TRAINING NEEDS ANALYSIS OF PRE-SERVICE TRAINING DEPARTMENT, DISTRICT INSTITUTE OF EDUCATION AND TRAINING, RAIPUR, CHHATTISGARH, INDIA

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ABSTRACT

BACKGROUND

Training Needs Analysis of Pre-Service Training Department, District Institute of Education and Training, Raipur, Chhattisgarh, has been carried out. National Policy on Education suggested to establish District Institute of Education and Training (DIETs) across the nation and at present there are 500 DIETs in India. The DIET, Raipur, is owned and maintained by the Chhattisgarh Government partly funded by Government of India to impart quality education to eligible candidates to create qualified teachers/faculty for the schools of Elementary Education. It conducts two years course, Diploma in Education (D.Ed.). A TNA consultancy report can strengthen the professional competence of the officials working with DIET, Raipur, and it can ensure the stakeholders participation to achieve the set objectives of the DIET. The terms of reference and surveillance (Phase I-Entry and contracting), SWOT and EMB factors (Phase II-Data collection) and cause and effect (fishbone) analysis (Phase III-Analysis and diagnosis), performance report and priority list (Phase IV-feedback) and training plan, design brief and TNA report (Phase V-Withdrawal) have been used as materials and methods. The aims and objectives, performance problems, various environmental, motivational and behavioural problems have also been incorporated in the work. Training and non-training recommendations, training plan, priority list and design brief are the other highlights of the paper. The consultancy report recommends teaching skill specific training programmes like training on physical education, music, art, peace education, computer education to the faculty, efforts for writing subject specific textbooks and digital resource material on website, encouragement of faculty members for in-service courses like B.P.Ed. (special education for disabled), availability of conference/meeting hall facility for 300 audience, establishment of digital library with relevant digital resource material, establishment of hostel for D.Ed. stakeholders and so on.

KEYWORDS

TNA, SWOT Analysis, EMB Factors, Fishbone Analysis and Performance.


BACKGROUND

The Training Needs Analysis (TNA) is one of the training development programmes of DoPT. Quality education is the bedrock of wellbeing on our society. With a view to ensure these aspects, National Policy on Education suggested to strengthen the two dimensions of our teacher education-pre-service and in-service areas. As part of it, DIETs were established across the nation. At present, there are 500 DIETs in India. The vision of the institutes is to provide better academic input for teachers in service as well as prospective teachers. The DIET, Raipur, is owned and funded by the Chhattisgarh Government and Union Government through SCERT to impart quality education to eligible candidates to create qualified faculty for the schools of elementary education in Chhattisgarh (CG). It conducts two year courses, D.Ed. in-service training courses for teachers of elementary education. It is under the governance of Department of Education, Government of CG and is funded by Grants and Aids of CG Government and Union Government. The main context of the TNA study is to reduce performance gap among the client and stakeholders.

Study Area and Performance Problem

Training needs analysis of Pre-Service Training Department, District Institute of Education and Training, Raipur, Chhattisgarh, is the results of TNA conducted at Pre-Service Training Department, District Institute of Education and Training (DIET), Raipur, Government of Chhattisgarh. The Principal, DIET, Raipur, CH, is the client and D.Ed. trainees are the stakeholders. There are two batches of D.Ed. stakeholders with a total of 150 strength and each batch with 75 stakeholders. Many performance problems in the client organisation are related to environmental, motivational and behavioural categories, which are affecting successful performance of client officers. The various causes include to environmental, motivational and behavioural categories existing in the client organisation.

MATERIALS AND METHODS

The methodology adopted in the TNA consultancy includes primary and secondary data collection, interview and observation and the use of various TNA tool kits. The various TNA tool kits used during the five phases of TNA consultancy are terms of reference and surveillance (Phase I-Entry and contracting), SWOT and EMB factors (Phase II-Data collection) and cause and effect (fishbone) analysis (Phase III-Analysis and diagnosis), performance report and priority list (Phase IV-Feedback) and training plan, design brief and TNA report (Phase V-Withdrawal).

ENTRY AND CONTRACTING

Terms of Reference

The terms of reference with DIET, Raipur.
Surveillance
Surveillance of available primary and secondary data about DIET, Raipur, is collected from the website of DIET, Raipur, and personal interviews with the stakeholders.

Data Collection
SWOT Analysis
The 'SWOT' is a mnemonic for an analysis of four factors related to an organisation's performance viz. strengths, weaknesses, opportunities and threats. The strengths of organisation are attributes of organisation helpful in achieving the objectives. Weaknesses are attributes harmful in achieving organisational objectives and areas of improvements. Opportunities are external conditions, which are helpful in achieving objectives. Threats are the factors, which could do damage to the objectives of the organisation. The data collected during SWOT analysis is compiled (Annexure I).

Environmental, Motivational and Behavioural (EMB) Factors
This tool is used to distinguish performance factors directly linked to training needs and other non-training factors that also require attention. The factors contribute the environment in which they are performing, includes all the tools, equipment, materials and logistical support necessary for successful performance. The persons are motivated to perform at high standard, if they find it rewarding to do something to the best of their ability. The person has the necessary behaviour (or knowledge and skill) to carry out the tasks at high standard, they are required to perform. The EMB factors in the client organisation are compiled (Annexure II).

Analysis and Diagnosis
Cause and Effect (Fishbone) Analysis
The cause and effect analysis enables to analyse a particular performance problem in more detail. Often, a problem is apparent through one or perhaps several 'symptoms' that indicate faulty performance. It is also known as "fishbones" (because of their shape) or Ishikawa diagrams (after their inventor, Dr Ishikawa, the Japanese Quality Control Statistician). The problem being analysed can be expressed as a deficiency or as "desired state." The analysis focuses attention on either a detailed analysis of the causes of the problem or seeking ideas for its solution.
This tool identifies the problem area or "effect" to be analysed or the desired state to be reached by holding brainstorming sessions with students, faculty and officials of DIET to establish all the major possible causes and effect. The cause and effect diagram has been prepared (Figure 1).

![Figure 1. Cause and Effect (Fishbone) Analysis](image-url)
RESULTS AND DISCUSSIONS

Aims of the TNA consultancy is to enhance the teaching and training skills of the faculty members, enhance infrastructural facilities of the client organisation and enhance learning skills of the stakeholders. The objectives include training needs analysis for DIET, Raipur, involvement of stakeholders in the overall performance, training of trainers/faculty viz. ILTC, computer education, in-house keeping, smart classes, art, crafts, music and work experience and peace education, increase the infrastructural facilities viz. digital library, canteen and hostel facilities for D.Ed. students (stakeholders) and one more conference hall of 300 audience capacity and identification of all the EMB factors for proper functioning of DIET, so as to increase the performance of the client organisation.

Performance Problem

Many performance problems related to environmental, motivational and behavioural categories affecting successful performance of DIET were identified during the interaction with the client and stakeholders and these are incorporated (Table 1).

<table>
<thead>
<tr>
<th>Performance Problem</th>
<th>Symptoms of the Problem</th>
<th>Causes of Problem</th>
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<tbody>
<tr>
<td>D.Ed. trainees lack teaching skills according to the guidelines issued by NCTE and NCFTE-2009.</td>
<td>Students lack interest, knowledge and learning skills in arts, crafts, music, work experience, computer education, physical education, peace education, lack of interaction in classroom transaction, poor punctuality of trainees at morning assembly as well as after lunch, uneasiness among trainees during working hours and poor interest of students in reading.</td>
<td>Faculty with insufficient professional qualification (i.e. Med.), only 12 faculty are with M.Ed, insufficient training for arts, crafts and music and work experiences, insufficient training for peace education, insufficient training for computer education, lack of conference hall facility for 300 audience, lack of well-equipped library (digital) facility for students, poor sanitation and housekeeping activities and no residential facility for D.Ed. trainees.</td>
</tr>
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</table>

Table 1. Performance Problems in Client Organisation

CONCLUSION

For improving performance, training and non-training implications, training plan, priority list and design brief and have been proposed (Annexure III, IV, V and VI). These include teaching skill specific training programmes like DTS, training on physical education, music, art, peace education, computer education, library management, efforts for writing subject-specific textbooks and digital resource material on website, encouragement of faculty members for in-service courses like B.P.Ed. (special education for disabled), availability of conference/meeting hall facility for 300 audience, establishment of digital library with relevant digital resource material, establishment of hostel for D.Ed. stakeholders and so on. Client appreciated the consultancy report and various training interventions and non-training implications. The client is of opinion that the implementation of the recommendations will definitely reduce the performance gap among the faculty/officials of the client organisation and stakeholders. The tools used include terms of reference and surveillance (Phase I-Entry and contracting), SWOT and EMB factors (Phase II-Data collection) and cause and effect (fishbone) analysis (Phase III-Analysis and Diagnosis), performance report and priority list (Phase IV - Feedback) and training plan, design brief and TNA report (Phase V- Withdrawal). The tools used during the consultancy were useful for proposing training and non-training recommendations.

<table>
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<tr>
<th>Strengths</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Government organisation with established credibility, systematic time table for training, systematic guidelines for DIETs by NCTE and NCFTE 2009, DIET with own website, academic whatsapp groups, semester wise internship, well-defined assessment system by Exam Regulatory Authority, Chhattisgarh, sufficient fund available for academic activity, infrastructure facilities, viz. PAS, computer lab, internet facility, teaching hall, conference hall, library, sufficient teaching and establishment staff, D.Ed. students from different discipline with PGs, 10% of lectures are done by smart classes using PPTs and pictographs and others by discussion methods, well organised, revised syllabus approved by NCTE, highly qualified and resourceful faculty with PG, B.Ed., availability of annual work plan and progress reports, availability of enough computer system, availability of skill-specific training modules for in-service teachers and teachers capable to teach in Hindi with English terms.</td>
<td>Reference material available in English and Hindi, a few faculty members with M.Ed. and Ph.D., sufficient books and journals in the library and in-service training facility for teachers through SCERT at Raipur, NCERT and NUEPA at Delhi, SIEMAT SIE, State Science Institute and State English Language Institute.</td>
</tr>
</tbody>
</table>

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<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
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<tbody>
<tr>
<td>Lack of proper hostel and canteen facilities for the stakeholders, lack of regular maintenance of equipment, lack of large meeting hall, lack of bilingual language training in Hindi and English, lack of proper issuance of books from library to the students, lack of digital library, lack of enough resource materials in DIET website, 80% of teaching is done by discussion method in Hindi, lack of proper infrastructure, lack of qualified librarian with B.Lib., faculty members of DIET for teaching D.Ed. are not appointed on the basis of their specialisation needed in the DIET, lack of faculty with computer, physical education, peace education, art and crafts teaching skills, lack of fully computerised modern digital library facilities, lack of faculty with teaching skills required for persons with special needs, less sharing opportunity for best practices of faculty and trainees, lack of well-defined system for feedback from D.Ed. trainees, lack of large meeting hall/auditorium for organising various activities for the capacity of 300 people and teachers have not undergone induction level training course after joining the DIET, but only task-based training.</td>
<td>Loss of the credibility of the institution for providing quality education, recognition of D.Ed. course maybe withdrawn by NCTE and lack of job security in D.Ed. trainees.</td>
</tr>
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</table>

Annexure I. Data Collected During SWOT Analysis
Priority No. | Job or Person | Aim | Strategy | Target | Responsibility |
--- | --- | --- | --- | --- | --- |
1. | Asst. Professors and Lecturers | To enable for effective teaching skills | Teaching skill-specific training programmes like DTS. A short refresher course on subject-wise teaching methodology | 1 month | SCERT/DIET |
2. | Lecturer responsible for physical education | To enable for effective training in physical education | Physical education training with help of B.P.Ed. Training Institutes | 1 month | SCERT/DIET |
3. | Lecturer responsible for music education | To enable for effective training in music education | Music training with help of music training institutes | 1 month | SCERT/DIET |
4. | Lecturer responsible for art education | To enable for effective training in art education | Art training with help of art training institutes | 1 month | SCERT/DIET |
5. | Lecturer responsible for peace education | To enable for effective training in peace education | Peace education with help of peace education training institutes | 1 month | SCERT/DIET |
6. | Lecturer responsible for computer education | To enable for effective training in computer education | Computer education training for with help of computer training institutes | 1 month | SCERT/DIET |
7. | Office staff responsible for library management | To enable for effective library management | Library management with help of institutes running similar courses | 1 month | SCERT/DIET |
8. | Principal, Vice Principal, Asst. Professors and Office Superintendent | To enable for effective management of DIET and various departments | Office management training with help of Management Training Institutes | 1 month | SCERT/DIET |

**Environmental Factors** (Non-Training Factors)

- Lack of sufficient fund for improvements, lack of proper infrastructure facilities, viz. large conference hall, digital library, digital library with sufficient resources, lack of sufficient hostel facility for trainees, lack of regular maintenance of equipment, 80% of teaching is done by discussion method and lectures by smart classes.

**Motivational Factors** (Non-Training Factors)

- Faculty should be appointed on the basis of specialisation, defined incentives and promotions on additional qualification and performance at desired level.

**Behavioural Factors** (Training Factors)

- A capacity-building training should be given to faculty, a computerised training management system to faculty, ILTC to faculty, training on computer education and internet, bilingual teaching to officials and students.

**Annexure II. EMB Factors in the Client Organisation**

<table>
<thead>
<tr>
<th>Training Intervention</th>
<th>Non-Training Implications</th>
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</thead>
<tbody>
<tr>
<td>Teaching skill-specific training programmes like DTS for all faculty members, one month physical education training for one faculty member with help of B.P.Ed Training Institutes, one month music training for one faculty member with help of music training institutes, one month art training for one faculty member with help of music training institutes, one month peace education training for one faculty member with help of training institutes, one month computer training for one faculty member with help of computer education training institutes and one month library management training for one faculty member staff responsible for library management.</td>
<td>Efforts for writing subject-specific textbooks and digital resource material on website with help of related institutes, encouragement of faculty members for in-service courses like B.P.Ed. (special education for disabled), PGDCA or BCA, P.G. in Education, Music, Psychology or Art, posting of faculty with subject-specific qualification in P.G., availability of conference/meeting hall facility for 300 audience, establishment of digital library with relevant digital resource material, maintenance of hostel with necessary furniture and establishment of hostel for D.Ed. stakeholders.</td>
</tr>
</tbody>
</table>

**Annexure III. Training Intervention and Non-Training implications**

**Annexure IV. Training Plan**

<table>
<thead>
<tr>
<th>Performance Problems</th>
<th>Training Implications</th>
<th>Other Implications</th>
<th>Priority No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty with insufficient professional skills</td>
<td>Teaching skills-specific training programmes like DTS for all faculty members</td>
<td>Encouragement by incentive to faculty members for in-service courses like M.Ed./P.G. in education. Posting of faculty with subject specific qualification in P.G.</td>
<td>1</td>
</tr>
<tr>
<td>Insufficient training for physical education</td>
<td>One month physical education training for one faculty member with help of B.P.Ed. Training Institutes</td>
<td>Encouragement by incentive to faculty member for in-service courses like B.P.Ed.</td>
<td>2</td>
</tr>
<tr>
<td>Insufficient training for art education</td>
<td>One month art education training for one faculty member with help of Art Training Institutes</td>
<td>Encouragement by incentive of faculty member for in-service courses like M.A. in Art</td>
<td>8</td>
</tr>
<tr>
<td>Insufficient training for music</td>
<td>One month music education training for one faculty member with help of Music Training Institutes</td>
<td>Encouragement by incentive of faculty member for in-service courses like M.A. in Music</td>
<td>5</td>
</tr>
</tbody>
</table>
Insufficient training for peace education

One month peace education training for one faculty member with help of peace education institutes

Encouragement by incentive of faculty member for in-service courses. Efforts for writing subject-specific digital resource material on website with help of related institutes

Insufficient training for computer education

One month computer training for one faculty member with help of Computer Training Institutes

Encouragement by incentive of faculty member for in-service courses like PGDCA/BCA efforts for writing subject-specific digital resource material on website with help of related institutes

Insufficient management of library

One month library management training for one faculty member with help of institutes running B.Lib.

Encouragement of administrative staff for in-service courses like B.Lib. Proper library hall with furniture for 100 readers. Establishment of digital library with relevant Digital Resource Material

Insufficient infrastructure management

One month office management training for Office Superintendent, Asst. Professor with help of Management Training Institutes

Availability of conference/meeting hall facility for 300 audiences. Maintenance of hostel with necessary furniture

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**Annexure V. Priority List**

<table>
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<tr>
<th>#</th>
<th>Design Brief Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Information about the client</td>
<td>Principal, District Institute of Education and Training, Raipur.</td>
</tr>
<tr>
<td>2</td>
<td>Context within which training is being designed</td>
<td>DIET was established in 1988 at Shankar Nagar, Raipur, to maintain continuous progress of elementary education (pre-primary, primary and upper primary). This Institution has responsibility to provide help in relation of whole primary education arrangement of the district, Raipur and set aside educational problem. The institute (DIET) has divided its total work into six departments, of which Pre-Service Training Department is our concern in collaboration with other departments</td>
</tr>
<tr>
<td>3</td>
<td>Performance problems being addressed</td>
<td>The faculty members are not able to perform as per NCTE norms as they lack knowledge and skills regarding - insufficient training for physical education, insufficient training for music, insufficient training for peace education, insufficient training for computer education and insufficient management of library</td>
</tr>
<tr>
<td>4</td>
<td>Details of identified training needs</td>
<td>Teaching skills-specific training programmes like DTS for all faculty members, a short refresher course on teaching methodology, one month physical education training for one faculty member with help of B.P.Ed. training institutes, one month music education training for one faculty member with help of music training institutes, one month peace education training for one faculty member with help of Peace Education Training Institutes, one month computer education training for one faculty member with help of computer training institutes, one month library management training for one faculty member with help of institutes running B.Lib.</td>
</tr>
<tr>
<td>5</td>
<td>Information about non-training initiatives</td>
<td>Encouragement by incentive of faculty members for in-service courses like M.Ed./P.G. in education, posting of faculty with subject-specific qualification in P.G., efforts for writing subject-specific textbooks and digital resource material on website with help of related institutes, encouragement by incentive of faculty member for in-service courses like B.P.Ed., encouragement by incentive of faculty member for in-service courses like M.A. in Music, encouragement by incentive of faculty member for in-service courses like PGDCA/BCA, encouragement of administrative staff for in-service courses like B.Lib., availability of conference facility for 300 audience, maintenance of hostel with necessary furniture and introduce hostel facility for stakeholders</td>
</tr>
<tr>
<td>6</td>
<td>Details of people to be trained</td>
<td>Principal and Vice Principal, DIET, 5 Assistant Professors, 12 Lecturers, 1 Office Superintendent, 1 Hostel In-Charge and 1 Library In-Charge</td>
</tr>
<tr>
<td>7</td>
<td>Significant constraints</td>
<td>Availability of fund for training to be managed through Director, SCERT from Government, time period to be managed through phase wise training for individual</td>
</tr>
<tr>
<td>8</td>
<td>Aim of the proposed trainings</td>
<td>To enable the Principal DIET, Vice Principal, Asst. Professor/Lecturers, Office Staff, Hostel In-Charge and Library In-Charge to acquire necessary knowledge and skills for successful pre-service training</td>
</tr>
<tr>
<td>9</td>
<td>Specific outcomes to be achieved</td>
<td>At the end of the trainings, training skills of the faculty members should be enhanced; at the end of the training, training efficiency of the subject-specific faculty members should be enhanced; at the end of the training, use of library should be enhanced; at the end of the training, learning skills of the D.Ed. trainees should be enhanced; at the end of the training, infrastructural facilities should be better managed</td>
</tr>
<tr>
<td>10</td>
<td>Standards against, which outcomes can be evaluated</td>
<td>Annual achievement of the targets in terms of learning achievements of the trainees and after appointment of the trainees in primary education, in terms of learning achievements of the students, taught by the trainees</td>
</tr>
</tbody>
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**Annexure VI. Design Brief**
ACKNOWLEDGEMENT
The author is grateful to V. Kunhambu, Regional Director, Central Ground Water Board, Kerala Region, Government of India, Thiruvananthapuram, for all the encouragement given during the course of the work. Thanks to Himashankar Joji, son of the author, for the data entry and editing of the manuscript.

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