

**Tajuk: Effectiveness of Learning Transfer in National Dual Training System (NDTS)**  
*(Thesis PhD)*

**Abstract**

Learning transfer is the ultimate goal of any training programme. The new Malaysian skills training is based on the dual learning principle in which trainees alternate between attending theoretical classes in the skills training institute and receiving on-the-job training at worksite. This new paradigm of skills training is better known as National Dual Training System (NDTS). The main problem is that there were complaints from the employers that the competencies of the output of the skills training in Malaysia are of poor quality. This was due to low absorption of learning transfer performance from training places to workplace. Apart from that there were little studies related to the effectiveness of learning transfer due to there is no acceptable way and mean to measure the learning transfer. The aim of this study was to ascertain on whether the effectiveness of learning transfer did occurred in the automotive mechatronics of NDTS programme. The research focus area is the Mechatronics Automotive course. A longitudinal study method was employed as the research methodology. The participants of this research were the trainees and coaches from NDTS Mechatronics Automotive course. The study utilised the self-administered questionnaire, semi-structured interview, focus group and case study. Measuring 16 factors of the Learning Transfer System Inventory (LTSI) plus 3 factors derived from literature review and expert group discussion enable researcher to determine the relationship between the learning transfer factors. It was apparent that NDTS training programme appears to had facilitated the positive transfer and near transfer from training situation to workplace environment. The findings suggest that the most influential dimensions of the effectiveness of learning transfer in NDTS were revealed as the course content, training delivery and working tasks. Result indicated that the effectiveness of learning transfer in NDTS had occurred by the overall framework accuracy percentage of 79.2%. Therefore, the emerging effectiveness of learning transfer framework of NDTS in Malaysia is proposed.

## **Abstrak**

Pemindahan pembelajaran merupakan sasaran utama kepada setiap program latihan. Sistem latihan kemahiran baru yang diperkenalkan oleh Malaysia adalah berdasarkan kepada prinsip latihan dwi lokasi latihan iaitu latihan di institusi latihan kemahiran dan latihan di tempat kerja. Paradigma baru sistem latihan ini lebih dikenali sebagai Sistem Latihan Dual Nasional (SLDN). Rungutan dari para majikan tentang kualiti para graduan yang tidak menepati keperluan industri adalah disebabkan oleh kelemahan pemindahan pembelajaran. Selain itu, tidak banyak kajian yang telah dilaksanakan mengenai keberkesanan pemindahan pembelajaran dari tempat latihan ke tempat kerja kerana tidak terdapat cara dan kaedah yang sesuai untuk mengukur keberkesanan pemindahan pembelajaran. Tujuan kajian ini adalah untuk menentukan keberkesanan pemindahan pembelajaran bagi SLDN. Fokus utama kajian ini adalah tertumpu bagi kursus Otomotif Mekatronik. Metodologi kajian adalah berbentuk *longitudinal*. Para peserta kajian ini adalah terdiri daripada kalangan para pelajar dan pengajar kursus. Kajian ini menggunakan borang kajiselidik, temuduga separa-berstruktur, kumpulan fokus dan kajian kes bagi mengukur 16 faktor inventori pemindahan pembelajaran beserta 3 lagi faktor tambahan yang dikembangkan dari kajian literatur serta perbincangan pakar berkumpulan bagi menentukan perkaitan diantara faktor-faktor pemindahan pembelajaran. Hasil kajian mendapati program latihan SLDN telah menghasilkan pemindahan pembelajaran berbentuk *positive transfer* dan *near transfer* dari tempat latihan ke tempat kerja. Dapatan kajian mengesyorkan dimensi utama mempengaruhi keberkesanan pemindahan pembelajaran SLDN adalah *course content*, *training delivery* dan *working tasks*. Keputusan kajian juga mendapati keberkesanan pemindahan pembelajaran telah berlaku dengan ketepatan kerangka kerja pada 79.2%. Dengan yang demikian, satu kerangka kerja keberkesanan pemindahan pembelajaran telah dapat dicadangkan.