
PIARC workshop on the current state of Technology Transfer Center (TTC) development

Siem Reap, Cambodia

17 - 18 May 2002

Workshop program : Friday morning 17 May

■ Session 1 : Introduction

- introductory remarks, role of PIARC and workshop objectives
- round table of participants
- presentation of main findings from pre-workshop questionnaire

■ Session 2 : Improving TTC performance based on experiences

- Theme 1 : What are the key success factors for TTC development in 2002 ?

- case study presentation : Tanzania - Hagai BISHANGA

- general discussion and sharing of experiences (see support)

■ Presentation of FHWA TTC program : Stephen GAJ

Workshop program : Friday afternoon 17 May

- Presentation of WIN : Claire MONETTE
- Session 2 : Improving TTC performance (continued)
 - Theme 2 : What tools / policies are needed to enable TTCs to achieve high levels of customer satisfaction ?
 - Analysing and measuring performance : David SULLIVAN
 - general discussion and sharing of experiences (see support)
 - Theme 3 : What are currently the most efficient ways of meeting training needs for TTC development in 2002 ?
 - Improving access to technology transfer : Bertrand GUELTON
 - general discussion and sharing of experiences (see support)
 - Presentation from TRL on TTC : Colin GOURLEY

Workshop program : Saturday morning 18 May

- Session 3 : Thinking forward
 - Analysing training needs - David SULLIVAN
 - general discussion and sharing of experiences
 - Theme 4 : Which are the areas where PIARC and other donors could focus their assistance and support to aid future TTC development ? - Colin ELLIS
 - Next steps to be carried out by individual countries regarding technology transfer and development of TTCs
- Evaluation of workshop and programme for next session
- End of workshop

Workshop goals

- Analyse and understand the current environment of a TTC
- Share experiences to date of established TTCs
- Provide an opportunity for TTC managers to benefit from the experience of others
- Present methodologies needed to enable each TTC
 - to diagnose more accurately their present level of performance
 - to better define staff training needs

Some basic questions about YOUR country's roads

- From your personal knowledge of your country's road system and using approximate figures, please indicate on the flip chart :
 - what is the total size in km of your national road network, paved and tracks, excluding the rural networks ?
 - within this network, what % do paved roads represent ?
 - how many light vehicles are there on your roads ?
 - and how many heavy trucks ?

The perceived benefits of setting up a TTC

- Main objective to facilitate the acquisition and dissemination of technology and best practices by :
 - promoting beneficial policies, technologies & programs
 - avoiding duplication of products and process developments
 - evaluating and adapting technology to local needs and expertise
 - involving the local road community and its knowledge
 - improving skills of practioners leading to better road systems

Basic characteristics a TTC

- a repository for information about technologies and resources
- a conduit between developers and users of technology & policy
- a focal point for advancing best practices using various means
- a platform for systematic technology transfer to meet local needs
- a catalyst for improvements and enhancements of local practices

Successful technology transfer centres do exist

- Effective TTC exist around the world, eg the LTAP in USA which maintain 5 basic mandatory activities :
 - compile and update a mailing list of users and stakeholders
 - publish a quarterly newsletter to communicate on success stories
 - conduct or arrange seminars and training sessions
 - provide material and information
 - evaluate effectiveness of program and process feedback

PIARC initiative in 1999 to foster setting up of TTC

- Targeted on low income member countries < US\$ 1000 p.capita
- Now more than 8 countries involved : Bangladesh, Burkina Faso, Chad, China, India, Madagascar, Mongolia, Tanzania....
- resources and scope of activities of existing TTC logically vary widely depending on the country and their context
- difficulty of measuring performance and success
- organisation and institutional integration also vary

Core activities of TTC in pilot countries

- The 8 pilot countries which have joined the PIARC sponsored scheme to set up a TTC have agreed as a minimum to sustain the operation of a small office and a number of core activities :
 - managing a small library of key documents
 - maintaining internet access for exchange of information
 - providing a list of relevant websites and training courses
 - issuing a regular newsletter to public and private stakeholders

Pre - workshop TTC questionnaire (1)

■ « Who are the key public and private partners and shareholders for your TTC ? » :

- administrations, national and local government bodies
- academic and research facilities specialised in road transportation
- professional road transport sector federations & associations
- Institutes of Engineers & Architects, the Police, Road Safety...
- road maintenance firms, consultancies, US FHWA, Donors...

Pre - workshop TTC questionnaire (2)

- « What missions and objectives were fixed for your TTC at its creation ? » :
- collect and disseminate information (WIN) about international best practices to all identified national road transport stakeholders,
- promote innovation and progress, hosting conferencies, organizing delegations, training sessions...
- increase effective public and private involvement in road transport sector, including educational establishments
- set up the centre, recruit staff, collect existing documentation etc

Pre - workshop TTC questionnaire (3)

- « How were these missions and objectives achieved ? » :
 - many TTC have only recently become professionally active
 - hosting conferencies, organizing delegations, training sessions...
 - establishing the notoriety of the TTC and gaining national support

Pre - workshop TTC questionnaire (4)

- « What problems were encountered ? » :
 - for many countries, physically setting up the TTC, recruiting staff etc is the first problem encountered
 - insufficient funding is a common problem which compromises the TTC performance, autonomy and sustainability
 - insufficient dissemination of available information
 - excessive time spent in searching for information
 - communicating on the scope of the PIARC initiative to foster TTC development and gain support from potential stakeholders

Pre - workshop TTC questionnaire (5)

- « How does your TTC assess its performance relative to its different missions ? » :
- many TTC have only recently become professionally active, but they intend to analyse the number of meetings and training sessions organised

Pre - workshop TTC questionnaire (6)

- « What is the agenda for your TTC for the year 2002 and beyond ? » :
- implement core activities - library, newsletter, training, seminars
- set up an Operating Board and a TTC management team
- recruit new staff...and retain existing staff
- recruit staff competent in IT skills

Pre - workshop TTC questionnaire (7)

- « What equipment does your TTC currently possess ? » :
- many TTC are newly resident in offices of parent organisation
- office equipment, phone, computers, fax, printers, scanners...
- publications from the road and transportation sector, video...

Pre - workshop TTC questionnaire (8)

- « What new purchases are planned in the next year ? » :
 - office furniture, computers, fax, printers, scanners, video...
 - internet installations, website index
 - purchase IT software to set up databases

Pre - workshop TTC questionnaire (9)

- « How many people work in the TTC today....and in 2 years ? »
 - generally small scale operations with 1 manager (sometimes on a part time basis) and 1-2 staff mainly operating as administration and library assistants
 - with aim to increase staff numbers to 2-3 over next 3 years

Pre - workshop TTC questionnaire (10)

- « How is the TTC currently managed ? »
 - most TTC have set up (or are about to) an Operating Board or Management Committee comprising members from key public and private stakeholder institutions
 - these bodies generally approve annual budget proposals, work programmes and activity reports from TTC managers

Pre - workshop TTC questionnaire (11)

- « What progress is being made relative to establishing core activities ? »
 - hosting conferencies, organizing delegations, training sessions...
 - many TTC have only recently become professionally active but relevant activities are planned in the short term
 - establishing the notoriety of the TTC and gaining national support

Pre - workshop TTC questionnaire (12)

- « Are there measures or indicators of performance for the TTC ? »
- measurement of performance has not yet been dealt with in many cases but reflexions on defining indicators are taking place

Pre - workshop TTC questionnaire (13)

- « Does the TTC publish a periodic activities report ? »
 - depending on the age of the TTC, a report is published every 2-6-12 months

Pre - workshop TTC questionnaire (14)

- « What are the estimated training needs for TTC managers and other staff ? »
- see tomorrow

Pre - workshop TTC questionnaire (15)

■ « Other remarks ? »

➤ it is necessary to consider how revenues can be generated by TTC activities so as to assure its perenity - what experience do older TTC have on this issue ?

Measuring performance

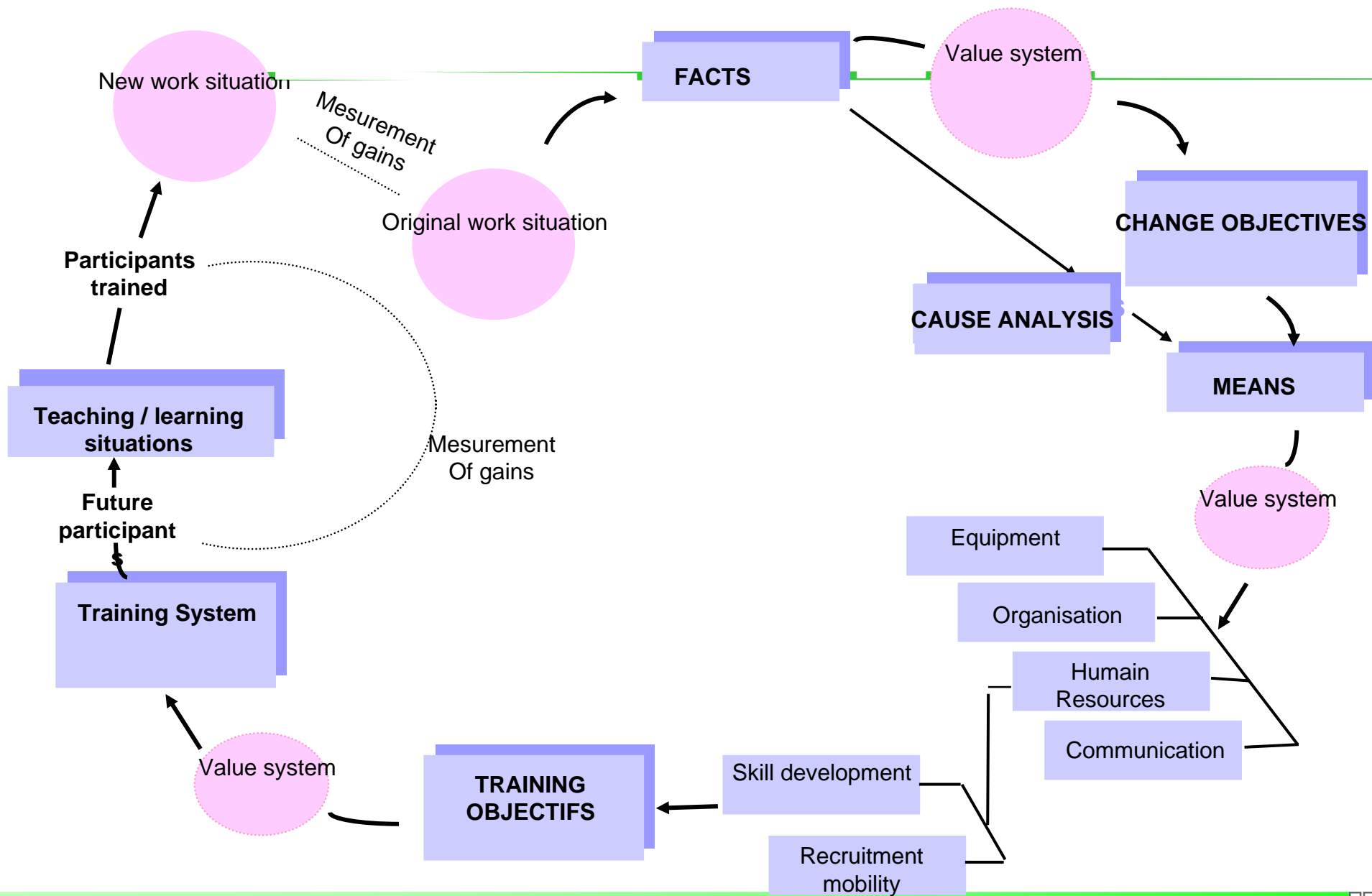
- Defining criteria and indicators needed to quantify TTC performance levels relative to published missions and objectives :
 - Eg Mission : support all road transport sector stakeholders
 - Eg Objective : improve identification of TTC 's customer base
 - Eg Criteria : number of new clients identified
 - Eg Indicator : % of new clients identified over a 6 month period

Analysing training needs within the TTC

- Identification of skills available within TTC relative to current functions and work program
 - drawing up of skill matrix showing present skill base and inadequacies
 - identification of skill areas to be developed, people to be trained
 - Choice of learning medium (training course, coaching, self-learning...)
- assessment process of effects of training programs

Role of TTC directors in setting up a skill development programme

- Effectuer le diagnostic de la performance du service (*strengths & weaknesses*)
- Définir les projets d'évolution du service, cohérence avec les axes de développement des CCT
- Analyser les écarts entre la performance actuelle et la performance souhaitée,
- Identifier les moyens d'action pertinents
- Sélectionner le moyen d'action qui concerne le développement des compétences individuelles et collectives de l'équipe



Les facteurs individuels de la performance professionnelle

Les compétences

Les acquis liés à :

- la formation
- l'expérience

Savoir

Les aptitudes

- sur le plan intellectuel
- sur le plan physique
- sur le plan de la personnalité

Pouvoir

Les motivations

- les besoins
- les désirs
- les intérêts professionnels

Vouloir

La compétence

Savoirs formalisés

- ↓ Connaissances (*savoir théorique*)
- ↓ Savoirs procéduraux
(*techniques, méthodes*)

Savoirs de l'action

- ↓ Expérience (*apprentissages-pratiques*)
- ↓ Savoir-faire (*actes professionnels*)

Les facteurs explicatifs de la performance

L'individu

- Compétences
- Aptitudes
- Motivation

Le système de management

- Exigences de la fonction
- Niveau des objectifs fixés
- Moyens disponibles
- Rôle de la hiérarchie : assistance, contrôle
- Règles ou caractéristiques organisationnelles

L'environnement extérieur

- Aléas, imprévus favorables ou défavorables
- Contexte économique, social, commercial, technique

RÉSULTATS

La logique générale de détermination des besoins de développement de compétences

