Tactic #2: Producing a thorough Evaluation Plan

CDI/STD Meeting, EASA, Nairobi-Kenya, 17-19 October 2016

Presenter: ‘Nopi Linkonyane, ATNS-Aviation Training Academy, South Africa
1. An overview of “Producing a thorough Evaluation Plan” from the TRAINAIR PLUS Methodology (TDG) perspective;

2. The importance of complying with the TDG methodology for best results;

3. Challenges and why they are regarded as such: ATNS Case Study;

4. Solutions and benefits of overcoming the challenges: ATNS Case Study;

5. Conclusion: Best Practice(s)
1. An overview of a thorough Evaluation Plan (TDG perspective)

1.1: The purpose of EVALUATION

a. To evaluate the effectiveness of the training by determining if ALL the performance objectives have been accomplished to the required level of competency;

b. To diagnose any failures in meeting the performance objectives and, where failures exist, to determine their causes;

c. To revise the training material as required.
1. The purpose of EVALUATION

a. To evaluate the effectiveness of the training by determining if ALL the performance objectives have been accomplished to the required level of competency;

b. To diagnose any failures in meeting the performance objectives and, where failures exist, to determine their causes;

c. To revise the training material as required.

1.2: PLANNING is anticipatory decision-making about what needs to be done, how it has to be done, and with what resources.
1. An overview of a thorough Evaluation Plan (TDG perspective)

1.1: The purpose of EVALUATION

a. To evaluate the effectiveness of the training by determining if ALL the performance objectives have been accomplished to the required level of competency;

b. To diagnose any failures in meeting the performance objectives and, where failures exist, to determine their causes;

c. To revise the training material as required.

1.2: PLANNING is anticipatory decision-making about what needs to be done, how it has to done, and with what resources.

1.3 An Evaluation PLAN is a roadmap that specifies the kind of data needed to inform the decision (effectiveness of training). It identifies ways in which data will be collected, who will collect it, when and where will this data be collected, as well as how this data will be analysed.
1.3: A plan for evaluating the effect of training on the organization’s operational performance should be:

- **Prepared** at the end of the Preliminary Study and
- ** Included in the report** for Management.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1: Preliminary Study</td>
<td>Step 2: Job Analysis</td>
<td>Step 6: Production &amp; Developmental Testing</td>
</tr>
<tr>
<td>Step 2: Job Analysis</td>
<td>Step 3: Population Analysis</td>
<td>Step 7: Evaluation &amp; Validation</td>
</tr>
<tr>
<td>Step 3: Population Analysis</td>
<td>Step 4: Design of Curriculum</td>
<td></td>
</tr>
<tr>
<td>Step 4: Design of Curriculum</td>
<td>Step 5: Design of Modules</td>
<td></td>
</tr>
<tr>
<td>Step 5: Design of Modules</td>
<td>Step 6: Production &amp; Developmental Testing</td>
<td></td>
</tr>
</tbody>
</table>
1.3: A plan for evaluating the effect of training on the organization’s operational performance should be:

- **Prepared** at the end of the Preliminary Study and
- **Included in the report** for Management.

**Step 1: Preliminary Study**

**Recap:**
The purpose of the Preliminary Study is to provide Management with the information needed to make a decision whether **training is required** and, if so, what **training strategy** to use.

This Step consists of two (2) related activities:
1. Performance Problem Analysis;
2. Training requirements analysis
1. An overview of a thorough Evaluation Plan (TDG perspective)

1.4: EVALUATION PLAN: [TDG Form 7]

<table>
<thead>
<tr>
<th>STP No. &amp; Title:</th>
<th>Methods</th>
<th>Dates:</th>
<th>Who will carry out the evaluation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors/Aspects to be evaluated</td>
<td>Observations/Interviews</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicators (What is to be monitored)</td>
<td>Tests or Measurements</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questionnaires</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Discussions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational Statistics</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. An overview of a thorough Evaluation Pan (TDG perspective)

1.4.1: Factors/ Aspects to be evaluated

- The list should correspond to SYMPTOMS of the PERFORMANCE Problem identified during the PRELIMINARY Study Step;
- The identification or detection of a performance problem stems from some directly observable or measurable facts or events;
- Such facts or events are called symptoms of a performance problem;
- Examples are:
  - Poor Productivity;
  - Poor Quality of service;
  - High Costs with low returns;
  - Poor Time Management, poor use of allocated time.
1. An overview of a thorough Evaluation Plan (TDG perspective)

1.4.2: Indicators

<table>
<thead>
<tr>
<th>STP No. &amp; Title:</th>
<th>Factors/Aspects to be evaluated</th>
<th>Indicators (What is to be monitored)</th>
</tr>
</thead>
</table>

- The INDICATORS are the MEASURING INSTRUMENTS by which monitoring can be carried;
- Examples are:
  - Work units per day;
  - Number of reported faults;
  - Number of reported complaints;
  - Number of reported delays; etc.
### 1.4.3: Methods

<table>
<thead>
<tr>
<th>STP No. &amp; Title:</th>
<th>Methods</th>
<th>Dates:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors/Aspects to be evaluated</strong></td>
<td><strong>Indicators</strong> (What is to be monitored)</td>
<td><strong>Methods</strong></td>
</tr>
<tr>
<td></td>
<td>Observations;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interviews;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tests;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Measurements;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Questionnaires;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Discussions;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reports;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Operational Statistics</td>
<td></td>
</tr>
</tbody>
</table>

- Indicate which method will be used for **MONITORING each INDICATOR**:

- **Examples are**:
  - Observations;
  - Interviews;
  - Tests;
  - Measurements;
  - Questionnaires;
  - Group Discussions;
  - Reports;
  - Operational Statistics
1. An overview of a thorough Evaluation Plan (TDG perspective)

1.4.4: Who will carry out the evaluation?

<table>
<thead>
<tr>
<th>STP No. &amp; Title:</th>
<th>Methods</th>
<th>Dates:</th>
<th>Who will carry out the evaluation?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>• <strong>Use this Section to record who will be responsible for the evaluation:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• <strong>Examples are:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Which Manager;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Which Supervisor;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Which Team Leader;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Which OJTI; etc.</td>
</tr>
</tbody>
</table>

• Use this Section to record who will be responsible for the evaluation:

• Examples are:
  - Which Manager;
  - Which Supervisor;
  - Which Team Leader;
  - Which OJTI; etc.
2. The importance of complying with TDG Evaluation Methodology

2.1: We PLAN because we want to deliver quality service and programmes.
   a. An Evaluation Plan helps us refine our data collection methods and Assessment Practices so that the information we gather will be useful;
   b. It promotes a culture of evaluation whereby relevant stakeholders are conscious of how to ensure that relevant information is gathered to improve training;

2.2: The Evaluation Plan will give Management a tool for measuring the impact of the training project on the organization.

2.3: Usually, the evaluation of expected improvements in performance will be carried out some months AFTER training has been successfully completed.

2.4: This is known as POST-TRAINING Evaluation and it is a Management Task.
3. The Challenges of designing an Evaluation Plan

3.1: The challenges of designing an Evaluation Plan that will yield results that can be measured against organizational Key Performance Indicators (KPIs)

**Challenge:** Using KPIs in the training and post-training evaluation;

**Issue:** Prior planning for post-training evaluation to measure training impact;
3. The Challenges of designing an Evaluation Plan

3.2: Group work:

Instructions: 20min

Select a spokesperson to present

a. Discuss the challenges and the tactic(s);
b. Decide on solutions and best practices to execute the tactic(s);
c. Discuss & present An Evaluation Plan based on organizational KPIs;
4. Best Practice for designing an Evaluation Plan

4.1: The ATNS-Aviation Training Academy’s Case Study

Key Performance Indicators w.r.t. Quality Management Systems (Examples)

i. Continually improving the management systems in support of ensuring continued compliance.

ii. Evaluate the efficiency of the business system by prioritised safety and quality system related internal audits;

iii. Regularly reviews the Quality Management System at which, appropriate measurable quality objects are established and reviewed;
## 4. Best Practice for designing an Evaluation Plan

### 4.1: The ATNS-Aviation Training Academy’s Case Study

<table>
<thead>
<tr>
<th>STP No.  311/067/QMS INT AUD</th>
<th>Title: Quality Management System (QMS) Internal Auditors Course</th>
<th>Methods</th>
<th>Dates:</th>
<th>Who will carry out the evaluation?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factors/Aspects to be evaluated</strong></td>
<td><strong>Indicators (What is to be monitored)</strong></td>
<td>Observations/Interviews</td>
<td>Tests or Measurements</td>
<td>Questionnaires</td>
</tr>
</tbody>
</table>
| i. High number of CIRs raised (Continuous Improvement Reports) against the internal QMS auditors | Decrease in the number of CIRs raised against the internal QMS Auditors | | | | | | | • Senior Internal QMS Officer,  
• Quality Management Representative (QMR), |
4.1: The ATNS-Aviation Training Academy’s Case Study

Sources of information for CIR:

- Monthly QMS Quality Reports by Central QMS Office;
- Report reflects codes for types of CIR issued;
- Examples:
  - NC1: Not following procedure;
  - NC2: Late submission of document;
  - NC3: Incomplete document
4. Best Practice for designing an Evaluation Plan

4.1: The ATNS-Aviation Training Academy’s Case Study

Source: ATNS July Quality Report
5. Conclusion

The ATNS-Aviation Training Academy’s Case Study

1. **Some job descriptions** are not properly written as a result it is difficult to identify performance problems for Stage 1 Step 1;

2. Some jobs are not **aligned to the Policies and Procedures** that are supposed to guide routine responsibilities. Therefore, it is difficult to identify performance problems and appropriate indicators;

3. In some instances there are **no resources** (HR) to monitor performance, e.g. there is:
   
   a. One Quality Management Representative for the whole Organisation (24 Stations country-wide) and
   
   b. Two LQR (Local Quality Representatives);
Contact us

ATNS HEAD OFFICE
Postal address
Private Bag X15
Kempton Park
1620
Street address
Block C, Eastgate Office Park
South Boulevard Road
Bruma
2198
Gauteng
Republic of South Africa
Contact details
Tel: +27 11 607 1000
Fax: +27 11 607 1570
Website: www.atns.com
Email: marketing@atns.co.za

THE AVIATION TRAINING ACADEMY
Postal address
Private Bag X1
Bonaero Park
1622
Contact details
Tel: +27 11 570 0400
Fax: +27 11 395 3347