UNDERSTANDING THE TRANSFER OF TRAINING AND THE BARRIERS TO TRANSFER: A CASE STUDY IN A PRIVATE INSTITUTION

NG CHIAH YEE

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UNDERSTANDING THE TRANSFER OF TRAINING AND THE BARRIERS TO TRANSFER: A CASE STUDY IN A PRIVATE INSTITUTION

By

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Thesis Submitted in Fulfilment of the Requirement for the Degree of Master of Science in the Faculty of Educational Studies
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The purpose of this study is to examine the transfer of training and its relationship with Trainees’ Characteristic, Programme Design and Organization Support in skills transfer, using two evaluation methods: self-rating and end result measurement. The barriers of training transfer faced by programme participants were also studied. In addition, a comparison of mean differences was carried out on self-rating and end result evaluation method. A total of 52 middle managerial staffs both academic and non-academic from INTI COLLEGE, Nilai were selected using stratified random sampling techniques. These respondents participated in computer skill-training programmes, namely MS Word, MS Excel, MS PowerPoint and Internet conducted by the college in year 2000.

Data was collected using self-administered survey questionnaire. Responses were analyzed using Statistical Package for Social Science (SPSS). Measures of Central Tendency, Standard Deviation and frequency were used for descriptive analysis while Person Product-moment Correlation Coefficient (r) was used to determine the relationship of the variables. Analysis of Paired-samples T-Test was
used to determine the differences between the level of transfer of training using self-rating skill method and the end result measurement.

The results of the study revealed that majority of respondents experienced high level of skills transfer for both the self-rating and end result evaluation method. When comparing the courses individually, study shows no significant different between the mean of self-rating and end result for MS Word \((t=0.035, p=0.974)\), MS Excel \((t=1.058, p=0.331)\) and Internet \((t=0.244, p=0.817)\) at 0.05 level of significant. Study found that there is a significant different between the two methods for MS PowerPoint \((t=3.684, p=0.001)\). This finding implies that both the methods could be used to measure skills transfer of training for MS Word, MS Excel and Internet programme. However, end result method would be more appropriate to measure skills transfer for MS PowerPoint as compare to the self rating method. Even though the study showed high level of transfer in the staffs’ computer skills training programme, barriers were found to exist from the programme participants, programme design and organization that inhibit transfer.

The study as a whole revealed that transfer of training was important to determine the effectiveness of training programme. The success of training was found to rely heavily on trainees’ characteristic. Therefore, it is recommended that future studies should examine the roles and types of positive characteristics that would encourage transfer. For training transfer methodology, the study recommended self-rating method to be used in self-administered survey studies, while end result method to be used in classroom setting to evaluate immediate transfer. If end result method is chosen, it is recommended that incentives should be given to the respondents for encouraging their participation in the survey.
Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sains

MEMAHAMI PEMINDAHAN LATIHAN DAN RINTANGAN PEMINDAHAN: KAJIAN KES DI SEBUAH INSTITUSI SWASTA

Oleh
NG CHIAH YEE
Julai 2001

Pengerusi: Dr. Shamsuddin Ahmad
Fakulti: Pengajian Pendidikan


Data dikumpul dengan menggunakan borang soal selidik. Dapatan kajian dianalisis dengan programme SPSS. Kaedah Pengukuran Memusat (MCT), sisihan piawai dan frekuensi digunakan untuk menghuraikan analisis diskriptif, manakala Ujian Pekali Korelasi Pearson digunakan untuk melihat perkaitan antara angkubah terpilih. Analisis Paired-samples T-Test pula digunakan untuk melihat perbezaan min antara kaedah penilaian kendiri dengan kaedah penilaian hasil kajian.
Dapatan kajian menunjukkan kebanyakan responden kajian mengalami pemindahan kemahiran pada tahap yang tinggi dalam kaedah penilaian kendiri dan penilaian hasil kajian. Apabila perbandingan antara khusus dijalankan secara berasingan, kajian mendapati tiada perbezaan signifikan antara min kaedah penilaian kendiri dengan min kaedah penilaian hasil kajian untuk kursus MS Word \( t=0.035, p=0.974 \), MS Excel \( t=1.058, p=0.331 \) dan Internet \( t=0.244, p=0.817 \) pada tahap signifikan 0.05. Kajian juga mendapati wujudnya perbezaan signifikan antara kedua-dua kaedah ini untuk MS PowerPoint \( t=3.684, p=0.001 \). Hasil kajian dapat menyimpulkan bahawa kedua-dua kaedah penilaian adalah sesuai digunakan untuk mengukur pemindahan kemahiran khasnya untuk kursus MS Word, MS Excel dan Internet. Walau bagaimanapun, kaedah penilaian hasil kajian adalah lebih sesuai digunakan untuk mengukur pemindahan latihan untuk kursus MS PowerPoint. Walaupun pemindahan latihan kursus latihan komputer untuk kajian institusi berada pada tahap tinggi, tetapi masih terdapat rintangan yang wujud di kalangan peserta kursus, rekabentuk latihan dan organisasi yang telah menghalang pemindahan.

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Love, Chiah Yee.
I certify that an Examination Committee met on 11th July 2001 to conduct the final examination of Ng Chiah Yee on her Master thesis entitled “Understanding the Transfer of Training and the Barriers to Transfer: A Case Study in a Private Institution” in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulations 1981. The Committee recommends that the candidate be awarded the relevant degree. Members of the Examination Committee are as follows:

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Date: 08 NOV 2001
DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

NG CHIAH YEE

Date: 20/9/2001
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CHAPTER I
INTRODUCTION

Background of the Study

Education and manpower training have an important and significant impact in developing a component and productive workforce. Moreover, in the midst of rapid development, the concept of quality and excellence for both the workforce and the products have been highlighted to support and sustain the nation’s development. Therefore, training and development in organization would be the key factor in affecting Malaysia’s economy.

Striving towards globalization and technological advancement has been a critical issue to maintain and sustain the quality of the workforce market. To be a fully developed nation by the year 2020, a truly discipline workforce is needed where they need to be fully equipped with not only knowledge and professional skills, but also rightly infused with good professional values, attitudes and work ethics (Sulaiman, 1992). This is clearly highlighted in one of the speeches of Prime Minister, Datuk Seri Dr Mahathir Mohamad (cited in Mohd. Mansor, 1992; p.14) which stated, “Manpower plans should address skills shortages, staffing needs, career development, attitude change and productivity. Emphasis should be on building the level of professionalism and enhancing the quality of the labor force”.

The nation is not only striving hard to produce more skilled manpower to meet the future demand, yet the quality of the workforce need to be monitored as well. It is truly important for a developed nation to excel the workforce in both quality and
quantity forces to be competitive in global market. Leo (1992, p.59) puts quality workforce as a “function of various interacting forces in which education, training and utilization of human potentials play a dominant role”. While Malaysia’s Prime Minister (cited in Leo, 1992; p.59) highlighted the criteria for quality workforce as:

...productive and disciplined, ...forward looking and equipped for their changing tasks, ...devoted to know-how and knowledge upgrading and self improvement, ... and ...skillful, talented, creative ...have high standards with regard to their management abilities, language competencies, achievement motivation, attitudes towards excellence and to their entrepreneurial spirit ...

Since the nation demand for a more workforce that excels in both quantity and quality, the training could play a role in human development practices.

**Manpower Development Through Training**

One of the greatest challenges for Malaysia to maintain and enhance the momentum of growth is the human resource development. As the country is moving towards industrialization to attain vision 2020, the demand for trained manpower will certainly be in a critical stage. The country needs to work out a systematic policy with education and manpower training in order to meet the nation’s demand in producing quality workforce to face the near future (Fong Chan Onn, 1992).

Training has always been an important and integral part in manpower development. The training function is no longer an extra operation, which is viewed as costly fund, but instead to be part of the system, which contributes to the organization’s mission. With a comprehensive, appropriate and well-planned training practices, it will bring out the best of the employee and further enhances and ensures the profitability prospects, quality and market share growth of the organization (Svenson & Rinderer, 1992). When training is well designed, it gives individual
opportunities to enter job market with needed skills, to perform new functions, and to be promoted into new situations (Goldstein, 1989).

According to Brood and Newstorm (1992), training consists of instructional experiences provided primarily by employers to employees, which is designed to develop new skills and knowledge that are expected to be applied immediately upon returning to the job. Within the framework of organizational goals, training is one of the management tool used to develop the efficiency of an essential organizational resources, which is the people (Rashid, 1992).

**Training Effectiveness**

An evaluation on training programme's effectiveness is critical (Goldstein, 1986). Without documentations of the training effectiveness, it will be difficult for organizations to evaluate their money value spent on training. However, it is expected that a well-designed and well-conducted training programme will lead to positive reactions from trainees, learning of the important material, behaviour change on the job, and performance improvements (Ostroff, 1991).

Behaviour scales are the best-suggested appropriate tools (Taylor & Thackwraay, 1999) for organizations to have some indication on the perceived success of the training and development activities. It is also supported by Fitzgerald (1992, p81) in his statement that “A successful and effective training demand for a change in behaviour, such as the use of new knowledge and skills on the job”. Therefore, the basis of training is rooted in the notion that individuals who are trained will be different at the end of the training. Training is a planned change. Due to the assumptions that people have the potential to change all the time, it follows that the
demonstration of training effectiveness must involve the specification or prediction of change on specific behaviours or learning content (Haccoun & Hamtiaux, 1994).

Most research on training uses trainees’ reactions towards a programme and their beliefs about the amount they have learned to assess its effectiveness (Axtell & Maitlis, 1997). This type of evaluation might not give a holistic picture about how well a trainee learned and apply the learning back into their job. Therefore, more researches are demanding the studies on the extent to which trainees effectively apply the new knowledge, skills and attitude learned from a training programme into their workplace. It is believed that, the success with which individual applies new skills in workplace is of importance to both attendees of the training programme and to employers who continue to invest heavily in such development activities (Axtell & Maitlis, 1997).

In Zulkarnian and Mazanah's (1998) Training Effectiveness Model, it has also been highlighted that one of the criteria for an effective training is the transfer of training, which involved three parties – the trainee, trainer and management. In fact, knowledge in selecting trainable trainees, choosing best training methods and techniques is also important to maximizing trainees learning and ensuring positive transfer (Wexley, 1989). For training to be effective, the trainee’s supervisor has the responsibility to be involved in the specification of training content. They need to provide on the job opportunities for the trainee to apply newly acquired skills and abilities, support the trainees while they are practicing new skills and give rewards and appraisal for correct application. At the same time, a trainee must also be encouraged to correct wrongful or incomplete applications. With the support from supervisor, a harmonious and supportive environment for encouraging transfer will be created and therefore maximizing training transfer.
Transfer of Training

One of the greatest challenges for those involved in learning and training is the effective transfer of knowledge from one person to another. As Dawkins (1992, p.29) mentioned, “For information to become knowledge, it must be received, understood and then internalized. This has become the concern especially in the information age and will be affecting the educations, corporate communications, employee training and new skills development.” Then, no matter which field one is attached to, training effectiveness should be given much attention and transfer of training will be a priority of all training practices.

It is important for human resource development (HRD) practitioners, to show the organization that they are getting good returns on their investment in training. To do that, they must find out whether the new skills and knowledge taught in training can be applied in the job. Besides that, HRD practitioners are also responsible for assessing the value of what participants gained from training and the extent to which training increases job productivity (Garavaglia, 1993). Therefore, the extend of how much new job skills, knowledge and attitudes being transferred to the job setting is essential to give a better picture of the training effectiveness.

What is transfer of training? In Kirkpatrick’s Four Level Model of evaluation, transfer of training takes place in Level 3, the Behavioral Level, where it refers to the measurement of the extent to which participants changed their on-the-job behaviour due to the training (Kirkpatrick, 1996). It also refers to the degree which trainees apply the knowledge, skills and attitudes they gained from training in their jobs (Bowne, 1999). Specifically, Broad & Newstorm (1992) defined transfer of training as the effective and continuing application by programme participants of what they have learnt and gained through training in their job situation. Evaluation of training in
terms of on-the-job behaviour is more difficult than reaction and learning evaluations, which are the Level 1 and Level 2 in Kirkpatrick's Model of evaluation. It requires a more scientific approach and the consideration of many factors (Kirkpatrick, 1996). However, in transfer of training evaluation, there are difficulties in proving that one's changed in behaviour is due to the training as compared to other factors. The existence of extraneous factors (eg, skills acquired from friends and by self-learning), therefore have made training transfer a great challenge.

However, the amount of training transfer happens in training practices seem to be something interesting to explore. In actual practices, there is growing recognition of "transfer problem" occurs in organizational training nowadays, (Baldwin & Ford, 1988). Studies on American industries found that annually $100 billion is spent on training and development, unfortunately not more than 10% of these expenditures actually gave good result (Baldwin & Ford, 1988). According to Broad and Newstorm (1992), it is believed that only about 40% of the content of programmes conducted was transferred to the work environment immediately after training, about 25% was still being applied six months later and a mere of 15% was still being used at the end of the year. Another study in United States found that only few firms can show their training expenditures results in the observable behaviour changes on the job although the organizations had invested more than $45 billion in employees training (Garavaglia, 1993). This shows that application of knowledge gained through training is really a challenge not only for the trainee but also for the organizational as well.

Studies in Malaysia painted a same scenario in the transfer of training. In Abu Hassans (1997) study, it has been reported that the level of transfer training among teachers attending Art of Language courses is low, although there are indications of change in the level of knowledge, skill and ability in problem solving. It has been
further supported by Mohd Zamri’s (1996) study done with the employees at Kuala Lumpur City Hall. The study found that there is moderate to high level of transfer of training among the respondents, where 44.5% experienced a high level of transfer of training, 38.3% experienced medium level of transfer of training, while the rest experienced low level of transfer of training. These studies clearly indicate that there is a big difference between knowing principles and techniques and using them on the job (Kirkpatrick, 1996). One’s success is not judged by how much the trainee knows, but by his or her competence in using the knowledge gained to deal with the situation at hand (Houle, 1972). Hence, the challenges lie in the transfer of training itself.

In order to demonstrate the value of training to an organization, it is important for HRD department to plan, budget, and implement transfer measures (Garavaglia, 1993). The transfer of training outcome can result in three possibilities as what mentioned by Wexley and Latham (1981). First, is a positive transfer where learning results in a better performance on the job. It is the degree to which trainees apply new knowledge, skills and attitudes learned in training back into their job. Second, negative transfer, where the training causes a negative effect on the job behaviour. Third, zero transfer, where the training has caused no transfer of training at all for the employees.

Transfer of training is important to be measured and evaluated. Garavaglia (1993) has highlighted several reasons that support the importance of training transfer evaluation. Firstly, training practitioners plan, budget and implement training measures in order to demonstrate the value of training to an organization. Hence, transfer measurements are needed to provide data for justifying training costs. Secondly, transfer measurements are important to verify the effectiveness of training curriculums. Through evaluation feedback, it helps trainers and instructional
designers to update and redesign training programmes. Thirdly, transfer measurements can account for and document the nature and extent of on-the-job transfer and also lead to measuring organization's wide results. Transfer measurements that compare responses immediate after the training with responses in a later follow-up would gauge the longevity of newly learnt skills.

Many researchers have different opinions of when is the best time to measure the transfer of training. Some evaluators collect the initial data immediately after training, while the rest in one month, six months or one year after the training ends. These are the post training data. Somehow, evaluators rationalize their action by giving more time for trainees to apply new skills in their job and at the same time not to forget what have been learned. However, Garavaglia (1993) suggests that it is appropriate to measure the initial transfer of training approximately three to twelve months after training with six months being the most common time frame. Similarly, Connolly (1992) suggests that the ideal time for evaluation to take place is about 3 to 9 months upon completion of the training. She further commented that if evaluation is done prior to three month, there will not be adequate time for trainee to practice new skills and if more than one year, it will be difficult for trainees to remember whether the skills they used is what they had actually learnt from the training program. In order to measure the longevity of behaviour changes, most training evaluators recommend follow-up transfer measures at six months or yearly intervals.

No matter how well a person learned a useful skill, there is no guarantee in the acquisition action (Lynton & Pareek, 1990). Some trainees who have gone through training felt their new capabilities and knowledge being ignored over the time. They looked for support from the organization and supervisors, but instead some of them ended-up being rejected and opposed. An individual's application of training
sometimes depends on the number of people (colleague, immediate superior, management) and additional resources (facilities) in the organization. Organization is the immediate environment where an individual plays his roles upon returning from training, but how far the organization gives its support in training seems to be questionable.

**Methodology for Training Transfer**

The method or measurement used to evaluate training effectiveness is another essential criteria for training evaluation. Before training effectiveness could be addressed, first of all a well-developed evaluation method has to be developed (Simon & Werner, 1996). However, this seems to be neglected often in the studies of training evaluation. According to Ostroff (1991), one of the reasons that contributed to the failure of the significant training effects, for example behaviour or performance change on the job, is due to the evaluation method chosen. Most of the method used may not be sensitive enough to detect the training effects (Ostroff, 1991). With this, it may not be able to measure training results accurately and efficiently. Thus, it will lead to a wrong perspective of the training success.

As being illustrated by Alden (1976) there are four criteria for measuring transfer of training; a) participant’s perception, b) expert’s opinion, c) behaviour measurement, and d) end results / product measurement. With a variety of measurements for transfer of training, it is much critical to judge which measures is the most relevant to be used for evaluation of training effectiveness.