as an alternative entry route for those with no formal qualification to further their higher education by recognising their prior experiential learning and work experience. Such development would “encourage educational flexibility, open access, equal opportunity, value for money and increase potential economic growth through a higher educated workforce” (Clarke and Warr, 1997, p. 1236). APEL allows learners to leverage on their working experience to enrol into institutions of higher learning to pursue a formal qualification. Candidates are required to undertake three levels of APEL assessment, i.e. aptitude test, portfolio and interview. The aptitude test measures their competency, followed by a portfolio where they compile pieces of evidence of experiential learning like certificates, testimonials, reference letters, newspaper articles and evaluations among others. Finally, they have to undergo an interview with an APEL assessor, who is also a faculty member of the school the candidate intends to enrol into. Based on MQA’s guidelines, only when the candidate passes all three levels of assessments, he/she is allowed to enrol into a master’s programme. Only selected institutions of higher learning in Malaysia have been granted approval by MQA to implement APEL and the institution selected for this study is one of them.

1.2 Problem statement
With the advancement of technology and the introduction of APEL, pursuing tertiary education is now more accessible to learners than before. However, there will be challenges and best practices that will arise during the APEL implementation process and these challenges and best practices should be documented in order that universities administering it are made aware of them for further and continuous improvement (Singh and Md Yassin, 2009; Kaprawi, 2011). As many Malaysian HEIs have yet to
incorporate APEL policies and guidelines in their practices (Kaprawi, 2011), they will face challenges when it comes to its implementation. Elsewhere in the world, South Africa Quality Assurance (SAQA, 2011) mentioned that South Africa itself is struggling to determine effective strategies for APEL implementation despite implementing it since the 1990s. Hence, as MQA has set out the guidelines and the ODL HEIs have provided training needed for APEL assessment, this paper seeks to discuss the feedback from APEL assessors with regard to the APEL assessment instruments and challenges they face in its implementation to give insight into the APEL system.

1.3 Research questions
This research aims to answer the following questions with reference to the master’s degree studies:

(1) How is APEL implemented?
(2) What are the challenges in the implementation of APEL?
(3) What recommendations can be done to improve the APEL implementation process?

1.4 Importance of research
APEL is an alternative form of enrolment into HEIs that the Government of Malaysia introduced in 2011. Until now, not much research has been done regarding its implementation in Malaysia. The number of learners’ enrolled through this form of assessment may be low but will continue to grow as time continues. During this period, the feedback on the implementation of the APEL-A assessment process from APEL assessors would be greatly beneficial to the stakeholders involved in improving its implementation process. The highlighted challenges faced by these APEL-A assessors as well as the recommendations put forth may also be useful for the continuous improvement of the APEL-A admissions assessment process.

1.5 Limitations of the research
The first limitation to this research is due to the fact that APEL is a relatively new system in Malaysia. As such, not much literature can be found with regard to this area of research. This is a double edged sword as, on one hand, there is little prior research to against which to benchmark this research with. On the other hand, this also opens up a whole new world of possibilities to the potential of this research and the significance it can bring to this new field of knowledge. Another limitation is that it would be hard to obtain the assessment questions used for the aptitude test for analysis as these questions are kept within the MQA question bank and are confidential. As APEL is a relatively new form of assessment, the number of participants that are admitted through the APEL assessment method is quite limited albeit growing as time progresses. Nevertheless, it is hoped that this research would be able to shed light on APEL and help evaluate its effectiveness and validity in the admission of students into universities in Malaysia.

2. Literature review
After revamping the Lembaga Akreditasi Negara or National Accreditation Board (LAN) to MQA in 2007, MQA established the Malaysian Qualifications Framework (MQF). MQF is a form of instrument to classify national academic qualification criteria benchmarked against international practices. These criteria are based on academic learning outcomes, credit and academic load systems that apply to qualifications awarded by all HEIs in Malaysia. This enables individuals to progress towards higher education through an education pathway that links qualifications systematically, including credit transfers and/or recognition of prior experiential learning acquired through formal and informal learning that encourages lifelong learning. According to Kaprawi et al. (2015, p. 146), APEL, under MQF, is defined as
“a systematic process that involves the identification, documentation and assessment of prior experiential learning, such as knowledge, skills and attitudes to determine the level at which an individual has achieved the desired learning outcomes, as access to a programme of study and/or the award of credit”. MQF was later revised and officially released as MQF 2nd edition in 2018.

The Ministry of Education Malaysia designated three institutions as ODL-mode institutions namely: WOU, Open University Malaysia and Asia u-University while allowing other public and private universities to conduct their own distance and continuing education programmes (Bahroom and Latif, 2012). This meant that there were various kinds of interpretation of the concept of APEL. Different HEIs place importance on different priorities and practices in their APEL assessment according to the needs of each programme resulting in various student experiences of APEL. Research (Falconer and Troy, 2007; Konrad, 2001) on how APEL applicants’ claims of prior experiential learning is evaluated based on four qualities: validity, sufficiency, quality and currency. Under validity, the evidence submitted must match the learning outcomes to the claim for credit. Sufficiency requires the volume and level of learning to match the claim. Quality looks into the submitted evidence’s relation to the applicant’s experience, whereas currency ensures that what is submitted is current to standard practices.

Sanséau and Ansart’s (2013) research based in France found four main challenges when integrating the recognition of prior experiential learning in lifelong learning. They were that the candidates’ experience were primarily technical or relational; recognition of prior experiential learning was expensive; the necessity to link recognition of prior experiential learning to a degree or diploma; the risk that lifelong learning may become overly “professionalised”. Current APEL research in Malaysia (Md Yunos, 2013; Kaprawi, 2011) involves candidates from the Technical Vocational and Training (TVET) background as APEL is seen as an effective tool to help tailor the required training needed by the candidates to better match them to their tasks. It also enables human resource upskilling that is critical to Malaysia’s need for skilled workers to achieve Vision 2020. However, little research looks into the academic spectrum where APEL procedures are now used to admit candidates into HEIs in Malaysia. These challenges plus these factors mentioned above further distort the public’s perception on APEL and how it should be implemented.

Therefore, to successfully implement the APEL system, a lot of consultation, networking and exchange of ideas and experiences from among APEL stakeholders and experts from both national and international institutions are needed (Kek, 2016; Van Kleef, 2010; Singh and Md Yassin, 2009). Like Malaysia, many HEIs from various countries still face multiple challenges when it comes to the implementation of APEL due to the lack of information of the APEL system that is still relatively unknown to the public and this should be addressed.

3. Theoretical framework
According to Kaprawi (2011), APEL in Malaysia is founded on three main theories: adult learning theory, experiential learning theory and the Johari Window Concept. The adult learning theory and experiential learning theory have long been the pillars of the APEL system (Harris, 2000). The Adult learning theory from Knowles (1990) discusses on the changes that occur when learning happens, particularly in terms of psychology (behavioural and cognitive), anthropology and linguistics. Kolb’s (1984) experiential learning theory holistically looks into the combination of experience, perception, cognition and behaviour that have become the methodological hallmarks of the recognition of prior learning. Kolb’s experiential learning model, expressed in a four-stage cycle of learning, holds the principle of experiential learning theory as its core where ‘immediate or concrete experiences’ provide a basis for “observation and reflection” where they are considered “abstract concepts” that after going through “active tests”
become new experiences (Kolb, 2016). The Johari Window Concept on which Alan Chapman’s (2003 cited in Businessballs.com, Businessballs, 2017) Johari Window Model is based takes into account the candidates’ effective aspects of learning including behaviours, cooperation, empathy, personal development and other soft skills.

All three theories form the basis of the APEL assessment tools to determine if the candidate qualifies to be admitted into the academic programme of his/her choice. The adult learning theory takes into account the candidates experience growing up to adulthood and what the candidate has acquired throughout his life. Based on the ALT, the aptitude test that is divided into four parts assesses a candidate’s numeracy skills, language skills in Bahasa Malaysia and English as well as general knowledge/critical thinking. The portfolio section on which the experiential learning theory is based is to collect information on what the candidate had obtained throughout his working and other relevant experiences. Besides certificates, testimonials, reference letters, newspaper articles, etc., the portfolio that candidates submit includes a personal reflection stating the reasons why they chose to study the intended programme and what have they done in the past that would support their application. Finally, an interview is arranged for the candidate and both the admission and academic assessors to meet and discuss the candidate’s suitability to enrol into the intended academic programme. This assessment tool is based on the Johari Window Concept that assesses if the candidate possesses the relevant affective skills like soft skills, interpersonal skills and behaviour suited for the intended programme and industry.

4. Implementation and challenges of accreditation of prior experiential learning (APEL)

“Accreditation of prior experiential learning (APEL) refers to the assessment and accreditation of any form of learning that has taken place in the context of either formal or informal education or during work itself” (Kaprawi et al., 2015). APEL is about giving value to the experience, skills and competencies gathered through formal, non-formal and informal means, and it includes formal schooling, work and life experiences, training, independent study, voluntary work, hobbies and family experiences (Malaysian Qualifications Agency, 2014).

The APEL application process for masters’ level in WOU was adopted from the Malaysian Qualifications Agency (2014). The first stage is labelled as Start. In this stage, applicants are advised to do the self-assessment and ensure that the basic entry requirements set by the Ministry of Higher Education are met. Apart from being a Malaysian and meeting the age and academic qualification requirements, applicants must also assess the relevancy of their prior learning experience to their desired field of study. It is important for the applicants to understand the learning needs of the desired programme. The filtering process of applicants at this point would provide a clear and timely indication as to whether a learner should proceed with APEL. If the applicant feels he has the potential to pursue a master’s degree in the desired field and has met the basic requirements, the applicant may apply to be assessed through APEL. Next, applicants are required to fill in the application form and to prepare a bank draft as an assessment fee. Then, the form together with the bank draft is to be submitted to the MQA for evaluation. Once, the MQA has processed the application form, they will notify the date and location of the aptitude test to be taken by the applicant. The next level is known as the APEL Assessment stage. At this stage, the applicant must sit for an aptitude test that the applicant must pass. It is also the first assessment to be taken by the applicants, and 40 per cent of the total APEL assessment comes from this aptitude test. The main objective of the Aptitude test is to evaluate the applicants’ competencies and readiness to pursue a master’s programme in any of the higher institutions in Malaysia. The criteria that will be tested include knowledge in Bahasa Malaysia, mathematics, general knowledge/critical thinking and English.
After passing the aptitude test, the applicant can proceed to the preparation of the portfolio. A portfolio is a compilation of documents of the applicant’s prior experiences that includes formal, informal and non-formal learning. Applicants must provide a portfolio according to the format set by the MQA. For certificated learning, applicants must attach certified copies of the certificates or documents. For experiential learning, applicants may submit evidence in the form of a testimony from an employer/client/colleague, job specifications, images, web files and others and for non-formal learning, they may attach the certificates of attendance from the courses or trainings that they have attended. The portfolio assessment carries a weightage of 60 per cent of the total APEL assessment. Upon submission, their portfolios will be reviewed by subject matter or course experts from the corresponding schools according to their intended programme of study. Assessors will view the portfolios and are required to validate the evidences prior to their evaluation. They then rate the learner’s portfolio based on seven criteria set by the university, namely, generic, numerical, communication, lifelong learning, knowledge, practical skills and self-reflection. In order to pass this portfolio assessment, the applicant must get a minimum of 50 per cent of the total marks. The portfolio assessment process is expected to be completed within three working days from the date of submission. If the applicants pass the portfolio test, they will be contacted by the panel assessor(s) to set the date of the portfolio presentation or interview. At this stage, they are required to explain their acquired learning in greater detail. The assessor will then rate the applicants based on five scoring criteria, namely, administrative, communication or language, knowledge or skills in specific discipline, readiness to undertake a postgraduate study and finally action plan to complete the programme of study. An official notification letter to inform the results will be issued to the applicant by MQA. Applicants who have passed the APEL assessment (aptitude test and portfolio assessments) will be awarded the APEL admissions certification that can be used to apply for admission into any of the HEIs in Malaysia. Applicants who have failed the aptitude test may appeal for a review of the results or apply for a re-sitting. Applicants who have failed the portfolio assessment may resubmit the portfolio assessment. However, this re-submission can only be made at least six months after the date of notification of APEL results (Malaysian Qualifications Agency, 2014). Figure 1 summarises the implementation process of APEL in Malaysia in the form of a diagram.

5. Methodology
This paper is written based on the critical reflection of two APEL-A assessors appointed from a MQA approved assessment centre. Both assessors have been appointed as APEL-A assessors since 2015 and have assessed a combined total of 150 APEL candidates. According to Bart (2011), “critical reflection is a reasoning process to make meaning of an experience. Critical reflection is descriptive, analytical, and critical and can be articulated in a number of ways such as in written form, orally or as an artistic expression”. This process of reflecting on their experiences is not only good practice for the assessors to improve themselves but also offers a wealth of information that are able to add depth and breadth to an experience that would build connections between the research questions and the content.

6. Challenges in the implementation of APEL: admissions
Based on the above process, the assessors found the following challenges in the assessment process for admissions.

6.1 Limited literature and records of existing practices
It is noted that although a thorough evaluation matrix has been put in place, there still is much room for improvement as can be learnt of South Africa’s experience in implementing APEL. There is also the probability of non-standardisation between the four HEIs implementing APEL that may result in non-uniformity of AEL certification across the field. There is still
much room for the discussion of how APEL can and should be administered with standardisation across the board. This would raise the perception of APEL in the eyes of the common man and augur well with potential future employers as they will have a clearer picture of the true potential of an APEL-certified candidate.
6.2 Conceptualisation of the APEL process
As noble as the idea of allowing work experiences to be used as leverage for an individual to upgrade themselves with the proper paper qualifications, the lingering question remains whether the different experiences of each and every applicant is sufficient enough to qualify a candidate for tertiary education. In addition, the current process is very qualitative and subjective. Even with the existing framework in place, it still remains the prerogative of the APEL assessor to assess the applicant readiness to undertake tertiary education. It also runs the risk of non-uniformity in assessment standards across the assessment centres as different HEIs may use different forms of measurement to assess and admit a candidate.

6.3 Complicated and time-consuming APEL process
In allowing APEL to increase the number of lifelong learners in Malaysia, credit has to be given to the attempts of the Malaysian Ministry of Education and MQA in allowing this entrance qualification. However, when it comes to actual implementation, it is clear that the APEL assessment process is a complicated and time-consuming process as compared to conventional entrance education and examinations. Besides passing the aptitude test, candidates are required to compile artifacts to build their portfolios. After that, the process also involves an interview session that involves the candidate and two APEL assessors. All these are time-consuming and could probably cause greater delay when the number of APEL applicants grows.

6.4 Standard of acceptance vary according to discipline
Through APEL, the need for a common entrance examination to judge an individual’s competency is no longer standard. Conversely, since it is subjected to each applicant’s formal, informal and non-formal learning experiences, there exists a grey area as to whether each and every individual applicant is actually capable for tertiary education. The process to ensure the authenticity of the portfolios submitted by APEL applicants is verified only by the APEL assessors based in the assessment centre of the four HEIs. According to Laming (2004), “when someone comes to make a judgement in the everyday world, the point of reference is most often taken from past experience. Different people have different accumulations of past experience and for that reason make different judgements about the same issue”. The assessors’ expertise in their own fields plays an important role when judging the APEL candidates. However, as stated by Laming (2004), each of us has different views on the same issue and this could result in different views over the same candidate. As the result, the standard of acceptance could vary according to discipline across the faculties or the universities in general.

6.5 Lack of continuous training for APEL assessors
MQA has produced various assessment tools because its implementation and appointed assessors were given training before being appointed in 2011. However, these APEL assessors have not been sent for continuous training because of their appointments. Some trained assessors may even have retired or changed jobs and new assessors appointed by the HEIs may not have received the necessary training from MQA. Each HEI may organise meetings individually to update and train their assessors, but there have not been any formal workshops organised by MQA to collectively update all APEL assessors on the latest challenges that have surfaced because of its implementation or the improvements done by MQA to further improve the implementation process. This lack of continuous training may result in unfair assessment of candidates and could further hurt the credibility of the APEL assessment.
7. Recommendations for improvement in the implementation of APEL: admissions
In light of these challenges faced by the assessors, there is a need to look for improvements for the implementation of APEL-A. Transparent guidelines and continuous training for APEL assessors are needed to ensure consistency in practices and fairness to those from conventional learning. Institutions should also strive to integrate APEL into the institution’s academic policy. Our recommendations are as below.

7.1 The need for transparent and clear guidelines
It is imperative that clear and transparent guidelines from MQA are needed in the implementation of APEL certification. This would not only boost confidence of the employers but also ensure fairness is practiced by all assessors regardless of which HEI they come from because the process is very qualitative in its measurements and open to debate. All this would add to the credibility, integrity and sustainability of APEL in Malaysia and be recognised as equals to conventional education admissions.

7.2 Ensuring consistency in practices and fairness to those from conventional learning
As discussed above, the implementation of APEL would support the government’s initiative in increasing Malaysia’s human capital growth as part of our effort to attain developed nation status. However, it is imperative that APEL is held up to the same standards as traditional forms of formal learning. APEL should be seen as a step for individuals who did not have opportunities for formal learning earlier in life to be given a second chance at education and not as a crutch for these people. Besides ensuring fairness for traditional formally educated individuals and experiential learning individuals, ensuring a consistency in practice would also ensure a truly high-skilled workforce in Malaysia. This would also indirectly raise the confidence of potential future employers in employing APEL certification holders as well.

7.3 Integrating APEL as part of the institution’s academic policy
Although it is noted that only a few HEIs in Malaysia currently offer APEL, resolving the questions discussed in this paper would give us an insight into the implementation of APEL in implementing it across of HEIs. Much can be learnt from the experience of South Africa in its implementation of APEL and what we can avoid and learn from its mistakes. Rolling out APEL throughout all HEIs in Malaysia would certainly be a step in the right direction towards Vision 2020 and high-income nation status.

7.4 Provide continuous training for all APEL assessors
Continuous training should be given to all APEL assessors regardless of discipline to further enhance their assessment skills. MQA can gather all appointed APEL assessors from all four HEIs for training and workshops. Discipline-specific training may also be provided to make all APEL assessors to be on the same page. This would provide a standard reference to all the assessors specific to their discipline as various disciplines requires different learning experiences as pre-requisites to pass the APEL assessment. These continuous trainings can also be done at least once every two years to keep the assessors abreast on the new challenges faced by other assessors across the nation as well as provide the new improvements made to the guidelines to keep the APEL assessment process current to the development of society.

8. Conclusion
To summarise, APEL in Malaysia was created on the backbone of adult learning theory, experiential learning theory and the Johari Window Concept. Together these three concepts
create a holistic approach in assessing the experiential learning for tertiary certification. MQA has created a framework that has been implemented across the selected four HEIs to aid in the assessment and standardisation of experiential learning as the foundation of a tertiary education. It cannot be denied that there would exist disputes and challenges in the implementation of APEL, especially due to the subjective nature of its assessment. As such, we would recommend the need for quality assurance for APEL so that it can be held in the same regard as conventional education. Lifelong learning is important to every nation in the world as it leads to developing human capital and increasing economic competitiveness. Therefore, it is hoped that MQA will continue to provide direction and encourage for the effective administration of APEL by the selected HEIs. With APEL, it is hoped that more and more people will be given the opportunity to improve themselves in their career and personal satisfaction.

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The research trends in recommender systems for e-learning

A systematic review of SSCI journal articles from 2014 to 2018

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Abstract
Purpose – A recommendation algorithm is typically applied to speculate on users’ preferences based on their behavioral characteristics. The purpose of this paper is to provide a systematic review of recommendation systems by collecting related journal articles from the last five years (i.e. from 2014 to 2018). This paper aims to study the correlations between recommendation technologies and e-learning systems.

Design/methodology/approach – The paper reviews the relevant articles using five assessment aspects. A coding scheme was put forward that includes the following: the metrics for the e-learning system, the evaluation metrics for the recommendation algorithms, the recommendation filtering technology, the phases of the recommendation process and the learning outcomes of the system.

Findings – The research indicates that most e-learning systems will adopt the adaptive mechanism as a primary metric, and accuracy is a vital evaluation indicator for recommendation algorithms. In existing e-learning recommender systems, the most common recommendation filtering technology is hybrid filtering. The information collection phase is an important process recognized by most studies. Finally, the learning outcomes of the recommender system can be achieved through two key indicators: affections and correlations.

Originality/value – The recommendation technology works effectively in closing the gap between the information producer and the information consumer. This technology could help learners find the information they are interested in as well as send them a valuable message. The opportunities and challenges of the current study are discussed; the results of this study could provide a guideline for future research.

Keywords Literature review, Learning behaviour, Assessment of e-learning recommender system, Recommendation technology

Paper type Research paper

Introduction
E-learning is defined as an instruction tool that provides knowledge and helps facilitate learning by use of a digital device or a web technology (Clark and Mayer, 2016). In comparison with traditional instruction modes and learning approaches, the use of e-learning is more effective for learning purposes. For example, early research (McClusky, 1947) showed that the educational film, as a delivery medium on an e-learning system, has better learning outcomes because it contributes to achieving educational goals. Further, e-learning is a type of new...
learning style that could be a solution for lifelong personal learning (Zhang et al., 2004), as learners can learn without the limitations of time and place. Fundamentally, it is of great value for educational reform and development. To be specific, e-learning is widely regarded as “educational technology, information and communication technology (ICT), multimedia learning, technology-enhanced learning (TEL), computer-based instruction (CBI), a virtual learning environment (VLE), mobile learning” (Ridwan, 2015) and so on. With the progress of information and communication technology development, e-learning system provides support for educational management. Due to the importance of e-learning system, many researchers have expended much effort on the research of emerging educational technologies on e-learning platforms through some theoretical models or frameworks.

Specifically, Persico et al. (2014) proposed an improved technology acceptance model (TAM) that is a three-dimensional model to evaluate the technological innovations of an online learning system, which includes three dimensions of “phases of use, users and components.” Arkorful and Abaibou (2015) established the application of information and communication technology in teaching and learning processes, and the advantages and disadvantages in using e-learning in higher educational institutes through literature reviews of previous research. Truong (2016) put forward his views on ways to integrate learning styles into adaptive e-learning systems. His review paper describes predictions of online learning styles and a method of automatic classification is also proposed, as well as recommendations and potential opportunities for future work. Based on the TAM, a framework was proposed to investigate the effect of learning styles in blended e-learning systems (Al-Azawei et al., 2017). Although many variables could be integrated, the author chose the “integration of perceived satisfaction and technological acceptance,” and his findings suggested that learners’ needs, rather than their learning styles, should be used as a research variable for personalized educational systems. Big data technology has also attracted the interest of scholars and is a promising research topic for online learning systems. Huda et al. (2018) argued that the emerging technology of big data plays an important role in the innovative environments of online learning resources, which promotes a conducive learning environment and performance improvements during a student’s learning development process. The above studies on e-learning technologies introduce the trends and developments of the current educational technologies, especially the wide application of information and communication technologies in teaching and learning. The users’ learning style has become a hot topic in the study of learning system models in recent years. Based on a model of online learning style, Li et al. (2019) proposed a course recommendation method for learners. The conclusion indicates that learning style is an essential factor in the recommendation system as the course information can be recommended to the target users according to the data of their learning preferences.

From the perspective of information acquisition, searches and recommendations are the two primary means for users to get information (Alonso et al., 2006). Search is an active and explicit behavior, and the search engine is the best tool to satisfy the needs of users in finding matching information. However, dissemination and acquisition of information could also be achieved through a recommender system. In the recommendation process, the user passively receives what the system recommends. Often, the user’s needs are vague and unclear. Therefore, a recommender system tends to have significant individual differences due to different user requirements.

Moreover, the recommendation algorithm has a close relationship with the recommendation content. The process for users to obtain recommendations may be continuous and long-term, because the system needs to use different recommendation filtering techniques in order to provide users with appropriate content, such as product information or news, on the basis of understanding users’ interests and their behavior. Therefore, the recommendation technology could be applied in various fields, such as shopping websites, music channels, learning platforms and so on. The great potential for
this technology appeals to many researchers who are increasingly focused on the application and the development of the recommendation technology in an e-learning system. In this paper, we review related recommendation technologies for e-learning systems. The journal articles that fall within the scope of both “recommendation” and “e-learning” are included in our research.

In recent years, the popularity of internet technology has made it easier for people to access information and facilitate their studies and their life. It has become a common phenomenon for many people to search for information and learn new skills through the internet. Over the past decade, the number of online learners has increased dramatically (Kim and Bonk, 2006). To cater to people’s needs, many online learning platforms have arisen. However, due to information overload issues (Hiltz and Turoff, 1985), it is not easy for users to find their favorite subject amidst all the information available. Second, the majority of people do not understand their own specific needs. The user efficiency for information retrieval will be reduced, so e-learning platforms need to adopt specific strategies to optimize decentralized resources. The application of a recommender technology is a good solution. The recommender system provides users with customized recommendations within a specific domain (Martínez et al., 2009) and presents useful information to interested users. Therefore, our research on online learning platforms is of great importance. It could not only contribute to optimizing recommendation strategies but also act as a guideline for future researchers to navigate the best research directions.

As shown in Figure 1, there was a total of 115 articles relevant to e-learning recommender systems from the years 2014 to 2018. For an in-depth analysis, 31 articles were selected from the following nine top-tier publications including Computers in Human Behavior, Computers Education, IEEE Transactions on Learning Technologies, Educational Technology Society, Interactive Learning Environments, British Journal of Educational Technology, Educational Sciences Theory Practice, Journal of Computer Assisted Learning and Journal of Computing in Higher Education. On average, 6.2 articles are published in these journals every year.

According to the citation analysis report of the Web of Science database, 31 articles have been cited 258 times, of which 255 self-citations have been removed. Figure 2 shows the citation frequency of these articles every year, which shows that the recommendation of e-learning has gradually become a hot research topic since the year 2014 and has attracted the attention of many researchers.

Serious Game is an important pedagogic tool that could be applied to the curriculum to promote students’ learning. Gauthier and Jenkinson (2018) applied the Activity Theory Model of Serious Game to analyze the relationship between game design decisions and
teaching strategies. By comparing students’ learning behavior in a game and a nongame application, this article introduced three game design strategies that could enhance students’ productive negativity in STEM higher education. Through a qualitative and quantitative analysis, Wang et al. (2017) found that the mechanics and dynamics of Serious Game will affect the students’ concentration and enjoyment, while another journal demonstrated four kinds of relationships between users’ learning styles and the game genre, two of which have proven to be valid and can be utilized in e-learning recommender systems based on the special needs and the preferences of learners (Khenissi et al., 2016).

The Semantic Web is an intelligent network which can be understood by people and machines, as well as providing automatic services depending on the semantics in the e-learning system (Sampson et al., 2004). With the development of semantic web technology, Ouf et al. (2017) discussed a new personalized learning framework for an e-learning ecosystem, and a complete learning package consisting of learner models and learning process components was created as well, while Albatayneh et al. (2018) introduced a recommendation architecture for an e-learning forum on the basis of semantic filtering technology and learners’ negative ratings. Moreover, this learning recommender system performed well and had a better recommendation accuracy than similar systems. A recommendation approach was presented based on a user similarity calculation. The method used various technologies, such as the semantic web technology, to customize the best learning path for learners on the basis of students’ preferences and interests. It has also proven to be effective in the social learning environment (Halimi et al., 2014).

Over the past years, the issue of the social network has appealed to many scientists’ interests, as network theory can connect related or nonrelated metadata and can be used to analyze social phenomena (Borgatti et al., 2009). In addition, the social network is crucial to collaboration and communication between people. People also use tags to indicate their characteristics, hobbies and so on, and these tags are also used to share photos or texts. Collaboration tags are very popular on the internet and could be used to describe the process by which users, using keywords, add metadata to share content (Golder and Huberman, 2005). Klašnja-Milićević et al. (2018) use the user’s tags to improve the recommendation algorithm in the e-learning environment and integrate social collaborative tagging technology to provide recommendations of learning materials for users on the online learning platform. Karataev and Zadorozhny (2017) exploited a self-adaptive learning framework for the teaching process and applied it to collective learning in social networks. The research shows that social learning promotes adaptive learning for students and improves the quality of teaching in the classroom.

Social software applications have attracted the attention of educators in higher educational institutes. It is widely used in teaching to increase the interaction between

![Figure 2. The distribution of the citation frequency of 31 articles in the field of e-learning recommender systems from the years 2014 to 2018](image)
learners and lecturers (Schroeder et al., 2010). For example, teachers can build online learning groups through the social network application Facebook. In the study group, students can supervise each other, and teachers can efficiently manage the learning process. Galanis et al. (2016) described a social dynamic learning framework that can promote users' informal digital learning. Based on this system, a peer evaluation mechanism was also put forward for personalized learning recommendations. The increase in collaborative learning is also correlative to the emergence of social networks. Stantchev et al. (2015) introduced a cloud computing service into an e-learning platform that could be used to assess the user’s knowledge level by artificial intelligence mechanisms and recommend education and training for users’ personal learning and their career development. However, social networks generate massive amounts of information during user’s interactions. To address this problem, a neural collaborative filtering model was presented to predict the ratings, and the recommendation method of this model is feasible and effective.

In this paper, we have reviewed some journal articles, from the years 2014 to 2018, related to e-learning recommender systems, from which a coding scheme was proposed, and an in-depth analysis was conducted to evaluate the effectiveness of the systems.

To be specific, the following series of research questions are investigated:

**RQ1.** What were the primary metrics for e-learning systems?

**RQ2.** What were the primary evaluation metrics for recommendation algorithms?

**RQ3.** What were the primary recommendation filtering technologies in e-learning systems?

**RQ4.** What were the important phases of the recommendation process?

**RQ5.** What were the learning outcomes achieved in the e-learning recommender system?

**Research methodology**

**Data collection and processing**

In this research, the Web of Science database was selected as our data source because it is one of the most influential journal article collections. In the database, 221 articles were found by using the query of "recommendation" and "e-learning." Then, the publication period was set for the years 2014 to 2018 to ensure that our research kept up with the newest development trends of this field. As our research subject belongs to the category of educational technology, nine reputational and representative journal publications were selected as our principal research sources, such as the *Journal of Computing in Higher Education*. Therefore, there were a total of 31 articles in the query results. Moreover, to ensure that these articles truly match our e-learning recommender system, the following inclusion criteria were established to analyze each article. Each article must be relevant to the recommendation technology, and the research topic must be included in the area of e-learning. Specifically, the article should use one or more learning models to support users’ learning or teaching processes. Moreover, these learning systems must have some specific recommendation targets for the users as well, such as recommendations of teaching modes or learning resources. According to the criteria, 11 irrelevant articles were filtered out, leaving 20 articles that met the criteria for our research data set. For example, Yilmaz and Keser (2016) discussed the effect of reflective thinking activities in an e-learning system as well as providing suggestions for learning environment design. However, this study is not involved in the recommendation technologies and relevant content recommendations. Another example is an article about the blended learning approach in higher education based on multimedia tools (Bicen et al., 2014). Figure 3 illustrates our data collection and processing analysis process.
The assessment for e-learning recommender systems

To evaluate the e-learning recommender system, this section develops coding schemes from five research areas including learning systems, recommendation algorithms, filtering techniques, recommendation processes and learning outcomes. The details are shown as follows.

**Codes for e-learning systems.** On the personalized learning platform, learner’s ability is also an essential factor that we need to consider, in addition to learners’ preferences, interests or learning behaviors. However, in the era of information explosion, web-based learning systems have emerged with many problems. Therefore, in the e-learning system, as suggested by Chen et al. (2005), the following issues need to be addressed, including disorientation, cognitive overload, adaptive mechanisms and information overload.

Disorientation refers to an event that causes a learner to lose direction in hyperspace or deviate from the learning goal without knowing it (Bhatti et al., 2017), while cognitive overload indicates that “learner’s intended cognitive processing exceeds the learner’s available cognitive capacity” (Mayer and Moreno, 2003). The cognitive load theory shows that learners can effectively absorb and retain information only when they do not acquire information when in an “overloaded” mental capacity (Chandler and Sweller, 1991). To be specific, learners’ short-term memory can only retain a certain amount of data in a short period of time. If the information exceeds our available knowledge capacity, then the data cannot be retained in our brains for a long time.

Adaptive learning mechanisms could provide learning guidance according to individual differences (Huang and Shiu, 2012). For example, a system with an adaptive mechanism can be adjusted based on the course structure and learning preferences, which could adapt to the teaching styles, and provide students with suitable courses for their personal learning (Graf, 2009). Information overload is used to describe the difficulty of understanding an issue (Yang et al., 2003), and when we input too much information about the issue into the system, there will be a selective mechanism to make decisions effectively. However, due to the limited cognitive processing capacity of decision-makers, problems with inefficient decision-making may occur (Speier et al., 1999).

**Codes for algorithm evaluations.** The codes for the recommendation algorithms include two evaluation metrics such as accuracy and coverage. Accuracy is a small fraction of the
correct recommendations for the total possible recommendations, while coverage measures the proportion of objects in the system’s search space. Coverage is related to the percentage of items and users for which the recommender system can provide predictions. Accuracy metrics consist of statistical accuracy and decision support accuracy. Statistical accuracy metrics indicate the actual user ratings, and the accuracy of the filtering technology is assessed by directly comparing the introduced ratings, while decision support accuracy metrics include the “Reversal rate, Weighted errors, Receiver Operating Characteristics, and Precision-Recall Curve, Precision, Recall, and F-measure” (Isinkaye et al., 2015).

**Codes for filtering technologies.** The codes for recommendation filtering technologies include content-based filtering, collaborative filtering and hybrid filtering. Content-based technology is a domain-dependent algorithm that emphasizes the analysis of the attributes of items to generate predictions, such as web pages, user profiles, publications and news.

Collaborative filtering is “a domain-independent prediction technology that cannot be easily and adequately described by metadata such as movies and music” (Isinkaye et al., 2015). Suggestions are provided by calculating the similarities between their configuration files to match users with relevant interests and preferences. Collaborative filtering includes memory-based techniques and model-based techniques. Memory-based techniques use user ratings to calculate similarities between users or items. Additionally, the items are combined with a neighbors’ performances to generate recommendations once the user’s neighbor is found. Model-based techniques, such as machine learning or data mining technologies, are usually used to develop models to predict user ratings for unrated items, which are similar to a user-based or item-based neighborhood algorithms and are more scalable when dealing with large sparse data sets (Sandvig et al., 2008).

Hybrid filtering combines many different recommended techniques for better system optimization and to avoid some limitations and problems with pure recommender system. Most commercial systems are hybrid, such as the Google news recommender system (Das et al., 2007). This technique can be further classified into seven categories including weighted hybridization, switching hybridization, cascade hybridization, mixed hybridization, feature-combination, feature-augmentation and meta-level (Isinkaye et al., 2015).

**Codes for recommendation processes.** The codes for the recommendation process phase consists of the information collection phase, the learning phase, and the prediction/recommendation phase (Isinkaye et al., 2015). The information collection phase will collect users’ information to generate a user profile or model for the prediction tasks, including user attributes, behaviors or the content of the resources accessed by the user. This phase includes explicit feedback, implicit feedback and hybrid feedback. Explicit feedback is explicit input of user’s interests in the item, and the implicit feedback is the indirect inference of user preferences by observing the user’s behavior, while mixed feedback is obtained by combining explicit feedback and implicit feedback. In addition, the learning phase is also an essential phase in the recommendation process. It is the application of learning algorithms to filter and utilize the feedback information collected during the information gathering phase. The last phase is called the prediction or recommendation phase, which recommends or predicts the types of items the user may like.

**Codes for learning outcomes.** As suggested by Fu and Hwang (2018), the main codes for learning outcomes include 15 dimensions. In this review, as the focus is the recommender system for e-learning, we adapt the original 15 dimension codes to six categories, skills, cognition, behavior, affection, correlations and others, which is more suitable to the context of the recommender systems. For affection, it can be further elaborated as eight subcategories according to Fu and Hwang (2018). The category cognition, is related to cognitive learning outcomes. The third category “skills” refers to the accuracy and fluency of the user’s operation or demonstrations on the online learning platform. The categories
“behavior” and “relevance” refer to the effect relationship, learning behavior, or cause-effect relation, including valuable model, social influence, or contributing factors at different research levels.

Research results

Distribution of e-learning systems

As shown in Figure 4, approximately 80 percent of the articles (16 out of 20) mentioned the adaptive mechanism as an indicator for the e-learning system. Two articles mentioned the metric of “information overload” and each of the remaining articles involved “disorientation” and “cognitive overload,” respectively. Therefore, it can be intuitively observed that the adaptive mechanism is a critical metric for the system because it can automatically and quickly create system feedback under the same external conditions and adjust the original strategy to achieve the best optimization goals (Yu et al., 2005).

Distribution of algorithm evaluations

As shown in Figure 5, there are six articles in connection with the statistical accuracy, and four articles used the decision support accuracy to evaluate the recommended algorithm. Therefore, in all the research data sets, half of the objects were involved in the metric of accuracy. However, only two articles mentioned the coverage of the algorithm. The results showed that the recommendation accuracy is more critical to evaluating the quality of an algorithm when it was compared with the metric of coverage, as accurate recommendations can provide users with useful information and help them improve their learning.
or work efficiency. Furthermore, the accuracy of the algorithm is related to the user’s experience and, to a large extent, to the performance of the system.

**Distribution of filtering technologies**

To understand how an e-learning system provides recommendation services, we have studied the recommendation mechanism of system models from the perspective of a recommending filtering technology. As shown in Figure 6, recommendation filtering techniques include content-based filtering, collaborative filtering and hybrid filtering. Figure 6 indicates that hybrid filtering is the most commonly used technology in the e-learning platforms, while the other two technologies are also prevalent. The total frequency of usage of these three technologies is 61. This means that the learning system typically does not use one single technology but uses two or more technologies to complete the recommendation tasks.

Figure 7 shows the distribution of the two subcategories of the collaborative filtering technique. The analysis results show that the model-based technique is used more frequently, probably because it can process large sparse data sets better and faster than the memory-based approach (Sarwar *et al.*, 2001).

Since most e-learning platforms use hybrid filtering techniques, it is essential to investigate the subcategories of this technology. Hybrid filtering techniques can be further divided into seven subcategories. As shown in Figure 8, weighted hybridization and feature-combination were used six times in our review articles, accounting for 26 percent of the total number. The feature-augmentation technique is seldom used, and only two papers use this filtering technique, accounting for 9 percent of the total. However, we have not found any articles using the switching hybridization approach.
Distribution of recommendation processes
As shown in Figure 9, the information collection phase is the most crucial phase of the recommendation process, followed by the prediction/recommendation phase. From the results in Figure 10, it could be inferred that explicit feedback is the primary and most direct way for the recommender system to gather information. Among the 20 articles we studied, seven articles used implicit feedback, six articles used hybrid feedback and the proportion of articles using these two channels to collect feedback data were basically the same.
Distribution of learning outcomes

The learning outcome is an important indicator to evaluate the quality of the learning system output. Figure 11 shows the six types of learning outcomes that may be measured in an e-learning platform. Based on our study of electronic recommender systems, affections and correlations are the most frequent learning outcomes in these studies, followed by cognition. The behavior is also one of the elements of learning outcomes that needs to be considered in the recommender systems. As the first learning outcome "affection" is a vital research factor for all categories, it was divided into eight subcategories in order to do further research. As shown in Figure 12, among the 18 studies involving affections, the technology acceptance/learning intention, opinion/learning experiences of students and learning attitudes/expectation of learning engagement are the three most frequently measured indicators from a total of 12 items, which account for approximately 66.67 percent of the category of “affections.”

Discussion

In this section, we will analyze our review study from a macro perspective. Based on the pedagogical approaches for e-learning systems, we divided the research data set into the following eight categories, namely, game learning, collaborative learning, social learning,
adaptive learning, blended learning, lifelong learning, flipped learning and others (relevant to semantic web).

As shown in Figure 13, collaborative learning and social learning are often selected as research objects for learning recommender systems. Among 20 review articles, 60 percent (12 out of 20) articles were related to these study subjects. Second, there are four articles about the study of semantic web technology, which accounts for approximately 15.38 percent of the total number of pedagogical methods. In the remaining articles, three articles discussed the educational model of game learning, and there is only one paper referring to flipped learning. For example, Hsieh et al. (2017) proposed an adaptive filtering mechanism by using the LINE as a tool for innovative teaching in the flipped learning environment.

As shown in Table I, the articles published between the years 2014 and 2018 have mentioned social learning, which indicates this research topic has been important for online recommender systems in recent years. However, adaptive learning, blended learning and lifelong learning have been less involved in the recommender systems of recent years. Therefore, it could be simply predicted that game learning, collaborative learning and social learning will be the research trends in future online learning systems. Chang and Hwang (2019) summarized the number of papers published from 2007 to 2016 about mobile game-based learning and the statistics show the increasing trend of study on game learning. As collaborative learning is a development trend in the twenty-first century, Efendi and Yulastri (2019) used the collaborative learning model to demonstrate its effectiveness on computer network courses, while Khechine and Augier (2019) conducted an investigation to
study the factors affecting the adoption of the social learning platform and its conclusion indicates that social learning has great potential. According to the latest paper mentioned above, the study of game learning, collaborative learning, and social learning have become hot research topics which will attract more scholars’ attention in the next few years.

Conclusion
In this systematic review study, some research questions have been answered by involving metrics for e-learning systems, evaluation metrics for recommendation algorithms, recommendation filtering technologies, phases of recommendation processes and learning outcomes. Further, we have developed a coding scheme for the evaluation of each selected journal article, performed a statistical analysis on each coding category, and compared the differences of the elements under the same evaluation index. We then summarized the pedagogical approaches of each research article, discussed the distribution of the research topics, and predicted three major development trends for e-learning systems in the future.

After an in-depth analysis of the research studies, we have reached the following conclusions. Between the years 2014 and 2018, 80 percent of the review articles adopted the adaptive mechanism as one metric of the learning system. Because it is critical to maintain the system stability and performance optimization of the e-learning platform with self-adjustments and feedback mechanisms, in regard to the evaluation metrics of the recommendation algorithm, approximately 50 percent of the research literature will give priority to the accuracy of the algorithm, while only 10 percent of the research articles mention the coverage metric. In terms of the recommendation filtering technology, nearly 38 percent (23 out of 61) of the articles apply the hybrid filtering technology, but both content-based filtering and collaborative filtering are equally important to improve the service quality of the learning recommender system. The information collection phase is an essential part of the recommendation process phase, including explicit feedback and implicit feedback. The explicit feedback indicates some information that could be directly obtained, such as users’ preference, while implicit feedback indirectly predicts how much interest the user has for the item based on user behavior. With these feedbacks, the system can accurately recommend preferred information or content to the user. Finally, affections and correlations are the most prominent among the six main types of learning outcomes, which account for 60 percent (35 out of 58) of all possible outcomes.

In summary, this paper reviewed the research on recommender systems for e-learning from the years 2014 to 2018 and explored the future direction of the educational research field. Nevertheless, some potential new developments and applications of educational technologies are presented, such as collaborative tagging techniques, semantic web technologies, and so on.

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Employers’ attitudes to HOU postgraduates’ qualities and skills

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Abstract

Purpose – The purpose of this paper is to investigate employers’ attitudes towards qualities and skills for the twenty-first century of Hanoi Open University (HOU) postgraduates. More specifically, it is to find out employers’ assessment and satisfaction on five sets of skills: foundation skills, professional competencies, personal attributes, organizational skills and technical knowledge and skills.

Design/methodology/approach – The study used a survey questionnaire as a tool to collect data. The survey was conducted on employers of HOU postgraduates who graduated during the academic years 2015–2016 from five faculties at HOU.

Findings – The findings of the study show that employers highly appreciated HOU postgraduates in numeracy skills, ICT literacy skills and information literacy within foundation skills; critical thinking and problem solving skills, collaboration skills and conceptual skills within professional competencies; responsible, integrity and interpersonal skills within organization skills; productivity, organization and planning and time management within organizational skills; knowledge-related regulations and policies at workplace, capacity to use knowledge and skills at workplace and lifelong learning within technical knowledge and skills.

Originality/value – The values of the study are that the employer attitudes identified can be used to evaluate educational programs and can be used as a quality assurance measure. The study helps to indicate the gap between the expectation and the satisfaction of employers on HOU postgraduates. Thereby, suggestions can be given to HOU’s management to improve the services at the university in general and the services to postgraduate students in particular to upgrade their qualities and skills to meet social demands.

Keywords Employers, Satisfaction, Skills, Qualities, Postgraduates, Importance

Paper type Research paper

1. Introduction

Education quality, which depends on various stakeholders, including students, academicians, employers, the government and education service providers, is a major issue concerned by the society as a whole. Though education quality is measured and assessed by different means, the purpose of the measurement and assessment is by any means to improve the quality of education programmes offered, in particular, and the quality of the labour force, in general.

Education institutions often evaluate the education quality on three factors: input (learners’ competencies, teachers, management staff, facilities, finance, etc.), training process (syllabus, educational structure and system, testing and assessment, scientific research, etc.) and output (learners’ achievement, teachers’ assessment, employability of graduates, etc.). Under the impacts of globalization and integration, education institutions are changing their strategies, shifting their foci from the quantity to the quality of their products. Meanwhile, employers who benefit from the final products of education concentrate on its "output", including graduates' personal attributes, knowledge and skills. For them, quality is to meet employers’ needs and requirements. This is shown through how graduates and postgraduates can meet the requirements of their employers and the demands of the workplace.
This approach in evaluating the education quality, which is from the employer perspective, can be called the “demand” approach.

Thus, the perception of employers on the sets of skills that they consider important and satisfactory can be used to evaluate educational programmes and can be used as a quality assurance measure. The findings of this study help to identify the employers’ needs and requirements on the qualities and skills of postgraduates for the twenty-first century, in general, and the employers’ satisfaction on Hanoi Open University’s (HOU) postgraduates, in particular. Thus, suggestions are given to employers, learners and especially to managers at HOU to improve the services at the university in general and the services to postgraduate students in particular to upgrade their qualities and skills to meet the social demands.

2. Theoretical framework

In Vietnam, there are no framework for qualities and skills for the twenty-first century of postgraduates. Although there have been some studies on employers’ attitudes towards qualities and skills for the twenty-first century of postgraduates, these studies applied frameworks for qualities and skills for the twenty-first century of undergraduates. In this context, this study applied the framework for twenty-first century qualities and skills of postgraduates developed by the OU5 research team (see Sumalee et al., 2017).

Based on the existing employer satisfaction surveys carried out by a number of institutions such as The University of Sydney Business School (2014), The University of Texas-Pan American (2001), Hanover Research Council (2009) and The University of North Dakota (2011), the OU5 research team built up its own framework for qualities and skills that are widely thought necessary to the twenty-first century. In this framework, skills that are identified important across most available frameworks are categorized into five sets: foundation skills, professional competencies, personal attributes, organizational skills and technical knowledge and skills. The five sets of skills with 30 subsets are described in detail as follows.

2.1 Foundation skills

In general, foundation skills refer to skills that form the building block to any educational programme that enables learners to proceed to programme-specific courses. Such skills also refer to essential skills that a person needs to manage work and life in general. While different frameworks may identify different set of foundation skills, these often include communication skills and numeracy. In the OU5 framework, six subsets of skills under foundation skills are determined as follows: English language oral communication, English language written communication, English language comprehension, numeracy skills, ICT literacy skills and information literacy.

2.2 Professional competencies

Professional competencies refer to the skills that a person needs to do something (to think, to collaborate) in a professional context. There are competencies that are generic to a large number of professions, including critical thinking, creative thinking, conceptual skills, problem solving skills, scientific skills, research skills, collaborative skills, social skills, team skills and lifelong learning skills. In the OU5 framework, six subsets of skills under professional competencies are determined as follows: critical thinking and problem solving, creative and innovative thinking, analytical skills, conceptual skills, collaboration skills and research skills.

2.3 Personal attributes

Personal attributes refer to a wide category that depends on the personality of an individual. In this study, personal attributes refer to those that perceived to be relevant to employability.
Six subsets of skills under personal attributes are determined as follows: responsible (capacity to achieve targets and meet deadlines), integrity (capacity to observe professional and general ethical standards), self-reliance (capacity to work autonomously), adaptability (capacity to be flexible and adaptable), interpersonal skills (capacity to communicate and relate well with others) and cross-cultural skills (ability to work in a multicultural and international context).

2.4 Organizational skills
This set of skills lists generic business skills that most enterprises/organizations would consider as important skills that they would expect from their employees. In the OU5 framework, six subsets of skills under organizational skills are determined as follows: organization and planning, time management, productivity, leadership, decision-making skills and entrepreneurial skills.

2.5 Technical knowledge and skills
Technical knowledge and skills include capacity to use knowledge at workplace and capacity to acquire/develop new knowledge and skills. In the OU5 framework, six subsets of skills under technical/domain-specific knowledge and skills are determined as follows: lifelong learning (capacity to develop knowledge and skills), capacity to use knowledge and skills in the workplace context, knowledge-related regulations and policies at workplace, knowledge of international standards and related bodies, general knowledge of surrounding environment, and cross-cultural skills (ability to work in a multicultural and international context).

3. Methodology
3.1 Aims and objectives of the study
The aim of the study is to investigate employers’ attitudes towards HOU postgraduates’ qualities and skills for the twenty-first century.

To this aim, the study seeks answers to the following questions:

RQ1. What are the expectation of employers on the twenty-first century qualities and skills of postgraduates?

RQ2. What are the employers’ satisfaction levels on the twenty-first century qualities and skills of HOU postgraduates?

RQ3. What are the gap between the expectation of employers on the twenty-first century qualities and skills of postgraduates and their satisfaction levels on the twenty-first century qualities and skills of HOU postgraduates?

RQ4. What are the areas of the twenty-first century qualities and skills that HOU postgraduates need to improve?

3.2 Methods of the study
To collect data to find answers to the research questions, the study used a survey questionnaire as a major instrument. The questionnaire was designed based on the five sets of skills with 30 subsets of skills identified on the framework. Participants were asked to rate the importance of each of the 30 subsets of skills and also their satisfaction on each of the 30 subsets of skills related to their HOU employees. The instrument design includes two sets of five-point Likert scales to measure importance and satisfaction. The interpretation of the rating is shown in Table I.
3.3 Population and sampling

The target population for the survey questionnaire was employers of HOU postgraduates. Within the scope of the study, the survey questionnaires were distributed to employers of HOU postgraduates for the academic years 2015–2016 in five faculties, namely Business Management, English Language, Economic Law, Information Technology and Electronic Technology, due to the fact that only these five faculties had postgraduates for the academic years 2015–2016. Total, there were 785 HOU postgraduates for this period, and during the time frame of this study, there were 375 employers nationwide who employed HOU postgraduates. However, 234 responses were received.

The respondents came from five different provinces, of whom 17.99 per cent were from Bac Ninh, 9.33 per cent from Ninh Binh, 41.01 per cent from Hanoi, 14.39 per cent from Bac Giang, and 17.27 per cent from Vinh Phu. In total, 50.85 per cent of the respondents were female and 49.15 per cent were male; 58.12 per cent of them were from the public sector and 41.88 per cent from the private sector. 25.21 per cent of them specialized in Business Administration, 6.84 per cent in Accounting, 50.85 per cent in Economic Law, 6.41 per cent in Information Technology and 10.68 per cent in the English language (Table II).

3.4 Procedures and data analysis

The questionnaire was in Vietnamese and delivered to 375 employers nationwide who employed HOU postgraduates. The questionnaire was delivered in person or by e-mail. After a month, 234 responses were received.

Only completed questionnaires, with all subsets of skills rated, were used for data analysis. The data obtained were analyzed using descriptive statistics. The Statistical Package for Social Science software was used for this purpose.

The data were analyzed in terms of the mean score and standard derivation for each set and subset of skills on importance and satisfaction.

4. Findings and discussion

First, the mean score for importance of each set and subset of skills was obtained. These values were used to rank the sets of skills in terms of importance. The knowledge on the importance of the sets and subsets of skills is crucial for the university to learn about the demands of the labour market. In a similar manner, the mean score for satisfaction was obtained for each set of skills.

| Scale          | Interpretation               |
|----------------|------------------------------|
| 1.00–1.80      | Not at all satisfied/important|
| 1.81–2.60      | Not very satisfied/important  |
| 2.61–3.40      | Somewhat satisfied/important  |
| 3.41–4.20      | Very satisfied/important      |
| 4.21–5.00      | Extremely satisfied/important |

Table I. Interpretation of the rating of employers

| Occupation                  | No.  | Percentage |
|-----------------------------|------|------------|
| 1. Business Administration  | 59   | 25.21      |
| 2. Accounting               | 16   | 6.84       |
| 3. Economic Law             | 119  | 50.85      |
| 4. Information Technology   | 15   | 6.41       |
| 5. English Language         | 25   | 10.68      |
| Total                       | 234  | 100.00     |

Table II. Occupation distribution of respondents
and subset of skills. These values were used to identify the sets and subsets of skills that were satisfactory to employers. The knowledge on the satisfaction of employers can serve to measure the quality of the educational programmes that the university offers.

Second, the mean score for importance and satisfaction of each subset of skills was analyzed to find out the correlation between these indices. The knowledge on the correlation between importance and satisfaction of each subset of skills can be used to identify the weak points that the university should address to improve the qualities and skills of its postgraduates. Following are the findings in details.

4.1 Employers’ views on the sets of skills identified
The data show that, in general, expectation levels of employers on different sets of skills vary. Employers had highest expectation on personal attributes and professional competencies with the importance level of personal attributes at 3.76 and professional competencies at 3.66, within the range of “Very Important”. The importance levels of other sets of skills were lower, within the range of “Somewhat Important”. The lowest rating was for foundation skills at 2.96 (Table III). This implies that employers may take for granted that employees had already acquired foundation skills at lower levels of education and that at the higher level of education, personal attributes and professional competencies were those that counted in the workplace context and should be stressed.

In terms of satisfaction, the data show that the satisfaction levels of all the five sets of skills identified were at “Somewhat Satisfied”. Similarly to the importance levels, the satisfaction levels for personal attributes and professional competencies were higher at 3.38 and 3.20, respectively. This can lead to a conclusion that HOU had to some extent satisfactorily met the demands of the labour market. A rather surprising finding at this point was that the lowest rating was again for foundation skills at 2.83. Although employers did not view foundation skills as important as other set of skills, their low satisfaction on this set of skills implies that this is a week area the university should address.

The data also show that there was a strong correlation between the levels of importance and the levels of satisfaction, with only a slight change in the ranking between organizational skills and technical knowledge and skills. Again, this may imply that the expectation of employers had been met to a satisfactory level; in other words, HOU could be said to have satisfactorily met the demands of the labour market. However, the fact that the levels of importance were lower than the levels of satisfaction for all the sets of skills implies that the qualities and skills of HOU graduates were still lower than the expectation of employers and there were still areas for quality improvement.

4.2 Employers’ views on the subsets of skills identified
4.2.1 Employers’ views on foundation skills. The data show that, in general, expectation levels of employers on different subsets of foundation skills vary. Employers had higher expectation on ICT literacy skills and information literacy, with the importance levels on these skills being at 3.46, within the range of “Very Important”. This may imply that these

| Importance | SD | Set of skills | Satisfaction | SD |
|------------|----|--------------|--------------|----|
| 2.96       | 0.36| Section A: foundation skills | 2.83 | 0.36 |
| 3.66       | 0.38| Section B: professional competencies | 3.20 | 0.35 |
| 3.76       | 0.40| Section C: personal attributes | 3.38 | 0.36 |
| 3.36       | 0.39| Section D: organizational skills | 3.00 | 0.35 |
| 3.31       | 0.37| Section E: technical knowledge and skills | 3.11 | 0.35 |

Table III. The rating of employers on the five sets of skills
skills should receive more emphasis and weight in postgraduate educational programs in
the context of Vietnam at the time being. This is relevantly in line with the fact that ICT is
now playing a more and more important role at workplace. The importance levels of English
language written communication and English language comprehension were the lowest at
2.38 and 2.44, respectively, within the range of “Not Very important”. This may imply that
the English language written communication and English language comprehension of the
labour force in Vietnam had been improved over time, with all kinds of promotion programs
for English learning since 1986, when the open door policy was put into place. However,
while expectation levels for English language written communication and English language
comprehension were within the range of “Not very important”, the expectation level for
English language oral communication was higher, within the range of “Somewhat
Important”. This may imply that at workplace, this English language skill was used more
often than other English language skill. Also, in the range of “Somewhat Important” was the
rating for numeracy skills (Table IV).

Regarding the satisfaction levels of employers on these subsets of skills, data show that
the employers had higher satisfaction levels on information literacy, ICT literacy skills and
numeracy skills, with the rating for these skills were within the range of “Somewhat
Satisfied”. This may imply that HOU postgraduates had to some extent meet the
expectation of the employers in terms of these skills. However, it was quite expected that the
satisfaction levels of employers on skills related to the English language were all lower,
within the range of “Not Very Satisfied”. This may imply that the weakness of HOU
postgraduates in the English language skills was limited to the context of the university.

The data show that the correlation between the importance levels and the satisfaction
levels were strong. This may imply on one hand “a good news” that HOU postgraduates had
to some extent meet the expectation of the employers on skills of higher importance, and on
the other hand “a bad news” that HOU postgraduates were weak at skills of lower importance,
and this weakness should be addressed soon as it was limited to the context of the university.

4.2.2 Employers’ views on professional competencies. As shown in Table V, the overall
importance mean score of all subsets of skills within professional competencies was within

| Section A: foundation skills | Importance | Satisfaction |
|-----------------------------|------------|--------------|
|                             | X          | SD           | X          | SD           | Gap          |
| 1. English language oral communication | 2.64 | 0.35 | 2.46 | 0.37 | 0.18 |
| 2. English language written communication | 2.38 | 0.37 | 2.44 | 0.37 | 0 |
| 3. English language comprehension | 2.44 | 0.37 | 2.44 | 0.37 | 0 |
| 4. Numeracy skills | 3.38 | 0.36 | 3.15 | 0.34 | 0.23 |
| 5. ICT literacy skills | 3.46 | 0.36 | 3.23 | 0.35 | 0.23 |
| 6. Information literacy | 3.46 | 0.36 | 3.28 | 0.35 | 0.18 |

Table IV. The rating of employers on foundation skills

| Section B: professional competencies | Importance | Satisfaction |
|-------------------------------------|------------|--------------|
|                                     | X          | SD           | X          | SD           | Gap          |
| 7. Critical thinking and problem solving | 3.69 | 0.38 | 3.36 | 0.35 | 0.33 |
| 8. Creative and innovative thinking | 3.54 | 0.37 | 3.05 | 0.34 | 0.49 |
| 9. Analytical skills | 3.77 | 0.39 | 3.28 | 0.35 | 0.49 |
| 10. Conceptual skills | 3.74 | 0.39 | 3.31 | 0.35 | 0.43 |
| 11. Collaboration skills | 3.79 | 0.39 | 3.31 | 0.35 | 0.48 |
| 12. Research skills | 3.41 | 0.36 | 2.9 | 0.34 | 0.51 |

Table V. The rating of employers on professional competencies
the range of “Very Important”, of which the expectation of employers on collaboration skills was the highest at 3.79, and the expectation of employers on research skills was the lowest at 3.41. Because these skills are those that a person needs to do something in a professional context, they are directly related to the workplace context, and then it is not a surprise that the expectation levels of the employers on these skills were higher than their expectation levels on other sets of skills.

The data show that satisfaction levels of employers on all these subsets of skills were within the range of “Somewhat Satisfied”. This is a good new for HOU as it implies that HOU postgraduates had to some extent satisfied the needs and requirements of the employers.

However, the gap between the overall mean score of importance and satisfaction was rather big. This may imply that HOU postgraduates need to improve all of the six subsets of skills within professional competencies, focusing more on skills with bigger gap between importance and satisfaction, ranging from 0.51 for research skills down to 0.33 for critical thinking and problem solving.

4.2.3 Employers’ views on personal attributes. As shown in Table VI, for personal attributes, the employers’ expectation levels on all subsets of skills, except for cross-cultural skills, were within the range of “Very Important”, with the highest expectation level being that on integrity and self-reliance at 4.1. The lowest overall importance mean score was of cross-cultural skills at 3.0, within the range of “Somewhat Important”. It is not a surprise that the employers had high expectation on all subsets of skills within personal attributes as unlike skills such as the English language skills, these skills are the foundation for any person to develop personally and professionally in all contexts.

Regarding the satisfaction levels of the employers, the data show that within the range of “Very Satisfied” were the ratings for integrity, responsible, interpersonal skills and self-reliance at 3.59, 3.56, 3.49 and 3.44, and the ratings for the other subsets of skills were within the range of “Somewhat Satisfied” at 3.33 for adaptability and 2.87 for cross-cultural skills, respectively. This implies that in terms of this set of skills, HOU postgraduates can be said to have satisfied the requirements of the workplace in most subsets of skills. The low satisfaction level of the employers on cross-cultural skills of HOU postgraduates may be not a story limited only to HOU, given that the integration of Vietnam into the world has been going on for quite a short period of time. Anyway, this is a weak area that the university should address.

As also observed in Table VI, the gap between the ratings of the employers on importance and satisfaction was highest for self-reliance, integrity and adaptability at 0.66, 0.51 and 0.41, respectively. Therefore, apart from cross-cultural skills, it is necessary for HOU’s postgraduates to improve self-reliance, integrity and adaptability within personal attributes.

4.2.4 Employers’ views on organizational skills. All skills in organizational skills refer to skills one needs to be a leader or manager; thus, they seem to be challenging to the employees. As shown in Table VII, the employers expressed their highest expectation on productivity, time management and organization and planning, with the ratings for these

| Importance | Satisfaction |
|------------|--------------|
|            |              |
| 13. Responsible: capacity to achieve targets and meet deadlines | 3.92 | 0.41 | 3.56 | 0.37 | 0.36 |
| 14. Integrity: capacity to observe professional and general ethical standards | 4.1 | 0.43 | 3.59 | 0.37 | 0.51 |
| 15. Self-reliance: capacity to work autonomously | 4.1 | 0.43 | 3.44 | 0.36 | 0.66 |
| 16. Adaptability: capacity to be flexible and adaptable | 3.74 | 0.39 | 3.33 | 0.35 | 0.41 |
| 17. Interpersonal skills: capacity to communicate and relate well with others | 3.67 | 0.38 | 3.49 | 0.36 | 0.18 |
| 18. Cross-cultural skills: ability to work in a multicultural and international context | 3.0 | 0.34 | 2.87 | 0.34 | 0.13 |
subsets of skills being within the range of “Very Important” at 4.13, 3.97 and 3.92, respectively. The ratings for leadership and decision-making skills were within the range of “Somewhat Important”. It is quite surprising that the rating for entrepreneurial skills was at only 2.26, falling into the range of “Not Very Important”. The low rating for entrepreneurial skills may be attributed to the fact that entrepreneurship has not much been promoted in Vietnam, and the economy of Vietnam is still heavily dominated by state own enterprises.

In terms of satisfaction, the satisfaction levels of the employers on the subsets of skills within organizational skills were all below the level “Very Satisfied”. This means that more emphasis should be given to all of these subsets of skills, especially for entrepreneurial skills.

Regarding the gap between importance and satisfaction, it is alarming that the gaps for productivity, time management and organization and planning, skills that were rated as more important, were big at 0.75, 0.79 and 0.66, respectively, and the gaps for these skills were much bigger than the gaps for other skills. Although the gap for entrepreneurial skills was “minus”, meaning that the satisfaction level was higher than the importance level, the rating for this subset of skills was low, falling into the range of “Not Very Satisfied” at only 2.54, then the “minus” does not mean that this is a strong area.

In sum, more emphasis should be given to all of these subsets of skills, especially for entrepreneurial skills, productivity, time management and organization and planning.

4.2.5 Employers’ views on technical knowledge and skills. In terms of importance, Table VIII shows that within the range of “Very Important” were the subsets knowledge-related regulations and policies at workplace, capacity to use knowledge and skills in the workplace context and lifelong learning, with the ratings of the employers being at 3.92, 3.82 and 3.72, respectively. The ratings for the other three subsets of skills, namely general knowledge of surrounding environment, cross-cultural skills and knowledge of international standards and related bodies were lower, within the range of “Somewhat Important” at 3.08, 2.67 and 2.64, respectively.

There was a light fall in overall satisfaction mean scores on most subsets of skills, except for knowledge of international standards and related bodies. Within the range of

| Section D: organizational skills | Importance | Satisfaction |
|-------------------------------|------------|--------------|
| X | SD | X | SD | Gap |
| 19. Organization and planning | 3.92 | 0.41 | 3.26 | 0.35 | 0.66 |
| 20. Time management | 3.97 | 0.42 | 3.18 | 0.35 | 0.79 |
| 21. Productivity | 4.13 | 0.44 | 3.38 | 0.36 | 0.75 |
| 22. Leadership | 2.95 | 0.34 | 2.87 | 0.34 | 0.08 |
| 23. Decision-making skills | 2.95 | 0.34 | 2.77 | 0.35 | 0.18 |
| 24. Entrepreneurial skills | 2.26 | 0.39 | 2.54 | 0.36 | −0.28 |

Table VII. The rating of employers on organizational skills

| Section D: technical knowledge and skills | Importance | Satisfaction |
|-------------------------------|------------|--------------|
| X | SD | X | SD | Gap |
| 25. Lifelong learning: capacity to develop knowledge and skills | 3.72 | 0.38 | 3.33 | 0.35 | 0.39 |
| 26. Capacity to use knowledge and skills in the workplace context | 3.82 | 0.40 | 3.38 | 0.36 | 0.44 |
| 27. Knowledge-related regulations and policies at workplace | 3.92 | 0.41 | 3.54 | 0.37 | 0.38 |
| 28. Knowledge of international standards and related bodies | 2.64 | 0.35 | 2.64 | 0.35 | 0 |
| 29. General knowledge of surrounding environment | 3.08 | 0.34 | 3.05 | 0.34 | 0.03 |
| 30. Cross-cultural skills: ability to work in a multicultural and international context | 2.67 | 0.35 | 2.74 | 0.35 | −0.07 |

Table VIII. The rating of employers on technical knowledge and skills
“Very Satisfied” was only the rating for knowledge-related regulations and policies at workplace; the ratings for all other skills were within the range of “Somewhat Satisfied”. This means that all though HOU postgraduates had satisfied the rudiments of the workplace to some extent, there were still areas for improvement for all subsets of skills within technical knowledge and skills.

In terms of the gap between importance and satisfaction, the data again show the phenomenon that in most cases, the gaps for more important skills were bigger than the gaps for less important skills, with the gaps for “Knowledge-related regulations and policies at workplace”, “Capacity to use knowledge and skills in the workplace context” and “Lifelong learning”, the skills that were rated as more important, being at 0.38, 0.44 and 0.30, respectively, and the gaps for “General knowledge of surrounding environment”, “Cross-cultural skills” and “Knowledge of international standards and related bodies”, the skills that were rated as less important, being at 0.03, −0.07 and 0.00, respectively. This means that, as for most subsets of skills aforementioned, HOU postgraduates have to improve both “more important” and “less important” skills; they have to improve “more important” skills because these skills are “more important” and because the gap between importance and satisfaction are big.

In sum, the skills that the employers considered as important, the skills that the employers considered as satisfactory and the skills that HOU postgraduates need to improve are summarized in Table IX.

### 5. Conclusion

After analyzing the employers’ rating on the five sets of skills identified in the framework designed by the OU5 research team (2017), this study has identified the employers’ needs and requirements on the twenty-first century skills and qualities of postgraduates in general

| Skills                | Important skills                  | Satisfactory skills                  | Skills that should be improved                  |
|-----------------------|-----------------------------------|--------------------------------------|------------------------------------------------|
| 1. Foundation skills  | ICT literacy skills               | ICT literacy skills                  | ICT literacy skills                             |
|                       | Information literacy              | Information literacy                 | Information literacy                            |
|                       | Numeracy skills                   | Numeracy skills                      | Numeracy skills                                |
|                       | Collaboration skills              | Critical thinking and problem solving| Research skills                                 |
| 2. Professional        | Analytical skills                 | Collaboration skills                 | Creative and innovative thinking                |
| competencies           | Conceptual skills                 | Conceptual skills                    | Analytical skills                               |
|                       | Integrity                         | Integrity                            | Self-reliance                                   |
|                       | Self-reliance                     | Responsible                          | Adaptability                                    |
|                       | Responsible                       | Interpersonal skills                 | Adaptability                                    |
| 3. Personal attributes | Productivity                      | Productivity                         | Productivity                                    |
|                       | Time management                   | Organization and planning             | Adaptability                                    |
|                       | Organization and planning         | Time management                      | Adaptability                                    |
| 4. Organizational skills | Knowledge-related regulations and policies at workplace | Knowledge-related regulations and policies at workplace | Capacity to use knowledge and skills in the workplace context |
|                       | Capacity to use knowledge and skills in the workplace context | Capacity to use knowledge and skills in the workplace context | Lifelong learning |
|                       | Lifelong learning                 | Lifelong learning                    | Knowledge-related regulations and policies at workplace |

Table IX. Prominent skills and qualities for HOU postgraduates
and the employers’ satisfaction on HOU postgraduates in particular. The conclusions are drawn as follows:

- In the five sets of skills, the employers determined the following as typical sets of twenty-first century skills: the employers seemed to prefer numeracy skills and ICT literary skills as the most important skills within the set of foundation skills; collaboration skills and analytical skills as the most important skills within professional competencies; integrity and self-reliance as the most important skills within personal attributes; productivity, time management and organization and planning as the most important skills within organizational skills; lifelong learning, capacity to use knowledge and skills in the workplace context and knowledge-related regulations and policies at workplace as the most important skills within technical knowledge and skills.

- The results for the overall employer satisfaction confirm that employers highly appreciate HOU’s postgraduates in numeracy skills and ICT literary skills for foundation skills; collaboration skills and analytical skills for professional competencies; integrity, responsible, interpersonal skills for organizational skills; productivity, time management and organization and planning with technical knowledge.

- The most significance of the study is that HOU’s postgraduates could identify their weaknesses to overcome. For foundation skills, they need to upgrade information literary and English language oral communication skills. For professional competencies, creative and innovative thinking, analytical skills, conceptual skills, collaboration skills and research skills should be enhanced. For personal attributes, HOU postgraduate need to improve self-reliance, integrity and adaptability skills. For organizational skills, they should strengthen productivity, time management and organization and planning skills. For technical knowledge and skills, knowledge-related regulations and policies at workplace, capacity to use knowledge and skills in the workplace context and lifelong learning should be advanced.

Hence, the findings of this study may give some implications for HOU management board, for employers as well as for HOU postgraduates as follows.

5.1 For HOU management board

- learning contents related to communication, negotiation and foreign languages skills should receive more attention from faculties and should be enriched in the learning programs;
- the university should promote relations with the corporate sector to deliver training programs and scientific research activities as mandated in the circular 2017/TT-BGDĐT, dated 4 April 2017 by the Ministry of Education and Training; and
- the faculty of postgraduate studies should co-operate with specialist faculties to organize seminars, workshops, etc. on issues and problems related to training programs.

5.2 For employers

- employers should strengthen their relationship with the university and create favourable conditions for experts to go to the university to share their knowledge and experience with postgraduate learners and for postgraduate learners to go to their businesses for internship and field trips; and
- employers should involve themselves in the development of programs and curricula to make them more practical.
5.3 For postgraduate learners

- Postgraduate learners should know well the needs of employers. The best way for postgraduate learners is that they should be more active in attending seminars, workshops, etc. organized by various businesses. They should also pay more attention to skills such as problem solving, public speaking, time management, etc. Besides, they should actively set up relations with the corporate sector to get to know more about the world of jobs.

Acknowledgement

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Reaching the unreached through open and distance learning in India

With special reference to Kumaun region of Uttarakhand

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Abstract

Purpose – Education is the most important tool for the development of different types of faculties in human beings. It plays an important role in the overall development of the human beings, and it is generally considered as a catalyst of social change. Education always remains a territory of significance and worry for the policymakers, social researchers and the academicians. In the complex society like India, which is multi-racial, multi-lingual, multi-religious and pervaded with innumerable issues, the issues of ignorance are a major test in transit of its advancement. In this direction, open and distance learning (ODL) plays an important role in providing quality education to the learners who are unable to be a part of the formal system of education. Open and distance learning serves as a source of education for the marginalized and disadvantaged sections of the society. Open and distance learning goes for the spread of learning and securing information through distance mode including the utilization of any correspondence innovation to give chances to advanced education. Regardless of caste, creed and religion, it provides uniform education to different sections of the society. The purpose of this paper is to assess the attitude and satisfaction level of the learners towards open and distance learning.

Design/methodology/approach – For this study, explorative research methodology has been used, and analysis has been done on the basis of data extracted from the primary and secondary sources of information. The respondents were personally interviewed through structured interview schedule for the collection of primary data. In fact, the interview is an act of verbal communication for the purpose of eliciting information. In addition to intensive field work, secondary sources like records, manuscripts, survey reports and many other related studies and their findings have been used as the source of secondary information collected through respective sources.

Findings – ODL has been successful in realizing its objective, reaching to the unreached by spreading education in the remote and far-flung areas through its study centers located in various locations. However, there is more need of creating awareness among the people in the far-flung areas by opening more study centers as per the need and geographical location of the area. In the present era of science, technology and innovation, no major shift has been seen among the parents towards the girl child and providing education to the girl child is not the top priority in the villages, marriage gets the first preference instead of education. However, girls are coming forward to continue their education but the problem is that of money as in the case of boy respondents. So there is a need to review the fee structure of the ODL program as per the economic conditions of the student’s family, and some provisions should be made, especially for the girl students, to motivate them to come forward to continue their education, as it will spread message among other girls who did not complete their schooling.

Social implications – Through this paper, it could be realized that ODL provides opportunities to those who have no access to normal schooling but want to continue their education to compete in the changing world. ODL plays an important role in the hilly regions where most of the children left or dropped out their studies, especially the girls students, due to various reasons: it may be the long distance of the school from home or poor economic condition of the family. ODL emerged as a tool in solving all the problems and reaching the unreached through its learner-friendly approach.

Originality/value – Open and distance learning gives uniform stage to the individuals who need to upgrade their education and also skill development. This paper finds out that majority of the learners were satisfied

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I am thankful to National Institute of Open Schooling, Noida, Uttar Pradesh (India), for giving me financial assistance and opportunity to conduct the study.
with the performance of the open schooling. A positive attitude towards open schooling was found among the
learners. They were of the view that because of open schooling, they gained self-confidence and better status
in the society. They were of the opinion that they were no longer considered as a loser and they were in a
position to get something new, which may be helpful for them and their family.

**Keywords** Transformation, Open and distance learning, NIOS, Open schooling

**Paper type** Research paper

### Introduction

Open and distance learning (ODL) emerged as an alternative and important tool to reach to
the unreached and to combat with the problem of illiteracy. The open and distance learning
is the need of the hour, especially at the secondary and senior secondary school level along
with the formal educational system.

Open and distance learning is a tool for those who have no access to normal schooling
but want to continue their education to compete in the changing world. It gives easy access
to education to various segments of society, particularly to the individuals who are living in
inaccessible territories. Open learning serves as a source of education for the marginalized
and disadvantaged sections of the society. Open and distance learning aims to advance and
disseminate education through diverse means. It conducts various programmes for the
benefit of the learners and caters the needs of the different sections of the people. Open
schooling, in reality, has an idea that has the capability of revolutionizing society
everywhere, thus drawing out the best in individuals. ODL helps and encourages learners to
take up education through distance mode who due to some reasons could not able to
continue education in the past.

In the hilly region like that of Uttarakhand, the ODL mode is very effective and
important to reach to the unreached residing in the tough geographical terrains and to the
marginalized sections of the society. The open schooling can play an important role in the
hilly regions, as most of the children left or dropped out from school, especially girl students
in the rural areas, due to various reasons such as the long distance of the school from home
or poor economic conditions of the family. There are various reasons for it. Due to the money
order economy and water scarcity, males migrate from their native place to the urban areas
for the livelihood. The whole responsibility is taken up by the women who have to take care
of everything, as the schools are located in the far-flung areas, due to which it becomes very
difficult for the mothers to leave their children alone. The girl child in the hilly regions has to
support her mother in household chores, from collecting fodder and water for the animals
and for themselves. The open schooling with its learner-friendly characteristics like
flexibility of place as per the learners need, SLM, ICT support, PCP and students support
services helps to resolve the problems of the learners. So keeping all these facts in mind, the
study was done to know the role and importance of the open schooling and the view of the
learners towards it in hilly regions of Uttarakhand state.

### Objectives of study

The objectives of the study were as follows:

- to assess the view of the learners towards open and distance learning; and
- to evaluate the role of ODL in providing quality education to the learner.

### Review of literature

There are various studies related to education and open schooling, which are explained below.

Wickramaratne (2001) in his study focussed on the relevance of counseling services in
relation to the nature of the needs of the students. The study shows that because of the
attributes of the establishment as a distance learning body, for the learners and the learning process, there is a requirement for advising mediation to be accentuated to meet both individual and concentration-related necessities of the students. Counseling services act as an icebreaker, as it provides an opportunity to the learners to be familiar with various facets of ODL (Trivedi and Gupta). Although many studies have been done on the impact of counseling sessions, there is a need to assess the problems faced by the learners in the counseling sessions. The present research paper tries to fill the above gap.

Ngumi and Mwaniki (2009), in their study, revealed that there is a need to create awareness among aspiring students and to provide better information dissemination avenues on the part of the universities. The study proposed that an extensive pre-program introduction practice is to be incorporated into the coursework through which students can realize what is normal in their course of study.

Trivedi and Gupta (2010) termed the first induction meeting as a counseling session as an “icebreaker,” as the learner is made familiar with the study center setup, library, multimedia facilities, staff and academic counselors, thus helping in the clarification of doubts and queries, boosting confidence. Tips are also offered how to study as an independent learner in the distance learning mode.

Sharma (2012), in his study, concluded that the Personal Contact Programmes (PCPs) play an important role in distance education. The study reveals that PCPs are an effective tool for the overall development of the learners. The findings of the examinations uncover that amid the PCPs, the serious issues ought to be taken up and talked about by including the learners. The learners are advice to come up at PCP with the tough questions to be sort out during PCP. The students ought to be urged to pursue the examination material altogether before they come to PCPs.

Omito and Kembo (2016), in their study, investigated e-Learning access and infrastructure for the final-year Bachelor of Education (Arts) students who were learning through distance mode at the School of Continuing and Distance Education of the University of Nairobi. The study was set to address one goal: to explore accessibility and access of e-Learning foundation for separation learning at the University of Nairobi. Overview configuration utilizing polls and a meeting plan was used to assemble information. An example size of 217 understudies was drawn from 500 Bachelor of Education (Arts) understudies. Both unwavering quality and substance legitimacy were tried, dependent on a pilot template. The findings were as per the following: both PC equipment and programming were costly, and subsequently, a larger part of the understudies could not bear. A dominant part of the respondents additionally discovered learning at the digital bistros not reasonable. The findings uncovered that University of Nairobi had insufficient PC research centers, due to which a decent number of understudies were not able to access them whenever the timing was ideal. Finally, a lion’s share of the respondents confronted impediments examining on the web due to the absence of help from the college’s e-Learning staff. It was presumed that the University of Nairobi needed satisfactory access and foundation for e-Learning, particularly for separation training.

Duggal (2016), in his study, tried to find out the reasons of learners dropout in nonprofessional undergraduate degree program of the IGNOU. The findings of the study shows that the major reason of their dropout was ignorance about the system of IGNOU. It is reflected that the dropped-out students could have been retained by orienting them about the flexibility and facilities provided to them in terms of re-registration, maximum duration, readmission, change of regional center, change of study center, change of courses, facility of repeatedly appearing in examination, so on and so forth, and also by giving them guidance, on a constant basis, to enable them to plan their studies effectively and complete their programmes successfully.
Mythili (2017), in her study, assessed the satisfaction and performance of the academic counselors in an online training program. To study the relation between the level of satisfaction and improvement in performances, four sub-groups were identified on the basis of the level of improvement of performances shown after the training. The findings of the study show that the sub-group with lowest improvement in scores displayed the lowest satisfaction rate, whereas the sub-group with the highest improvement in scores showed the highest level of satisfaction.

Bordoloi (2018), in her study, found that ODL raised an elective path for making education accessible and for providing scope for skill-based education at minimum cost and engaging the energetic grown-up population of a nation like India.

Husni, in his study, explored the contribution of student support in increasing student persistence by employing mixed methods approach. The study utilized 13 consecutive informative plan by gathering the quantitative information from 14 looking over 153 students. The study shows that student support had a 15 significant role in imparting student steadiness. The study also suggested the 16 improvement of student support at the level of effective, cognitive, and systemic in order to enhance learner’s persistence.

It is clear from the above studies/review of literature that as far as the open schooling in hilly areas is concerned, no study of this sort has been done by any social scientist. Therefore, the need of the hour is to make an extensive and intensive study of the open schooling in hilly areas. The present study aims at evaluating the reach and responsiveness of open schooling in the hilly areas with special reference to Kumaun region of Uttarakhand state.

**Research methodology**

In the present paper, the exploratory research methodology has been used, and analysis and interpretation is done on the basis of the data collected from both the primary and secondary sources of information. The interview schedule and tools were constructed to get the first-hand information of the learners and to assess the attitude and awareness level of the learners towards the distance education and the study centers and the problems faced by the learners therein.

**Universe of the study**

All the NIOS centers located in the Kumaun region of the Uttarakhand constitute the Universe of the study. Table I shows the details of the NIOS center located in the Kumaun region of Uttarakhand.

**Sampling procedure and the samples of the study**

All the NIOS centers located in the Kumaun region of the Uttarakhand constitute the Universe of the study. Underlying the stated objectives, all the 32 centers established in the Kumaun

| S. No. | District          | No. of NIOS centers | No. of students enrolled | 20% of students enrolled in selected centers |
|--------|-------------------|----------------------|--------------------------|---------------------------------------------|
| 1.     | Nainital          | 09                   | 592                      | 118                                         |
| 2.     | Udham Singh Nagar | 07                   | 302                      | 62                                          |
| 3.     | Almora            | 05                   | 82                       | 16                                          |
| 4.     | Bageshwar         | 01                   | 67                       | 13                                          |
| 5.     | Champawat         | 05                   | 264                      | 52                                          |
| 6.     | Pithoragarh       | 05                   | 186                      | 37                                          |
| 7.     | Total             | 32                   | 1,493                    | 298                                         |

Table I. Details of NIOS centers located in Kumaun region of Uttarakhand
region of Uttarakhand were selected for the study. At the second stage, from all the selected study centers, 20 percent (i.e. 298 or 290) of the enrolled students were the respondents of the present study (whether they are male or female or they are enrolled in 10th or 12th class).

**Tools and technique of data collection**

In the present study, following tools/scales were constructed or used to get the first-hand information from the respondents:

1. role and performance scale (to know the role and performance of the NIOS centers); and
2. satisfaction scale (to know the satisfaction level of the students enrolled in NIOS centers).

The above tools were constructed with the help of the expert according to the objective of the study. The tools were constructed by the researcher and expert to measure the role and performance of the NIOS, to measure the satisfaction level of students enrolled in NIOS and to study the problems faced by the students enrolled in NIOS. The review of relevant literature related to the above-mentioned variables led to the conclusion that questionnaires and scales available were not sufficient and suitable to measure all the above areas. Thus, there was a need to develop a new scale to cover all the aspects of the study, so keeping all these facts in mind, the above scales were constructed. The present scales were developed on an empirical basis.

The respondents were personally interviewed through structured interviewed schedule for the collection of primary data. In addition to the intensive field work, secondary sources like records, manuscripts, survey reports and many other related studies and their findings have been used as the source of secondary information collected through respective sources.

**Analysis and interpretation of data**

*Performance of the NIOS center*

Through this scale, the researcher tried to find out the changes that occurred in the learners and tried to know the attitude of the learners towards NIOS. The five-point scale was used to know the view of the learners towards the statement “while learning through NIOS.” Students were asked to tick the right option out of five options.

It is clear for Table II that majority of the respondents, 63 (33.9 percent), agreed with the view that there is a possibility of studying and working together through open schooling, and a minimum number of the respondents, 11 (5.9 percent), were neutral towards the view. Thus, it shows that open schooling plays an important role by providing platform to the learner to continue their education with their work together.

| Responses         | Frequency | Percent |
|-------------------|-----------|---------|
| Completely disagree | 33        | 17.7    |
| Disagree          | 16        | 8.6     |
| Neutral           | 11        | 5.9     |
| Agree             | 63        | 33.9    |
| Completely agree  | 63        | 33.9    |
| Total             | 186       | 100.0   |

**Table II.**

Statement: is there any possibility of studying and doing domestic work together through ODL

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**Possibility of studying and doing domestic works together (Boys)**

| Responses         | Frequency | Percent |
|-------------------|-----------|---------|
| Completely disagree | 33        | 17.7    |
| Disagree          | 16        | 8.6     |
| Neutral           | 11        | 5.9     |
| Agree             | 63        | 33.9    |
| Completely agree  | 63        | 33.9    |
| Total             | 186       | 100.0   |
number of the respondents, 11 (5.9 percent), were neutral towards the view. Thus, it shows that open schooling plays an important role by providing platform to the learner to continue their education with their work together. In the hilly areas, the majority of the household works were performed by the girl child, from grazing of animals to collection of water for domestic purposes. A positive sign was seen among the girls respondents, as they were of the view that open and distance learning provided an alternative to continue their education in such a systematic and flexible manner, due to which they were able to manage the domestic chores and study together.

Table IV clearly depicts that out of 186 boys respondents, majority of the respondents, 68 (36.6 percent), agreed with the statement, and a minimum number of the respondents, 10 (5.4 percent), completely disagreed with the view. The students enrolled in the open school are mostly either working in private sector, army or engaged in other activities, so through open school, it becomes possible for them to upgrade their qualification while working, as there is no compulsion of regular attendance and there is a flexibility to give exam to continue the education.

Table V clearly depicts that majority of the respondents, 29 (27.9 percent), agreed with the statement, and a minimum number of the respondents, 5 (4.8 percent), completely disagreed with the view.

### Table III.
Statement-possibility of studying and doing domestic works together (Girls)

| Responses       | Frequency | Percent |
|-----------------|-----------|---------|
| Completely disagree | 16 | 15.4    |
| Disagree        | 21 | 20.2    |
| Neutral         | 4  | 3.8     |
| Agree           | 31 | 29.8    |
| Completely agree | 32 | 30.8    |
| Total           | 104 | 100.0   |

### Table IV.
Statement: ODL provides an opportunity to do work and study together (Boys)

| Responses       | Frequency | Percent |
|-----------------|-----------|---------|
| Completely disagree | 10 | 5.4     |
| Disagree        | 33 | 17.7    |
| Neutral         | 32 | 17.2    |
| Agree           | 68 | 36.6    |
| Completely agree | 43 | 23.1    |
| Total           | 186 | 100.0   |

### Table V.
Statement-possibility of work and study together (Girls)

| Responses       | Frequency | Percent |
|-----------------|-----------|---------|
| Completely disagree | 5  | 4.8     |
| Disagree        | 24 | 23.1    |
| Neutral         | 20 | 19.2    |
| Agree           | 29 | 27.9    |
| Completely agree | 26 | 25.0    |
| Total           | 104 | 100.0   |
disagreed with the view. The girl respondents were of the view that because of NIOS they were able to continue their education while performing their routine work together.

It is clear from Table VI that the majority of the respondents, 65 (34.9 percent), said that open school spread awareness about education among rural women, and a minimum number of the respondents, 15 (8.1 percent), were of the view that no awareness was created among the rural women through open school system. The women in the hill areas are married mostly in the age group of 15–18 years, and due to this, they dropout from the school to take up the household responsibility.

Hence, they do not complete their schooling, but now the NIOS has emerged as a new alternative for the women to carry on their education with their domestic chores. The flexibility of the NIOS program has developed or created awareness among the rural women.

Table VII depicts that the majority of the respondents, 32 (30.8 percent), said that open school spread awareness about education among rural women, and a minimum number of the respondents, 9 (8.7 percent), were of the view that no awareness was created among the rural women through open school system. NIOS emerged as a new alternative for the women to carry on their education with their domestic chores. The flexibility of the NIOS program has developed or created awareness among the rural women.

The main component of open schooling is its learners. Table VIII reveals that majority of the respondents, 65 (34.9 percent), agreed with the statement that focus is given on the

| Responses                  | ODL Spreads Education among rural women (Boys) | Frequency | Percent |
|----------------------------|-----------------------------------------------|-----------|---------|
| Completely disagree        | 15                                            | 8.1       |
| Disagree                   | 22                                            | 11.8      |
| Neutral                    | 25                                            | 13.4      |
| Agree                      | 59                                            | 31.7      |
| Completely agree           | 65                                            | 34.9      |
| Total                      | 186                                           | 100.0     |

Table VI. Statement: ODL spreads education among rural women

| Responses                  | ODL Spreads Education among rural women (Girls) | Frequency | Percent |
|----------------------------|-----------------------------------------------|-----------|---------|
| Completely disagree        | 9                                             | 8.7       |
| Disagree                   | 16                                            | 15.4      |
| Neutral                    | 17                                            | 16.3      |
| Agree                      | 30                                            | 28.8      |
| Completely agree           | 32                                            | 30.8      |
| Total                      | 104                                           | 100.0     |

Table VII. Statement: ODL spreads education among rural women (Girls)

| Responses                  | Focus of education is on learners (Boys) | Frequency | Percent |
|----------------------------|----------------------------------------|-----------|---------|
| Completely disagree        | 7                                      | 3.8       |
| Disagree                   | 22                                     | 11.8      |
| Neutral                    | 35                                     | 18.8      |
| Agree                      | 65                                     | 34.9      |
| Completely agree           | 57                                     | 30.6      |
| Total                      | 186                                    | 100.0     |

Table VIII. Statement: focus of ODL is on learners
learners’ needs and education, and a minimum number of the respondents, 7 (3.8 percent), completely disagreed with the statement. Thus, it is clear from the above table that the main focus of the NIOS is on its learners and their needs.

Table IX reveals that majority of the respondents, 32 (30.8 percent), agreed with the statement that focus is given on the learners’ needs and education, and a minimum number of the respondents, 4 (3.8 percent), completely disagreed with the statement. Thus, it is clear from the above table that the main focus of the ODL is on its learners and their needs.

Table X clearly shows that the majority of the respondents, 70 (37.6 percent), agreed with the statement that through NIOS, their confidence level has increased, and a minimum number of the respondents, 6 (3.2 percent), completely disagreed with the statement. ODL developed a positive attitude in the learners, as they are coming forward to continue their education and motivating others who have left the education in between to rejoin education through NIOS.

The response of the girls was same as that of boys: the majority of the girl respondents, 39 (37.5 percent), agreed with the statement that through ODL, their confidence level has increased, and a minimum number of the respondents, 3 (2.9 percent), completely disagreed with the statement. ODL developed a positive attitude among the learners, as they are coming forward to continue their education and motivating others who have left the education in between to rejoin education through NIOS (Table XI).

| Responses          | Focus of education is on learners (Girls) | Percent |
|-------------------|-----------------------------------------|---------|
| Completely disagree | 4                                       | 3.8     |
| Disagree          | 16                                      | 15.4    |
| Neutral           | 26                                      | 25.0    |
| Agree             | 32                                      | 30.8    |
| Completely agree  | 26                                      | 25.0    |
| Total             | 104                                     | 100.0   |

Table IX.
Statement: focus of education is on learners (Girls)

| Responses          | ODL increases confidence among learners (Boys) | Percent |
|-------------------|-----------------------------------------------|---------|
| Completely disagree | 6                                            | 3.2     |
| Disagree          | 39                                           | 21.0    |
| Neutral           | 27                                           | 14.5    |
| Agree             | 70                                           | 37.6    |
| Completely agree  | 44                                           | 23.7    |
| Total             | 186                                          | 100.0   |

Table X.
Statement: ODL increases confidence among learners

| Responses          | ODL increases confidence among learners (Girls) | Percent |
|-------------------|-----------------------------------------------|---------|
| Completely disagree | 3                                            | 2.9     |
| Disagree          | 25                                           | 24.0    |
| Neutral           | 18                                           | 17.3    |
| Agree             | 39                                           | 37.5    |
| Completely agree  | 19                                           | 18.3    |
| Total             | 104                                          | 100.0   |
Table XII clearly depicts that maximum number of the respondents, 68 (36.56 percent), said that the distance of the center is little bit far away from their home, and a minimum number of respondents, 11 (5.9 percent), said that the distance of the center from their home is average. Thus, it is clear that the distance is not a big problem related to the study center. The center is mostly running in Government Inter Colleges (GICs) in the hilly regions, and they are located in the center to cover almost all the population of that area. Thus, it is confirmed that the distance of the centers from their home is not a big problem related to NIOS.

Table XIII reveals the same results as that of boy respondents: out of 104 girls respondents, majority of the respondents, 39 (30.8 percent), said there is little bit distance of NIOS centre from the home, and 8 (7.7 percent) said that there is a average distance of the center from their home. Normally in the hilly regions, people travel almost 5–10 km in a day. Thus, it is clear from the interpretation of the data that distance is not such a big problem for the learners.

Major findings

- The majority of the respondents said that through ODL, it is possible to continue their education and domestic work together. A positive attitude was seen among the learners towards learning through NIOS.
- The National Institute of Open Schooling (NIOS) is trying its best in developing the attitude and aptitude among the learners for education for those who cannot afford to go far.
- In the beginning of the study, segmentation on the basis of gender was taken into account, but while concluding the study, no difference was found towards the impact of NIOS in imparting the education to male and female learners.
- The NIOS has been successful in realizing its objective, reaching to the unreached by spreading education in the remote and far-flung areas through its study centers located in various locations. However, there is more need of creating awareness among the people in the far-flung areas by opening more centers as per the need and geographical location of the area.
Counseling is an important component of open learning system, and it is such relationship between two persons in which one person endeavors to help another to understand and solve his/her adjustment problems. The study shows that the learners were fully satisfied with the counseling sessions and with the counselors of the centers. The majority of the centers are running in the GIC, where trained teachers are available to solve the problems of the learners every time whenever they visit the center.

Distance of the center is not the problem as far as the learners are concerned, as most of the centers are located in the nearby GIC.

The findings of the study show that majority of the learners were satisfied with the performance of the open schooling, and a positive attitude towards open schooling was found among the learners. They were of the view that because of open schooling, they gained self-confidence and a better status in the society. They were of the opinion that they were no longer considered as a loser, and they were in a position to get something new, which would be helpful for them and their family.

Break occurs in the studies of the girl respondents, as the girls perform all the household chores and being at home, they hold other responsibilities like taking care of young ones, and in villages, they have to take care of the animals and have to bring water for household activity. Due to these factors, they miss the PCP and sometimes, they do not even submit TMA. So these are the basic problems the students suffer, but they are satisfied that the flexibility of the program helps them to carry on their studies, as there is no barrier of time and years in ODL.

Computers are available in the centers; however, in the hill regions, the centers have computers but not in adequate numbers, and the net connectivity in the centers is not up to mark. The main reasons are the electricity and internet connection problems in the hilly regions. The learners either visit cyber cafe or friends’ house to download the admit card and other materials required.

The large numbers of counselors are from the conventional system. They are not acquainted with the philosophy and communication methods of distance education, sometimes defeating the purpose and objectives of counseling sessions. Hence, it is suggested that the orientation program of at least 10–15 days should be organized for the counselors to upgrade their knowledge regarding various aspects of distance education.

The paper will help policy planners and decision makers in evolving and strengthening the ODL philosophy in order to cater the needs of the large sections of the society, particularly residing in the far-flung and remote areas.

Conclusion
Open and distance learning provides opportunities to those who left the study in between and did not have access to learning. Through its different traditional, professional and functional courses, open and distance learning is assuming a vital job in the general advancement of the learners. There is no uncertainty that distance learning is assuming an essential job in granting school instruction/advanced education through distance mode. Yet, the need of the hour is that more accentuation must be given to distance learning so that the drop outs and the individuals who are unable to carry on their study through customary mode of education can get a chance of learning through distance mode of education, thus being a part of the scholarly society. In the recent years, a tremendous increase has been shown in the enrollment number in ODL institutions. However, there is a need to keep a check on the private universities or institutions offering the distance program without any
recognition from the concerned authority. The distance education system provides opportunities not only to younger students but also to those from the older age groups. It shows the spirit and positive side of the ODL to provide opportunities to everyone, regardless of age, caste and sex. The papers clearly conclude that ODL emerged as an effective tool to educate the learners, particularly residing in the far-flung areas and who are not able to have access to education due to tough geographical conditions, social and cultural taboos and economic backwardness.

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The quality of orientation in ODL
A correlational and content analysis of ZOU sessions held in the Midlands Regional Campus

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Abstract
Purpose – The purpose of this paper is to assess the consistency with which quality is maintained in the orientation process. Orientation is a key university process intended to prepare new students for life in higher education (HE). For open and distance learning (ODL), orientation can be a key process for lessening some of the challenges associated with the separation of the learner and the lecturer. Indeed, for ODL students, orientation can be fraught with a variety of challenges one of which could be quality problems.
Design/methodology/approach – Convenient sampling was used to obtain a total of 89 students in the first semester and 34 students in the second semester. The respondents came from all the eight districts in the Midlands province of Zimbabwe. They belonged to various degree programmes found in the eight faculties of the institution. Correlation was used to determine quality variations. Using a mixed methods approach, the study sought the views of the students and the relationships between activities done in the two semesters of 2018. SPSS version 16.0 software was used to compute Spearman’s correlations whereas content analysis was used to analyze the open-ended responses to the questionnaire. This mixed methods approach helped the researchers to analyze and compare the quality of the orientation sessions.
Findings – Results yielded a positive and high significant correlation between first and second semester variables (r = 0.916, p = 0.000), a finding indicating that staff members in the Midlands Regional Campus of Zimbabwe Open University have not changed their ways of conducting orientation. On a scale of 1 (least effective) to 5 (most effective), the average ratings for the presentations in the first and second semesters were 4.08 and 4.26, respectively. In the qualitative analysis, adequacy of the venue, timing, coverage of aspects and use of media were all rated positively for the two sessions. However, for the two sessions, some students mentioned negative sentiments to do with the provision of needed materials at time of student registration, the public address system, orientation packages, time management and communication.
Research limitations/implications – This paper looks at the process of orientation as it was done at one regional campus of an ODL institution in Zimbabwe. It also analyses the quality of the orientation using correlation as a lens that measures consistency and also by critically analyzing content in the respondents’ voices. Implications are that the findings and recommendations can also be applied in other ODL (and even non-ODL) institutions with a view of finally coming up with common policies and procedures with regards to providing quality service and support to the twenty-first century student.
Practical implications – Findings were relevant and could be used for designing applicable orientation programmes in ODL institutions and for improving the quality of student support and services.
Originality/value – While a number of studies have been carried out on orientation in HE, it would appear that research on orientation in ODL institutions, especially in Zimbabwe, appears minimal, hence this study covers an unexplored niche.
Keywords Content analysis, Open and distance learning, Quality assurance awareness, Student orientation, Quality of orientation, Correlational analysis

Paper type Research paper

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Introduction
Institutions which offer studies through open and distance learning (ODL) delivery mode have to contend with an image problem regardless of the status of the quality (Jung and Latchem, 2012; Robson in Lentell and Perraton, 2003). Consequently, ODL institutions have to go the extra mile to assure clients of the reputation of their institutional processes. As the first stage in a student’s university life, the process of orientation needs to undergo quality assurance to enhance effectiveness.

Orientation is a key university process intended to prepare new students for life in higher education (HE). Dictionary.com (www.dictionary.com/browse/orientation) defines orientation as “an introduction, as to guide one in adjusting to new surroundings, employment, activity, or the like” while the English Oxford Dictionary (https://en.oxforddictionaries.com/definition/orientation) says it is a “course giving information to newcomers to a university or other institution”. Although there is no generally agreed definition of student orientation (SO) in HE, some research on the constructs that measure it has been carried out (Alnawas, 2015). Defining quality, Sim et al. (2005, p. 1) say it is “fitness for use’ which includes the identification of customer needs and attempt to meet these needs”. Quality can also be defined as the degree to which a set of inherent characteristics fulfils requirements. Student satisfaction which is one indicator of quality in HE is achieved if students rate positively the orientation programme:

Also, Orientation programs are geared towards introducing new students to college and university services that support their educational and personal goals, and they also assist students in gaining the knowledge, attitudes, and skills that will help them adjust and make a smooth transition into the college/university community (Arhin and Wang’eri, 2018, p. 2).

However, for ODL students, orientation can be fraught with a variety of challenges one of which could be quality problems. This study was carried out with a view to assess the consistency with which quality is maintained in the orientation process. If quality is not maintained, especially during and also after orientation, student retention and academic achievement may be compromised.

Statement of the problem
ODL students often face a lot of challenges due to separation from their peers, tutors and the institution through resources, time and geographic space. It has often been observed that most ODL university students do not attend orientation sessions and hence lack quality assurance awareness and other important information related to how they interact with learning materials, their tutors and peers. This lack of information may impact negatively on student retention, academic achievement and graduation rate.

Purpose of the study
The purpose of the study was to assess, by way of correlations and content analysis, the consistency with which quality is maintained in the orientation processes at the Midlands Regional Campus of the Zimbabwe Open University (ZOU). The study also sought to investigate whether the orientation sessions were effective and helpful to the students and to suggest areas for improvement.

Research questions
This study was guided by the following research questions:

RQ1. Why is it necessary to hold orientation sessions for new ODL students at the regional campus?

RQ2. How do ODL students rate the quality of orientations done at the regional campus?
RQ3. What are the challenges faced by the ODL students with regards to orientation?

RQ4. How can the orientation challenges faced by the ODL students be overcome?

Hypotheses
For this study, the following null hypotheses were crafted and using a t-test for comparison of means and for testing for the significance of correlations, they could be rejected at 5 per cent level of significance:

H10. There is generally no consistency/correlation with which quality is maintained in the orientation process (to be rejected).

H20. There is no correlation between variables related to orientation preparation in the two semesters of the year 2018 (to be rejected).

H30. There is no correlation between variables related to orientation presentations by staff members and students in the two semesters of 2018 (to be rejected).

H40. There is generally no significant difference in the way members of staff deliver their presentations during the orientation sessions (to be rejected).

Review of related literature
The following aspects are covered in this review of related literature: the need and quality of orientation sessions for new ODL students, correlations between variables related to orientation sessions in ODL, the challenges faced by the ODL students with regards to orientation and the solutions to overcome the challenges faced by the ODL students.

The need and quality of orientation sessions for new ODL students
Orientation has recently been viewed as a factor affecting, among other variables, student retention and academic achievement (Majoni and Mashatise, 2015; Caplan, 2008; Arhin and Wang’eri, 2018). Orientation also enhances students’ experiences (Larmar and Ingamells, 2010) and enables them to interact well and feel as being part and parcel of the overall university community.

The need for orientation is also highlighted by what new students seek and expect as they attend the sessions. According to Poot (2005) research findings at La Trobe University revealed that students sought the following from orientation:

- explanations of expectations;
- explanations of the different teaching and learning methods used;
- clear course aims and objectives and an understanding of where units and courses will lead;
- ongoing academic support throughout first year; and
- support of lecturers, tutors and other students.

Majoni and Mashatise (2015) have described the aspects of the orientation sessions done at ZOU’s Mashonaland Central Regional Campus. These include the role of the Regional Centre, address by the Vice Chancellor, delivery mode and study skills, use of the library and use of ICT, registration and examinations, student services and programme specific orientation. Researchers in this study observed that the same issues were addressed at the Midlands Regional Campus, but included other aspects such as quality assurance awareness, sport, student experiences (i.e. address by a former student), address by SRC and
Alumni, writing of assignments and a mini tour of the Regional Campus. In Majoni and Mashatise’s study it was revealed that students were satisfied with the orientation programme and benefitted from it.

The quality of the orientation process is another important factor. Quality of the orientation can be measured by student and tutor satisfaction ratings. A research carried out at ZOU by Dick et al. (2015) revealed that students and tutors, respectively, viewed orientation as effective (93.3 and 100 per cent agreed), and that the orientation package was provided (73.3 and 62.5 per cent agreed). “As part of the orientation package, it was opined that each student should be provided with a Communication and Academic Writing Skills module to enhance the quality of assignments produced” (Dick et al., 2015, p. 73).

At NOUN Port Harcourt study centre in Nigeria, research findings by Patrick and Iherjirika (2012) showed that female adult learners were satisfied with the quality and manner of orientation for new students while their male counterparts were satisfied with the quality of orientation for e-examination. Thus in planning orientation universities should recognize the importance of new students’ needs (Caplan, 2008) and therefore make sure that such orientation events and activities are of the highest possible quality (Poot, 2005). Hence there was need to investigate in this study if quality was maintained in the orientation processes at the Midlands Regional Campus of ZOU and whether the orientation sessions were effective and helpful to the students.

Correlations between variables related to orientation sessions in ODL

Research on correlations between learner support systems in ODL and student satisfaction has been carried out. Sim et al. (2005) found out that at the School of Distance Education of Universiti Sains Malaysia there was a high positive correlation \( r = 0.74, p < 0.01 \) between the orientation programme and the overall satisfaction of quality variables. At the University of Cape Coast in Ghana, Arhin and Wang’eri (2018) established a test of correlation which showed that the orientation programme for students was significantly related to retention of students in distance learning \( r = 0.11, p = 0.01 \) although the correlation was weak. Caplan (2008) has reviewed literature which showed that there was a clear correlation between orientation and student success whereas Larmar and Ingamells (2010, p. 212) said that “participation in a learning community is positively correlated to engagement, outcomes and overall satisfaction with higher education”. In their study of orientation programmes and challenges at UGC-Academic Staff Collages from Maharashtra and Gujarat, India, Surve and Bagul (2015) came up with two important results which were that:

1. there was a (moderate to weak but) positive correlation between objectives of orientation programme for faculties and contents of the training programme \( \rho = 0.434, p = 0.000 < 0.01 \); and
2. there was evidence of a strong positive correlation between effect of orientation programme on student evaluation and assessment \( \rho = 0.773, p = 0.000 \).

In the case of ZOU Midlands Regional Campus, there was need to establish how the two orientation sessions held in the year 2018 were correlated.

Challenges faced by the ODL students with regards to orientation

Challenges some ODL students face with regard to orientation have been documented. For instance, Mowes (2005) reported that students at the University of Namibia commented of not receiving any information or invitation to orientation seminars, not being informed about all the available student support services during orientation, the orientation seminar being too short for students to know everything and career guidance and study skills not being offered during orientation seminars. Caplan (2008) has also mentioned poor event preparation and planning as other challenges.
Solutions to overcome challenges faced by the ODL students

Orientation is one of the many student support services and need to be of high quality (Nsamba and Makoe, 2017) – informing students in time, arranging of appropriate venue, good presentations, good communication, good peer-peer and student-tutor interactions.

There is need therefore for universities to come up with good orientation guidelines, procedures, principles and policies. For example, such procedures and policies could be of the form as those proposed by the University of Tasmania (Poot, 2005, p. 3), such as these:

- Orientation is a process, not an event. Orientation should extend from enrolment through to at least the first six weeks of semester.
- Information provision must be limited to what is immediately relevant at each stage of the orientation process.
- The academic and social integration of new students into the institution must be a priority for all staff during the orientation process.
- Students need to be provided with detailed information about the content and requirements of their units/course of study.
- Any discrepancy between the expectations of the students and the expectations of the institution must be explicitly addressed.
- Students must have access to appropriate study skills support.

It is envisaged that good quality SO would lead to student satisfaction and university reputation (Alnawas, 2015) and the needs of the employers would be met.

Theoretical and conceptual framework

According to McIsaac and Gunawardena (2001) ODL theories are grouped into three categories, namely, independence and autonomy, industrialization of teaching and interaction and communication. While various aspects of these theories have relevance in this study, however the theory of interaction and communication (Holmberg, 1988 as cited in Roberts, 2017) appears to be clearly linked to orientation in ODL. Key issues in this theory involve didactic conversation, personal relationship between teaching and learning, well developed instructional material and two-way communication, intellectual pleasure and study motivation, conversational concept and learner centred and personal communication (Holmberg, 1988 as cited in Roberts, 2017).

The theory of interaction and communication links well with the view of orientation as service provision through active dialogue with students. Orientation is viewed as one of the factors affecting student satisfaction and hence it should be of the highest possible quality. According to Alnawas (2015, p. 626; citing Pesch et al., 2008):

[...] successful implementation of the concept of SO in HE means that a university: (a) looks at the educational experience from the perspective of the student; (b) regularly assesses student perceptions of the university’s commitment to understanding and meeting student needs; (c) provides students with a challenging and quality education that will enable them to pursue successful careers; and (d) recognises and addresses the needs of multiple stakeholders, including the university, the students, and employers (Pesch et al., 2008). When such students are produced, the reputation of the university is enhanced and the needs of employers are met (Pesch et al., 2008).

Thus student academic achievement and the excellence (or quality) of the institution depend on several factors, some of which are student satisfaction, student performance, support services offered by the institution and its physical structures, among other factors. The quality of the SO seminar as one of the support services the university can provide to its students can be measured either quantitatively, qualitatively or both. This study therefore
attempted to measure quality of orientation quantitatively by adapting some attributes or dimensions of the SERVQUAL model (Parasuraman et al., 1988; Shahin, 2006). These five generic dimensions are:

1. Tangibles: physical facilities, equipment and appearance of personnel.
2. Reliability: ability to perform the promised service dependably and accurately.
3. Responsiveness: willingness to help customers and provide prompt service.
4. Assurance (including competence, courtesy, credibility and security): knowledge and courtesy of employees and their ability to inspire trust and confidence.
5. Empathy (including access, communication, understanding the customer): caring and individualized attention that the firm provides to its customers.

By also borrowing ideas from the work of Nsamba and Makoe (2017) who have evaluated the quality of students’ support services in ODL at Unisa, South Africa, this study attempted to qualitatively evaluate the quality of orientation by analyzing the content in the positive and negative responses to the open ended statement: “Provide your own personal evaluation of the orientation. Offer any suggestions for improvement”.

Materials and methods
All students from various faculties and departments who attended the two orientation sessions held at the ZOU Midlands Regional Campus during 2018 semesters were given the Orientation Evaluation Form (see Appendix) to fill in. The students had to fill in their biodata in Section A, to tick on a Likert Scale from Strongly Agree to Strongly Disagree statements concerning orientation preparation (Section B) and to rate for effectiveness the actual presentations on a scale of 1 for “lowest” to 5 for “highest” (Section C). Section D was open ended and it asked students to provide their personal evaluation of the orientation, citing challenges and suggesting some improvements. Attending orientation was not compulsory. Convenient sampling was used. Of those who attended the first session (January–June semester), eighty-nine students (29 males and 60 females) completed the questa-view. For the second semester (July–December semester), 34 students (15 males and 19 females) competed the questa-view. The respondents came from all the eight districts in the Midlands province of Zimbabwe. They belonged to various degree programmes found in the eight faculties of the institution. Using a mixed methods approach, the study sought the views of the students and analyzed the relationships between activities done in the two sessions using Spearman’s correlation. SPSS version 16.0 software was used to compute the correlations whereas content analysis was used to analyze the open-ended responses in the questa-view. This mixed methods approach helped the researchers to analyze and compare the quality of the orientation sessions.

Results, data analysis and interpretation
Quantitative data presentation and analysis
The students were requested to tick on a Likert Scale from Strongly Agree (coded 5) to Strongly Disagree (coded 1). “Neutral” was coded 3. Effectiveness of the presentations given by various people was rated from lowest (1) to highest (5). Thus 20 variables were created, coded and entered onto SPSS 16.0 as follows:

1. Venuedeq: the venue to conduct orientation was adequate and convenient.
2. Communication: communication to attend the orientation was effective and timeous.
3. Timing: the timing of orientation was suitable.
Presenters were efficient and friendly.

Presenters demonstrated comprehensive knowledge of their topics.

ZOU operations were clearly articulated.

The orientation covered all the areas I looked forward to hear.

The proceedings showed good planning and organization.

Audio-visual media were adequately used.

An orientation package was provided.

Effectiveness of presentation on quality assurance awareness given by quality awareness coordinator.

Effectiveness of presentation on registration and examinations given by the regional administrator.

Effectiveness of presentation on the ZOU delivery mode given by a regional programme coordinator (RPC).

Effectiveness of presentation on library services given by library assistant.

Effectiveness of presentation on sports activities and services given by regional coordinator for sports.

Effectiveness of presentation on students’ experiences given by a former student.

Effectiveness of presentation on Students’ Representative Council (SRC) given by SRC President.

Effectiveness of presentation on student services given by the Student Advisor.

Effectiveness of presentation on information and communication technologies (ICT) given by ICT technician.

Effectiveness of presentation on writing of assignments given by an RPC.

Table I shows the means and standard deviations when all values of the variables for Semester I (Sem I) and Semester II (Sem II) had been summed up and averaged.

Table I shows that both means for Semester I (for preparations and actual presentations) were greater than the means for Semester II, probably suggesting that there had been some slight deterioration of the quality of orientation and service delivery. However, these differences were not statistically significant at $\alpha = 0.05$ ($t = 2.385, p = 0.253$) hence showing consistency in the delivery of orientation.

Table II shows descriptive statistics for each of the variables for Semester I and Semester II.

| Variable                  | Mean  | SD     |
|---------------------------|-------|--------|
| Sem I preparations       | 4.3000| 0.16459|
| Sem I actual presentations| 4.3500| 0.30383|
| Sem II preparations      | 4.0825| 0.23873|
| Sem II actual presentations| 4.2612| 0.32608|
From Table II it is noted that the variables ICT and WritAssgn were not entered for Semester II. This was so because these topics were not included in the orientation programme for Semester II. However, for all the other variables it can be observed that the means for Sem I were slightly greater than the means for Sem II and this could imply that the overall quality of the orientation, as gauged by these variables, especially for library service (Libserv) and Student Advisor (StdAdvisor) had deteriorated. The $t$-test for comparison of means produced significant results for those differences ($t = 6.450, p = 0.000$).

Correlations
Table III shows significant ($p < 0.05$) Spearman’s correlations for some of the variables. In Table III, the numbers 1 and 2 after the variables represent Semesters I and II, respectively. Table III also shows that 27 out of 36 pairs of variables (excluding Sem I and Sem II means) were negatively correlated whereas the remaining 9 pairs were positively correlated. This could suggest that, on the whole, the first orientation session was rated more positively than the second session. These correlation coefficients were rather small, however (from less than $p = 0.5$ to about $p = 0.2$). Insignificant correlations (where $p > 0.05$) were not entered in the table. Nevertheless, it was observed that on the whole, there was a significant and high positive correlation between Sem I and Sem II means for all variables ($p = 0.758, p = 0.000$). This result is in tandem with Sim et al. (2005) who recorded a high positive correlation between the orientation programme and the overall satisfaction of quality variables. Thus one could conclude that there was some degree of consistency of the orientation sessions as there were slight differences in the students’ rating of the orientation preparations and presentations for the two semesters. The students’ actual voices (as recorded in this study in the qualitative content analysis section) shed more light regarding issues of quality and consistencies of the two sessions.

Testing of hypotheses
There was a strong positive correlation ($p = 0.884, p = 0.000$) between quality of orientation preparation done in Semester I and quality of orientation preparation done in Semester II.
Also independent samples t-tests indicated that there were no significant differences between values for the quality of orientation preparations done in Semester I and those done in Semester II (t = −1.438, p = 0.194). Thus $H_2$ (There is no correlation between variables related to orientation preparation in the two semesters of 2018) is rejected.

There was a small positive correlation (although not significant at 5 per cent level) between the quality of orientation presentations by staff members and students in the two semesters of 2018 ($\rho = 0.144$, $p = 0.367$). There were also no significant differences between quality of orientation presentations given in Semester I and those given in Semester II ($t = −0.948$, $p = 0.368$). Thus $H_4$ is rejected.

There were significant positive correlations between the majority of variables related to orientation presentations by staff members and students in the two semesters of 2018. For example, StdExperience1 and QAAwareness2 ($\rho = 0.328$, $p = 0.029$) and Presenterefafrdly1 and SRC2 ($\rho = 0.425$, $p = 0.007$) were positively correlated. Thus, $H_3$ is rejected.

Since $H_2 - H_4$ were rejected, it implies that $H_1$ is also rejected.

### Table III.

| Variables Correlation ($\rho$) | 1 tailed sig. level ($p \leq \alpha$) |
|---|---|
| Venueadeq1 and Venueadeq2 | −0.346 | 0.022 |
| Timing1 and Timing2 | 0.379 | 0.014 |
| Timing1 and QAwareness2 | −0.295 | 0.048 |
| Timing1 and RegandExam2 | −0.440 | 0.005 |
| Timing1 and Libserv2 | −0.419 | 0.008 |
| Presenterefafrdly1 and SRC2 | 0.425 | 0.007 |
| Orientoverall1 and ZOUDelvmode2 | 0.307 | 0.039 |
| Orientoverall1 and StdAdvisor2 | 0.306 | 0.039 |
| Avamedia1 and Communication2 | −0.326 | 0.030 |
| Avamedia1 and Presenterafa2 | −0.304 | 0.040 |
| Avamedia1 and RegandExam2 | −0.356 | 0.019 |
| Avamedia1 and ZOUDelvmode2 | −0.336 | 0.028 |
| Avamedia1 and StdExperience2 | −0.473 | 0.002 |
| Orienthandout1 and Avamedia2 | 0.363 | 0.017 |
| Orienthandout1 and ZOUDelvmode2 | −0.300 | 0.042 |
| QAwareness1 and Communication2 | −0.297 | 0.044 |
| QAwareness1 and QAAwareness2 | −0.416 | 0.007 |
| QAwareness1 and Libserv2 | −0.441 | 0.005 |
| QAwareness1 and StdExperience2 | −0.357 | 0.019 |
| QAwareness1 and StdAdvisort2 | −0.316 | 0.034 |
| RegandExam1 and Orienthandout2 | 0.308 | 0.038 |
| ZOUDelvmode1 and Avamedia2 | −0.351 | 0.021 |
| ZOUDelvmode1 and Orienthandout2 | −0.359 | 0.19 |
| ZOUDelvmode1 and Presentercompknowld2 | −0.345 | 0.023 |
| ZOUDelvmode1 and Timing2 | −0.320 | 0.032 |
| StdExperience1 and ZOUDelvmode2 | 0.289 | 0.049 |
| StdExperience1 and QAAwareness2 | 0.328 | 0.029 |
| StdExperience1 and Avamedia2 | −0.426 | 0.006 |
| StdExperience1 and Orientationall2 | −0.365 | 0.013 |
| SRC1 and PresenterComknowld2 | −0.300 | 0.043 |
| SRC1 and Sport2 | 0.465 | 0.003 |
| StdAdvisor1 and Orienthandout2 | −0.308 | 0.038 |
| StdAdvisor1 and Libserv2 | −0.388 | 0.012 |
| WritAssign1 and Orientoverall2 | −0.34 | 0.024 |
| WritAssign1 and ZOOplications2 | −0.430 | 0.006 |
| WritAssign1 and Presenterefafrdly2 | −0.418 | 0.007 |
| Sem I means and Sem II means | 0.758 | 0.000 |

Showing significant correlations between some of the variables.
Thus, on the whole, it appears that the quality of preparation and presentations (i.e. implementation) of orientation sessions by ZOU staff members and students have been consistent over the two semesters of 2018. It remains to be investigated whether this consistency would prevail in the semesters after 2018. However, orientation planning and implementation have not been without challenges. The next section looks at the qualitative analysis of the data provided by the respondents.

Qualitative data

Findings and discussion

This section focuses on the findings (and emanating discussions) as they relate to each of the research questions and for each of the two sessions:

RQ1. Why is it necessary to hold orientation sessions for new ODL students at the regional campus?

Most of the informants gave their reasons why it was necessary to hold orientation sessions for new ODL students at the regional campus and were in favour that the sessions should continue to be held. The following sentiments support their views:

The orientation session was very helpful and should be continued every semester (Session I).

The orientation was a good thing for the university to us new students. I can say all that we didn’t know about ODL was covered (Session II).

I had the chance to meet new friends and to learn about SRC, Sporting and other non-academic activities that I could join (Session I).

The ZOU new site (venue) was well cleaned and convenient. Orientation should continue to be held there (Session II).

The session was a good one. A lot has been learnt and achieved e.g., language, knowing one’s ambitions and goals (Session I).

It was splendid. It gave us a chance to meet fellow students. Keep it up (Session II).

The above sentiments support the view that orientation sessions equip students with important academic and essential non-academic information and also measures student satisfaction (Alnawas, 2015), factors which lead to student retention (Arhin and Wang’erii, 2018).

However, some few students had negative views about holding orientation sessions for the regional campus. They commented that:

The event was poorly planned. I wonder why some people say it should be held again (Session I).

Time for the orientation was poorly communicated. Some were told it was 8.00am and others 9.00am. Some presentations were rushed though. Hence to me orientation was a waste of time and should be discontinued (Session II).

These sentiments allude to both semesters and depict the need for a thorough appraisal of the orientation process with a view to redress anomalies cited:

RQ2. How do ODL students rate the quality of orientations done at the regional campus?

On the whole, the orientation sessions held at the regional campus were rated positively. The following sentences and phrases echoed by the informants were in corroboration of the positive rating: “The service is excellent” (Session I), “Everything went well” (Session II), “Well presented” (Session I), “The presenters were friendly” (Session I), “Orientation was brilliant” (Session II), “A first class orientation session-keep it up” (Session I), “We really
benefited” (Session II), “The session was a good one. A lot has been learnt and achieved, e.g., language, knowing one’s ambitions and goals” (Session I), “The venue was well cleaned” (Session II), “Communication was effective” (Session I).

The researchers noted that the students’ ratings above do add to the board of knowledge on the service quality dimensions (Nsamba and Makoe, 2017):

RQ3. What are the challenges faced by the ODL students with regards to orientation?

Despite rating the orientation sessions positively (RQ2 above), the informants mentioned the following challenges:

Communication to attend Orientation came late and during the actual Orientation time was not managed well (Both Sessions I and II).

Adequate time was not allocated to the presentation on assignment writing (Both Sessions I and II).

Electricity blackout was not planned for (Session I).

Library borrowing period was inadequate to cater for distant students and PHES (Physical Education and Sport) books in the library are few (Session II).

Some presentations were inaudible and rushed (Sessions I).

We did not get presentation programme and handouts (Both Sessions I and II).

Challenges faced by students with regards to orientation were not new since similar ones had been mentioned in other studies (Majoni and Mashatise, 2015; Mowes, 2005):

RQ4. How can the orientation challenges faced by the ODL students be overcome?

Suggestions as to how the challenges could be overcome were proffered. For instance, the majority of the informants said:

The university should provide students with the requisite materials as soon as they register and use the orientation sessions to explain more about those materials (Session II).

Improve on time management. For example, adjust orientation times and periods for students outside Gweru (Both Sessions I and II).

Also use local languages such as Ndebele and Shona to avoid any skip of information (Session II).

The institution must improve on communication system to update all students on intended programmes (Session I).

The ZOU presenters should provide us with handouts for the orientation (Session II).

Improve on the audio-visual media. The operator should be jerked up and man the ICT equipment well (Session I).

It will help if the new students are given a platform to participate and ask questions to the ZOU personnel during the Orientation (Session I).

It is noted that in a separate study by Majoni and Mashatise (2015), similar suggestions were given by the students. Further, Majoni and Mashatise recommended that time should be provided for students to tour the Regional Centre buildings and offices and highlight their functions. As depicted in the ODL theory of interaction and communication (Roberts, 2017) there was need for improved communication between students and the institution to minimize the occurrence of challenges. Also students needed to be allocated more time to ask questions. Analysis of students’ responses appear to reveal that the qualitative data showed more discrepancies in orientation service provision than depicted in the quantitative data.
Conclusion

This study concludes that generally students were satisfied with the quality of orientation sessions held at the ZOU Midlands Regional Campus. This is highlighted by the majority of students who echoed positive sentiments; although there were few ones who echoed negative sentiments about orientation. The quantitative results also showed some positive correlations between orientation variables and positive ratings of the orientation preparations as well as actual orientation presentations. In some cases, negative correlations were recorded but they were rather small. Thus research questions of the study were answered and null hypotheses of lack of consistency in the sessions, lack of correlations between orientation variables and lack of overall quality were rejected.

Recommendations

The recommendations point to the need to continue having orientation sessions every semester, for thorough planning and preparation by the University so as to maintain quality, and to finally come up with good orientation principles and guidelines. There is also need for further research to investigate challenges and evaluate quality of orientation sessions held in other semesters and in other campuses of the ZOU.

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Appendix. Orientation evaluation form

QUALITY ASSURANCE UNIT: MIDLANDS REGION
EVALUATION OF ORIENTATION

As part of our quality assurance processes in the region, we would like to improve the quality of our orientation. Please take a few minutes at the end to evaluate the orientation process.

SECTION A
Date:...................... Gender: Male ☐ Female ☐
District ..............................................................................................

Degree Programme..............................................................................

SECTION B
Tick in the appropriate box

| WORSHOP/PRESENTATION COMMENT | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|--------------------------------|----------------|-------|---------|----------|------------------|
| 1. The venue was adequate and convenient. |                |       |         |          |                  |
| 2. Communication to attend the workshop was effective and timely. |                |       |         |          |                  |
| 3. The timing of workshop was suitable. |                |       |         |          |                  |
| 4. Presenters were efficient and friendly. |                |       |         |          |                  |
| 5. Presenters demonstrated comprehensive knowledge of their topics. |                |       |         |          |                  |
| 6. ZOU operations were clearly articulated. |                |       |         |          |                  |
| 7. The workshop covered all the areas I looked forward to hear. |                |       |         |          |                  |
| 8. The proceedings showed good planning and organisation. |                |       |         |          |                  |
| 9. Audio-visual media was adequately used. |                |       |         |          |                  |
| 10. A workshop package was provided. |                |       |         |          |                  |

SECTION C
On a scale of 1 to 5, rate these presentations for effectiveness with 1 being the lowest and 5 being the highest:

1. Quality Assurance Awareness.......... 2. Registration and Examinations........
3. ZOU Delivery Mode............ 4. Library Services...........
5. Sport.............. 6. Student Experiences...........
7. SRC.................... 8. Student Advisor............... 9. ICT
10. Writing of assignments

SECTION D
Provide your own personal evaluation of the orientation. Offer any suggestions for improvement ........................................................................................................................................................................
.......................................................................................................................................................................................................................................................................
Perception towards quality and effectiveness of social work education through open and distance learning

A study in Delhi

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Abstract

Purpose – The purpose of this paper is to highlight the perception of the students towards the quality and effectiveness of social work education offered by Indira Gandhi National Open University (IGNOU) through open and distance learning (ODL).

Design/methodology/ approach – The sample size consisted of 150 students, 15 academic counsellors engaged in either teaching or development sectors, or faculty members of School of Social Work of IGNOU. The methods of data collection included interviews and content analysis. Interview schedule for students, interview guide for academic counsellors and interview guide for faculty members were used.

Findings – The study centres were allotted as per student’s choice. Students were satisfied with the counsellors because of their support, availability, contact, accessibility and assisting the students to clearing their doubts. The study found that the student’s attendance in counselling sessions was found to be negligible, even a large number of respondents were not aware of the ODL system. The study also shows that students face lots of problem with regard to their field work supervision and other components of field work as were also neglected.

Practical implications – The findings of the study are extremely relevant for formulating necessary guidelines for improving the social work education through ODL mode. The study recommends revision of course materials translated in Hindi language, holding of individual and group conferences regularly as well as proper evaluation of field work reports.

Originality/value – This is first such study conducted in India to examine the effectiveness of social work education through ODL.

Keywords Social work education through open and distance learning, India, Field work practice

Paper type Research paper

Introduction

Distance education has become a platform for delivery of education around the globe (Gabriel et al., 2015). The open and distance learning (ODL) system in India has emerged as an important mode for providing education to diverse sections of society. Besides that, the changing dynamics of the ODL system in the last six decades have been encouraging. With the proliferation in the ICT, the boundaries of classroom or campus are becoming blurred. As it is said, the temporal and spatial boundaries have disappeared (Kulandaiswamy, 1992) due to the impressive number of ODL institutions in the country bears testimony to the fact. Single-mode open universities have increased from 4 in number during the 8th Plan period to 14 in the 10th Plan period. The number of dual mode universities offering programmes...
through the distance mode (DEIs) has risen to more than 200. This is due to the fact that the
growth in the infrastructure for face-to-face instruction is unable to match the educational
demands of the ever-increasing number of aspiring students. At present, nearly 25 per cent
students of higher education in the country are enrolled in the ODL system. One of the
unique characteristics of ODL is reaching the unreached in which adults of all ages (after 18
years and above) participate in various educational programmes. Unlike the existing
conventional systems where admission is usually given to freshers after completing their
education from higher secondary schools or after graduation from regular colleges/
universities, Indira Gandhi National Open University (IGNOU) system facilitates people
from every walk of life to benefit from the ODL system. Some of the beneficiaries include
retired persons, housewives and people in employment.

The phrase distance learning itself is not a single construct but it is nonetheless used in
this shorthand way as if it were. When applied to the education of social workers, the lack of
clarity of definition deepens (Vicary et al., 2018). Vicary et al. (2018) also cites Collins
“distance learning is perceived as a subset of open learning provided usually to individual
learners and study materials delivered to their home either through hard copy materials,
television or other media” (Collins, 2008, p. 423).

The Masters in Social Work (MSW) programme in IGNOU was started in 2008 also
offered in Nepal and Ethiopia both in Hindi and English medium. The BSW Programme was
launched in the year 2004 also being offered both in the Hindi and English medium.
(Saumya, 2013). The BSW and MSW Programmes at IGNOU were developed in response to
requests from social service agencies across the country and the desire to reach the
unreached towards an accessible and affordable graduate and post graduate education.
With its national network of student support services, IGNOU provides social work
education through distance mode in various parts of the country.

The University Grants Commission (UGC) vide its regulations dated 25 November 1985
laid down the minimum standards of instructions of the grant of the first degree through
non-formal/distance education. With regard to private universities, the UGC laid down the
UGC (establishment and maintenance of standards in private universities) Regulations 2003,
which was notified in the Gazette on 12 December 2003. These Regulations, inter alia, laid
down that a private university established under State Act shall operate ordinarily within
the boundary of State concerned. However, after the development of main campus, in
exceptional circumstances, the University may be permitted (by the UGC) to open off
campus centres, off-shore campus and study centres after five years of its coming into
existence, subject to certain conditions indicated therein.

State wise distribution of universities offering social work through ODL
According to the data available from the UGC, there are 25 universities offering social work
through ODL in India. The state wise distribution of universities presented in Table I shows
social work education programmes offered via the ODL mode in Indian universities.

In India, the maximum number of universities/institutions is located in the state of
Tamil Nadu followed by Uttar Pradesh. Maharashtra, Madhya Pradesh, Rajasthan, West
Bengal and Maharashtra have two universities/institutions each. The rest of the states
have one university each. However, given the vast geographical and demographical
landscape of India with hugely populated 29 states and 7 union territories, the number of
universities delivering social work programme via ODL is meagre. If all the state open
universities take initiatives to offer quality social work education through ODL
programme then all the states could be well covered. It is to be mentioned here that
IGNOU, the largest Open University in India, having reach to all the states and union
territories in the country is offering social work education through distance mode in
various study centres.
The School of Social Work (SOSW) at IGNOU started offering social work programmes since 2004 and is spread to different states and union territories (Table II). SOSW, IGNOU, has reached all the states with its 56 regional centres in India with an equal distribution of having minimum one centre in every state (Table V). While Uttar Pradesh and Bihar have four regional centres each, Andhra Pradesh, Maharashtra, Delhi and Kerala each have three regional centres and the other states and union territories either have one or two regional centres. Every regional centre in turn has hundreds of study centres; these study centres are facilitated by the regional centres and other supports and services are provided by the headquarters, IGNOU.

The University offers several programmes (228 in 2016) leading to certificates, diplomas and degrees of professional, vocational, technical and awareness generating areas. IGNOU is also offering BSW, MSW, PGDSW, MPhil and PhD in social work. In fact, IGNOU is probably the only university in India to have indigenously developed textbooks on social work, supplemented with audio and video programmes in both English and Hindi. There is

### Table I

| Name of the state | Name of the university | Level of social work education |
|-------------------|------------------------|--------------------------------|
| Andhra Pradesh    | Acharya Nagarjuna University | MA (Social Work) |
|                  | Dravidian University     | MPhil (Social Work) |
|                  |                         | PhD (Social Work) |
|                  | Maharsri Markandeswar University | MA (Social Work) |
| Karnataka         | Karnataka State Women’s University | BA (Social Work) |
| Maharashtra       | Padmanabhae Dr D.Y. Patil Vidyapith | BA (Social Work) |
|                  | Tilak Maharashtra Vidyapeeth | MA (Social Work) |
| Odisha            | Utkal University         | MA (Social Work) |
| Rajasthan         | Janardan Rai Nagar Rajasthani Vidyapeeth | MA (Social Work) |
|                  | Vardhaman Mahaveer Open University | BA (Social Work) |
| Tamil Nadu        | Annamalai University     | MA (Social Work) |
|                  | St Peters Institute of Higher Education and Research | BA (Social Work) |
|                  | Alagappa University      | MA (Social Work) |
|                  | Periyar University       | MA (Social Work) |
|                  | Vinayak Mission University | MA (Social Work) |
| Uttar Pradesh     | Rajarshi Tandon Open University | MA (Social Work) |
|                  | Sam Higginbottom Institute of Agriculture, technology and Sciences (Deemed University) | MA (Social Work) |
|                  | Teerthankar Mahaveer University | Certificate Programme in Social Work |
| West Bengal       | Netaji Subhash Open University | MA (Social Work) |
|                  | Rabindra Bharti University | MA (Social Work) |
| Delhi             | Indira Gandhi National Open University, New Delhi | BA (Social Work) |
|                  |                         | MA (Social Work) |
|                  |                         | MPhil (Social Work) |
|                  |                         | PhD (Social Work) |
|                  |                         | PG Diploma in Social Work |
|                  |                         | MA (Social Work) |
|                  |                         | MA (Social Work) |
|                  |                         | BA (Social Work) |

#### Social work education through ODL mode – the IGNOU efforts

The School of Social Work (SOSW) at IGNOU started offering social work programmes since 2004 and is spread to different states and union territories (Table II). SOSW, IGNOU, has reached all the states with its 56 regional centres in India with an equal distribution of having minimum one centre in every state (Table V). While Uttar Pradesh and Bihar have four regional centres each, Andhra Pradesh, Maharashtra, Delhi and Kerala each have three regional centres and the other states and union territories either have one or two regional centres. Every regional centre in turn has hundreds of study centres; these study centres are facilitated by the regional centres and other supports and services are provided by the headquarters, IGNOU.

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also interactive radio counselling and teleconferencing sessions for social work students, which no other university in the country provides.

The School of Social Work at IGNOU

The SOSW was established on 16 August 2007 with the approval of the President of India who is also the Visitor of the university. The school currently offers eight programmes of study in social work and two on HIV and family education. Over 30,000 students currently pursue these programmes of study through ODL from within India and 12 other countries from India’s neighbourhood and the African continent. This makes SOSW the largest School of Social Work. SOSW gives utmost importance to research and has about more than 60 students pursuing MPhil/PhD currently. The school also recognised Rajagiri College of Social Sciences, Kalamassery as a Research Centre for research work.

SOSW is known for developing indigenous material on social work keeping in view the core value of competence. The school has produced over 200 titles with ISBN numbers and offers over 60 courses on social work and closely related topics in both English and Hindi. Apart from print materials, the school also has produced about 75 video programmes, which are on regular telecast and most of them are available in YouTube. The school also has direct interactive teleconferencing sessions and interactive radio counselling for social work students within India and for the students covered under Pan African e-network.

Social work education through ODL mode has gained wider acceptance in India as it offers college/university level of education which is flexible and open in terms of methods and pace of learning; selection of courses and subjects; eligibility for enrolment; age of entry; conduct of examination; and implementation of the programmes of study. Besides providing opportunities for adding qualifications, it has remained an important source for updating knowledge and acquiring new knowledge in diverse disciplines.

Review of literature

In terms of student learning and satisfaction, distance education courses have been found to be comparable to traditional classroom courses (Schoech and Helton, 2001). Rafferty and Waldman (2006) reiterated the need for social workers to stay abreast of communication technologies that support virtual contact and practice. Distance education has become a
critical method of delivering social work education because it has opened access to education for many people, including those in rural areas and in underserved communities, those who are far along in the careers, and those who are financially strained. Recently social work education is being completely delivered through distance education via online. The University of North Dakota and Texas State University offer complete MSW programme through online. The Metropolitan State College Denver and Florida State University offers online BSW and MSW programmes, respectively. Even in Canada, the University of Calgary offers a one-year MSW degree online. In one study “online student” outcomes were comparable to the outcomes for “face-to-face” students in terms of knowledge and skills gained in class (Wilke and Vinton, 2006).

One of the major limitations in the distance education in social work is the lack of effective field work practice and supervision leading to lack of competency in doing work in the field. With respect to assessing practice effectiveness, the profession faces a much more complex and daunting task than those in professions where outcomes are more concrete. Documenting those social workers interventions halted further delinquency or resolved marital conflicts is usually more difficult than measuring whether an engineer’s plans produced a good bridge or a surgeon’s operation cured a physical defect (Bisno and Cox, 1997). Since its inception, social work education through ODL mode in India is often debated for its quality and standards (Dash, 2018). Due to the absence of a systematic study to evaluate the effectiveness of social work education through ODL mode, it is always considered inferior to the programmes offered through regular/conventional mode. However, the easy access, affordability and convenience for the marginalised and disadvantaged sections of population, the distance education system has received immense popularity and growth in India (Dash and Botcha, 2018).

Siegel et al. (1998) cited in Vernon et al. (2009) examined the status of distance learning in social work and foreshadowed the emergence of distance education as a viable medium for delivering accredited education. The system of ODL has been highly flexible and dynamic to suit the convenience of learners. The technology of designing and developing self-instructional material (SIM), which is very different than writing a textbook, is based on a well-researched area taking into account self-learners’ competence level and understanding, availability of time and similar such factors. In essence, the purpose is to ensure that the learner feels encouraged to go through SIM in print or Interactive Multimedia mode without feeling deprived of the availability of teachers on a regular basis. The programme delivery of course provides condensed contact sessions and field experience or practices as per requirement of the type of programmes (Dikshit, 2016). Distance education has great potential in India but to realise this potential we have to ensure its standards and quality and equivalence to other modes of education. It should not be thought of as a financially cheap alternative or as a cash cow for raising financial resources (Veeraraghavan, 2016). A number of studies have been conducted to evaluate the effectiveness of distance education. The various aspects of distance education like learner outcomes, cost effectiveness and the growth of students have been studied by Garrison (1987), Fulford and Zhang (1993), Holmberg (1986) and Verduin and Clark (1991), and agree on the effectiveness of distance education. Some other research studies conducted by Berman and Wilson (1995), Forster and Rehner (1998), Raymond (1996) and Thyer Polk and Gaudin (1997) have examined the quality of distance education programmes in social work in terms of technology related issues, faculty and students’ perceptions and cost effectiveness revealed positives outcomes of distance education.

It is gaining prominence because it reaches a broader student audience, addresses student needs, saves money and uses principles of modern learning pedagogy (Zarghami and Hausafus, 2002). Although differences exist between distance education and face-to-face instruction, evidence suggests that distance education can make graduate study available to
a larger number of students and that it is at least as effective as classroom instruction, in terms of student learning (Weinbach et al., 1984 quoted in Blakely, 1991). However, in India, social work education through open and distance mode is still looked at by social work educators and practitioners with suspicion, some have rejected it altogether while some still question, exhibit inhibition, raise doubts and concerns and are still not ready to accept it completely (Lange, 1986 cited from Pawar, 2000). There is no research available in India on the effectiveness of social work through distance education as it is still in its nascent stage. The flexibility of the system and the rapid advancement of technology have contributed to the recognition of ODL as an effective means of education. Though the technological facility to impart distance education varies from institutions to institutions, it is accepted by learners who are marginalised and disadvantaged owing to various reasons. The demand for distance education in India is growing as it provides flexibility in learning. ODL offers a more convenient and cost-effective method of learning to its students. Governments worldwide are promoting more and more use of ODL as a complementary approach to traditional educational structures in order to meet the new and changing demands for education and training in the twenty-fifth century (Gutierrez, 2010). So, the study has attempted to examine the role and effectiveness of IGNOU in offering social work education through ODL.

Methodology

The paper is based on the responses of the students (BSW and MSW), academic counsellors and four faculty members of the SOSW, IGNOU. In this chapter, various aspects relating to the quality and effectiveness of social work education through ODL mode has been discussed. The sample consisted of 150 students selected through simple random sampling method, 15 academic counsellors and 4 faculty members of SOSW of IGNOU selected through convenience sampling. The academic counsellors were mostly engaged in colleges/ universities. Out of 15 academic counsellors, 3 were from development sectors.

The data were collected both from primary and secondary sources. The primary sources of data comprised of the students, academic counsellors, from various centres of IGNOU, namely, Laxmibai College, Shyamlal College, Jamia Millia Islamia, All India women’s conference, Urmi Vikas charitable trust, Sradhananda college and faculty members of SOSW, IGNOU for gaining first-hand information from the respondents. The secondary sources of data were tapped and information procured was analysed through content analysis. This primarily pertained to the UGC reports, IGNOU literature on social work, NAAC reports, IGNOU prospectus and IGNOU annual reports and other relevant documents.

The methods of data collection included interviews and content analysis. Interview schedule for students, interview guide for academic counsellors and interview guide for faculty members were used. Data were processed both manually and through the use of computer programmes. The processing of analysis involved categorising the qualitative raw data (obtained through administering interview schedule) under some common headings and then coding the same. The quantitative data were precoded. The codes were then transferred to the master sheets and then to Excel spreadsheet. Through Excel, tables and figures were made for easy understanding and viewing. Diagrammatic representation of data was also attempted to provide clarity and easy comprehension.

Findings and discussions

Reasons for joining social work courses

The study has aimed to find out the reasons for admission into BSW and MSW programmes. About 30 per cent of the respondents reported that they joined BSW programme to help people effectively. A significant section of the respondents also viewed
that they can do something for the society and aware of the people about their needs, problems and resources (Figure 1).

The MSW student respondents also gave multiple responses for joining the MSW programme. A large size of the respondents reported that they joined the MSW programme for helping people effectively.

Some of the respondents also viewed that they wanted to do something for the society. They can pursue their jobs simultaneously along their study. Most of them got information about BSW and MSW programmes of IGNOU from their friends and family members. More than 30 per cent of the respondents got to know about the BSW/MSW programme from their teachers and faculty members (Table III).

**Allotment of study centre**

The study also aims to find out whether the study centre allotted to the students were as per their choice. A majority of the students reported that the study centre was allotted to them as per their choice. It helps the students to visit the study centre without many hassles. A majority of the MSW students viewed that the study centre coordinator was very cooperative.

![Figure 1. Reasons for joining social work courses among BSW students](image-url)
to them and used to clarify any doubts related to submission of examination form, assignment submission and field work related issues (Figure 2). However, a significant number of BSW students viewed that study centre coordinator never cooperated with them (Figure 3).

Awareness of the ODL system

Awareness of the ODL system is very important for the success of any ODL programme. ODL programme is quite different from the correspondence education. In the present study, a large number of respondents about 100 per cent BSW students and 92 per cent of the MSW students were not aware of the ODL system. They have not even heard of the term ODL. They consider the MSW and BSW programmes offered by IGNOU as correspondence course (Figure 4).

| Source of information | BSW | MSW | Total |
|-----------------------|-----|-----|-------|
| Friends               | 60  | 45.3| 52.7  |
| Family members        | 38.7| 20  | 34.7  |
| Newspapers            | 9.3 | 10.7| 10    |
| Organisation staff    | 0   | 20  | 10    |
| Teacher/faculty       | 16  | 45.3| 30.7  |

Table III. Source of information regarding BSW/MSW course of IGNOU

Figure 2. Allotment of study centre of choice

Figure 3. Coordinators cooperation with the students

Figure 4. Awareness about ODL system
Satisfaction with counselling sessions

By and large a majority of the students were satisfied with the counselling provided by the academic counsellors. From the responses of 150 students, it is found that 72 per cent of the MSW students and 65 per cent of the BSW students were satisfied with the counsellors because of their support, availability, contact, accessibility and assisting the students to clearing their doubts (Figure 5). The respondents who were not satisfied with the counselling sessions viewed that academic counsellors/faculty members were not regular and sincere in their classes. They used to come late and sometimes remain absent in their counselling sessions. The respondents suggested that the number of counselling sessions should be increased.

About 77 per cent of the respondents viewed their relationship with academic counsellors as cooperative. The academic counsellors provide them continuous guidance in the matters of counselling, field work report writing, assignment submission and preparation for the term end examinations. As compared to the BSW students, the MSW students reported that academic counsellors were more cooperative to them.

A majority of the academic counsellor’s reported that students were irregular in attending the counselling sessions. Most of them reported that SIMs are easy to understand and they do not feel it necessary to attend the lectures. A significant number of respondents also viewed that as per IGNOU, student’s attendance is not mandatory. A majority of the students are also self-employed and find it difficult to attend the counselling sessions (Figures 6 and 7).

Views on self-instructional course materials

SIMs developed by IGNOU are indigenous in nature. These materials are specially prepared and designed for the BSW/MSW target groups. Though in the ODL mode, the students get very little opportunity to interact with the teachers and peer groups in classroom situations.
This loss is compensated by a special kind of self-learning material which includes all the study materials developed to stimulate independent learning. These course materials are prepared in such a way that a learner can learn from the materials independently without any difficulty. Majority of the student respondents (86 per cent) reported that the SIMs are easy to understand. They cover the basic concepts, statistical information and very helpful to the students in navigating through the course materials. About 91 per cent of the BSW students and 81 per cent of the MSW students expressed satisfaction with regard to the course materials as good and updated materials. About 40 per cent of the respondents who were dependent on course materials in Hindi literature found it difficult to understand. They viewed that course materials in Hindi should be written in a simple and lucid language.

**Views of academic counsellors on the quality of course materials**

However, a majority of the academic counsellors reported that the SIMs developed by IGNOU are good and excellent as it is written by various experts and mostly senior academicians engaged in various universities in India (Figure 8). A significant number of academic counsellors suggested that the SIMs produced in Hindi medium need improvement and revision. However, a few counsellors suggested that updating and revision is required in the SIMs so that the latest developments in policies, theories are incorporated in the text (Figure 9).
More than 92 per cent of the respondents were not aware of the quality of instructions provided to them through other multimedia programmes. They were not aware of the video, audio and teleconferencing programmes provided by IGNOU for them (Figure 10).

A majority of the academic counsellors reported that there were significant differences in the course materials produced for the BSW programme and the MSW programme (Figure 11). The academic counsellors reported that the MSW course materials are much more comprehensive than the BSW course materials.
**Orientation programme**

The orientation programme informs the students about basic objectives, components, values and ethics of professional practice in social work. The UGC Model curriculum also mentions two types of orientation: orientation to social work practice and orientation to social work setting/agency of placement. NAAC manual for social work education 2005 has also specified that orientation is essential for making aware of the students regarding the objectives of field placement.

The major objectives of the orientation visits are to acquire observation skills and develop a spirit of enquiry, to understand society responses to social problems through various services, to understand, appreciate and develop ability to critically evaluate the initiative of voluntary and government programmes. Orientation visits also aims at developing an appreciation for social work intervention in these programmes by recording relevant information about the client system and the problem/concern; the selection of programmes/strategies for solving the problem and its relevance to the client system; the role of social workers and its relevance to the client’s needs and the problems; the relationship between micro problems and the macro problems, the appropriateness of the organisations resources and the nature of intervention, gaps identified and suggestions (IGNOU MSWL 007, 2009, p. 75). Regarding the orientation visit, the researcher tried to find out awareness of the students regarding the purpose of the orientation visit. Majority of the students (82 per cent) reported that they were aware of the orientation visit. In total, 58 per cent of the students viewed that their study centre organises orientation visit of their students before they begin for their field work. A majority of the respondents viewed that the study centre organises one day orientation programme for both MSW and BSW students (Figure 12). However, the rest of the respondents reported that orientation programmes are held in the mid of their academic sessions.

**Concurrent field work**

Concurrent field work is one of the important components of field work practice in social work education. As per NAAC Manual, 2005 and UGC Model curriculum 2001, concurrent field work provides the students an opportunity to develop intervention skills in field situations and aims at developing professional skills among the students. As per IGNOU field work manual, MSW students are required to undergo 45 days concurrent placement every year and the BSW students to undergo 25 days of concurrent field work placement every year.

The study shows that majority of the students were aware of the various components of field work practice (Figure 13). The results show that all the students were placed in either governmental or non-governmental organisations for field work placement. None of the student was placed in the open community settings.

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![Figure 12. Orientation programme](image-url)
A large number of the respondents reported that they were not given the same kind of treatment and importance to the students placed for their concurrent field work than their counterparts from the other conventional schools offering BSW and MSW programme (Figure 14). A majority of the students (90 per cent) reported that they were placed in the agencies where the professional social workers are employed who guide them in carrying out their field work. A majority of the students also reported that they contact with the agencies for their placement without any support of the school supervisors (Figure 15). Moreover, study centres do not provide specific list of agencies where students can go for their field work placement. Students were free to select the agencies as per their choice for their field work placement.

In the BSW and MSW field work curriculum, students are required to apply various methods of social work in their field of practice. Besides that, students are expected to be competent to apply various tools, techniques and principles of social work in their field work practice. Students are required to practice mainly six methods in field settings. These methods are social case work, social group work, community organisation, social work research, social action and social welfare administration. The study has aimed to obtain information relating to the methods practiced by the students during their field work practicum (Table IV).

The students of the MSW expressed that they had learned various methods of problem solving and intervention skills by the use of various methods particularly social case work, group work, community organisation, social action, social welfare administration and social work research methods. The MSW students reported that they had successfully used social case work, social group work methods in the field settings. A large size of MSW students also reported that they had used social work research methods during their field work practice. For BSW students the results showed different findings. A large number of BSW students reported that during their first year programme, they only used to understand the
field settings. However, in the second and third year they have used social case work and
group work methods (Table V).

A large section of the BSW and MSW students reported that the guidance of the school/
college supervisor helped them to some extent in the development of various skills required
for successfully performing in the field work settings. Most of them reported that they had
learned significantly the application of social work tools and techniques in the field settings.

**Individual and group conferences**

Individual conferences help the students to sort out their specific problems related to field
work as well as those related to their studies. Accordingly, IGNOU guidelines for field work
(IGNOU MSWL 007, 2009) states that at least five individual conferences and five group
conferences to be conducted. It should be made clear to the students that only those problems
should be brought to the individual conference that cannot be brought to the group
conference. The problem can be specific to the agency or the learner otherwise group
group conferences are better place to discuss field work matters as all other students will also benefit
from the experience. (NAAC, 2005) Individual conference is also one of the important roles of
supervisors. It also states that individual conferences to be held for at least 30 min per student
per week. During individual conferences, reports are to be checked, making written comments
on them and discuss the same in the individual conferences. The UGC first and second review
committee on social work education also views that individual conferences are essential in the
process of supervision in field work. In the present study only 20 per cent of the respondents
reported that individual conferences are held with the supervisors and rest of the respondents
reported that individual and group conferences are rarely held.

**Academic counsellor’s views on student’s reports**

Most of the counsellors reported that students copy their field work reports as well as their
assignments from their peers. The IGNOU assignments are also available from the market in
readymade form and students just copy from it and submit to the study centres (Figure 16).

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### Table V.

| Methods of social work practiced during field work (MSW and BSW) | BSW | MSW | Total |
|---------------------------------------------------------------|-----|-----|-------|
| Social case work                                              | 53.3 (40) | 57.3 (43) | 55.3 (83) |
| Social group work                                             | 37.3 (28) | 48 (36) | 42.7 (64) |
| Community organisation                                        | 21.3 (16) | 23.3 (19) | 23.3 (35) |
| Social action                                                 | 4 (3) | 5.3 (4) | 4.7 (7) |
| Social welfare administration                                 | 2.7 (2) | 8 (6) | 5.3 (8) |
| Social work research                                          | 37.3 (28) | 68 (51) | 52.7 (79) |

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### Table IV.

| Methods of social work practice during field work | BSW | MSW | Total |
|-------------------------------------------------|-----|-----|-------|
| Social case work                                | 53.3 (40) | 57.3 (43) | 55.3 (83) |
| Social group work                               | 37.3 (28) | 48 (36) | 42.7 (64) |
| Community organisation                          | 21.3 (16) | 23.3 (19) | 23.3 (35) |
| Social action                                   | 4 (3) | 5.3 (4) | 4.7 (7) |
| Social welfare administration                   | 2.7 (2) | 8 (6) | 5.3 (8) |
| Social work research                            | 37.3 (28) | 68 (51) | 52.7 (79) |

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### Table V.

| Development of skills due to the guidance of school supervisor | Great extent | BSW Some extent | Hardly any | Great extent | MSW Some extent | Hardly any |
|---------------------------------------------------------------|---------------|----------------|------------|---------------|----------------|------------|
| Enhancing skills                                             | 10.7 (8)      | 60 (45)        | 29.3 (22)  | 17.3 (13)     | 72 (54)        | 10.7 (8)   |
| Improving theoretical knowledge                               | 16 (12)       | 70.7 (53)      | 13.3 (10)  | 36 (27)       | 60 (45)        | 4 (3)      |
| Developing values and ethics                                  | 9.3 (7)       | 57.3 (43)      | 33.3 (25)  | 16 (12)       | 52 (39)        | 32 (24)    |
| Changing attitudes                                            | 13.3 (10)     | 68 (51)        | 18.7 (14)  | 22.7 (17)     | 73.3 (55)      | 4 (3)      |
| Applying methods                                              | 28 (21)       | 62.7 (47)      | 9.3 (7)    | 37.3 (28)     | 57.3 (43)      | 5.3 (4)    |
| Application of social work principles                         | 32 (24)       | 57.3 (43)      | 10.7 (8)   | 22.7 (17)     | 65.3 (49)      | 12 (9)     |
| Application of tools and techniques                           | 9.3 (7)       | 78.7 (59)      | 12 (9)     | 17.3 (13)     | 77.3 (58)      | 5.3 (4)    |
Contribution of the school supervisors

School supervisor plays a significant role in grooming the students of social work to be professional social workers. The school supervisor has to undertake various initiatives to capacitate the learners in the development of their skills, knowledge levels, values, attitudes, etc. Most importantly, the school supervisor helps the students to apply theoretical knowledge taught in the classroom to apply in the practical settings. The role and contributions of the school supervisor in guiding and supervising the students of social work is presented in Table VI and Figure 17.

Supervision aims at teaching the core skills of social work like interviewing, listening, observation, recording and administrative tasks like planning, drafting, budgeting, etc., professional aptitudes like accountability, responsibility, punctuality and commitment to the work have to be imbibed by the students (IGNOU MSWL 007, 2009).

The supervisor should also plan the field work in consultation with the agency officials keeping in mind the objectives of the agency, the existing programmes of the agency, the resources available to the agency and the needs of the community/client are to be taken into consideration. The role of the learner should be clearly explained to the agency officials. She/he has to be given only those tasks that help in achieving the social work objectives. A majority of the respondents reported that the guidance of the field work supervisor helped them to some extent in developing their skills relating to developing skills, knowledge, changing attitudes and in the application of social work tools and techniques in the field settings.

The study also pointed out that the school/college coordinator allots field work supervisor to the students. Some of the respondents also pointed out that sometimes their preference for school supervisor is also considered.

The supervisors have a multi-faceted academic role. They can aid learners by helping them to improve their knowledge and skills, establish priorities among work tasks and develop increased self-awareness. They also orient learners to social work values and

Table VI.
Development of skills due to the guidance of agency supervisor

|                                | Great extent | BSW Some extent | Hardly any | Great extent | MSW Some extent | Hardly any |
|--------------------------------|--------------|----------------|------------|--------------|----------------|------------|
| Enhancing skills               | 22.7 (17)    | 64 (48)        | 13.3 (10)  | 25.3 (19)    | 70.7 (53)      | 4 (3)      |
| Improving theoretical knowledge| 4 (3)        | 78.7 (59)      | 17.3 (13)  | 14.7 (11)    | 52 (39)       | 33.3 (25)  |
| Developing values and ethics   | 22.7 (17)    | 68 (51)        | 9.3 (7)    | 25.3 (19)    | 65.3 (49)      | 9.3 (7)    |
| Changing attitudes             | 22.7 (17)    | 74.7 (56)      | 2.7 (2)    | 30.7 (23)    | 52 (39)       | 17.3 (13)  |
| Applying methods               | 25.3 (19)    | 52 (39)        | 22.7 (17)  | 22.7 (17)    | 46.7 (35)      | 30.7 (23)  |
| Application of social work principles | 17.3 (13)   | 50.7 (38)      | 32 (24)    | 24 (18)      | 54.7 (41)      | 21.3 (16)  |
| Application of tools and techniques | 16 (12)     | 81.3 (61)      | 2.7 (2)    | 22.7 (17)    | 70.7 (53)      | 6.7 (5)    |

Figure 16.
Plagiarism in field work reports/ assignments
how to use social work knowledge while dealing with clients during field work process (IGNOU MSWL 007, 2009).

About 30 per cent of the respondents reported that the school supervisors played a significant role and have made great impact with regard to enhancing skill sets, improving knowledge levels, imbibing values, changing attitudes, as well as applying social work methods, principles, tools and techniques which were of great use in the field work settings. A significant section of the respondents also viewed that the school supervisors were less interested and put little time in checking their reports and were very casual in their approaches towards individual and group conferences. A few percentages of the respondents (16 per cent) were of the opinion that the school supervisors never paid any interest and also never spent any time except the counselling sessions to enhance the skills, competencies and knowledge levels of the students (Figures 18 and 19).

Sources of employment for BSW and MSW students
The study also tried to find out the employment opportunities for the students after passing out BSW and MSW Courses from IGNOU. A large number of MSW students (88 per cent) were not aware of campus placement drive undertaken by IGNOU. Similar is the case with BSW students. In total, 68 per cent of the BSW respondents were not even aware of campus placement programme undertaken by IGNOU (Figure 20).

A large number of BSW students (61.3 per cent) of the respondents were not aware of employment opportunities available after BSW programme and even more than 29 per cent of the respondents were not even aware of available employment opportunities for them.
A significant number of BSW students (29.3 per cent) of the reported that NGOs are the major source of employment for them (Tables VII and VIII).

A large size of the respondents was not even aware of salary structure paid to MSW/BSW students after completing their course through ODL mode in IGNOU. However, the most of the BSW students were not aware of job opportunities available for students as compared to the MSW students.

**Conclusion**

IGNOU is doing a remarkable work in providing education through ODL mode and opportunity to grow in life to all sections of society. It has revolutionized education system in India and has made education accessible to everyone as its presence is felt in all the states and union territories of India and also in few foreign countries. It is the first school

![Chart showing challenges and constraints during field work practice at college level (MSW students)](image)

| Table VII. Major source of employment after education | BSW | MSW | Total |
|--------------------------------------------------------|-----|-----|-------|
| NGOs                                                   | 29.3 (22) | 30.7 (23) | 30 (45) |
| Government sectors                                     | 2.7 (2) | 9.3 (7) | 6 (9) |
| Self-employment                                        | 6.7 (5) | 30.7 (23) | 18.7 (28) |
| Not aware                                              | 61.3 (46) | 29.3 (22) | 45.3 (68) |

| Table VIII. Monthly packages                           | BSW | MSW | Total |
|--------------------------------------------------------|-----|-----|-------|
| Less than 5,000                                        | 4 (3) | 9.3 (7) | 6.7 (10) |
| 5,000–10,000                                           | 25.3 (19) | 25.3 (19) | 25.3 (38) |
| 10,000–15,000                                          | 5.3 (4) | 28 (21) | 16.7 (25) |
| 15,000–20,000                                          | 2.7 (2) | 5.3 (4) | 4 (6) |
| Above 20,000                                           | 1.3 (1) | 2.7 (2) | 2 (3) |
| Not aware                                              | 61.3 (46) | 29.3 (22) | 45.3 (68) |
of social work in India to take social work education to all the states and union territories in the country. It has developed indigenous SIMs and uses multimedia approach for imparting social work teaching and training. It is adopting all means and is coming up with new ideas and technology to provide quality education. IGNOU has established itself as Peoples University in India. Not only are students found everywhere and anywhere undertaking their studies and earning their degrees, but geographical boundaries between nations no longer appear to have much relevance. As the new education paradigm irretrievably alters the way teaching and learning is conducted, the application of modern educational ICTs has a major role to play (Oladokun and Aina, 2011). The study found that a majority of the students had joined the course because they wanted to do something for the society. A majority of the students reported that the study centre was allotted to them as per their choice, so that they were able to attend the counselling sessions conveniently. It helps the students to visit the study centre without many hassles. A majority of the students were satisfied with the counsellors because of their support, availability, contact, accessibility and assisting the students in clearing their doubts. However, the student’s attendance in counselling sessions was found to be negligible. In the present study, a large number of respondents were not aware of the ODL system. They have not even heard of the term ODL. The study reported satisfaction of the students with the counselling provided by the academic counsellors. Students were satisfied with the counsellors because of their support, availability, contact, accessibility and assisting the students in clearing their doubts. The study also shows that students face lots of problem with regard to their field work supervision. The field work practice component is not successfully conducted in the study centres selected for study. The orientation programme is not held timely, so they face lots of problems in pursuing their field work. Individual and group conferences which are one of the important components of supervision are practiced merely as rituals and are very much neglected in these study centres. The study recommends revision of course materials translated in Hindi language which should be very simple and easy to understand. It also recommends that the individual and group conferences should not be practiced merely as rituals rather it should be followed properly. The field work supervisors should properly check the field work reports and make constructive suggestions.

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