RULES OF ENGAGEMENT: IMPROVING TEACHING THROUGH ONLINE FACULTY DEVELOPMENT TRAINING

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Abstract

Resourcing education is a challenge for tertiary institutions. In the Caribbean, some governments have reduced funding at this level. Institutions like the UWI Open Campus, which offers Distance Education, have been exploring innovative and creative ways for contracting staff and improving engagement to meet these changing realities. The examination of the impact of training on online facilitators yields useful data for higher education institutions. The Open Campus employs only adjunct facilitators who are usually experts in their disciplines and have industry experience, but, generally, are employed per semester (or as needed), are not teacher-trained or prepared to deliver in the online environment. Curriculum training to understand how the course is aligned to the delivery strategies, therefore, assumes critical importance.

This paper examines one faculty development pathway used in the Open Campus for preparatory training, by identifying the critical competencies for online teaching success and the impact of these on online facilitators. The perspectives of forty-six (46) new facilitators on the value of the training process; competencies and best practices gained from the engagement are reviewed. Data from an impact survey was validated through focus group interviews and periods of close observation. Themes emerging from the data include: access and motivation, socialisation to the online environment; knowledge construction and efficacy. These were also validated and refined through focus group interactions. Key findings are presented using an embedded mixed methods approach with supporting data from qualitative and quantitative paradigms. These data-sets are supported by relevant research literature.

The findings suggest that structured training pathways for adjunct faculty yield positive results. Participants' perspectives indicate viable strategies and suggestions for successful practices in teaching and learning in higher education.

Keywords: Faculty Development, Quality Teaching and Learning, Facilitator Preparation

Introduction

Online faculty preparation in the UWI context

Training for online faculty has become increasingly important with the changes in teaching and learning procedures and the growth of technology. Distance education has moved from correspondence courses, blending teleconference with instances of face-to-face instruction, to having courses being delivered fully online both synchronously and asynchronously. With these rapid changes, institutions have been faced with the challenge of not only contracting and retaining qualified staff, but of offering training that meets the needs of faculty who are moving from a largely traditional context of face-to-face teaching to packaging and delivering courses online using rapidly evolving technology. To support teaching and learning and student development at the highest standard, training must adhere to standardised processes and be uniform, while allowing for context and content flexibility. Keegan (2003) believes that recruitment and selection of distance education facilitators must be based on their competencies in the use of technology for managing the logistical aspects of distance instruction, as well as their qualifications for teaching the content of a course. Thus, faculty training is a critical foundation for quality online education. Supporting the ideas articulated by Keegan, The UWI Open Campus has positioned itself to support staff training and development with research-based training pathways in distance and adult education.

The Campus, which operates in seventeen (17) Anglophone Caribbean countries, was created with a mandate to meet the educational needs of the constituents of The University of the West Indies. The contributing countries of the UWI, outside the residential campus countries of Barbados, Jamaica and Trinidad and Tobago, as well as parts of these campus territories have long been considered as the underserved populations of the institution. In catering for this population, the institution must examine the variable contexts and resource needs. This research addresses the institutional training needs and presents applicable results from one cohort of faculty trained in Managing and Facilitating Online Instruction (MFOI).

The research context

With increasing programme offerings directed at meeting the needs of the principal stakeholder, the students, sustainable structures that will reduce costs and present flexible learning paths should be provided. There is also the concomitant need to have faculty who are adequately prepared to work online, against the background of the Open Campus' recruiting exclusively adjunct facilitators who work on a per-semester or as needed basis. While these facilitators are usually experts in their disciplines and come with industry experience, they are generally not teacher-trained. Curriculum training to understand the course alignment and delivery strategies within the context of the online environment therefore becomes important for quality assurance. The distributed locations of the campus and the use of adjunct facilitators (who serve students in diverse locations), have made it critical for the campus to create and implement faculty preparation processes which seek to prepare faculty for the development of knowledge, skills and abilities (KSAs) to teach in an online environment (Anderson, 2008). Perhaps, the greatest

challenge for the Open Campus is ensuring that the training offered can outfit a cadre of competent facilitators who are ready to deliver courses online on completion of their training.

Research Objective

The purpose was to examine the impact, if any, of training on online facilitators, as well as the implications for the institution. To focus the research on measurable targets, the question, "*What is the impact of faculty development training on new online facilitators?"* provided the main focus for the inquiry. This question guided the development of the research instruments and the focus group questions for data validation. The participant responses from the research provide a baseline for faculty training initiatives and facilitator competencies and the institutionalisation of these best practices in higher education.

Related Literature

Changes in education have resulted in an instructional paradigm shift from traditional lectures to constructivist and problem based learning in higher education. As a result, more progressive institutions have modified their instruction and adjusted the teacher preparation programmes. Online and distance learning, which uses a different pedagogical platform for delivery, must also prepare instructors to adopt a range of instructional approaches for use in these modalities. Supporting a theoretical framework, the guiding principles of the current research are presented under the three sub-themes:

1. Pedagogical and logistical elements of instruction - *philosophical frames, teaching and learning strategies*
2. Facilitator Competencies - *cognitive, affective, performance, consequence or product, and explorative or expressive*
3. Facilitator Roles - *pedagogical, social, managerial and technical*

The review is used to describe and highlight the essential features of these sub-themes, showing the key commonalities and differences through a systematic review and meta-analysis of selected research. The literature review has been used in this research to guide instrumentation and the refinement of the central research question. The literature also forms the base for themes emerging from the data, which are used for the presentation of the findings and suggestions for implementation of faculty development models. For the purpose of this study, the terms *teacher* and *facilitator* are used synonymously as presented in the literature.

In recent years, questions about the impact of faculty development on facilitators have been raised by researchers like Bawane and Spector (2009), Bourne and Moore (2003). These researchers identify the value of faculty training programmes in playing a crucial role in facilitator development. Collective ideas from their research indicate that facilitators' skills and attitudes are changed through training for their own development. Therefore, training programmes are of vital importance to both facilitators and institutions to pass on the latest innovations in teaching strategies and new curricula.

Bigatel, Ragan, Kennan, May, and Redmond (2012) advocate for an approach that transcends pedagogical and procedural boundaries. They posit that teaching in a technology-rich environment is complex, so the online instructor must possess a broader set of skills and competencies in order to ensure learner success. Richey et al (2005), provides a line of reasoning that is similar to that of Bigatel et al. Richey et al recommended a competency framework that includes four areas of facilitator development:

1. *Content and pedagogy* – refer to teachers' knowledge and instructional practices require them to apply technology competence in teaching and learning.
2. *Collaboration and networking* – utilise the communicative potential of multimedia to extend content engagement beyond the learning environment for the development of new skills.
3. *Social issues* – understand legal and ethical codes, and apply digital literacy practices for the promotion of a healthy learning community.
4. *Technical issue*s – establish technical proficiency and support technology integration.

The building blocks of the framework articulated by Richey et al provide insight into the skillsets required for the development of faculty competence and is a useful precursor of the discussion on the sub-themes selected to support the current research.

Pedagogical and logistical elements of instruction

The distance education environment highlights interacting components such as the instructor/facilitator, students and content. Information and Communication Technology (ICT) makes interaction in this environment possible, every component playing a significant role in producing the desired outcome. Interaction between the instructor and students has been an important pedagogical requirement throughout the traditional Western education paradigm (Keegan, 2003). Distance education employs a learner-centred approach to instruction that, according to Gibson-Harman et al. (2002), sets its goal as guiding learners in their pursuit of knowledge as opposed to the transfer of information. The significance and demonstration of the required competencies may vary according to the context or roles one is assumed to undertake while teaching. As such, the facilitator's technical readiness and content expertise are of equal value in the recruitment and selection process.

Facilitator competencies

Several researchers provide guidance for implementing different competency models through faculty development. Salmon (2011) believes that faculty training should include competencies for e-moderating, the process of engaging learners in a discussion, initially facilitating the engagement with the content online. In this model, Salmon identifies an understanding of the online process plus the application of technical and online communication skills as being equally important as content expertise and personal characteristics. Reid (2003) identifies competency development as an important service within the institution with the development of technical knowledge and content expertise being critical to the process of online facilitation. Shank (2004) identified five competency areas for asynchronous instruction based on the inputs derived from the instructional theories, research, and personal experiences with

emphasis on administration, design, facilitation, evaluation and technical prowess. Dennis et al. (2004) focused on the pedagogical, communicational, content and technological roles of the facilitator as foundational competencies that support quality online instruction. Klein et al. (2004) see competency development as an institutional mandate where competencies can be developed through professional, planning and preparation. They believe that instructional methods and strategies should be managed within a quality culture of assessment and evaluation. Richey et al. (2005) see the required competencies as a means of developing a culture of teaching within an institution. They support the development of a professional foundation which adheres to the practices of planning and analysis, design and development and implementation and management of the different competencies identified as critical within the institution.

While the literature presents these models and ideas, there is little evidence of clarity of institutional effectiveness with implementation of the different models. As such, each model should be selected with the understanding that learning as a process is dynamic.

Facilitator roles

Ever since distance education evolved into online learning the roles of the traditional teacher has changed. This change caused facilitators to learn new skills within a paradigm shift from controller and dispenser of knowledge to 'guides by the side' or facilitators, allowing students to take control of their own learning. O'Neil (2006) indicates that electronic technologies have increasingly changed the interaction between instructor and students. The facilitative instructor roles, therefore, identify differences in how instructors confirm engagement, assure participation, monitor behaviour and resolve conflicts.

The literature (Anderson, 2008; Bawane and Spector, 2009; Hathaway, 2012; Palloff and Pratt, 2007; Salmon, 2011) also suggests that facilitators must undertake defined roles to meet technological advances and the changes in student needs. These researchers identify how the changing instructor roles facilitate community and engender student success. The eight comprehensive roles from the literature are presented below:

1. Professional
2. Pedagogical
3. Social
4. Evaluator
5. Technologist
6. Administrator
7. Advisor/Counsellor
8. Researcher

Despite the multiplicity of the facilitators' roles presented, the research does not suggest how faculty training impacts these roles. The primary focus will be on four of those roles: *pedagogical, social, managerial and technical.* Whatever roles facilitators undertake, however, they must assume various managerial responsibilities in the online environment including management of the technology to foster students' learning, organising course materials and resources, monitoring and recording their progress. Facilitators must also provide a social

presence with its attendant responsibilities, which includes but is not limited to initiating and maintaining meaningful, harmonious interactions with students as they continue to build learning communities. Finally, in assuming the technical role Varvel (2007) notes that facilitators should guide technology use, assisting learners in finding needed technical assistance and helping to make the technology transparent to and for them. The facilitators' roles therefore require skills in cross-functional teaming to provide seamless integration for students in the online environment.

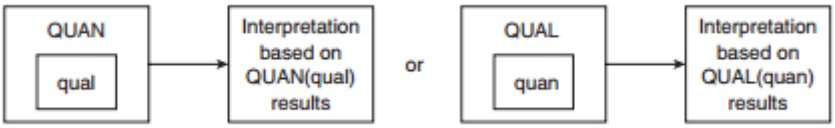
Methodology

Practitioner research is a valuable means of determining what works and what should be adjusted in teaching and learning. This research, using an embedded mixed methods approach, utilises a combination of data from a participant survey, interviews and observation for easy triangulation. The survey was administered to a group of 46 participants (11 males and 35 females) who completed an online faculty preparation course. A purposive sampling technique was used to select the participants for the study. A focus group of 6 participants (3 males and 3 females) was selected from the larger participant group to engage in two semi-structured interviews. The criteria for the selection of the focus group was that persons would qualify if they (1) completed the training and (2) were assigned to a group as a facilitator, based on student registration numbers. Periods of observations were also used to triangulate the data collected from the survey. This process was used to extend the findings of the research and answer the question related to faculty readiness and competence for online learning success.

The research was guided by ethical principles proposed by Bogdan and Bicklen (2003). At the outset, all participants were introduced to the aims and benefits of the research and were free to decide on their levels of participation and had the option to withdraw from the process at any time. The researchers outlined the principles of consensus and agreement and indicated the timeline for data collection (survey and interviews). To avoid bias, the survey data was collected through an online process that did not collect participant information. To support an interactive ethical framework, participants were encouraged to share their perspectives frankly. This process of informed consent promised both anonymity and confidentiality, since pseudonyms would be used to identify key informants. These considerations ensured full participation in the process and allowed for consistent engagement throughout.

An embedded mixed methods research design articulated by Creswell and Clark (2011) was used as the guiding methodology for data collection and interpretation. To satisfy the quantitative aspects of the research, a participant survey was used for data collection. Qualitative data was collected through focus group engagements and periods of course observation with selected members of the focus group.

Figure 1: Embedded design.



The selected embedded design includes the collection of both quantitative and qualitative data, with the qualitative data set in a supplemental role within the overall design. This design uses a one-phase approach for the embedded data (see figure 2). Data was analysed using an integration approach with a major quantitative data strand and supporting qualitative evidence.

The survey used to determine the impact of facilitator training consisted of 19 questions including both positive and reverse coded (negatively worded) items. Objective type questions used a Likert response scale. Open-ended items allowed for the inclusion of participants' perspectives on their readiness for online engagement. Cronbach's alpha was used to determine the validity of the instrument. The results are presented in Table 1 below:

Table 1: Cronbach's Alpha Reliability Analyses for the Survey Items

Information Systems (IS) Stage	**Reliability**	**Range**	**Mean**	**SD**
Facilitating Conditions (FC)	.822	3.29 – 5.00	3.39	0.46
Information Quality (IQ)	.842	3.88 – 5.00	4.71	0.33
Service Quality (SV)	.695	3.33 – 5.00	4.34	0.59
User Satisfaction (US)	.935	3.33 – 5.00	4.73	0.48
Effort Expectancy (EE)	.528	2.50 – 5.00	4.14	0.66
Criterion (CR)	.910	3.25 – 5.00	4.66	0.48
Net Benefits (NB)	.768	3.29 – 5.00	4.47	0.57
Technical Readiness (TR)	.977	4.00 – 5.00	4.83	0.34
Lifestyle Readiness (LR)	.630	3.60 – 5.00	4.60	0.39
Learning Readiness (LP)	.762	3.67 – 5.00	4.51	0.43

Note. Number of responses = 46; Number of responses for TR, LR, LP = 44

All items on the survey are within good levels of reliability (.6 and above), which indicates that the instrument was highly reliable.

Data collection

The process of data collection was completed with the impact survey being administered at the end of the training process. At the start of the data collection period, the focus group selection criteria (training completed, survey completed and placement in a course) was implemented. The six facilitators selected were observed periodically as they applied the strategies introduced during the training exercise. These facilitators were also invited to collaborative focus group engagements (synchronous virtual session/s where data collection continued, using a semi-structured interview process).

Results and discussions

Online education involves complex human and social interactions that can rarely be studied or explained in simple terms. Complex educational situations demand complex understanding; thus, the current research seeks to extend the scope and understanding of quality online faculty preparation through the presentation of the findings. The results of the research offer a response to the question around which the research evolved: *What is the impact of faculty development training on new online facilitators?* The findings therefore offer a clear picture of the nature of the existing problems and add valuable insights into teaching and learning in the context of higher education. For example, an in-depth survey was conducted with prospective online facilitators to determine their perceptions of initial and continuing professional development and how the principles had influenced their readiness for practice. A case study approach using observation of practice and in-depth interviews was used to explore selected participants' views of influences on their learning in practice.

In keeping with the selected mixed methods approach, analysis of the data is presented in an integrated model using the triangulation protocol of convergence and complementarity. Quantitative data is presented in tables with the supplementary qualitative data presented in vignettes. Codes themes and vignettes are utilized to support coherence and clarity in the presentation. Responses showing positive facilitating conditions and high levels of user satisfaction are used to determine facilitator readiness and competence. Research about teaching and learning in other online contexts is incorporated through the use of existing literature within the presentation of the findings.

Areas of discrepancy and dissonance are also included through an analysis of variance within the quantitative data and in the differences in participant responses from the survey and interview data. Further, variables of age, gender, experience and professional background are tabulated and supported with narratives from the qualitative data to triangulate and validate the findings. Three themes are used to explicate the findings and outline the value of the preparatory programme for online instructors. The data is used to showcase the readiness and competence of the facilitators who participated in the study.

Table 2: Demographic Features of Online Instructors (N=46)

	Demographics	**Frequency**	**Percentage**
Gender	Male	11	23.9
	Female	35	76.1
Age Range	29 or under	9	19.6
	30 – 39	19	41.3
	40 – 49	7	15.2
	50 – 59	8	17.4
	60 – 69	3	6.5
Campus	Cave Hill	4	8.7
	Mona	10	21.7
	Open Campus	18	39.1
	St. Augustine	14	30.4
Other online training	Yes	14	30.4
	No	32	69.6

Note. N = Number of survey responses

The demographics of the sample as shown in Table 2 indicate the age and gender breakdown and tacit readiness for online instruction. The average age of the study population (mode) was within the group 30 - 39 years. The majority was female (76%). More than two-thirds of the population (or 70%) had no previous exposure to online training or education. These demographics of the study population mirror the socio-demographic profile of the different cohorts that access the online facilitator preparation course.

Online readiness factors

Penna and Stara (2006) quantified e-readiness as a single numeric measure that explains the overall success of e-learning, where a low score signifies a deficiency that can be determined by corresponding low scores in one or more sub-scales. E-readiness is a critical component in evaluating the effectiveness of online course delivery both at the institutional level and individual level (Darab & Montazer, 2011; Hashim & Tasir, 2014; Keramati, Afshari-Mofrad, & Kamrani, 2011; Klobas & McGill, 2010; Lloyd, Byrne, & McCoy, 2012). The current study identifies the readiness of potential facilitators under four sub-themes:

1. *Facilitating conditions (FC)*
2. *Information quality (IQ)*
3. *Service Quality (SV) - Value*
4. *User Satisfaction (US)*

Facilitating conditions

The facilitating conditions in the study identify the areas of the online learning environment that encouraged participant engagement and interaction.

Table 3: Means and Standard Deviations (SD) for Items on the Facilitating Conditions of the Learning Management System (LMS)

Item	Mean	SD
FC1-is always available	**4.72**	**502**
FC2-is easy to use	4.28	688
FC3-is user-friendly	4.20	719
FC4-has attractive features that appeal to me	4.22	758
FC5-allows information to be readily accessible to me	4.52	623
FC6-Incorporates new skills and knowledge into the learning environment to enhance the quality of instruction	4.37	679
FC7-Models communication, navigation, decision-making, and problem-solving skills	4.48	658

To outline the facilitating conditions of the preparatory training process, the means and standard deviations of the items in the survey were computed. These central measures were used to identify the critical competencies for online teaching success and their overall impact on online facilitators. A positive competency in the current study is that the LMS used for offering facilitator training is (and should always be) available. The highest mean = 4.72, which indicates positive participant response. Participants of the study indicated, however, that the LMS is not user-friendly, showcased by a mean score of (M=4.20). This is a challenge that is recognised for remediation in the Open Campus. These ideas are supported by participant's response in ***Vignette 1, Engendering participation***:

> *The creation of the online environment as an indicator of what to expect, helped with readiness for online facilitation. In addition, the high standard of interaction and motivation from course coordinators was a good example and also helped.*

Vignette 1 identifies that interaction from the facilitators of the training supported participant engagement during the training exercise.

Information quality

Quality is often considered to be subjective and to change with the user and the information itself. In the study, information quality is concerned with the availability and relevance of information for training. Consistent participant information shown on this theme increases the objectivity and therefore validates the reliability of the information quality in the training. The table data, mean of 4.87 indicates that the trainers provided information that was timely. Further, the data showcases that the course content provided information that is relevant to their role as online facilitators through a mean of 4.83. While the facilitators agreed that the information was both timely and relevant, they also thought that improvements are needed to make the course information easier to understand. ***Vignette 2, Guidance and feedback*** support the information presented in the quantitative data identifying the interaction and guidance needed to support preparation.

A - Guidelines in facilitating on line feedback as it relates to specific course when using one thread and or the need for multiple threads. B - [Important factors for the creation of quality online relationships] Enthusiasm, organisation and commitment. No gaps were identified in the MFOI training. Time management was a challenge initially.

Participants of the study were pleased with the quality of information in the training course.

Table 4: Means and SD for Items on the Information Quality of the LMS

Item	Mean	SD
IQ1-offers the guidance that I require	4.78	.417
IQ2-is timely	**4.87**	**.341**
IQ3-is delivered promptly in response to my queries/ concerns	4.72	.544
IQ4-relevant to my role as an online facilitator	**4.83**	**.383**
IQ5-sufficient	4.65	.482
IQ6-easy to understand	4.59	.498
IQ7-up-to-date	4.61	.577
IQ8-well-organized	4.63	.532

Service quality

Service quality in this study identifies the expectation of support services to the participants in the training course. Table 5 showcases the responses on these items. The most positive response on these items was a mean of 4.83, supporting the idea that adequate information and online assistance were provided during the training. ***Vignette 3, Online assistance***, supports the table data.

A - Creating an environment where students felt they could ask anything and get assistance was important. This tone was set in the introduction note and subsequent interactions helped reinforce it.

B - [The guidance in the course showed] the need to be creative to making my course interesting and ensuring active participation from students. also the need to provide timely, clear and individual feedback to students.

Table 5: Means and SD of the Service Quality Items (Value) of the Online Training Course

Item	Mean	SD
SV1-The Training Facilitators provide adequate on-line assistance and explanation	**4.83**	**.383**
SV2-The e-learning support specialists are available in case I have a technical problem	4.07	.827
SV3-The e-learning support specialists are responsive	4.13	.909

As evidenced by the quantitative and qualitative responses, participants believe that sufficient familiarity through the training course and the facility of having questions answered prepared them well for the transition from training to facilitation. They were also concerned about the challenges with availability of e-learning support specialists in case of a technical problem during the exercise.

User Satisfaction

User satisfaction in this study is a measure of how the overall services provided through the training met or surpassed the expectations of the prospective facilitators. Table 6 highlights the responses on items used to measure US in the study.

Table 6: Means and SD of the User Satisfaction Items in the Training Course

Item	Mean	SD
US1-I am pleased with the experience in the training course	4.74	491
US2-I think the initial training course is successful	4.74	.491
US3-Overall, I am satisfied with the training received	4.74	.535

The table data indicates that overall users are satisfied with the training. This result regarding user satisfaction is very interesting with a mean score of 4.74 for all three items. The course was offered fully online. Generally the responses indicate that participants are pleased with the experience, think the training is successful and are satisfied with the training received. In ***Vignette 4, course tone***, participants share the professional qualities and attitudes gained through the training.

> *Developing a welcoming and hospitable environment was important in e-Tutoring. For instance learning how to humanise the course was important. Learn from the experience of others since no one individual holds all the answers…. It is also important to log in every day to respond to queries first then forum post and grade assignments. Posting e-Tutor presentations is also important. The MFOI course activity of dealing with a student complain[s] about exams helped with this (*preparation*). Improved knowledge of assessment requirements and improved delivery times for responses. It has cause[d] me to focus more on the task at hand and the importance of validity.*

Qualitative data were used to determine the net benefits of the training exercise. The gains were identified in responses to the interview questions. The positive gains from the course indicate that the training course enhanced the participants' teaching skills. Participants believe, however, that more work is needed to develop a community of learning.

Table 7: Means and SD for Items on the Net Benefits of Initial Online Training

Item	Mean	SD
NB1-enhances my teaching skills	**4.70**	**.511**
NB2-empowers me	4.67	.598
NB3-enhances time management skills	4.61	.649
NB4-contributes to my academic success	4.54	.657
NB5-makes me feel isolated	4.24	1.099
NB6-does not facilitate the development of a community of learning	4.22	1.228
NB7-does not take into account the quality of delivery	4.28	1.148

Note Items NB5 to NB7 were reverse scored as they were negative items.

Vignette 5 Learning benefits highlights the gains by participants throughout training.

> *A - Improvement has been seen in more efficient navigation through the TLE platform and access to learning materials. Improved response times to learners.*
> *B - Better able to assist students in manoeuvring on the environment and possible suggests provided by colleagues on how to deal with different issues*

Participants report an improvement in their communication and improvement in the structure of student engagement. This is very important since cordial communication is critical to quality online engagement.

Three sets of items were used to determine the technical, learning and lifestyle readiness of the participants of the study. These areas were used to cross validate the responses among the facilitating conditions, service quality and user satisfaction of the training course and participants. The results are tabulated in Tables 8 - 13.

Table 8: Means and SD for Items on Technical Readiness

Technical Readiness Item	Mean	SD
TR1-My computer setup is sufficient for online learning	4.80	.405
TR2A-I have access to the following pieces of software: Word Processor such as MS Word	4.84	.367
TR2B-I have access to the following pieces of software: Spreadsheet such as Excel	4.84	.367
TR2C-I have access to the following pieces of software: Presentation tool such as PowerPoint	4.84	.367
TR2D-I have access to the following pieces of software: Real Player or similar media player	4.80	.457
TR2E-I have access to the following pieces of software: Adobe Acrobat Reader	4.84	.367
TR2F-I have access to the following pieces of software: Browser such as Firefox, Internet Explorer or Google Chrome	**4.87**	**.344**
TR3-I have access to a printer	4.80	.405
TR4-I receive messages sent to my e-mail address	**4.87**	**.344**
TR5-I have daily access to the Internet for substantial periods of time (45 minutes or more)	4.84	.367
TR6-I have access to a dedicated network connection or have a Internet Service Provider/ISP	**4.87**	**.344**

Technical Competencies (readiness) in Table 8 are access to a browser, ability to receive email messages, and having access to a dedicated network connection or having an Internet Service Provider/ISP

Table 9: Means and SD for Items on Lifestyle Readiness

Lifestyle Readiness Item	Mean	SD
LR1-I have a private place in my home or at work and that I can use for extended periods	4.80	.408
LR2-I have adequate time that will be uninterrupted in which I can work on my online courses	4.59	.542
LR3-I routinely communicate with persons by using electronic technologies such as e-mail, text messaging and voice mail.	**4.82**	**.390**
LR4-I have persons and/or resources nearby who will assist me with any technical problems I might have with my software applications as well as my computer hardware.	4.61	.538
LR5-I value and/or need flexibility. For example, it is not convenient for me to come to campus two to three times a week to attend a traditional class.	4.18	.971

Tabulated data on lifestyle competencies range from a mean score of 4.18 - 4.82. The lifestyle competencies include ability to routinely communicate with persons by using electronic technologies such as e-mail, text messaging and voice mail. One challenge identified is that some participants might be unable to find adequate and uninterrupted time in which to work on online courses.

Table 10: Means and SD for Items on Learning Readiness (Preparation) Items

Item	Mean	SD
LP1-When I am asked to use technologies that are new to me such as a fax machine, voice mail or a new piece of software, I am eager to try them.	4.45	.697
LP2-I am a self-motivated, independent learner.	**4.73**	**.451**
LP3-It is not necessary that I be in a traditional classroom environment in order to teach	4.52	.628
LP4-I am comfortable providing written feedback rather than giving immediate verbal feedback.	4.43	.846
LP5-I am proactive with tasks; tending to complete them well in advance of deadlines.	4.30	.668
LP6-I communicate effectively and comfortably in writing	4.68	.471

Learning readiness competency requires being a self-motivated, independent learner. This has a mean score of 4.73. The positive response on this item was encouraging as this competence is vital for the online environment. Time management and procrastination were challenges for some participants, who admitted to not being proactive with tasks; tending not to complete them well in advance of deadlines.

To determine if there is a link among the variables and cross validate item responses a linear regression with technical readiness predicting facilitating conditions (FC), information quality (IQ) and service quality (SV, effort expectancy (EE), user satisfaction (US), and net benefits (NB) was computed. The results are shown in Table 11.

Table 11: Linear Regression on TechRead, FC, IQ, SV, EE, US and NB

				t-Test				***F*-Test**	
Dependent Variable	**B**	**SE**	**β**	**Statistic**	**Sig.**	**R^2**	**ΔR^2**	**Statistic**	**Sig.**
FC*	.522	.194	.379	2.688	.010	.144	.124	7.227	.010
IQ	.237	.143	.244	1.652	.106	.060	.038	2.729	.106
SV	.103	.262	.060	0.393	.696	.004	-.200	.155	.696
EE	.453	.288	.234	1.575	.122	.055	.033	2.482	.122
US*	.538	.199	.380	2.697	.010	.145	.125	7.275	.010
NB	.443	.249	.262	1.782	.082	.069	.047	3.177	.082

The results show a sig and positive relationship between technical readiness and facilitating conditions (β =.379) as well as user satisfaction (β =.38).

Technical readiness accounted for 14.4% (note the R^2 for FC) of the variance in facilitating conditions and 14.5% of the variance in user satisfaction. Generally, in order for the facilitators to be (US) pleased with the experience, think the training is successful and be satisfied with the training received, the (FC), The LE must always available for them to (TR) access to a browser, receive email messages, and have access to a dedicated network connection or have an Internet Service Provider/ISP.

To determine if there is a link among the variables and cross validate item responses a linear regression with Linear regression with LifeRead predicting facilitating conditions (FC), information quality (IQ) and service quality (SV, effort expectancy (EE), user satisfaction (US), and net benefits (NB) was computed. The results are shown in Table 12.

Table 12: Linear regression on LifeRead, FC, IQ, SV, EE, US and NB

				t-Test				***F*-Test**	
Dependent Variable	**B**	**SE**	**β**	**Statistic**	**Sig.**	**R^2**	**ΔR^2**	**Statistic**	**Sig.**
FC	.594	.161	.494	3.681	.001	.244	.226	13.553	.001
IQ	.340	.121	.397	2.807	.008	.158	.138	7.877	.008
SV	.198	.231	.131	0.859	.395	.017	-.006	.737	.395
EE	.547	.247	.323	2.216	.032	.105	.083	4.909	.032
US	.573	.172	.457	3.329	.002	.209	.190	11.084	.002
NB	.580	.202	.406	2.875	.006	.164	.145	8.268	.006

Note p<=.05

The results show a significant and positive relationship between lifestyle readiness and facilitating conditions (β =.494), information quality (β =.397), effort expectancy (β =.323), user satisfaction (β =.457), and net benefits ((β =.406).

Lifestyle readiness accounted for 24.4% as shown by the variance in facilitating conditions, 15.8% of the variance in information quality, 10.5% of the variance in effort expectancy, 20.9% of the variance in user satisfaction, and 14.5% of the variance in net benefits.

The highest variances were in FC and US. So critical competencies for online teaching success and the impact of these on online facilitators is to satisfy those conditions for FC and US as a priority:

1. (FC) The learning environment must always available for the trainees
2. (US) pleased with the experience, think the training is successful and be satisfied with the training received.

To determine if there is a link among the variables and cross validate item responses, a linear regression with LearPref predicting facilitating conditions (FC), information quality (IQ) and service quality (SV, effort expectancy (EE), user satisfaction (US), and net benefits (NB) was computed. The results are shown in Table 13.

Table 13: Linear Regression on LearPref, FC, IQ, SV, EE, US and NB

				t-Test				*F*-Test	
Dependent Variable	**B**	**SE**	**β**	**Statistic**	**Sig.**	**R^2**	**ΔR^2**	**Statistic**	**Sig.**
FC	.621	.135	.580	4.616	.000	.337	.321	21.310	.000
IQ	.273	.110	.358	2.485	.017	.128	.107	6.174	.017
SV	.354	.200	.263	1.770	.084	.069	.047	3.132	.084
EE	.558	.216	.370	6.674	.013	.137	.117	6.674	.013
US	.462	.157	.414	2.945	.005	.171	.151	8.674	.005
NB	.473	.183	.371	2.588	.013	.138	.117	6.700	.013

The results show a sig and positive relationship between learning readiness and facilitating conditions (β =.580), information quality (β =.358), effort expectancy (β =.370), user satisfaction (β =.414), and net benefits ((β =.371).

Learning readiness accounted for 33.7% (look at the R^2) of the variance in facilitating conditions, 12.8% of the variance in information quality, 11.7% of the variance in effort expectancy, 17.19% of the variance in user satisfaction, and 13.8% of the variance in net benefits.

Conclusions, Implications and Recommendations

The findings of this study support the use of techniques which direct participants in how to facilitate teaching online, as part of the programme of faculty development. The knowledge, skills and attitudes (KSAs) implemented through the MFOI training provide a quality framework; structured and replicable approaches that can be used consistently across higher educational settings. The research findings show a strong correlation between technical readiness and the facilitating conditions of the online learning environment. A technically ready participant will, generally, be a satisfied user of the online environment.

Data from this study provide a guide for institutions to identify critical online readiness factors and provide faculty training for competency development. For example, lifestyle readiness had a high correlation with the facilitating conditions and user satisfaction data in the study and was also supported by participants' responses. LR3-*I routinely communicate with persons by using electronic technologies such as e-mail, text messaging and voice mail* had the highest mean score of 4.82. It is important to note, however, that lifestyle readiness is an independent variable—a personal thing that cannot be trained or taught. It is innate in the participant and if they are not disciplined about their role then it can be detrimental to online teaching success. (e.g. not spending enough time in the learning environment to respond to participants/students, may result in errors in assignments or grades etc.) Lifestyle competencies include the ability to

routinely communicate with persons by using electronic technologies such as e-mail, text messaging and voice mail. Institutions should seek to find out if prospective facilitators will have adequate time that will be uninterrupted in which they can work on assigned online courses.

The highest variance in the data was in the Facilitating Conditions (FC) with a mean score of 4.72. This suggests that critical competencies for online teaching success and the impact of these on online facilitators is to satisfy those highest means for FC as follows: (FC) *The learning environment must always be available for prospective facilitators*, and Learning Readiness (LR) *A positive learning readiness competency is being a self-motivated, independent learner* – this is vital to teaching quality in the online environment. As such, a challenge for online faculty is that not being proactive with tasks; tending not to complete them well in advance of deadlines can be detrimental to student engagement and success. If the facilitation conditions are good but the prospective facilitator is ill prepared for the task (not learning ready) they will still be dissatisfied with the training. Learning readiness like lifestyle readiness is an independent variable—a personal thing that cannot be trained or taught. It is innate in the participant and if they are not disciplined about their role then it can be detrimental to online teaching success (E.g. late or last minute in grading assignments).

Online readiness factors, while presenting some ideas for facilitator selection and training, raise questions for future research, For example, can the creation of a learning community (facilitating conditions) during initial training improve online task management among facilitators? What are the cultural factors that best support faculty preparation programmes? What are the properties of a learning management system (LMS) that best support faculty training and by extension teaching and learning? Answers to such questions would provide guidance for the critical components of faculty development programmes.

This research addresses the institutional need of faculty training and presents applicable results from one cohort of faculty trained in MFOI. While not addressing student engagement and facilitation directly, the study contributes to student development by showing how outfitting faculty with the competencies for online engagement can contribute to teaching, learning and student development in higher education. It will, therefore, contribute to the field of teaching and learning by highlighting the innovations in the Open Campus' faculty development pathways and their contribution to students' success online. By highlighting the skills on which prospective online facilitators build to develop online teaching competencies, the work provides an understanding of the competencies needed to deliver quality online education. New innovations can expand this understanding as they are applied in higher educational contexts.

Recommendations

The findings of the study establish several practices that have been used for faculty development in the Open Campus and create possibilities for transferability and implementation in other higher education institutions. We share three of these as recommendations. Online training programmes should resemble online delivery as much as possible. Institutions should seek to create culture, climate and legacy within their training, which will then be replicable in online delivery.

1. ***Culture***

Quality begins with an organizational culture that values high expectations, respect for diverse talents and learning styles. The culture of a quality online course will be dependent on the facilitating conditions of the environment and the lifestyle and learning readiness of participants. A rigorous selection process is necessary before training is undertaken. The foregoing indicates that online training programmes should:

- have a welcoming tone
- encourage a learning community
- include traditions of rewarding efforts (early bird awards, special mentions)
- value participants' opinions

2. Climate

The climate of the programme will be dependent on the information and service quality which rely on the readiness of the trainers and their understanding of the competencies and roles. Quality instruction embraces active learning, assessment and prompt feedback, collaboration and adequate time on task for the development of mastery. Much more than being an expert in a selected discipline, the online instructor should be able to make learning fun. Consistent presence in the environment and trainer accountability is created under the aegis of a well-designed course/ programme.

3. Legacy

Prospective facilitators possess schema and experiences on which competencies are built for online learning success. Exemplary practices create a legacy during and after training that stays with the participants forever. During the training exercise, the trainer transmits ideas through interaction which the participants adopt for implementation in their own teaching. Facilitators engage learners as full partners and create substantive change in individual learners. Documentation of participant progress will provide a useful record of the experiences and the process.

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