Abstract

Adult Basic Education and Training in-service training for educators often fails to enhance job performance because it is not viewed as an experiential process involving factors that affects ABET educators before, during and after training. To seek an overview of longer term gain from the in-service training, the Kirkpatrick model of training evaluation was employed. The evaluation sought to obtain post training perception of the effectiveness of training and its longer term impact. This article explores the variables that affect the transfer of knowledge in in-service training of basic education educators. Based on the experiences of the author as adult educator and the review of the relevant available literature this article assessed factors that accelerate or impede transfer of learning. To circumvent these factors, this study recommends intervention mechanisms, namely, involving ABET educators in the planning of their in-service training, basing training on careful assessment of educators’ needs, using work-related situations in training, providing support during training and evaluating the in-service training, among others.

Introduction

Transfer is best defined in terms of preparation for future learning (Bransford and Schwartz (1999). Transfer of learning refers to the effective and continuing knowledge and skills gained in both on and off-the job training by trainees to their job (Baldwin and Ford (1988), Broad and Newstrom (1992), Harris (2000), Salas and Cannon-Bowers (2001). According to Mestre (2005), the concept of transfer of learning has engendered considerable debates. Transfer is deemed to be positive if acquisition and performance are facilitated, and negative if they are
impeded (Cormier and Hagman 1987; Marini and Genereux 1995). Measures of performance following many training and other interventions have shown very low levels of payoff, only 10 to 30 per cent of desired performance levels, according to several experts (Broad 2005:1). In his view, Mestre (2005) argues that the problem in proving transfer is connected to the narrow and reductionist definition it is given and if a more generalist approach is adopted and less emphasis given to the stimulus generalisation view, then the identification of transfer would be less problematic. When the trainee, in this case, ABET educator, is not able to demonstrate on the job what he or she has learned, the trainer tends to retrace the route of the cause to where the training started. Seldom do in-service trainers evaluate the amount of knowledge acquired in training. Although little research has been conducted in the transfer of learning in the in-service training of ABET educators, much has been learned from in-service training in the South African formal school sector. This paper integrates information from the flaws of in-service training in the formal schools of South Africa and the experiences of in-service trainer in the in-service training of ABET educator.

**Literature review**

One of the earlier reviews on learning transfer was provided by Baldwin and Ford (1988:68). They used a conceptual model that focused on training inputs, outputs and the condition of transfer. Training inputs included:

- Trainee characteristics (ability, personality and motivations)
- Training design (principle of learning, sequencing and training content)
- Training outputs included learning and retention.

In terms of trainee characteristics, Baldwin and Ford (1988:91) maintained that studies are needed in which personality or ability are measured and individuals placed into training programmes under different conditions of instructional methodology to determine which types of individuals best match which types of programmes for effective transfer of skills to the job. In the area of training design, there is a need to explore the type and level of fidelity needed to maximize transfer given time and resource constraints (Baldwin and Ford 1988:87). In this case, using diverse styles and situations is vital for transfer of learning to occur. Work environment requires the operationalization of a key variable such as supervisory support. Supervisory support can help or impede the transfer of training (Baldwin and Ford 1988:92). Even though the work of Baldwin and Ford (1988) identified factors affecting transfer of training, their model failed to show how activities for enhancing transfer can be effectively performed.

After conducting their review in transfer, Salas and Cannon-Bowers (2001) are fairly specific in their conclusion:

- The organizational learning environment can be reliably measured and varies in meaningful ways across organizations.
- The context of training is important as it sets motivation, expectation and attitudes for transfer.
- The transfer ‘climate’ can have a positive impact on the extent to which newly acquired knowledge; skills and attitude are used on the job.
Trainees need an opportunity to perform.
Delays between training and actual use on the job create significant skills decay.
Situational cues and consequences predict the extent to which transfer occur.
Social, peer, subordinate and supervisor support all play a central role in transfer.
Team leaders can shape the degree of transfer through reinforcement of transfer activities.
Training transfer differs depending on the type of training and closeness of supervision.

Salas and Cannon-Bowers (2001) recommend increased attention to vertical transfer, for instance, the extent to which learning outcomes at the individual level influence higher-level outcomes such as organizational effectiveness. In this case, trainers are expected to ensure that skills acquired during training are applied in the workplace. If this does not happen, then there will be no positive impact of training. Transfer of learning is the extent to which skills, knowledge, attitude (SKAs) acquired in training programme are applied, generalized and maintained over some time in the job environment. The following have been identified as techniques for increasing the transfer of learning:

- Participants should be actively involved in planning the training programme
- Develop a written contract between trainee and supervisor
- Use realistic work-related situations
- Facilitate trainee participation
- Arrange refresher sessions
- Support training (Harris 2000:358-359).

Transfer of learning researchers like Holton (1996); Bates, Holton and Seyler (1997) and Harris, (2000), focus on experiential learning as a means to enhance transfer of learning to performance. There is a wide acknowledgement that training does not always transfer to the job. For instance, Phillips, Jones and Schmidt (2000) assert that learning does not transfer to the job in 90 per cent of cases. The next section discusses factors that impede the effectiveness of the transfer of learning in the in-service training.

Factors that impede the effectiveness of transfer of learning

One of the biggest problems associated with in-service training programmes for adult educators is the lack of transfer of learning. The issue of the type of learning that is transferable to the job is a most perplexing one for every single development programme (Schutte and McLennan 2001:49). Very often what is learnt in a training session faces resistance back on the job. Such resistance is given prominence in the Penryn Outreach Teacher Training programme’s report from the Mpumalanga Province in South Africa, where Mateme (2001:38) found that when teachers went back to school to try and implement what they had learnt, (in training) they met with resistance from the principals. Researchers have found that people who experience lack of support have more stress-related physical and psychological symptoms than those with support (Chaplain 2001:208; Cooper, Dewe and O’Driscoll 2001:143; Hawe, Tuck, Manthei, Adair and
Moore 2000:203; Rout and Rout 2002:52-55; van Dick and Wagner 2001:258). This implies that for in-service training to be effective principals of ABET centres (centre managers) and colleagues should support educators who have attended the in-service training.

Sullivan, Brenchin and Lacoste (1999:156), in evaluating the Health Training Intervention in Zimbabwe, noted the following about the transfer of learning. Although the individuals who attended the group-based training course demonstrated mastery of clinical skills during training, they did not always use these skills in providing services to the clients at their work site. The following are the three key reasons why transfer of learning frequently fails to take place:

- Lack of support for use of the new competencies on the job
- Trainees are uncomfortable with using new competencies
- Trainees perceive training programmes to be impractical or irrelevant (Harris 2000:358).

Similarly, the evaluation of the Media in Education Trust (MiET) training in the Benoni/Brakpan Teaching and Learning Unit by Potenza (1999:234) revealed that the cascade model was not an effective way of training educators for the following reasons:

- Many educators who received training were not given sufficient time to train the staff back at their schools. In several schools these educators were only given time to report back on the training during break;
- Principals and HODs were generally not involved as trainers, hence, the management of most schools did not provide the necessary support required to cascade the model at school level effectively;
- Many teachers who were trained by the district indicated that they felt confident to deliver sessions at their schools. However, when district staff visited schools to observe them training the rest of the staff, they were often disappointed at the poor quality of training presented; and
- Most presenters and teachers felt that the session on assessment was extremely weak and created a lot of anxiety and confusion (Potenza 1999:234).

The literature presented so far underlies the problematic nature of the transfer of learning, an issue that deserves priority in the in-service training of ABET educators. The concept of learning transfer is an important principle in the in-service training. Again, if the assertion made by Phillips et al. (2000) holds that learning does not transfer to the job in the vast majority of cases, then there is much work to be done. The North West Department of Education has invested in the in-service training to help ABET educators to achieve the highest learning possible. But if these educators do not apply their learnt skills at their work sites, then it would lead to a negative impact or ineffectiveness of these training programmes. Making training work is all about being sure that learning drives performance, since it is performance, not just capability that contributes the most to impact from training (Brinkerhoff and Apking 2001:17).

Successful large-scale change begins with a shared assessment of the problem by power-groups and stakeholders, and the identification of specific challenges associated with the change effort (Joyner 1998:864). This implies that in deciding to use in-service training to introduce major innovations in the Department of Education, ABET educators should not be neglected in the designing of the training programmes. Trainees need to be included in what may be referred to as management of his/her professional growth (Miles 1998:62).

The literature consulted confirms that in most in-service training programmes, transfer of learning in training fails because organizational objectives are not clearly formulated, training programmes are not evaluated and skills, knowledge, attitudes and behaviour change apparently
do not form part of the training. In order to deal with the people aspect of learning situations as well as its task and role related aspects, the possession of appropriate and relevant knowledge and skills on the part of the trainers involved, will guarantee effective training and transfer (Analoui 1994:142).

**Guidelines for conducting effective in-service training**

At the final stage in the training process one has to find out how effective the training has been. The term ‘effective training’ implies that whatever knowledge and skills have been acquired in a learning situation should, totally without any loss, be deployed to the actual work situation (Wills 1993). Research has shown that activities that occur prior to training have an impact on how effective training turns out to be (Salas et al. 2001:7). These activities fall into three general categories: firstly, what trainees bring to the training setting; secondly, the variables that engage the trainee to learn and participate in developmental activities; and thirdly how training can be prepared to maximize the beneficial impact of the learning experience. The development of a training programme should therefore not occur in isolation from the ABET educators.

The following are key guidelines that underpin the success of in-service training:

- In-service training activities must be based on a careful assessment of the actual and perceived needs of the participants.
- In-service training goals and outcomes must be clearly specified.
- The design of objectives must be specified and linked to the in-service training outcomes.
- Specific in-service training activities must be designed to meet the identified objectives.
- In-service training facilitators must blend traditional and emerging views of professional development as they plan in-service activities.
- In-service training must consider group size, time and group composition as factors related to in-service outcomes.
- Consultation-based technical assistance that addresses support relative to the transfer of knowledge and skills should be considered.
- Model sites must be used for in-service training purpose to demonstrate best practice or concepts being taught in in-service activities.

The above guidelines imply that before engaging in training, it is important to consider what the in-service training is expected to achieve, what kinds of people will be the most effective trainers, and whether training needs (i.e. uninformed, unskilled state) of the ABET educators are considered a threat to the optimal performance of the in-service training programme. Once these needs have been identified, activities need to be properly planned to support teachers in applying the knowledge and teaching methodology creatively and confidently (Anderson 2001:1).

For in-service trainers to achieve application and problem solving based on assimilation
of newly acquired skills into the repertoires of ABET educators, the in-service trainers have to consider the following pedagogical elements:

- Presentation: formal communication of information and theory
- Modelling: watching demonstration
- Simulated practice: trying out new skills in controlled conditions
- Feedback: discussion and reflection on outcomes of the above
- Coaching for application: classroom support while practicing the new skill on the job (Harvey 1999:597).

Consonant with the guidelines offered by Malone et al. (2000), Harvey (1999:57) notes that for in-service trainers to achieve significant and successful training they also need to be knowledgeable enough to impart theory during their presentation. However, theory alone is insufficient, as it has to be coupled with practical skills. Thus, the in-service trainers have to demonstrate what the educators need to transfer when they go back at their work sites.

After exploring the literature on the cascading model of training, More (2004) devised an idealized framework for cascade training. This model suggests that the training needs analysis should precede any attempt at making use of the training model. The analysis cited here refers to the pre-training requisites should be properly taken care of in good time before the actual training commences. The actual training could benefit from co-facilitation, with one facilitator concentrating on the actual facilitation and another taking care of aspects that will form either training validation or the consolidation thereof towards the end of every training level. Where one facilitator is involved, his/her cognitive abilities should be such that they will produce the expected results. The cognitive analysis is critical here, since it suggests that the knowledge and skills the trainer possesses are first assessed before he/she can conduct training. Lapidus (2000:17-27) contends that well designed programmes often fail because lessons learnt are not used and are soon forgotten. To help curb this problem the time between the cascading tiers should be constantly gauged after every step in the cascade process to establish the usefulness of the suggested breaks (More 2004).

The challenge facing the in-service trainers is to grant them the opportunity to do class visits in order to be able to identify problems and frustration that ABET educators experience when implementing the changes that the in-service trainers have taken them through. It is suggested that relapse prevention strategies should be developed and be informed by observed practice and a detailed but brief empirical assessment procedure which is made part of training (More 2004). An agreed-upon time for intervention with post-training strategies should also inform part of such interventions. Where consultants are involved, a certain amount of contract settlement (retention fee) will have to be retained (as per contract agreement) until the post-training strategies have been conducted (More 2004:92-93).

In order to identify appropriate training outcomes, the ABET sector needs to measure changes in knowledge, skills, behaviour and attitudes of trainees as suggested by Bramley (1997:39-52). All the in-service trainers need to receive constant feedback from the educators and both the trainers and the trainees need to reflect on the outcomes of the training. Positive instances of in-service training can be found which remedy such deficiencies, that is to say, whether the training has achieved the set goals and objectives. Follow-up is vital in every activity. Therefore, the need for in-service trainers to conduct follow-up cannot be overemphasized. This follow-up
activity has to be done in the form of classroom support. Thus, in-service training will now be recognized as one of the best ways to assist teachers (educators) to effect these educational changes in their schools (centres) (Boulton-Lewis & Smith 2001:1-2).

To remedy the ineffectiveness of the cascade model, Mwirotsi, Herriot, Waudo, Crooley and Osborn (1997:7) in exploring the training of head teachers in Kenya, indicated that head teachers’ explicit intention was to reduce dilution in training and weaknesses in monitoring by employing a strengthened cascade system which led to decentralization of responsibilities and an ability to self-regulate the process. Further, the mode of training was not transmissive but experiential and reflective:

• At every cascade level as part of the training process, daily sessions on reflection were included.
• Trainers were required to consider the relevance of what they learned and to think how best their new found knowledge, skills and competences could be adapted and applied to their own local situation as they listened to and reflected on other views (Mwirotsi et al. 1997:8).

For effective cascading of knowledge and skills, Swanepoel et al. (2000:507) suggests that trainers must take note of the following:

• Scepticism (the extent to which the trainee exhibits a questioning attitude and demands logic, evidence and examples).
• Resistance to change (the extent to which the trainees the process of moving into the unknown or the effect that this may have in him/her).
• Attention span (the length of time a trainee can pay requires from the attention before attention wanes).
• Expectation level (the quality and quantity of training that the trainee requires from the trainers).
• Topical interest (the degree to which the trainee can be expected to have personal (job relevant) interest in the topic).
• Self-confidence (the degree to which the trainee independently and positively view him/herself).
• The results (determining the trainee for feedback, reinforcement and success experiences).

Jacobs (2002:181) suggests that the cascade model of training should achieve the following goals:

• Address the respective competence needs of the employees affected by the change, including the use of awareness, managerial and technical training.
• Use of an array of training approaches that are best suited to meet those needs, including both training conducted on the job and off the job.
• Be coordinated so that the training outcomes of one group are reconciled with the training outcomes of other groups.

It is not the cascade model per se which the problem is, but the manner in which it is often implemented (Hayes 2000:138). The cascade model of training still remains the dominant training model used by the North West Province Department of Education (Frame 2003:17;
Chisholm 2004:45). Literature suggests that for effective functioning of the cascade model of training, the training must be experiential in nature with maximum participation of trainees. For effective in-service training for ABET educators, Hagreaves (2004:2) suggests that the support systems that educators most require are: support systems for training, mentoring, time and dialogue which are so essential to successful change management. Nevertheless, in coming to terms with learning, it is imperative for trainers to understand the difference between outcomes and processes. Megginson et al., (1999:55) postulate that the intended outcomes can be categorized in terms of learning:

- How to do things well—this is sometimes described as vertical learning.
- What a person can already do, better, differently or to higher standards- This can also be described as vertical learning, because a person would be increasing his or her capability in an area in which a certain level of competence already existed.
- Something new, which is different from a person’s existing capabilities—this can be understood as horizontal learning because the person would be extending his or her capabilities into new areas.

This section highlighted that for effective in-service training, the first step is to identify the training needs, the second step is to analyse the issue that can influence the new skills and the third step is to evaluate the training to ensure that sufficient resources have been applied in the implementation of the training programme. The next section highlights adult education theory and discusses its utilization in the transfer of training purposes.

**Conclusion**

This article has introduced the concept of transfer and identified some of the key issues relating to understanding the process. It also recognizes the transfer problems in the in-service training. Identification of factors that serve to facilitate or impede the effectiveness of transfer of learning in most in-service training has been done. It also looked at the training approaches that could enhance the transfer of learning in ABET educator in-service training. Training approaches cover a wide variety from which a selection must be made. It is also essential that any training approach selected should suit the content and aim of training.

**References**


