"Using a blended-learning approach in induction training of school inspectors."

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Dedication:

This humble work is dedicated to my dear wife Milley; Faith my daughter; and my two sons Timothy and Titus; my dad and mum who are my life mentors (Beaton and Josephine Mwasikakata). To them I say thank you so much for enduring one year and three months without my presence in your lives. We have come a long way, and our mutual faith in the LORD keeps us going, and it seems to me that 'we have just started'. Remain blessed!

The Research Summary:

This research focuses on three issues:

> ***Non availability of a standardized induction course for newly recruited inspectors*** as the current situation is one where trainings are done in an ad-hoc fashion with no proper attention given to materials development, and little time given for training of new inspectors before they are deployed into full practice; ***mentorship by experienced inspectors is not done purposefully***, but informally as part of the normal working experience for the new recruits; and thirdly***, e-Learning still remains an alien mode of delivery in the Malawian education system.***

The intention of this research was to do formative evaluation of an instructional material for the induction of school inspectors, and to investigate the possibility of employing Blended Learning as an alternative mode of training delivery in the Malawian system. Such a mode of delivery is meant to give more flexibility and time for training to the trainees while also providing an opportunity for more formalized and systematic mentorship by the experienced inspectors in the trainees' duty stations.

The major challenge faced during the research was non-availability of reliable internet connectivity. As such, Local Area Network installation and that of the Learning Site's server on one of the computer of the school, where the research was done, became the preferred alternative. Also, the initial target group was actual newly recruited inspectors, but because there were none at the time of the research, school-based managers of the school were used as participants in the one-on-one evaluation phase of the research. Two experienced inspectors were also used to provide the expert review of the material as well as serve as mentor inspectors.

The results of the Pre and Post tests and responses to questionnaires by both participants and mentor inspectors were used to identify areas of the instructional material that require revision. With the results, it has been shown that:

-the material can be effectively used as a foundational phase of a more extended and comprehensive induction training package for newly recruited inspectors. It also can be used to provide a sound framework for designing such an extended version.

-a Blended Learning mode of delivery can be the most practical, effective and efficient approach to training of inspectors. It could also provide a more plausible solution to corporate training in other sectors that would like to avoid the problems of time constraints for officers to be kept at one venue of training away from their work places while maximizing on-the-job mentorship opportunities for the trainees.

-Most importantly, for the first time, an opportunity has been provided to systematically deal with the problem of lack of a standardized training program for new inspectors in Malawi by this instructional material, at no better time than now when the Inspectorate and Advisory Department is beginning to take initiatives to create such a program.

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Some commonly used abbreviations:

1.) F2f means face-to-face.

2.) LAN means Local Area Network.

3.) EQMS means Education Quality Monitoring System

4.) e-L means e-Learning.

Chapter 1. Research Background:

1.1 Problem statement.

This research identifies three main issues for its attention, and these are:

1.1.1.   Non availability of a standardized induction course for newly recruited inspectors.

The current situation regarding training of new inspectors is one done in an adhoc fashion, whereby experienced inspectors (who are available at a given time) are requested to produce training materials for the topics they have been asked to present on. The presentations are usually done in a seminar which normally runs for a maximum period of one week. The major challenges with this approach are two:

- materials used are substandard as there is not enough time to subject them to rigorous formative evaluation to establish their authenticity and usability;

- Very little time is availed to the trainees to grasp the fundamentals of their job, that is, one week is simply not enough to cover all the necessary content and do the practice using the supervision instruments before being deployed into their various duty stations.

It is the purpose of this research to investigate the possibility of having a standardized induction course based upon which a more comprehensive and complete package can be developed.

1.1.2. Mentorship by experienced inspectors is not done purposefully, but informally as part of the normal working experience for the new recruits.

The progress in terms of grasping the knowledge and skills of the job while being mentored by experienced inspectors is not documented, since it is not regarded as mentorship at all.

It is the purpose of this research to introduce a formalized mentorship approach as a part of the training package for the new inspectors.

1.1.3. Thirdly, e-Learning still remains an alien mode of delivery in the Malawian education system.

It is the intention of this research to investigate the possibility of employing Blended Learning as an alternative mode of training delivery in the Malawian system. The Blended Learning approach is likely to bring about the following benefits: there is no need to bring all trainees at one place, away from their duty stations (normal and practical working environments), leading to minimal interruption of duties of both trainees and mentor inspectors; more time will be availed for the

training as opposed to the usual time and resource-bound one-week workshops; expanded, systematic and well documented mentorship opportunities will be possible; and it allows for more flexibility in terms of trainees' study styles as it is more individualized than the traditional face-to-face approaches.

It should also be noted that initiatives are being taken by the Inspectorate and Advisory Section of the Ministry of Education to create some form of standardized training package. Two officers have been assigned to lead the process but not much has been done yet. It is the objective of this study to contribute towards such a noble initiative. It has been quite fitting, therefore, to have the two officers as reviewers of the instructional package used in this research in order to provide the much needed authenticity check regarding quality and scope of content and its mode of presentation.

Chapter 2. Literature Review:

2.1 Theoretical basis for this research.

The Blended Learning approach has been adopted as a mode of delivery in this research. The conventional approaches are basically two: *Both-end* and *Core* types according to Nemoto (2002). Both of these refer to a blending of f2f and e-Learning sessions. Both-end type is one where you have e-learning before and after group (f2f) training (i.e., e-L ..; f2f…; e-L.). Core type is where you have f2f sessions before and after e-Learning (i.e., f2f…; e-L…; f2f.). As it will be evident at the end of this chapter, this research takes a blending approach that is neither Both- end or Core type but a mixture of both, that is, activities requiring f2f will interchangeably follow those of e-L in a coherent flow of content and learning experiences. In other words, sessions requiring professional practice and group f2f that are so related to a particular portion of content will come immediately after study of that content is confirmed. Also, a 'scaffolding' approach to mentorship is used, in order to underscore the desired outcome of having inspector trainees gradually and purposefully attain professional and operational independence in the course of training.

The description of an e-Learning system given in chapter 7 of 'e-Learning Fundamentals' (Suzuki, 2004) forms the basis for what could be regarded as requirements for a workable e-Learning mode of delivery, and I quote: 'An e-Learning system includes elements such as a knowledge management system (KMS), a performance support system (PSS), an online community, and group instruction, as well as e-Learning in a narrow sense (online training), and all of these elements need to be designed' (Page7-1).

2.2 Current state of research (the status quo) versus the approach for this study:

2.2.1 The Malawian scenario:

As already indicated above, there is no standardized induction training course for newly recruited inspectors in Malawi. The current practice is one where presentations are prepared by experienced inspectors each time the need for induction arises. Such materials are usually prepared based on the concerned inspector's experience and previous presentations made to similar workshops, and also using the Instructional Handbook for Inspectors. The handbook is, perhaps, the only available reliable source of content, but as its title suggests, it was not written as a training material but just a reference book for the inspectors as they go about doing their job. The new recruits are required to attend a one week workshop where such presentations are

made. The new recruits are then taken on a one day observation tour where they are exposed to the practical aspects of what they covered during the workshops.

As it is, this training has very minimal effect for the following reasons:

- The quality of presentation materials is not guaranteed as it is not subjected to any formative evaluation before being deployed for use;

- The new recruits have inadequate exposure to the practical aspects of their job during the induction as it is done only for one day, offering little chance to get into the details of all the activities that accompany a full inspection visit. Much of the practice is left to the time they assume their duties after the one-week induction workshop, but then, this is not regarded as part of the induction since there is no evaluation mechanism in place to assess the performance of the new recruits.

The general working environment, however, is one which can easily support a mentorship approach by an experienced inspector since most often new recruits will find themselves working under the supervision of experienced inspectors.

2.2.2 The international scenario:

As implied in Chapter 1, attention is specifically given to those cases that have in place standardized training programs for inspectors. Hence, this section will cover information about the Board of Governors of the European Schools, and France and Netherlands as representative European samples, since it will be seen that approaches to induction are pretty much the same in countries where they have some standardized induction courses. Developing countries will also be discussed.

a) Board of Governors of the European Schools:

European Schools were created in Luxembourg, with the signing of the European Schools Statute on 12th April, 1957. The objective of these schools was to contribute to the development of a multicultural and multilingual Europe. The schools were primarily meant for the children from European families that were working for European companies, corporations and institutions in different places in Europe but coming from different European countries of origin. Some examples include the European Coal and Steel Community (Luxembourg), the European Economic Community (Brussels), the European Atomic Energy Community (Italy, Germany, Norway and the UK), and the European Patent Organization (Germany). As of 2008,

14 such schools had been opened in various member countries across Europe. The schools offer pre-university education (infant, primary and secondary school), and the highest certificate awarded is the European Baccalaureate which is recognized in all member countries of the European Union. The Board of Governors mentioned above is the governing authority of the schools, composed of Ministers of Education (or any official responsible for national education and/or relations with other European countries) of the member countries of the Union, one representative of the European Commission, one for the European Patent Office, one representative of the Staff Committees of the schools and one representative of the Parents Associations. It is headed by the Secretary General.

Under the Board of Governors are several Preparatory Committees, one of which is the Board of Inspectors comprising of one inspector from each country. It has two components: one for the nursery and primary sections, and another for the secondary section. Among other things, this Board is responsible for induction of new inspectors. During the meeting held from 15th to 16th April 2008 in Helsinki, this board came up with a framework for induction of new inspectors in European Schools. The framework consists of two approaches: the *Formal* and *Informal* approaches.

-*The Formal* approach is a one-day face-to-face workshop where new inspectors are taken through a discussion of content pertaining to their new responsibilities and the system as a whole.

-*The Informal* approach requires new inspectors to work in collaboration with experienced colleagues in their various settings, forming working partnerships that provide for mentorship services to the new inspectors. The minutes of the meeting further observe that "…Conscious efforts to expose new inspectors to appropriate learning situations relevant to European Schools, demonstration of skills required, creating a climate where questions are encouraged, providing access to information sources and mentoring arrangements are some of the ways in which informal induction in the European Schools can be fostered. Informal induction training supplements the formal approach." (pg3 of 5).

There is also a mention of the website of European Schools which carries all the information about the Board and its activities as well as the Learning Gateway, which appears to be a form of a learning site for the board. The minutes further observe that "… Technology provides

increasingly flexible options for learners to access information as and when it is required. However, social interaction is an important element of the induction process and provides a dimension which technology based training does not provide. Therefore, a variety of approaches designed to meet the needs of individual inspectors and members of inspection teams over given time periods is required." (pg4 of 5). This signifies a Blended Learning approach though the nature of technology-based provision being offered is not clearly explained, that is, whether the Learning Gateway and other website sources being used can be referred to as Learning Management systems that are purposefully created to support self-learning courses, as a supplement to the face-to-face components of the induction process.

The discussion that follows is based on the research project conducted by UNESCO's International Institute for Educational Planning (IIEP) based in Paris, France.

b) **France:**

In France, they also have a two-fold induction approach: the Formal and the Informal.

-The Formal takes a total of 22 weeks of training conducted at the National Training Centre for Inspectors and Heads of Administration.

-The Informal takes a total of 15 weeks of uninterrupted periods of 4 to 5 weeks each, conducted at the Regional Director's Office to which they have been assigned.

-The Formal and Informal are conducted in an alternating fashion, that is, after some weeks of the formal component, the trainees go for a 4 or 5 weeks of informal training where they are involved in an on-the-job training and then return for another phase of formal training at the centre.

The interaction in each approach is face-to-face, with no evidence of online delivery modes.

c) **The Netherlands:**

In 1989, a new induction procedure was adopted as explained in the following passage:

- A three month initial period, 20 days of which are spent on a uniform induction course aimed at laying down the theoretical foundations of the work and establishing a frame of reference within which the new inspectors could function. During these first three months, the new inspectors are not charged with any supervision responsibilities of schools.

- The remaining days of the three months are meant for an intensive, on-the-job training under the supervision of their inspectorate offices of designation.

- The three months are followed by a five month period of individual supervision by the tutor, which diminishes gradually in a scaffolding manner. After this, the new inspector is expected to have fully assumed his responsibilities and established himself in the practice, bearing full responsibility of his actions.

Hence, the total period of induction training is 8 months. As can be seen, they also have a two-fold approach: the formal and the informal, with the formal approach lasting for the first 20days and the informal taking much longer and with individual supervision from both superiors at a place of assignment and an assigned tutor.

d) **IIEP research results from 7 developing countries: Sri Lanka, Korea, Nepal, Uttar Pradesh, Botswana, Zimbabwe and Tanzania:**

The results show that only Sri Lanka has a long-term training similar to the two European examples above, running for periods ranging from 6-12 months and being generally residential. There is no evidence of any systematic induction courses in the other countries, except for some orientation arrangements that run for one to two weeks. Such programs in Botswana and Zimbabwe have some measure of a formal status. The major reasons for such an absence of systematic induction training include lack of interest on the part of senior decision-makers, lack of financial resources, lack of qualified personnel to handle such trainings and coupled with lack of institutions with such training expertise and experience as is required of this area of training.

  However, according to a much later source, the official website for the Tanzanian Ministry of Education and Culture (2005), there is a standardized training program for inspectors which include *induction*, *basic training* and *in-service training*. According to this source, before newly recruited inspectors takes up their responsibilities, they first undergo six months *on-the-job induction* training whereby they are attached to teams of experienced inspectors and is meant to prepare them for basic training. This is followed by a three-month intensive *formal basic* training. The last two weeks of the basic training are for field practice. A successful trainee is posted to a duty station to work for six months on probation, after which is confirmed

on the job. There is, however, no evidence as to the successes of implementation of this, otherwise, systematic approach.

2.3 Key observations from the literature search discussed above and the focus of this research:

a.) Just as is the case with many other developing countries, the Malawian system is in need of a systematic and standardized induction training approach. As observed above, the working environment is conducive for mounting a two-fold approach of *content study* and *on-the-job mentorship*.

b.) *Duration of induction training*: It is obvious from the above that any serious and well meaning induction cannot last only for one week. A longer period of induction that provides for deeper, systematic and well supervised on-the-job training is bound to yield professional results that are demanded of a quality monitoring officer. The bottom line is that induction can only be effective if it is combined with on-the-job practice that allows for a deeper familiarization of the tasks and responsibilities for the job.

c.) This research may not have had the benefit of time to fully cater for the second observation above, but aimed at providing a well formatively evaluated instructional material (details of which are provided in the next chapter) that gives a sound starting point from which a comprehensive and exhaustive training program can easily be developed. Such a material should be one that gives enough exposure to knowledge and skills to get an inspector into effective practice while it can also be easily extended into one that provides for a complete training package of a full professional inspector.

Just as any other profession, education supervision is a performance-based profession, if it is to lead to meaningful improvement in the quality of provision in the education system. As ably observed by Mary Broad (2000, pp430-431) in her article titled 'Ensuring Transfer of Learning to the Job', excellent design and delivery does not necessarily lead to effective performance and application of knowledge and skills learned. She points out the importance of being able to evaluate not only the learning achieved by trainees at the end of the training (Kirkpatrick's levels 1 and 2), but also '...the extent of behavior or performance of new skills on the job (level3), and often the organizational results of a training intervention (level4).' (pg431).

Thus, taking from 2.1 and the key observations made above, this study is on a blended learning approach that is a continuous sequence of both e-L and f2f sessions, organized in manner that provides for a continuous and related flow of learning experiences. The f2f sessions will also serve as evaluation flag posts for mentor inspectors to both guide the subsequent learning experiences effectively and monitor the net gains in the performance of the trainees as they progress with their study. The f2f sessions are to be carried out by using a 'scaffolding' technique of offering training support in order to help trainees incrementally attain a level of both professional and operational independence. Such an approach that emphasizes a continuous evaluation of the training process and requires the experienced inspectors/ mentors to keep such an evaluation record, should have a return effect of formalizing the mentorship that is already being unconsciously provided by experienced inspectors to the newly recruited.

Chapter 3. Methodology:

3.1 Creation of the instructional material:

An instructional material titled "Induction training for newly recruited inspectors" has been created. This material has a total of 9 sessions split in three blocks. Block 1 (Sessions 1 and 2) introduces the whole Education Quality Monitoring System (EQMS) in terms of its four components: Supervision; Education testing and evaluation system; Teacher pre and in-service training; and Establishment of the national curriculum framework. It also depicts the key role of Supervision among the four components so as to help the trainee understand how Supervision affects the other three components. The four components are also introduced as the four key functions of an education supervisor (inspector) in the Malawian education system. Block 2 (Sessions 3 to 7) discusses Supervision in detail and the Supervisor's job-description in order to deepen understanding of the supervisor's nature of work. Block 3 (Sessions 8 and 9) discusses supervision practice in detail by presenting supervision tools and instruments (data collection, analysis and report writing forms, checklists and templates). These instruments are paper-based. At least one school supervision visit also forms part of the activities of this block in order to allow the trainees to practice using the instruments and learn how to work as a team.

3.2 Instructional material's study design:

A Blended Learning approach has been adopted with the following main components:

a.) Introduction to the course through f2f discussion which centers on the 'How to Study' manual. The manual introduces the course and also includes tips on how to navigate through the learning site and some basic computer skills for first users of computers.

b.) All self-study content has been committed to online sessions (sessions 1 to 7 and part of 9 – responding to posttest and questionnaire)

c.)Session 8 is a group f2f, involving practice with supervision instruments, with the guidance of the mentor inspector. However, mentorship is not limited to f2f sessions only but to the whole course as the mentor inspector may be expected to provide learner guidance at any point in the learning process.

3.3 Sources used in the creation of material and the material's uniqueness/added value:

The material has been created mainly from three sources: Instructional Handbook for Inspectors (Malawi) and UNESCO'S International Institute for Educational Planning (IIEP) supervision

modules. The supervision instruments were extracted from the Inspection Review Consultancy Document (Feb, 2002) for Malawian Primary and Secondary Schools; by Mike Harrison.

This instructional material is unique for the following reasons:

a.) It provides both the global perspective of the Education Quality Monitoring System and related concepts as well as their applicative aspects in the Malawian setting;

b.) It provides organized practice and mentorship by the experienced inspectors thus making it possible for the first time to have purposeful, documented and easy-to-evaluate induction training for new inspectors;

c.) It takes away the trouble of having to prepare induction presentation materials every time the need arises;

d.) It has managed to put together in one place the otherwise scattered information about Supervision practice in Malawi;

e.) It provides a bridge between the old content of the Instructional Handbook for Inspectors and the new contemporary practices as enunciated in the Inspection Review Consultancy Document and the IIEP modules; and

f.) It is designed to be a largely self-learning material, thus allowing for flexibility and giving the trainee inspector more latitude of study and practice.

3.4 Formative evaluation of the material and research design:

The main activity of this research is the Formative Evaluation of the created instructional material. This initially comprised of three phases: the Expert Review, the One-on-One, and the Small group phases.

a.) The Expert Review phase: Involved two experienced inspectors who also acted as mentors with the major aim of providing the authenticity check of the material.

b.) The One-on-One phase: Involved 3 participants i.e., the Headmistress of Lilongwe Girls Secondary School and two of her deputies.

However, owing to shortage of time (due to challenges discussed later in this paper), it was not possible to do the Small Group phase. As such, the results of this research are those from the Expert Review and One-on-One phases, and as it is, they suffice to adequately revise and improve the material for the Small Group phase. The pictures below show two of the participants during one of the sessions.

Mrs. A. Kaliu (Headmistress) in focus in this picture.

Mrs. E. Kamanga (one of the deputies) in focus in this picture.
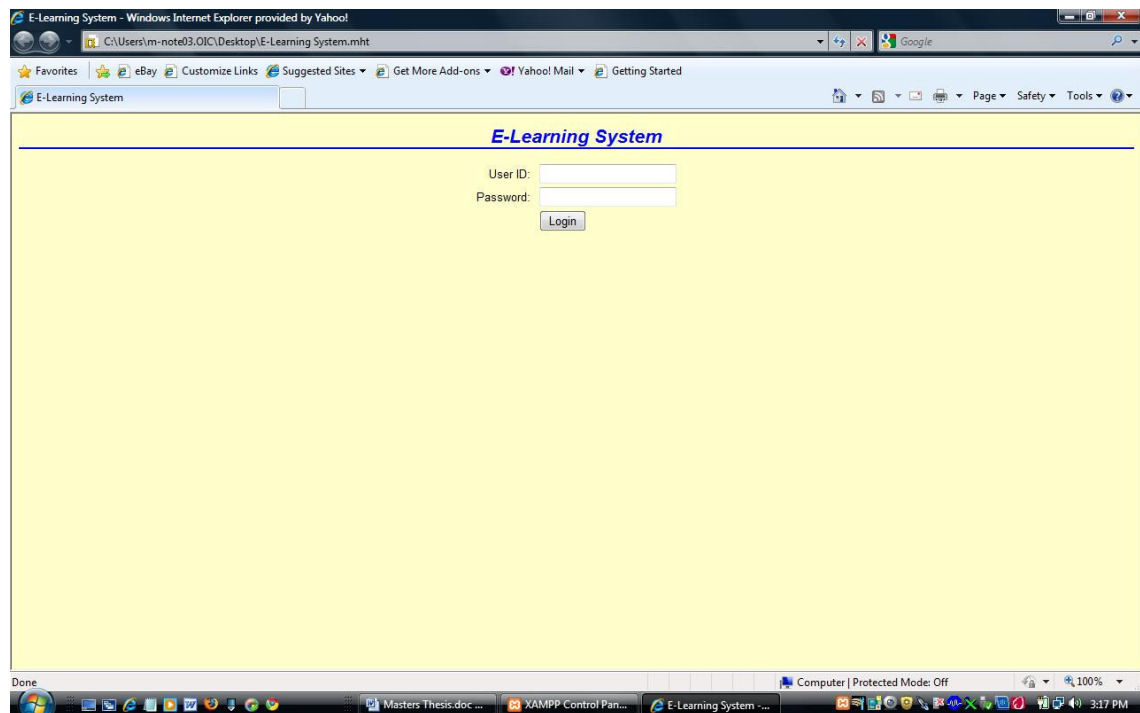
Login page of the e-Learning site.
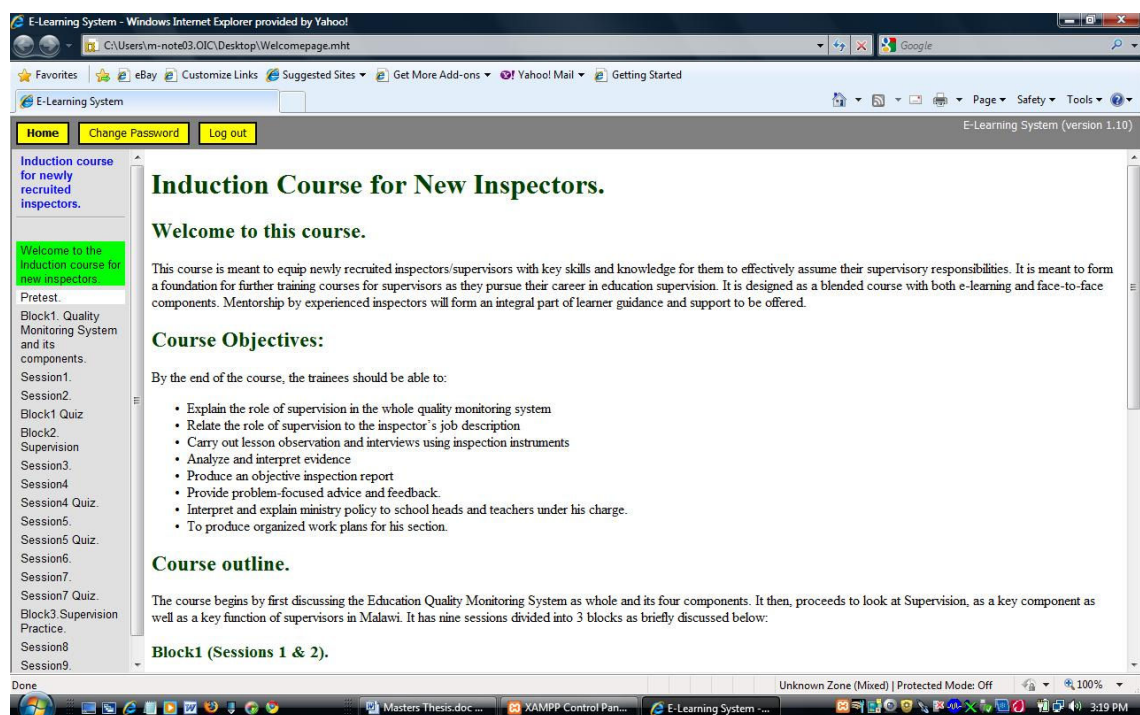
Sample content page with topics' outline in the left column and display of content in selected page.

A Descriptive Design was employed to analyze both the qualitative data from questionnaires and interviews as well as quantitative data from pre and post test scores of participants in the One-on-One phase.

The attainment of course objectives by participants of the One-on-One phase and the responses to the questionnaires that point to the ease of usability and understanding are the main indicators of the effectiveness and efficiency of the self-learning material as well as the blended learning mode of delivery.

The outcome of the analysis is to identify areas of the instructional material requiring revision and the possible nature of revision to be done.

3.5 Challenges that impacted on the planned methodology:

The major challenge was the absence of reliable internet connection. Most of the schools and offices are not reliably connected or not connected at all, but have computers. Hence, the use of local host servers installed on three computers of the school where participants work, and on the respective laptops of the two inspectors was one option adopted. The Local Area Network was later installed, enabling the participants to work online from any computer and be able to interact within the LAN.

The second challenge was electricity black-outs (power cuts), which could slow down participants' progress. At times, participants could lose their work which was not saved, and this could cause frustrations.

The other challenge, though not very serious, was participants' lack of basic computer operation skills and ability to access information from the Learning Site. This, was however, sorted out by taking them through the 'How to study' Manual.

Since the servers and LMS used by participants were not in the same LAN as that of the researcher, participants were required to always save copies of their work on the desktops of their computers from which it would be easy to retrieve and transfer into the researcher's server and LMS.

Chapter 4. Result of research:

This discussion will be done with respect to the three areas of focus for this research as indicated in Chapter 1, these being: the creation of an effective standardized induction course for school inspectors, the integration of a formalized mentorship component in the induction training package, and the use of the Blended Learning mode of delivery in the Malawian setting. These will be discussed based on the results of formative evaluation of the instructional material.

4.1. Creation of an effective standardized induction course for school inspectors:

4.1.1. Data relating to revision of content:

a.) As you may notice from the pre and posttest scores (appendix 1), results for both are available for only two participants. A posttest score for one (Kaliu) is missing. Taking into consideration the two only, the pretest and posttest averages of 6% and 57.5% respectively show quite significant gains in levels of attainment of the participants.

Also, a closer look at responses to questions for both tests shows that participants performed dismally in:

- Question 4 (on the role of supervision in relation to other components of the Education Quality Monitoring System – Session 2); and

-Question 5 (relating the job description to the 4 components – Session 3).

b.) The following quotes from participants and mentors' responses to the questionnaires depict what they feel are areas requiring revision and tend to shed more light on the nature of revision desired:

"The challenge to me was to differentiate supervision from inspection material. Another challenge was to link the role of supervision in the whole process of quality monitoring in relation to other components. All this was under the EQMS topic. The challenge was not that the material was difficult but rather the material was not fully developed. For example, the four components of the EQMS were not elaborated. I expected to learn more on issues of the national curriculum framework, the Testing and examination system and on Teacher in-service and pre-service training. So it was rather difficult to explain the role of supervision in relation to the whole monitoring system based on the four components of the EQMS." (Kaliu's response to Question 3, relating to Sessions 1 and 2.);

"*The session on provision of guidance and advice, I found it difficult to grasp some of the ideas which seemed to be closely related.*" (Kamanga's response to Question 3, relating to Session 6.); Mentor inspectors had this to say:

-Session 3:- Role of standards i.e., what are these standards? There is need at this point to introduce the criteria for standards to the trainees.

"Session 5-Essential task/activities of Supervision: Is this not the right time to introduce inspection/supervision instruments for collecting information for the trainees?

"-There is need to further describe the actual inspection and advisory processes for trainees to fully understand.

Hence, the following changes would be recommended:

a.) Instead of adding more content, it would be better to provide supplementary reading material on the four components of the Education Quality Monitoring System (Session1);

b.) More clarification of concepts using diagrams and illustrations/examples for content in Sessions 2 and 6;

c.) With regard to introduction of an outline of standards in Session 3, it could be desirable to do so. However, the session is meant to focus on the inspector's job description and help the trainee relate his job description to the four components of the EQMS. In so doing, the trainee will be able to see the scope of his work in a more applicative way in relation to the whole system. It is also expected that the standards are adequately presented in Session 8 during the study of supervision instruments, where they are not only discussed but actually put into practice during the supervision visit. This is still thought to be the best way to help the trainees familiarize themselves and gain more insight in the essence of the standards.

d.) With regard to content in Session 5, rather than introduce inspection instruments in this session (and not in Session 8), the best would be to rearrange the sessions by moving Session 5 content into Session 7 so that it precedes the discussion of instruments in Session 8. Session 6 can move to Session 5 and Session 7 can move to Session 6. This will still give a coherent discussion of Supervision and lead into the actual tasks of supervision and eventually into the instruments and practice.

With these changes, it should be possible to obtain a more coherent flow and more detail to the instructional material without having lengthy chunks of content for each session.

4.1.2. Data relating to duration of the course:

With regard to amount of time needed to study the course, the participants had the following to say:

"The appropriate duration for the course can be two weeks, working on it 3hours every day." (Chindenga);

"The course duration was to some extent not adequate. Of course it was coupled with a number of other challenges which made it difficult to complete the course within the specified duration. I would suggest a good two weeks with at least three hours without interruptions. Some of the parts which needed more time include the EQMS and on tasks to do with the supervision and inspection roles." (Kaliu); and

"The course duration was not adequate. An appropriate duration would be two weeks with study sessions every day. We needed more time for tasks where it required explanations." (Kamanga.)

The mentor inspectors had the following to say:

"If this is to be done as an initial part of the 'on-the-job' training package, then a minimum period of 2 to 3 months would be adequate to get the inspector trainee better equipped for practice." (Kayira); and

"May be 3 months i.e., including actual practical work like observing lessons, writing reports, e.t.c." (Mswayo).

The participants actually took four weeks to complete the course, owing to plenty of interruptions due to a wide range of reasons (i.e., pressure of work, frequent electricity black-outs, personal commitments, and etc.). The average work rate was *one hour* per day. As such, I find their suggestion of two weeks of uninterrupted study at a work rate of three hours a day as correct. However, it would do no harm to allow for four weeks maximum, since the circumstances under which this study was conducted represented the most realistic environment for the participants.

The opinions of the mentor inspectors were more inclined towards the more comprehensive and complete training package. The three months suggested would indeed be a good minimum for such an extended package. This kind of thinking is usually taking into account the average period for one complete school term in the Malawian school calendar, a minimum period for the trainee

inspector to have adequate practice and exposure to the reality of supervision activities on the ground. In this regard, the three months period really becomes a desirable minimum for the extended and comprehensive training package.

4.1.3. Possibility of an effective standardized induction course.

The significant gains in levels of attainment of the participants as shown by the pre and posttest average scores coupled with the successful identification of areas requiring revision show that a revised instructional material has a high possibility of yielding higher levels of attainment. As such, the instructional material provides a concrete opportunity for obtaining an effective standardized induction course for the inspectors.

4.2. Integration of a formalized mentorship component in the induction training package:

The fact that mentor inspectors were able to make such in-depth comments shows the extent to which they were able to follow the learning process and relate with the trainees' experiences with the instructional material. However, from my observation, the following needs to be done:

a.) There is still need to clarify the role of the mentor inspectors, as they displayed some measure of lacking certainty on the actual nature of mentorship to be offered in specific instances. In 'Discover E-Mentoring' by London Central Education Business Alliance, mentorship is defined as: 'A one to one, non-judgmental relationship in which an individual mentor voluntarily gives time to support and encourage another. This relationship is typically developed at a time of transition in the mentee's life, and lasts for a significant and sustained period of time.' A fair understanding of the implications of this definition can enhance mentoring performance of the mentor inspectors. Also, they needed more clarification on how to monitor trainee progress by using the Learning Site.

b.) Since the kind of mentorship desired is the one that also aims at promoting transfer of knowledge and skills to job performance, such clarification can also be enhanced by giving more consideration to the factors affecting performance as outlined in Mary Broad's article (pg433) mentioned above, in the design process of the instructional material. Mentor inspectors need to be well versed in issues relating to transfer of knowledge and skills to performance.

In view of the above, it could be more helpful to develop a supplementary material in form of a mentoring manual to provide guidance to the mentor inspectors, especially, taking into account the fact that the Blended Learning approach naturally demands the use of both face-to-face and e-mentoring approaches. But all in all, it has been quite enriching for them to be able to see the

trainees' responses to the pre and post tests as well as the questionnaires. This assisted them to see that it is possible to have a conscious and purposefully done mentorship.

4.3 Use of Blended Learning mode of delivery in the Malawian setting:

As noted in the preceding sections of this chapter, the blended learning did run successfully with LAN installation. What really was being investigated was the possibility of having the online component effectively used for such training processes to an average Malawian professional worker. With an initial f2f component that effectively focuses on basic IT skills and introduction of the learning site and course, it should be possible to offer such blended learning. Despite the non-availability of actual internet connection, Local Area Network is relatively affordable for institutions and offices. Installing a server and learning sites on the LAN would be enough to bring about the online aspect. Activities requiring interaction with those outside the LAN can form part of the f2f component.

Chapter 5. Conclusion:

5.1 Summary of findings:

The results of the pre and posttests show significant gains in the participants' levels of attainment, further confirming that the instructional material and the mode of delivery has some appreciable measure of effectiveness at delivering on the objectives of the course. Also, the one-on-one formative evaluation has effectively exposed areas of the instructional material that require revision as well as the nature of revision required.

The possibility of e-Learning with or without the internet has also been confirmed. With the use of Local Area Network, it is still possible to have a viable online component used in a Blended Learning mode.

More time is needed for a serious and well designed training package for newly recruited inspectors. One week workshops with no proper follow-up training do not allow for adequate preparation of the inspectors.

5.2 Limitations of this research:

Two major limitations arise for this research:

a.) Failure to conduct the Small Group phase denied the opportunity to identify more areas that would require refinement and result in the further improvement of the instructional material.

 b.) Mentorship tasks are not well clarified e.g., how the mentor inspector should monitor and evaluate performance of trainees. More work in mentorship design needs to be done to provide the mentor inspectors with an effective way of monitoring trainees' progress and providing effective mentorship.

5.3 Implications of the findings:

This material is the first of its kind in Malawi. As such it offers a number of new opportunities both for training of inspectors in particular, and corporate training in general. Despite the limitations, further revision and design of the instructional material for small group formative evaluation is possible. In this regard, it still remains crucial as a foundational course for a more comprehensive and complete training package for inspectors. For the first time, it is possible to work towards obtaining a standardized training arrangement for inspectors that uses a Blended

Learning approach, not only in Malawi but also in other developing countries where the traditional pessimism and fears at the mention of online education and training has been the order of the day. It is my hope that these findings have helped demystify e-Learning and dispel most of such usually exaggerated fears in my country.

Such a training package can also serve as a good example to be used in designing similar training packages tailor-made for other institutions/ work places in Malawi. The corporate sector in Malawi is yet to develop a culture where institutional tailor-made training arrangements are common, and mostly relies on training programs offered by external distance education/ training providers. The results of this research also provide hope for a new era where institutional tailor-made training programs can be created and established.

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Appendix 1. Participants' Pretest and Posttest scores:

Question and Name of participants	Pretest score	Posttest score
1. Define the Education Quality Monitoring System, outlining the key aspects of the definition. a.) Chindenga b.) Kaliu c.) Kamanga	10 marks 2 3 2	10 marks 7 ? 5
2. What are the four components of the Education Quality Monitoring System? a.) Chindenga b.) Kaliu c.) Kamanga	4 marks 1 1 1	4 marks 4 ? 4
3. What is Supervision? a.) Chindenga b.) Kaliu c.) Kamanga	4 marks 0 0 0	4 marks 3 ? 2
4. Explain the role of supervision in the whole quality monitoring system in relation to the other components. a.) Chindenga b.) Kaliu c.) Kamanga	10 marks 1 1 0	10 marks 3 ? 0
5. Mention at least one example of the tasks in the supervisor's job description under each of the four components of the Education Quality Monitoring System. a.) Chindenga b.) Kaliu	10 marks 0 2	10 marks 4 ?

c.) Kamanga	1	3
6. Mention any five instruments used in supervision visits. a.) Chindenga b.) Kaliu c.) Kamanga	5 marks 0 0 0	5 marks 5 ? 5
7. Explain how any three of the instruments mentioned above are used for collecting and/or processing data (also specify the kind of data they are used to collect). a.) Chindenga b.) Kaliu c.) Kamanga	15 marks 0 0 0	15 marks 9 ? 13
Final Score: a.) Chindenga b.) Kaliu c.) Kamanga	6% 12% 6%	60% ? 55%

Appendix 2. Participants' Questionnaire responses:

Question	Chindenga	Kaliu	Kamanga
1. What did you find 'good' about the material in general?	(a) It has equipped me with new knowledge and skills as an Inspector. (b) The material is clear and well understood.	It is the presentation of the course content; I really liked and enjoyed reading through the modules. The material in general was very relevant to my job.	The course Material was well arranged for a student to follow. For each session objectives were stipulated, definitions were clear and concluding remarks gave a very good summary.
2. What did you find 'not good' about the material in general?	Nothing, everything was well explained.	Honestly there is nothing that I found to be not good. The material was just good.	I failed to access the page on the internet which derailed my speed in carrying out the tasks.
3. What was difficult to understand in the material (mention the topic/sub topic, and explain the kind of difficulty you faced)?	As explained above, the material was well explained, and I did not have problems in understanding it.	The challenge to me was to differentiate supervision from inspection material. Another challenge was to link the role of supervision in the whole process of quality monitoring in relation to other components. All this was under the EQMS topic. The challenge was not that the material was difficult but rather the material was not fully developed. For example, the four components of the EQMS were not elaborated. I expected to learn more on issues of the	The session on provision of guidance and advice. I found it difficult to grasp some of the ideas which seemed to be closely related.

		national curriculum framework, the Testing and examination system and on Teacher in-service and pre-service training. So it was rather difficult to explain the role of supervision in relation to the whole monitoring system based on the four components of the EQMS.	
4. What was easy to understand in the material? (mention the topic/subtopic and explain what was easy about it)	Almost every topic was easy to understand provided you give yourself enough time read and understand the material properly.	What I found easy to understand was the topic on Supervision tools and Instruments. I found the topic easy because it was very interesting and relevant to my work. In addition the presentation of the material was just very good. For example, the three categories of the supervision tools and instruments and their examples were well presented and explained. This is what made the material easy to understand.	It was very easy to understand job description of the Supervisor or Inspector. Points are listed. There was no need to read through many times.
5. What must be added/ subtracted from the material? (What do you consider irrelevant, repetitive or obvious	Nothing should be subtracted on the material but what is needed is the implementation of all these aspects on the	What I feel must be added is material on the components of the EQMS. I would suggest that the four components of	I feel the pre-test should be subtracted because it made me think I would not manage handling the tasks ahead of

information to you?)	ground so that education standards should really improve.	the EQMS mentioned should be elaborated in relation to the quality monitoring system. I would also suggest that the role of the supervisor should be defined and be differentiated from that of an inspector in detail. Otherwise there is no information I found to be irrelevant, repetitive or obvious.	me.
6. What problems (if any) did you experience with navigation (accessing content) through the learning site?	These include, power problems sometimes and the problem with the server.	There were two major problems I experienced with navigation. Firstly was the challenge in accessing the internet. The page could not be displayed when I needed it most. Secondly, frequent black outs negatively affected my pace of working.	I Experienced power failure in some cases which led to loss of work done if not saved. In other cases the page could not be accessed on the internet.
7. Was the course duration adequate for you? If not, suggest an appropriate duration. Also, point out which parts of the content required more time.	The appropriate duration for the course can be two weeks, working on it 3hours every day	The course duration was to some extent not adequate. Of course it was coupled with a number of other challenges which made it difficult to complete the course within the specified duration. I would suggest a good two weeks	The course duration was not adequate. An appropriate duration would be two weeks with study sessions every day. We needed more time for tasks where it required. explanations

		with at least three hours without interruptions. Some of the parts which needed more time include the EQMS and on tasks to do with the supervision and inspection roles.	
8. Any other comments?	(a) Feed back has to given so that we can see the way we have performed in this e-learning. (b) Supervision has to be done now and again so that standards should really improve. (c) Schools should be given all the necessary materials for better teaching. (d) In- service courses have to be given to teachers every time.	I personally found the course very educative and inspiring. It is a rewarding course and it is very relevant to my job. The course content was also very good. However the challenge was on the inadequate time to do the actual supervision in the classroom in order to have a hands-on experience with the supervision tools and instruments.	In future sensitizing participants on what the course requires and may be agree on time frame would be good. On the whole I enjoyed participating in the exercise it has been an eye opener.

Appendix 3. Questionnaire responses for mentor inspectors:

Question	Kayira	Mswayo
1. What did you find 'good' about the material in general?	```-Quizzes are relevant to the content trainees have gone through, and consolidates what the trainees have learnt. -Lay out of the sessions is very good. Each part is numbered; starts with objectives then discusses content for each session. -Sessions 3 and 6 are brief, but the assignments, once done, expand the sessions and enrich the trainees' understanding.```	```The material in general is easy to follow. It has been portioned in brief presentations which makes studying easy and at the end of either one or two there are quizzes which make reflecting on the material much easier.```
2. What did you find 'not good' about the material in general?	```-Need to include gender neutral pronouns instead of only 'he'; but 'he/she'. -Need to make some changes in sentence construction as well as correct some typing errors. -Need to give a brief definition of the key terms: inspector/supervisor and/or inspection/supervision in the Welcome page so that the trainee should and initial understand of the terms, which help him/her follow the discussion in the material more easily.```	```Really "not good" but need to add some diagrammatic presentations for easy comprehension and breaking monotony in some areas. e.g., how supervision feeds into improvement of the education system.```
3. What parts of the content did you find factually or conceptually incorrect. Also suggest a more correct version of each of the identified	```Not necessarily 'incorrect', but the following improvements are suggested: -Session5 (Supervision). Is this not the right time to introduce inspection/supervision instruments for collecting information for the trainees?```	```Just need to make distinct difference between inspection, supervision and advisory.```

parts.	-Session7 Quiz: - If option or alternative is not a full sentence, avoid putting a full stop at the end, unless it is a completion type of question. -For uniformity, you might also have come up with five questions in sessioon7 quiz. -Session 8:- Abbreviation for READ = Record of Evidence and Analysis (not Assessment) Document.	
4. What parts of the content did you find factually and conceptually correct and insightful?	Almost all the content is factually correct and really insightful. But there is need to add more content and also reorganize it in some parts as suggested.	Generally all areas are factually and conceptually correct and insightful especially on the essential tasks/ activities of supervision.
5. What must be added/ subtracted from the material? (What do you consider irrelevant, repetitive or obvious information to you?)	-There is need to further describe the actual inspection and advisory processes for trainees to fully understand. -Session3:- Role of standards i.e., what are these standards? There is need at this point to introduce the criteria for standards to the trainees. -May be follow up activities should be discussed in the last sessions after you discuss supervision processes and instruments. Then follow up as indicated i.e., advisory and in-service training (workshops). -In the Welcome page's conclusion; the phrase 'keeping standards' is too choroqial. You may change to 'maintenance of standards.' -References: Add more to make your work more credible, and indicate place of publication for the Instructional	May add an issue on types of inspections commonly carried out and approaches to supervision, but also hints on report writing.

	Handbook (Lilongwe), as well as making sure that the references are in alphabetical order. -Session2: Need for more information under the discussion of the 4 components, so that the trainees can easily see their interrelationships. Also after the passage "Subsequent in-service training and education is also organized in order to ensure continuity in the teachers' capacity building so that at all times....." there is need for more information regarding how this done. The other way to achieve this would be to refer the trainees to some other materials for further reading which provide more information on the concerned portion of content.	
6. In what parts of the content did the trainees seek more guidance from you as a mentor? Suggest possible improvements for self-learning support.	-Having introduced the inspection and advisory processes in Session5, it would be better to briefly outline the steps/processes of inspection/supervision and advisory before they practice with mentor inspectors.	Suggestion: May add a brief component of face to face, possibly 1 week.
7. Did you find any difficulties with navigation (accessing the content) through the learning site? Please List them and suggest possible improvements.	No problem with accessing content pages. The learning flow is good and navigating through the content does not require special skills.	No difficulties, the process is so simplified and easy to follow and get through.
8. Any suggestions for learner motivation	-Maybe include some pictorial/ diagrammatic	Inclusion of diagrams for some

in the material?	information, just to break the monotony of text. Otherwise, the content layout is good enough. Also, the quiz instant feedback 'pop-ups' have a 'psychological uplifting' effect on the trainee, hence, could be considered a good aspect of motivation.	explanations
9. Any suggestions about course duration?	If this is to be done as an initial part of the 'on-the-job' training package, then a minimum period of 2 to 3 months would be adequate to get the inspector trainee better equipped for practice.	May be 3 months i.e., including actual practical work like observing lessons, writing reports, e.t.c.
10. Any other comments and observations?	Your content is well developed. It flows well and is easy for inspector/supervisor trainees to follow and comprehend (the content). It can professionally equip them.	None

Pictures of men used in the LAN installation at Lilongwe Girls Secondary School.

Peter.

Abisai