



**European Transport,
Highways and Planning**

21st

SUMMER ANNUAL MEETING

Outreach

Proceedings of Seminar G

**13 - 17 September 1993
University of Manchester Institute of Science
and Technology, England**

OUTREACH

**Proceedings of Seminar G held at the
PTRC Transport, Highways and Planning
Summer Annual Meeting, University of Manchester
Institute of Science and Technology, England,
from 13 - 17 September 1993**

Volume P369

Price for Delegates: £18.00

Price for Non-Delegates: £24.00

**Published by
PTRC EDUCATION AND RESEARCH SERVICES LTD**

**on behalf of
THE PLANNING AND TRANSPORT RESEARCH AND COMPUTATION
INTERNATIONAL ASSOCIATION**

1993

ACKNOWLEDGEMENT

PTRC would like to thank members of the Outreach Committee who have so willingly given their time in helping to organise the programme for this Seminar:-

**Dr Phil Cornwell (Chair), Traffic and Transport Consultants, UK
Anan Allos, Scott Wilson Kirkpatrick and Partners, UK
Dr George Banjo, University of Lagos, Nigeria
Chantal Barbieux, SOFRETU, France
Philip Blackshaw, The World Bank, USA
Andy Costain, PTRC, UK
Richard Darbera, University of Paris, France
Asif Faiz, The World Bank, USA
Geoff Gardner, Transport Research Laboratory, UK
Ousmane Gueye, United Nations
Claus Heidemann, University of Karlsruhe, Germany
Margaret Heraty, Independent Consultant, UK
Henning Lauridsen, Institute of Transport Economics, Norway
Yui Motomura, PADECO Co Ltd, Japan
Nicole Muhrad, INRETS, France
Lars Nordin, European Bank for Reconstruction and Development, UK
Dr Dick Robinson, Rendel Palmer and Tritton, UK
Dr Alan Ross, Ross Silcock Partnership, UK
Fathi Thabet, Montazeh Soukra Company, Tunisia
Dr Luis Willumsen, Steer Davies Gleave, UK
N E Yahia-Cherif, Ministry of Transport, Algeria**

(c) PTRC and Contributors

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission of the publisher.

**Available from PTRC Education and Research Services Ltd., Glenthorne House,
Hammersmith Grove, London, W6 OLG.**

Tel: +44 (0)81 741 1516. Fax: +44 (0)81 741 5993.

CONTENTS

Page

TRAINING AND INSTITUTION BUILDING

COSTAIN A M, PTRC Education and Research Services Ltd, UK Institutional development and capacity building: ingredients for success	269
BOLADE Dr T, Federal Urban Mass Transit Programme, Nigeria Training needs of the urban transport sub-sector in Nigeria: the experience of the Federal Urban Mass Transit Programme	187
BAHGAT Dr A, Director, Egyptian National Institute of Transport, Egypt The development of the Egyptian National Institute of Transport	215
ABBAS Dr K, Egyptian National Institute of Transport, UK Management training in the light of deregulation of the Egyptian Transport Industry	231
SOLCOVA I, Ministry of Transport, The Czech Republic and FLOWERDEW T, Consultant, UK An assessment of training needs in the Czech transport sector	277
WILLUMSEN Dr L G, Steer Davies Gleave Implementing a training programme: the Mexican experience	253
FARAHMAND-RAZAVI A, W A Fairhurst and Partners, UK The role of international consultants in the planning and policy making efforts in Developing Countries	259

ISSUES IN INTER-URBAN TRANSPORT IN EASTERN EUROPE

PERMALA A, Technical Research Centre of Finland (VTT), Finland Freight transport corridors to Russia via the Baltic sea	1
GOWEN H C, WS Atkins Planning Consultants, UK Priorities for investment in East European transport infrastructure	11
SHLIKHTER Dr S B, Russian Academy of Sciences Russia Transport aspects of Russia's integration into the European economic system	27
MCGLYNN R and GOWEN H, WS Atkins Planning Consultants, UK Reshaping Capital City transport in Central and Eastern Europe	33
ARROWSMITH B A, and WILTSHIRE P, Travers Morgan Transport, UK and GULGAS L, Budapest Municipality, Hungary Transport priorities in Budapest	53

CONTENTS

Page

RAIL PRIVATISATION

- GYLEE M, University of Central England in Birmingham, UK**
Privatisation of the railway system: a role for the regulator? 65
- CASTLES C, Coopers and Lybrand, UK**
Implementation of UK rail privatisation policy. Comparison with Swedish experience 81
- HUISMAN M C M, Ministry of Transport, Public Works and Water Management, The Netherlands**
Reshaping the relationship between the Dutch Government and Netherlands Railway (NS) 93

RESHAPING RAILWAYS

- AMOS P, Travers Morgan Consulting Group, UK**
The Soviet Railways in a market economy 105
- COBBETT D, Kennedy and Donkin Transportation, UK**
Restructuring of Bulgarian Railways 119
- THOMSON I, Economic Commission for Latin America and the Caribbean**
Railway restructuring around the world: some problems and possible solutions 135

TOLL FINANCED ROAD SCHEMES

- YATES C M, NOMURA International PLC, UK**
The Mexican approach to toll roads 147
- CARRUTHERS R, World Bank, USA**
Privatisation of transport infrastructure and operations: was it all worthwhile? Some lessons from Mexico 159
- SKJESETH T H and ODECK J, Norwegian Public Roads Administration, Norway**
Organisational framework and experienced financial difficulties of toll-road financing in Norway 173
- TIMAR A, Bureau of Motorways in concession, Hungary and BRIDE A, Morgan Grenfell and Co, UK**
Hungarian M1/M15 motorway project 283

CONTENTS

	<u>Page</u>
KRAMER J, Goldman Sachs International Limited Project finance: alternatives to BOT project finance	285
FRIDRICH J, Pragoproject, Czech Republic Financing the Czech D5 Motorway	287

MANAGEMENT TRAINING IN LIGHT OF DEREGULATION
OF THE EGYPTIAN TRANSPORT INDUSTRY

Dr. Khaled A. Abbas
Egyptian National Institute of Transport
P.O. Box 34 Abbassia - Nasr Road - Nasr City
Cairo - Egypt

1. Introduction

Powerful political and economic forces are affecting the size and the structure of the transport sector, as well as the objectives and organisation of the transport companies. Major changes to the transport industry through deregulation are happening and it is expected to see more changes in the future. The transition from planned to market economy in the transport sector is expected to have considerable effects. These effects constitute difficult times for any transport company. Innovative operational and management practices are needed to steer the companies safely towards reaching more stable grounds and conditions that can encourage and instigate profit making.

In order for an organisation to adapt to such major adjustments, it needs to be flexible and ready for change. The new strategic directions and the resultant changes taking place are making many new demands on the workforce. This entails having a workforce which can rise to meet the necessary challenges of the future.

Training is considered to be an important component in the management of human resources of any organisation. "It is generally recognised that the success of any policy depends on the quality of those who administer it, thus the development of human capital becomes one of the important investments in economic growth, especially in the Third World Countries, in which the availability of well trained personnel is often the main obstacle to economic development", Studnicki, 1981. The importance of training increases at times when there are significant strategic and organisational changes. If transport companies are to succeed they should invest in training their staff, converting them from typical government employees to business-oriented managers.

The significant trends realised by the U.S.A. Transportation Research Board (TRB), in its conference held on transportation education and training, to be driving the emerging educational and training needs of the future transport professionals are: development to management, privatisation, computerisation, reorganisation, deregulation and internationalism, see TRB, 1985.

This paper explores the different components of the training cycle. Its main emphasis lies in presenting the results of a questionnaire survey designed to assess the management training needs of some of the major Egyptian transport companies. The assessment is considered in light of the relatively recent moves towards deregulation of these companies, that took place as a result of the issuing of the Public Sector Law no. 203 in 1991. The paper discusses some of the questionnaire results, however a full consideration of the outcome of the questionnaire will be illustrated in future papers.

2. The Training Process

The training process, as perceived by the author, is depicted in figure 1. This is a dynamic iterative process. It comprises seven stages.

1. Knowledge of organisational goals.
2. Setting of training objectives.
3. Assessment of training needs.
4. Design of training.
5. Delivery of training.
6. Measuring training outputs.
7. Evaluation of training.

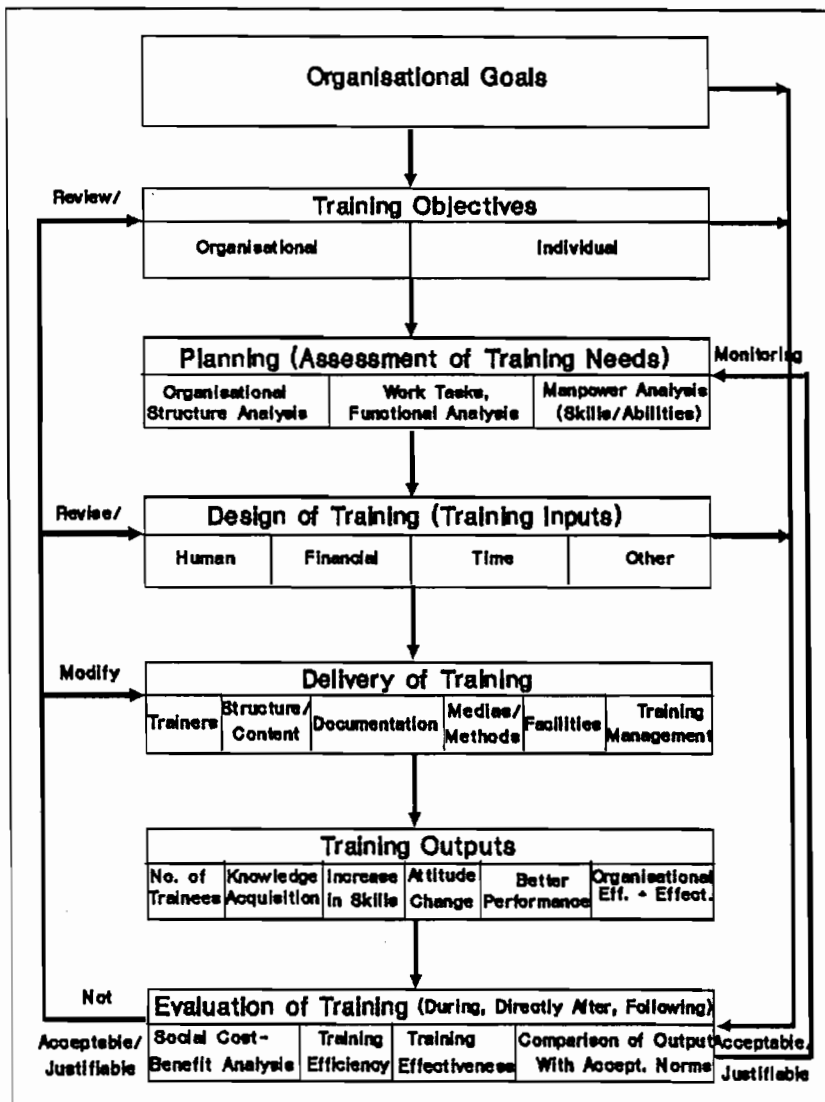


Figure 1: The training process

2.1 Organisational goals

The mission statement and the goals of a company ought to be sharply defined and clearly stated. These are meant to provide direction and purpose for the organisation. A mission statement should be brief, realistic, comprehensible and well known to all employees of the organisation.

2.2 Training objectives

The first task of the training department, within the company, is to set out the training objectives of the organisation as well as of individuals. This task is achieved through meetings and discussions with senior management of the company, department managers as well as with representatives of employees. "Effective and well focused training enhances the ability of managers to identify and address key problem areas; enables resources to be allocated more effectively; improves the quality of work undertaken and raises staff morale thus harnessing the staff potential more effectively. It should however be noted that training should be only one of a package of management measures to achieve these ends", Lawson and Watson, 1988.

2.3 Assessment of training needs

Following these two stages comes planning for training i.e. the assessment of training needs. The assessment of training needs entails the estimation, both qualitatively and quantitatively, of the required training. The qualitative assessment attempts to identify the important topics which the training courses should address. The quantitative assessment determines the numbers of personnel required to be trained over a predetermined period of time. Training needs assessment provides the necessary quality and quantity control for training expenditure and ensures that training is based on the real needs of the company.

"The process of conducting an analysis of organisational training needs will allow decisions to be made, on the basis of evidence, about where training will offer the best investment. It will strengthen proposals for funding training and allow priorities between training needs to be established", Roscoe, 1992.

The assessment of training needs involves the analysis of three components, namely organisational structure analysis, work tasks functional analysis and manpower analysis. There are different ways and techniques to carry out these three types of analysis such as observational techniques, checklists, questionnaires, content analysis, brainstorming, Delphi, ..etc.

This step is preferably carried out by the training department inside the organisation. However, in many cases, companies tend to consult training experts to carry out this task on their behalf. On the other hand, from the supply side centres and establishments offering training tend to carry a training assessment exercise from time to time to monitor the current needs of the training market in which they operate.

2.4 Training inputs

The fourth stage is concerned with the design of the necessary combination of training inputs. Training inputs include: human inputs i.e. nominating and selecting trainees; financial inputs i.e. paying the fees for the training courses as well as continuing to pay the salaries and all the allowances of the trainees as much as they were actually at work; production time inputs i.e. withstanding the absence of the trainees as regards their production time; and other inputs. Training inputs are subject to availability of resources specially the financial and the production time resources.

2.5 Delivery of training

Training takes place at specialised centres and training establishments. Several components work together in properly delivering the training courses. These include: trainers, structure and content of training courses, documentation, medias and methods used in delivering training as well as available training facilities. Trainers should be well qualified, experienced personnel with a strong character and ability to deliver and transfer knowledge and skills to trainees. Trainers need constant training themselves, to learn how to train other people as well as to get updated with the state of the art in the knowledge and skills in which they train other people.

Training topics must be set in advance and within these topics the structure and content of courses should be carefully prepared. The preparation of the courses' structure and content is mainly the responsibility of trainers. Training committees of academics, experts and company representatives are likely to be established to share in the preparation of the training courses.

Documentation of the training courses is a very important element in the delivery of training. Training documents should be carefully written and edited, well photocopied, clearly read, attractively binded, and most importantly handed to the trainees on the first day of their training.

In instructing trainees, trainers can use alternative training medias. These include: chalk board, white board, flip chart, handouts, published texts, audio/visual material (films, videos, slide presentations, transparencies, computer screen, audio cassettes, ..etc.), ..etc.

There are several ways in which training can be delivered. Training methods include: job rotation, secondment, supported open learning, lectures, field case studies, group exercises, discussions, project work, workshops, practical research, ..etc. Each of these methods has its advantages and limitations. The appropriate method should be selected in advance. Some of these methods can be used in a hybrid fashion.

Training facilities include: lecture and seminar rooms, computer laboratories, library, catering services, rest rooms, accommodation, parking space, ..etc.

Finally, it is the management of a training establishment that holds the responsibility for the organisation and coordination of all these elements contributing to the delivery of training.

2.6 Measuring training outputs

The output of the training process can be described in several forms. Quantitatively, the output of training is the number of trainees who have attended the training sessions, and passed any qualifying exams. Qualitatively, the output of training can be represented as the average amount of knowledge acquired by the trainees, the average increase in their skills, and the average change in their attitude and interpersonal skills. This set of qualitative outputs can be translated into an accumulative average better ability to perform at work, hence leading to an increase in organisational efficiency and effectiveness.

2.7 Evaluation of training

Companies use training as a means to develop their employees in a way that directly contributes to the success of the business. This involves companies investing in their staff to achieve real tangible benefits. Evaluation of training is an important final stage in the training process. "Evaluation of training provides feedback to trainers on the strengths and weaknesses of the various aspects of the learning events. It improves their professionalism. It gives better control over the training function by highlighting what is good and what is bad. Evaluation is meant to demonstrate evidence of worth and it indicates that training does have an impact on organisational effectiveness", Bramley, 1986. It should be carried out at three times: during training, directly after training, and following training by a period of time during which the trainee has settled back in his/her job.

As mentioned earlier, there are several non-quantifiable results related to training, in this respect social cost benefit analysis is considered as an appropriate technique for evaluation. In addition indicators of efficiency and effectiveness of training are measured. Efficiency of training represents measurements of the productivity of the training inputs i.e. comparisons between the training outputs relative to the training inputs. Effectiveness of training represents measurements of the extent of achievement of the preset training objectives i.e. comparisons between the training outputs relative to the training objectives. Other measures of success or failure could be obtained by comparing the output of training with standards and norms that are commonly used to render whether training is acceptable/justifiable.

If as a result of evaluation the training activities were justified, the process of training is then reiterated starting with the assessment of training needs. This is meant to continuously monitor the changes in the training market that might occur as a result of organisational and/or economic changes, or any other affecting factors. "Training needs assessment cannot be a sporadic or "on-off" activity. It needs to be visualised as something ongoing, in a sense repetitive, always alert to changes, and responsive to opportunities for improvement.", Richter, 1986.

On the other hand, if the evaluation shows that training is not justifiable steps are taken towards reviewing the training objectives, or revising the design of training, or modifying the delivery of training, or a combination of these tasks. With these iterative steps the dynamic cyclic nature of the training process is completed.

3. Management Training Needs of the Egyptian Transport Industry

It is a general truth that people make any business succeed (or fail) irrespective of the systems, procedures, hardware, ..etc that exist. The development of human resources is an essential ingredient for success. There is always a need for continuous professional development, both for the individual and the organisation, to cope and be up-dated with the rapidly and constantly changing ideas, methods, techniques that govern the

work environment. This is meant to achieve the organisational objectives with optimum use of resources.

"In the past, there has been very little consideration given to training needs assessment and the emphasis has been entirely on implementation. Not surprisingly, this has led to patchy quality, ineffectiveness and wasted resources. Training has not been treated as a systematic process but bolted onto projects more as an afterthought. Training, as a result, has suffered from a poor image and generated scepticism amongst both suppliers and users. It is in danger of becoming discredited", Costain, 1988.

The main objective of the study is to assess the management training needs of the Egyptian transport industry. This assessment is crucial at this point in time when all the companies are experiencing changes in different aspects as a result of their deregulation according to the Public Sector Law no. 203 issued in 1991.

This objective is achieved through a questionnaire survey. The main purpose of conducting the survey and analysing the questionnaire responses is to investigate, understand and statistically infer the way in which managers of transport companies as well as transport experts perceive the main components of management training. In other words, the study attempts to answer the following six questions:

1. Why do transport companies train? i.e. what are their objectives of training?
2. Where do transport companies train? i.e. what are the factors that govern their choice of training establishments?
3. Whom do transport companies train? i.e. what are the criteria used for selecting nominees for training?
4. What do transport companies want their trainees to learn? i.e. what are the course topics that are perceived as most relevant in the current period of deregulation?
5. When do transport companies want training activities to take place? i.e. what are the appropriate times for training?
6. How do transport companies want training to be carried out? i.e. details regarding number of trainees in a group, contents of courses, background of trainers, language and method of training, ..etc.

4. Steps Taken in Conducting the Survey

Before designing the questionnaire, interviews, discussions, and an examination of published studies were carried out to identify the different factors and problem areas thought to affect the management training in the transport industry in Egypt. These constitute the body of the questionnaire. The following represents the main steps undertaken to conduct the survey.

4.1 Pilot survey

The preliminary interviews, with managerial personnel of some of the transport companies showed that the questionnaire needed to be further refined and adjusted. These interviews also showed the difficulty encountered in arranging personal interviews, specially if no previous contacts with the managers exist.

4.2 Field survey

Based on the previously stated study objectives and the insight gained from the pilot survey, a final questionnaire was designed by the author. The questionnaire is of the revealed preference type. It comprises ranking and choice type of questions, see appendix I.

Several visits to the companies were carried out by the students co-supervised by the author in the 1992 Transportation Planning Diploma at the Egyptian National Institute of Transport. In the course of their Diploma projects, these students distributed the questionnaire forms and collected them after completion. The questionnaire was completed by senior managers of three passenger transport companies (out of four main intercity bus companies), two water freight companies (out of seven main freight companies), and the national authority for tunnels. In addition, the author conducted meetings and personal interviews with several transport experts who have completed the questionnaire, see appendix II.

Table 1 shows the details of the number of questionnaires distributed and the level of response. Table 2 displays the positions of respondents.

Table 1: Sample size and response rate

Managers/Experts Companies/Authorities	Population Size (Approximately)	Sample Size (Numbers)	Sample Size (Percentage)	
East Delta Bus Company	20	9	45	• 13
Middle Delta Bus Company	20	8	40	• 11
Upper Egypt Bus Company	20	8	40	• 11
Water Transport Company	20	12	60	• 17
River Transport Company	20	13	65	• 18
Sub-Total	100	50	50	• 70
National Authority for Tunnels	20	10	50	• 14
Academic and Professional Experts	N.A.	11	N.A.	• 16
• Total	N.A.	71	N.A.	100

• Sample size as percentage of total sample

Survey was conducted during the month of November, 1992

Table 2: Number of respondents at different managerial levels

Respondents Positions Company/Authority	Board of Directors (Chairman/Member)	Sector Head	Director General	Department Director
East Delta Bus Company	-	3	6	-
Middle Delta Bus Company	1	1	3	3
Upper Egypt Bus Company	1	1	3	3
Water Transport Company	1	3	8	-
River Transport Company	1	4	8	-
Sub-Total	4	12	28	6
National Authority for Tunnels	2	1	6	1
Total	6	13	34	7

5. Diagrammatic Representation and Verbal Interpretation

Diagrammatic representations of the responses to the questionnaire are obtained through the use of bar charts. Figures 2 to 12 represent the relative importance attributed to the different parameters of the questionnaire. In viewing the bar charts, note that rank "1" signifies the highest degree of importance, in relative terms, given to the respective parameter. When there is "no rank" occurrence, there exist two interpretations to explain it. The first is that a respondent does not have enough information and/or knowledge to rank the particular parameter; the second is that the respondent does not consider the particular parameter to be important enough to be ranked. In this study the second interpretation is thought to be more plausible. This is mainly due to the high number of the no rank occurrences for specific factors and parameters that were originally expected to have a relatively low level of importance from previously gained insights.

The first question was concerned with determining the training objectives perceived as important by the respondents. As shown in figure 2 the objective of raising efficiency and effectiveness of the performance of employees came first. This was followed by employees acquiring new skills to work on solving specific problems which was followed by the objective of widening the scope and raising the intellectual level of employees.

The second question considered the factors used in choosing a training establishment. Figure 3 shows that the topics of courses is considered to be the most important factor in choosing a training establishment. This is followed by availability of proper training facilities. Reputability of the quality of courses as well as timing and administration of courses came next. Cost of courses came as the fifth factor in the ranking.

Question three addressed the criteria used in selecting nominees for training. The criterion of current position of the nominee as well as nominee fitting requirements specified by training establishment came first, see figure 4. These were followed by the academic qualifications of nominee, then the level of performance of nominee, followed by interests of nominee, then age of nominee.

The fourth question, which could be considered as the core of the questionnaire, was concerned with determining the course titles that were perceived as the most important towards achieving the current professional goals of the transport companies. Transport Economics came top of the list. This was followed by Transport Planning, then Information Systems for Management, see figure 5. Improving the Efficiency of Transport as well as Transport Marketing followed those courses at the top of the list by a margin of ranks.

The areas of training which are thought to need concentration are much more general and are to do with general management development and training in the skills and competencies necessary to operate in a commercial market place. Managers need constant updating on the new legislation that affect their companies such

as the Business Sector Law no. 203 that governs the formation of holding companies and their affiliates in the Egyptian economy.

In the foreseeable future competitive business environment is expected to prevail, company success is closely linked to the skills and expertise of an organisation's workforce, particularly the management personal. As more companies move into being more commercialised there will be a growing need for staff trained in financial management, sales and marketing skills. There will continue to be a need for training in computer technology, not only in appreciation and operation of a given system but more importantly in its applications in management information and decision making. The eight general areas, identified in the TRB conference, that transport education and training should concentrate on to effectively meet tomorrow's challenges are: broad-based education, communications skills, computer skills, analytical skills, strategic thinking, entrepreneurship, group dynamics, and global perspective, see TRB, 1985.

Question six attempted to establish the best timing for running the courses. The majority of the responses ranked the 9.00 a.m. to 1.00 p.m. as the most appropriate time. This was followed by the 2.00 p.m. to 6.00 p.m. period, followed by the 6.00 p.m. to 10.00 p.m., see figure 6.

Questions seven, eight, and nine were concerned with determining the preference towards the homogeneity and size of a training group. Respondents generally prefer trainees to come from several organisations rather than from one single organisation. The forum of participants attending from several organisations have the advantage of introducing a greater breadth of experience which can act as stimulus to discussion. To a large extent, they also prefer trainees to have similar work responsibilities rather than having different work responsibilities, see figure 7. As shown in figure 8, the most preferred training group size is from 15 to 20 participants.

Questions ten and eleven asked whether the respondents preferred the contents of the training courses to be specific or general as well as whether they would be interested in being involved in the curriculum design of the courses. Most respondents chose the courses' contents to be more specific rather than being general. Almost all of them showed interest in being involved in the design of the courses, see figure 7.

Questions twelve and thirteen were concerned with determining the language in which the course documents have to be prepared as well as that should be used in presenting the training courses. English translated into Arabic was chosen to be the best alternative for preparing the course documents. On the other hand, Arabic supported by English terms was chosen as the preferable way for presenting the courses, see figure 9.

Questions fourteen and fifteen addressed two related matters. The first is concerned with determining the emphasis of the course contents, while the second is concerned with determining the background of the course instructors. Respondents chose the emphasis of the course contents to be on a mixture of both practical and theoretical issues with the practical side

outweighing that of the theoretical. On the other hand, the respondents chose the background of the instructors to be from a combination of both academics and practitioners, but with the number of academics outweighing that of practitioners, see figure 10. As for the nationality of the course instructors, question sixteen addressed this point. A combination of both Egyptians and foreigners, with Egyptian instructors outweighing the foreign ones, was perceived as the best choice, see figure 11.

As regards the most appropriate methods of training, question seventeen dealt with this matter. The lecture forum is perceived as the most appropriate training method. This is followed by field case studies, then round table discussions, then practical research, see figure 12.

6. The Egyptian National Institute of Transport (ENIT)

"Stemming from the acceptance by the Egyptian Ministry of Transport that the main valuable asset is human resources, the Ministry has established the ENIT to be a centre of excellence for transport education, training, research and consultancy in Egypt. ENIT is perceived to have a significant role in the transitional period that the transport industry among other industries is currently moving through", Abbas et al., 1992.

Question eighteen of the questionnaire attempted to explore the role of the ENIT which is perceived as most significant in light of the current moves towards deregulation. Training came as the most crucial current role, and directly followed by the research role. The educational role came third followed by the consultancy role as last, see figure 13.

"The institute should be playing a prominent role in the coming years of deregulation and privatisation of the transport industry. This role could be stated as deploying all the institute's resources for enhancing and supporting the achievement of the strategic goals and objectives of the transport industry in Egypt. This could be achieved through training staff as well as conducting innovative and problem solving research projects..... Overall, the institute has to plan its future activities, to be more market oriented in terms of training needs, to develop its programmes and courses, to spend more money on publicity and to spread its services to other areas", Abbas et al., 1992.

7. Conclusion

Management of transport companies is becoming an increasingly complex and sophisticated task. There is a need for managers with high levels of expertise and communication skills. Where these skills are not available within a company, this may entail bringing them from outside. Among all these companies there is a strong desire to increase management professionalism and company image.

Training can be looked upon as contributing both to the development of the organisation as well as to the betterment of individuals. Strategically, training aims to foster the business success and growth of the transport industry through manpower

development. This is meant to improve the value of the companies most valuable asset their workforce.

This paper discussed the components of the training process. These include: knowledge of organisational goals, setting of training objectives, assessment of training needs, design of training, delivery of training, measuring training outputs, and evaluation of training.

A questionnaire survey was undertaken in an attempt to infer the way in which managers of transport companies as well as transport experts in Egypt perceive the main components of the training cycle. This study is considered crucial at the present time when all the companies are experiencing changes in different aspects as a result of their deregulation according to the Public Sector Law no. 203 issued in 1991.

The results of the questionnaire can be summarised as follows.

1. Raising efficiency and effectiveness of the performance of employees is regarded as the most important training objective.
2. The topics of courses is considered to be the most important factor in choosing a training establishment.
3. The current position of the nominee is considered to be the most important criterion in selecting nominees for training.
4. Transport Economics is perceived to be the most important course topic necessary to achieve the current professional goals of the transport companies.
5. The 9.00 a.m. to 1.00 p.m. is regarded as the best timing for running the courses.
6. Respondents generally prefer trainees to come from several organisations and to have similar work responsibilities.
7. The most preferred training group size is from 15 to 20 participants.
8. Most respondents chose the contents of courses to be more of a specific nature. Almost all of them showed interest in being involved in the design of the courses.
9. English translated into Arabic was chosen to be the best alternative for preparing the course documents. On the other hand, Arabic supported by English terms was chosen as the preferable way for presenting the courses.
10. Respondents chose the emphasis of the course contents to be on a mixture of both practical and theoretical issues with the practical side outweighing that of the theoretical.
11. Respondents chose the background of the instructors to be from a combination of both academics and practitioners, but with the number of academics outweighing that of practitioners. As for the nationality of the course instructors, a combination of both Egyptians and foreigners, with Egyptian instructors outweighing the foreign ones, was perceived as the best choice.
12. The lecture forum is perceived as the most appropriate training method.
13. Training came as the most crucial current role of ENIT.

As stated earlier in the introduction, this paper does not attempt to fully discuss the results of the questionnaire. Future papers will attempt to do so.

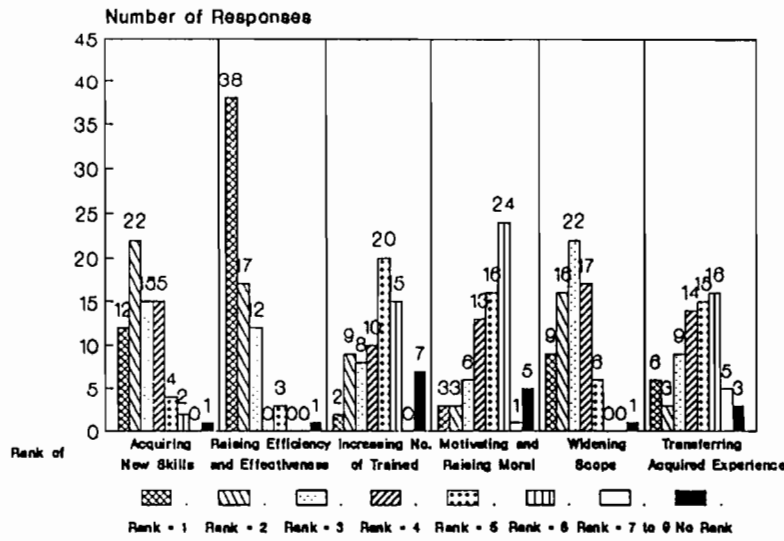


Figure 2: Reasons for training

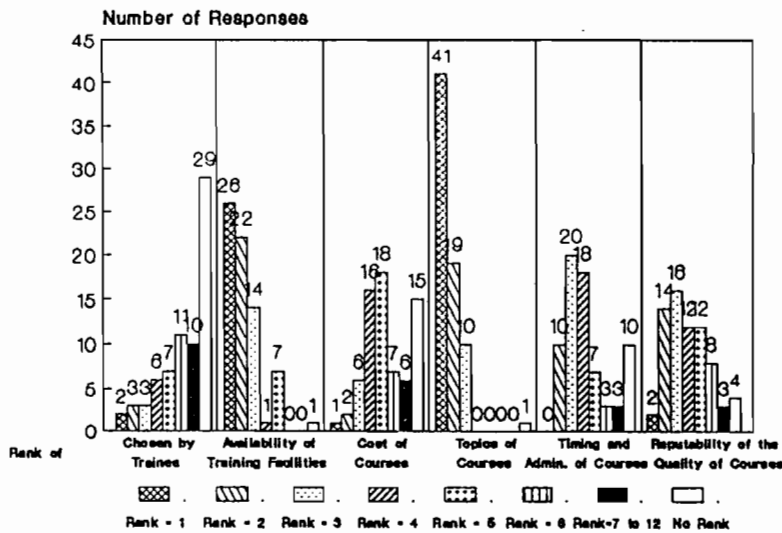


Figure 3: Factors used for choosing training establishment

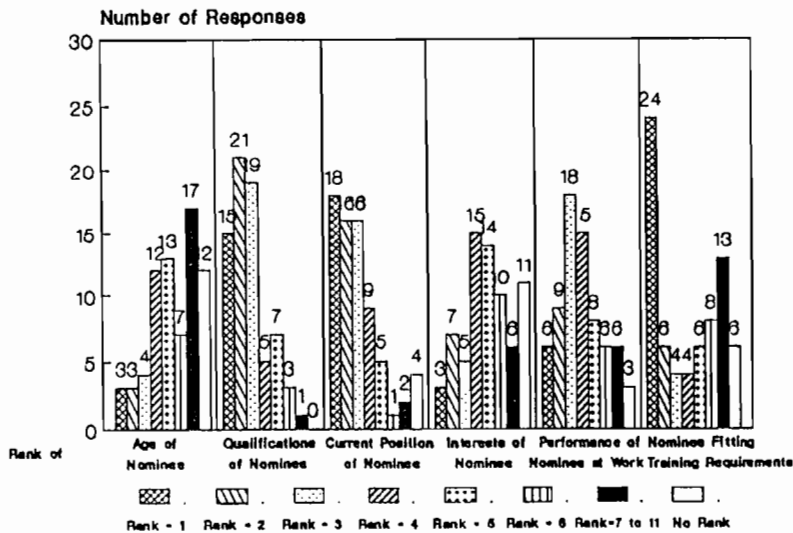


Figure 4: Criteria followed for selecting nominees for training

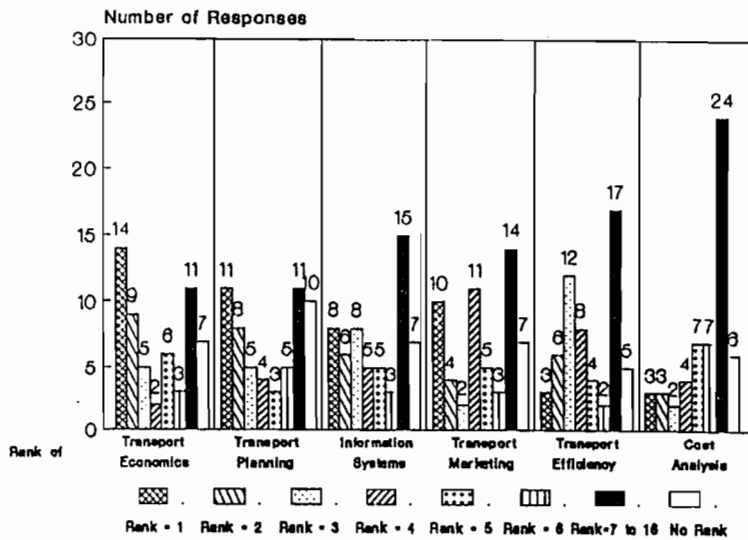


Figure 5: Course topics for transport training

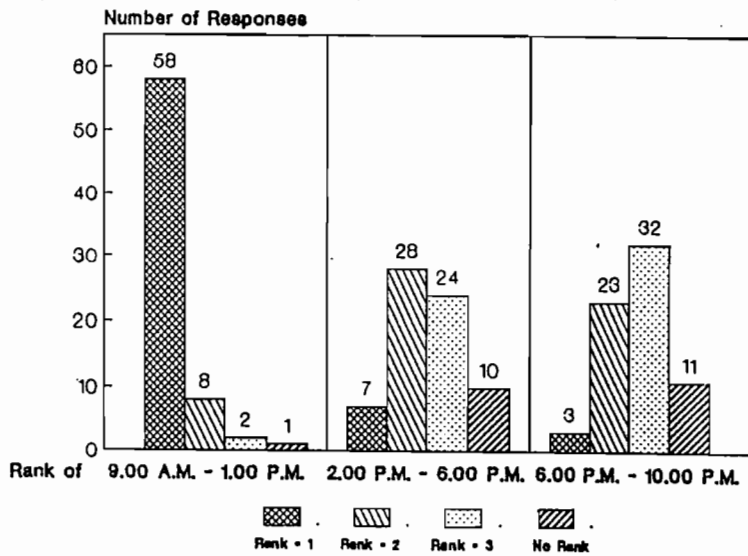


Figure 6: Timing of training courses

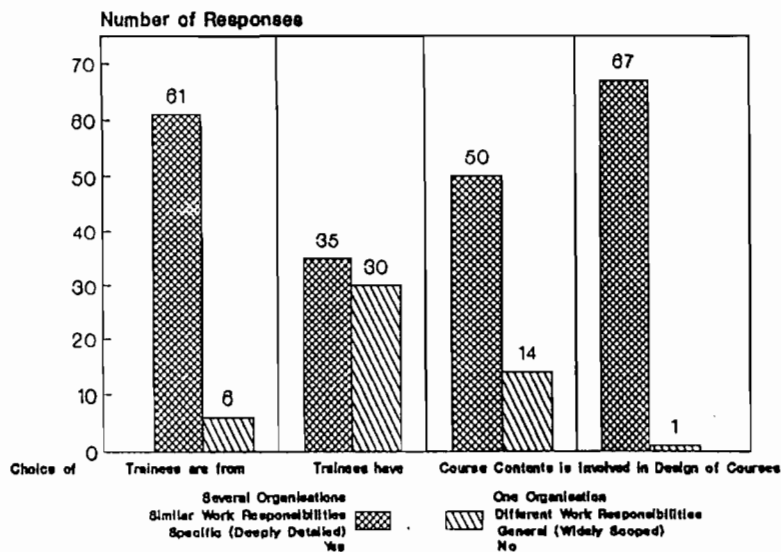


Figure 7: Homogeneity of training group/content and involvement in design of training courses

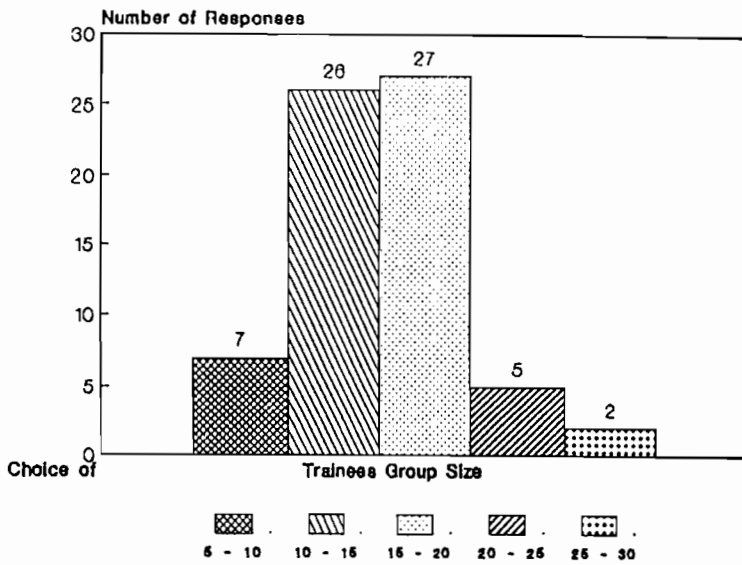


Figure 8: Size of a training group

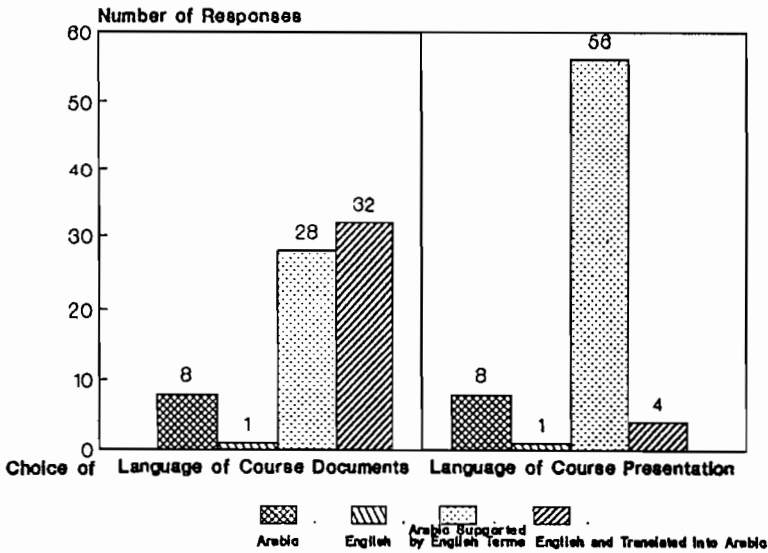


Figure 9: Language of course documents/course presentation

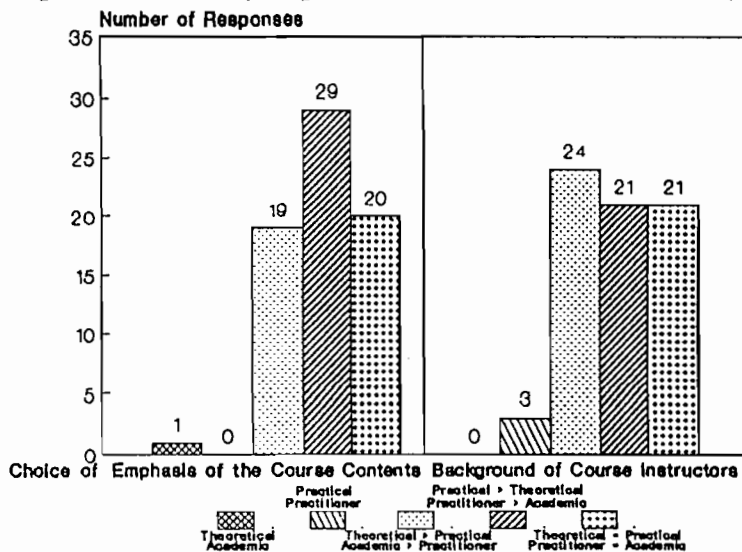


Figure 10: Emphasis of course contents/Background of course instructors

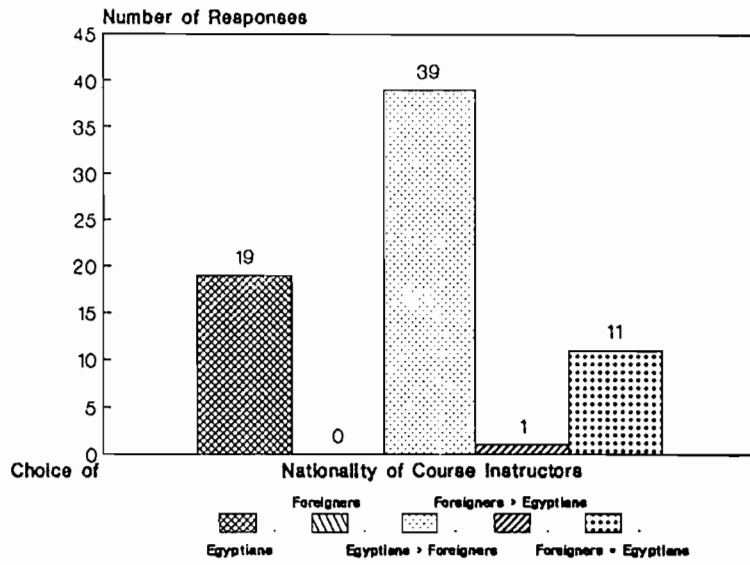


Figure 11: Nationality of course instructors

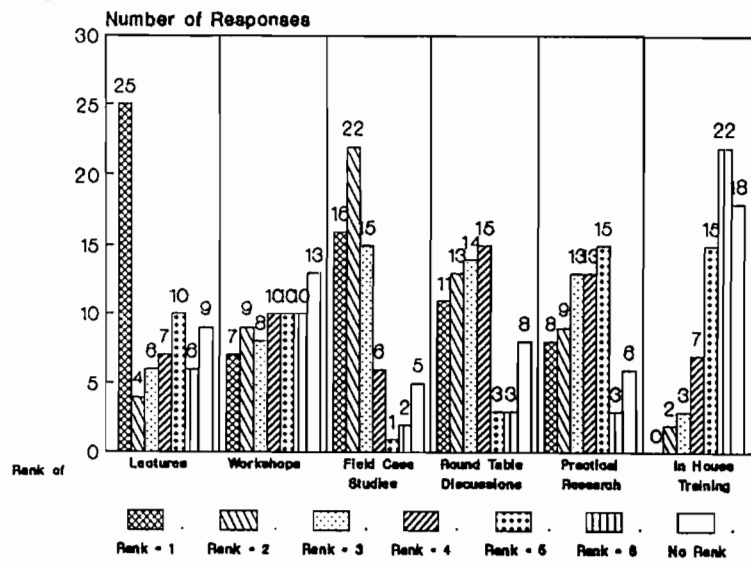


Figure 12: Methods of training

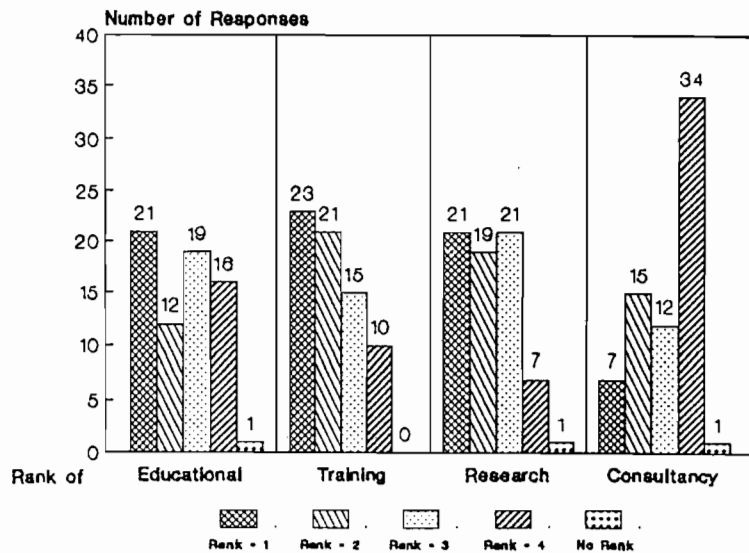


Figure 13: Roles of the Egyptian Institute of Transport

Acknowledgement

The views expressed in this paper do not necessarily reflect the views of the Egyptian Government. Acknowledgement is due to the students co-supervised by the author in the 1992 Transportation Planning Diploma at the Egyptian National Institute of Transport.

References

- Abbas, K. A. et al. (1992) **Towards Market Economy: Past Present and Future Policies in the Intercity Bus Transport in Egypt.** In Proceedings of the 20th Planning and Transport Research and Computation (PTRC) Summer Annual Meeting, Seminar J, Financing Transport Infrastructure: Transport Organisation in Market Economies, 129-147. Manchester, U.K.
- Bramley, P. (1986) **Evaluation of Training: A Practical Guide.** British Association for Commercial and Industrial Education BACIE. Gwyne Printers Limited, U.K.
- Costain, A. M. (1988) **The Importance of Assessing Training Needs and Evaluating Results in the Training Cycle.** In Proceedings of the 16th Planning and Transport Research and Computation (PTRC) Summer Annual Meeting, Seminar H/J, Urban Transport and Urbanisation in Developing Countries, 127-142. Bath, U.K.
- Lawson, G. P. and M. Q. Watson (1988) **Training Courses for Institutional Development.** In Proceedings of the 16th Planning and Transport Research and Computation (PTRC) Summer Annual Meeting, Seminar H/J, Urban Transport and Urbanisation in Developing Countries, 115-126. Bath, U.K.
- Richter, L. (1986) **Training Needs Assessment and Monitoring.** An International Labour Organisation (ILO) Publication. International Labour Office, Switzerland.
- Roscoe, J. (1992) **Analysis of Organisational Training Needs.** In Handbook of Training and Development, 50-79. Edited by Steve Truelove. Blackwell Business, U.K.
- Studnicki-Gizbert K. W. (1981) **Training of Transport Specialists.** In Transportation Research Record 793, Transportation Education and Training: Meeting the Needs of the 1980s, 29-33. Transportation Research Board, Washington, D.C., U.S.A.
- Transportation Research Board (TRB) (1985) **Summary and Recommendations of the Conference on Surface Transportation Education and Training,** Special Report 210. Williamsburg, Virginia, U.S.A.

APPENDIX I

The Patterns and Central Tendencies of Responses

Descriptive statistics were computed to provide an indication of the patterns and central tendencies of responses of the managers of transport companies and the experts to the questionnaire. As ordinal data do not have any meaning in an absolute numeric sense, the best statistical indicator that can describe the pattern of this level of information is the mode and the median. The mode represents the most frequently occurring value of responses. The median, additionally, represents the value below which there is a 50% probability of occurrence of responses. The questionnaire shows the mode and the median for the ordinal parameters and the percentage of responses for the nominal parameters.

The Questionnaire*

1. The questionnaire is concerned with collecting data and information that would be of benefit to a scientific research related to assessing the management training needs in the transport field in light of the Public Sector Law no. 203 issued in 1991.
2. Some questions depend on your personal experience and expectations and these are of great value to the study, please give your best valuable estimates.
3. We thank you in advance for your cooperation and encouragement for the scientific research and certainly this is a noble deed that we sincerely appreciate.

Name of Company (authority):

Name of interviewee:

Position of interviewee:

Date:

Other notes:

1. Rank the following objectives according to their importance as reasons for training.

Reasons for training	Ranking (Mode/Median)
* Employees acquiring new skills to work on solving specific problems	2/3
* Raising efficiency and effectiveness of the performance of employees	1/1
* Increasing the number of trained employees in specific areas	5/5
* Motivating and raising the moral of employees	6/5
* Widening the scope and raising the intellectual level of employees	3/3
* Personal reasons	No Rank/8
* Just to satisfy the administrative obligation of having training	No Rank/8
* Transferring acquired experience from trained employees to other employees	6/5
* Other reasons, please state	No Rank/No Rank

2. Rank the following factors according to their importance in choosing the training establishment.

Factors used for choosing training establishment	Ranking (Mode/Median)
* Chosen by trainee	No Rank/8
* Availability of proper training facilities	1/2
* In response to outside pressure	No Rank/9
* Cost of courses	5/5
* Topics of courses	1/1
* Timing and administration of courses	3/4
* Reputability of the quality of courses	3/4
* Publicity and personal contacts	No Rank/10
* Personal reasons	No Rank/No Rank
* Ad-hoc choice	No Rank/No Rank
* Acquiring accredited and certified courses	No Rank/9
* Other factors, please state	No Rank/No Rank

* This questionnaire is designed and prepared by Dr. Khaled A. Abbas - Lecturer at the Egyptian National Institute of Transport

** Questionnaire for high and middle management and experts

3. Rank the following criteria according to their importance towards nomination of employees for training.

Criteria followed for selecting nominees for training	Ranking (Mode/Median)
* Age of nominee	5/6
* Academic qualifications of nominee	2/2
* Current position of nominee	1/3
* Interests of nominee	4/5
* Level of performance of nominee	3/4
* Personal reasons	No Rank/11
* Sex of nominee	9/9
* Willingness of nominee	7/7
* Nominee fitting requirements specified by training establishment	1/4
* Length of service of nominee	No Rank/8
* Other criteria, please state	No Rank/No Rank

4. Rank the following course titles according to their importance towards achieving the professional goals of your company (authority).

Course titles	Ranking (Mode/Median)
* Transport economics	1/4
* Transport planning	1/5
* Information systems for management and support for decision making	1/5
* Transport marketing	4/5
* Improving the efficiency of transport	3/4
* Methods for evaluation of performance	No Rank/9
* Financing transport projects and analysis of financial structures	No Rank/10
* Computers and system analysis	No Rank/10
* Skills of negotiation and public relations	No Rank/13
* Management of human resources and training	No Rank/11
* Mathematical, analytical and modelling skills	No Rank/14
* Methods for analysis and reduction of costs	9/7
* Skills of leadership and team work building	No Rank/12
* Valuation of assets and portfolio handling	No Rank/14
* Restructuring and organisation of transport companies	No Rank/10
* Passenger/Freight transport operations	No Rank/12

5. In light of your company (authority) training needs and in light of the Public Sector Law no. 203 and the economic changes that Egypt is passing through, what are the most important areas that transport training should address?

Areas/Course topics

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

6. Rank the following course timings in accordance with your preference.

Course timings	Ranking (Mode/Median)
* 9.00 a.m. - 1.00 p.m.	1/1
* 2.00 p.m. - 6.00 p.m.	2/2
* 6.00 p.m. - 10.00 p.m.	3/3
* Other, please specify	No Rank/No Rank

7. Make your choice as regards your preference for the group participants to be from:

* Several organisations.....	91%
* One organisation.....	9%

8. Make your choice as regards your preference for the group participants to have:

- | | |
|--|-----|
| * Similar work responsibilities..... | 54% |
| * Different work responsibilities..... | 46% |

9. Which of the following group sizes do you prefer to be in a course (make one choice by ticking the appropriate box).

Group size	Choice (Percentage)
* 5 - 10	10%
* 10 - 15	39%
* 15 - 20	40%
* 20 - 25	8%
* 25 - 30	3%
* Other, please specify	0%

10. Make your choice as regards the course contents being either:

- | | |
|-----------------------------------|-----|
| * Specific (deeply detailed)..... | 78% |
| * General (widely scoped)..... | 22% |

11. Would you be interested to be involved in the curriculum design of the courses.

- | | |
|------------|-----|
| * Yes..... | 99% |
| * No..... | 1% |

12. In your opinion in what language should the documents of a training course be prepared (make one choice by ticking the appropriate box).

Language of course documents	Choice (Percentage)
* Arabic	12%
* English	1%
* Arabic supported by some English terms	41%
* English and translated into Arabic	46%
* Other, please specify	0%

13. In your opinion in what language should a training course be presented (make one choice by ticking the appropriate box).

Language of presentation	Choice (Percentage)
* Arabic	12%
* English	1%
* Arabic supported by some English terms	81%
* English and directly translated into Arabic	6%
* Other, please specify	0%

14. Make your choice as regards your preference to the emphasis of the contents of a training course to be mainly on: (make one choice by ticking the appropriate box).

Emphasis of course contents on:	Choice (Percentage)
* Theoretical subjects	1%
* Practical subjects	0%
* Mixture of both (Theoretical > Practical)	28%
* Mixture of both (Practical > Theoretical)	42%
* Mixture of both (Theoretical = Practical)	29%

15. Make your choice as regards your preference to the background of the instructors of a training course (make one choice by ticking the appropriate box).

Background of course instructors	Choice (Percentage)
* Academic background	0%
* Practitioner background	5%
* Mixture of both (Academics > Practitioners)	35%
* Mixture of both (Practitioners > Academics)	30%
* Mixture of both (Practitioners = Academics)	30%

16. Make your choice as regards your preference to the nationality of the instructors of a training course (make one choice by ticking the appropriate box).

Nationality of course instructors	Choice (Percentage)
* Egyptians	27%
* Foreigners	0%
* Mixture of both (Egyptians > Foreigners)	56%
* Mixture of both (Foreigners > Egyptians)	1%
* Mixture of both (Foreigners = Egyptians)	16%

17. Rank the following training methods in accordance with your preference.

Training method	Ranking (Mode/Median)
* Lectures	1/3
* Workshops	8/4
* Field case studies	2/2
* Round table discussions	4/3
* Practical research	5/4
* In house training	6/6
* Other, please state	No Rank/No Rank

18. The Egyptian National Institute of Transport is considered as a centre established to have four main roles in serving the transport industry in Egypt, rank these roles according to their importance in serving your company (authority).

Roles of the National Institute of Transport	Ranking (Mode/Median)
* Educational (Diploma in Transportation Planning)	1/3
* Training (several short courses and seminars in transport)	1/2
* Research (research projects related to transport problems)	1/2
* Consultancy (providing consultation in the transport field)	4/4
* Other, please state	No Rank/No Rank

19. We appreciate if you could state any suggestions or comments that can help to enhance and improve the role of the Egyptian National Institute of Transport.

20. Thank you for your cooperation towards completing this questionnaire, we appreciate if you could state any more views, comments, or suggestions that could help us in better assessing and monitoring the training needs in your company (authority).

A P P E N D I X II

Positions of Experts Responding to the Questionnaire

1. Emeritus Professor of Transportation Planning, Cairo University, Consultant and Member of the General Assembly of the Holding Company for Inland Transport and Member of the Board of Directors of the National Institute of Transport (Ex-Director of the National Institute of Transport).
2. Professor of Transportation Planning, Ain Shams University, Consultant and Member of the General Assembly of the Holding Company for Inland Transport.
3. Regional Transport Advisor at the United Nations Economic & Social Committee for Western Asia (ESCWA), (Ex-Vice Chairman of the Transport Planning Authority and Ex-Director of the National Institute of Transport).
4. Emeritus Professor and Advisor at the National Institute of Transport and Member of the Board of Directors of the Holding Company for Inland Transport.
5. Vice Chairman of the Transport Planning Authority and Member of the General Assembly of the Holding Company for Inland Transport and Member of the Board of Directors of the National Institute of Transport.
6. Head of the Central Department for Technical Matters at the Transport Planning Authority.
7. Director General of the Centre for Transport Information at the Transport Planning Authority.
8. Member of the Board of Directors of the Direct Freight Transport Company, (Ex-First Under Secretary of the Ministry of Transport and Ex-Chairman of the Arab Union Company for Passenger Transport and Ex-Chairman of the Roads and Bridges Authority).
9. Ex-Chairman of the River Transport Company and Member of the Board of Directors of the National Institute of Transport.
10. Ex-Chairman of the Water Freight Transport Company and Ex-Member of the Board of Directors of the National Institute of Transport.
11. Lecturer of Transportation Planning at the National Institute of Transport.