CHAPTER 3

METHODOLOGY
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METHODOLOGY

Research is essentially a systematic enquiry seeking facts through objectively verifiable methods in order to discover the relationship among them and deduce from them broad principles or laws. It comprises defining and redefining problems, formulated hypothesis or suggested solution and evaluation of data, making deduction and making conclusion to determine whether they fit the formulated hypothesis. The instruments that are used to collect new facts or explore new fields are called ‘tools’. Methodology occupies a very important position in any kind of research. The accuracy and adequacy of the research findings depend up on the method adopted. The scientific method encourages a rigorous, impersonal mode of procedure dictated by the demands of logic and objective procedure. The method free from personal bias or prejudice, ascertain demonstrable qualities of being certified, a method wherein the investigation proceeds in an orderly manner and a method that implies the research methods. It also considers the logic behind the methods that has been used in the context of the research study.

The chapter discusses the proper methods and tools that are of vital elements for successful research. It comprises the method adopted, variables, sample source of data, tools and their preparation, validity and the reliability of the tools, validation of the Soft Skills Praxis Pedagogic Package, data scoring procedures and statistical techniques used in the study.

3.1. STATEMENT OF THE PROBLEM

The investigator has done a vast review in the field of soft skills and felt hard to find out a pedagogic package for secondary students. So the investigator selected that area and done this experimental study. The study entitled as,” DEVELOPMENT
3.2. OBJECTIVES OF THE STUDY

1. To prepare and validate soft skills praxis pedagogic package on soft skills among secondary students.

2. To prepare and standardize a soft skills assessment tool for secondary students.

3. To find out the effectiveness of soft skills pedagogic package on developing soft skills among secondary students.

4. To find out the difference in the pretest scores of experimental and control group on soft skills and component skills among secondary students.

5. To find out the difference between the pretest and post test scores of experimental and control group on soft skills and component skills among secondary students.

6. To find out the difference between the gain scores of experimental and control group on soft skills and component skills among secondary students.

7. To find out the difference in pretest and posttest scores of experimental and control groups before and after the treatment among secondary students.

8. To find out the effectiveness of Soft Skills Praxis Pedagogic Package considering emotional competence as a co-variate among secondary students.
3.3. HYPOTHESES OF THE STUDY

1. There is significant effect of Soft Skills Praxis Pedagogic Package on enhancing soft skills among secondary students.

2. There exists significant difference in the pre test scores of experimental and control group on Soft Skills among secondary students.

3. There exists significant difference in the pretest scores of experimental and control group on communication skills among secondary students.

4. There exists significant difference in the pretest scores of experimental and control group on interpersonal skills among secondary students.

5. There exists significant difference in the pretest scores of experimental and control group on assertive skills among secondary students.

6. There exists significant difference in the pretest scores of experimental and control group on problem solving skills among secondary students.

7. There exists significant difference in the pretest and posttest scores of experimental and control groups on soft skills among secondary students.

8. There exists significant difference in the pretest and posttest scores of experimental and control groups on communication skills among secondary students.

9. There exists significant difference in the pretest and posttest scores of experimental and control groups on interpersonal skills among secondary students.
10 There exists significant difference in the pretest and posttest scores of experimental and control groups on assertive skills among secondary students.

11 There exists significant difference in the pretest and posttest scores of experimental and control groups on problem solving skills among secondary students.

12 There exists significant difference in the gains scores of experimental and control groups on soft skills among secondary students.

13 There exists significant difference in the gains scores of experimental and control groups on communication skills among secondary students.

14 There exists significant difference in the gains scores of experimental and control groups on interpersonal skills among secondary students.

15 There exists significant difference in the gains scores of experimental and control group on assertive skills among secondary students.

16 There exists significant difference in the gains scores of experimental and control group on problem solving skills among secondary students.

17 There exists significant difference in pretest and posttest scores of experimental and control groups on soft skills before and after the treatment among secondary students.

18 There is effect of Soft skills Pedagogic Package considering emotional competence as a co-variate among secondary students.

3.4. METHOD OF INVESTIGATION

Research design refers to the conceptual framework within which the research is conducted. It is a mapping strategy which provides the researcher an exact idea
about the work in terms of the framework of the study, availability of data, observations, analysis and sampling. Since the major objective of the study is to find out the effectiveness of Soft Skills Praxis Pedagogic Package, the investigator decided to use true experimental method. So the design proposed for the study is “The Pretest-Post test Equivalent Groups Design”. Though it is difficult to arrange a true experimental design, particularly in school classroom research, the investigator equalized the groups in terms of their emotional competency (a closely related skill with soft skills). Other factors of time of the day, treatment length in time, age and medium of students are also equated.

In the present study the researcher selects 80 students from a student population of 180. The 80 students are randomly assigned to experimental and control treatments, using 40 as the experimental group and 40 as the control group. Pretests are administered using Soft Skills Assessment Scale, before the application of the experimental and the control treatments and posttests (using the same tool) at the end of the treatment period. The treatment given to the students of standard IX in the experimental group is in the form of Soft Skills Pedagogical Praxis for 60 hours. Gain scores are also compared and subjected to Test of Significance of Difference between Means. Pre test scores also be used in analysis of covariance to statistically control for any differences between the groups at the beginning of the study. The comparability of the groups was checked analyzing the pre test scores of the experimental and control groups. It is found that there is no significant difference in the pre test scores. ANCOVA was used because even with random assignment the groups were not exactly equal. ANCOVA permitted the investigator to statistically control for the differences on the pre test. So that posttest differences would not be due to initial
differences prior to the praxis of soft skills Best & Kahn (2002). Again an emotional competence scale was administered to equalize the groups and the analysis was done.

So the investigator selected The Pretest-Post test Equivalent Groups Design in order to find out the effectiveness of Soft Skills Praxis Pedagogic Package among secondary students. The design of the study is presented in the figure 3.5.1

3.5 RESEARCH DESIGN OF THE STUDY

In the present study attempted to find out the effectiveness of the SPPP and how far the pupils attained soft skills through the implementation of the package. The study was carried out in four stages.

1. Administration of Pre Test for experimental group and control group using soft Skills Assessment Scale.
3. Conducting the training for experimental group through Soft Skills Praxis Pedagogic Package.
4. Administration of post test for both experimental and control group.

*Figure 3.5.1 The Pretest-Post Test Equivalent Groups Design*

<table>
<thead>
<tr>
<th>Group</th>
<th>Pretest</th>
<th>Treatment</th>
<th>Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group &amp; Control</td>
<td><strong>Administration of SSA Scale</strong></td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Experimental</td>
<td>Nil</td>
<td><strong>SPPP</strong></td>
<td>Nil</td>
</tr>
<tr>
<td>Control group</td>
<td>Nil</td>
<td><strong>Existing Method</strong></td>
<td>Administration</td>
</tr>
<tr>
<td>Experimental &amp; Control</td>
<td>Nil</td>
<td><strong>Administration of SSA Scale</strong></td>
<td>SSA Scale</td>
</tr>
</tbody>
</table>
3.7. SELECTION OF SAMPLE FOR THE CONSTRUCTION OF SOFT SKILLS ASSESSMENT SCALE

Sampling is the process of selecting units from a population of interest. So that by studying the sample, the results can be fairly generalized back to the population from which they were taken. In order to solve the diversity in the population (secondary school students) the investigator needs to narrow the population to IX standard students of Thrissur district. The population consisted of all the students of standard IX studying in schools which follow the curriculum designed by Board of Secondary Education in Kerala State. In order to conduct the initial try out of the tools the investigator randomly selected 10 students of standard IX from GHSS Chembuchira, Thrissur District.

For validating the final draft of the tools, the investigator randomly selected 5 secondary schools from Thrissur District which follow the curriculum designed by the Board of Secondary Education in Kerala State. From these schools, 400 students were randomly selected. The investigator administered the final draft of the Soft Skills Assessment Scale on selected skills.

In order to find out the reliability and validity of the tools the investigator randomly selected one school from Thrissur district from which 75 students of standard IX, were selected randomly.
3.8. VARIABLES OF THE STUDY

Variables are the things that are measured, controlled and manipulated in research. They differ in many aspects, most notably in the role they are given in research and in the types of measures that can be applied to them. The variables selected for the study were classified under two divisions. They are given in research and in the types of measures that can be applied to them. The variables selected for the study were classified under two divisions.

They are;  

**Independent Variable**

**Dependent variable**

**INDEPENDENT VARIABLE**

Independent variables are those that manipulated and they are independent form the initial reaction of patterns, features, intentions etc, of the subject. In this study, **Soft Skills Praxis Pedagogic Package is the independent variable.**

**DEPENDENT VARIABLE**

Dependent variables are those that are measured and registered since they are dependent on the manipulation and experimental condition. In the present study the dependent variable is **Soft skills;**

- Communication Skills
- Interpersonal skills
- Assertive skills
- Problem solving skills.
3.9. TOOLS USED IN THE STUDY

The tools are used for measurement of the study. The tools were scored following their respective scoring procedure and the results of experimental and control groups were compared. The present study used the following tools;

1. **SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE** (developed by the investigator along with supervising teacher)

2. **SOFT SKILLS ASSESSMENT TOOL** (Developed by the investigator along with supervising teacher)

3.10. STATISTICAL TECHNIQUES USED IN THE STUDY

The pre test scores and the post test scores of the Experimental and Control groups were consolidated for statistical analysis. Since the aim of the study was to find out the effectiveness of Soft Skills Praxis Pedagogic Package, it was necessary to find out whether there is significant difference between the mean scores. For this, the investigator used the following descriptive and inferential statistics. The collected data were analyzed by using the following statistical techniques for processing the data.

i. Mean and Standard Deviation

ii. Independent Sample ‘t’ test

iii. Paired sample ‘t’ test

iv. **ANOVA** (Analysis of Variance)

v. **ANCOVA** (Analysis of Co Variance)
3.11. DATA COLLECTION PROCEDURE OF SOFT SKILLS ASSESSMENT SCALE

The researcher is responsible for ensuring that the data collected and cases developed are accurate representations of each participant. Since the author is responsible for all the information provided in the thesis, care has been taken to ground the questions and narratives in the scale and not to divulge any information that may hurt the feelings of the participants or the institutions. The investigator collects the data by using Soft Skill Assessment Tool prepared by the investigator with the help of the research supervisor. For this the investigator conducted a pilot study using the assessment scale including 121 questions. The procedure of the data collection is as follows.

3.11.1. PREPARATION OF SOFT SKILLS ASSESSMENT SCALE

The study deals with the development and validation of Soft Skills Praxis Pedagogic Package on soft skills. For this the investigator must know the soft skills that which need the prime attention. As there is no standardized tool for the present study, the investigator prepared a Soft Skills Assessment Scale along with the help of supervising teacher. The pool of statements on 16 soft skills was given to experienced and qualified experts of various fields, related with the study. The language was checked by the language experts. It was also ascertained that the vocabulary used in the package was appropriate for the students of standard IX. An Evaluation Matrix was given to the experts and the necessary correction was done. Altogether with 121(One twenty one only), in the form of statements in- built with 5-point scale for the respondent to check the appropriate response which is most
descriptive of him/her viz., Always true of you, Very true of you, Sometimes true of you, Occasionally true of you, Not at all true of you.

It has both positive and negative items. The 121 test items have been arranged in such a fashion that the one test item pertaining to each dimension being measured are arranged one after the other. The test items include 77 positive statements and 44 negative statements. The score was given 5, 4, 3, 2 and 1 for the positive statements and 1,2,3,4 and 5 for reverse statements. The population consisted of all the students of standard IX studying in schools which follow the curriculum designed by Board of Secondary Education in Kerala State. In order to conduct the initial try out of the tools the investigator randomly selected 10 students of standard IX from GHSS Chembuchira, Thrissur District.

For validating the final draft of the tools, the investigator randomly selected 5 secondary schools from Thrissur District which follow the curriculum designed by the Board of Secondary Education in Kerala State. The Pilot study was conducted for 400 students of Thrissur District of kerala State and evaluates the responses.

3.11.2 ITEM ANALYSIS OF SOFT SKILLS ASSESSMENT SCALE

The investigator selected items for the final form of the scale following the procedure suggested by Edward, L., A (1975). Out of the 400 response sheet, the investigator removed 18 incomplete entries at random to bring down the number to 370, to follow the psycho metric procedures of item analysis.

After the pilot study the investigator selected 80 items having the ‘t’ value more than 1.75 with the help of the experts for final study. The scale of the final study includes 56 positive statements and 24 negative statements.
3.11.3 TRY OUT OF THE FINAL DRAFT OF SOFT SKILLS ASSESSMENT SCALE

In order to test the items, the investigator administered the draft of Soft Skills Assessment Scale with 80 items to 400 students of Standard IX, selected randomly from five schools of Thrissur District in the academic year 2011-2012. The school from which the sample selected for experimentation was excluded. During administration of the draft form, the investigator provided enough time so as to enable all the students to complete the scale. The students were asked to select any one of the five categories after carefully reading the statements. After the administration of the scale, it was scored, keeping in view of the scoring procedure suggested by Likert (Edwards, 1975).

3.11.4 DATA ANALYSIS

The investigator prepares the assessment scale on the basis of Likert’s method of assessment scale construction. The data analysis was done after collecting the responses in the pilot study. For this purpose the investigator first select higher 27% and lower 27% of students from the Pilot study. Then calculate the mean and standard deviation of the selected items and calculated the ‘t’ value. The items for which have the ‘t’ value greater than or equal to 1.75 can be regarded as an item which possesses the internal consistency and hence discriminating power. (Edwards L.A, 1975). The investigator selected the items, which secure the ‘t’ value more than 1.75 for the final study and reject all other items. (Appendix: Annexure 1) and then the investigator collected the data from the sample for final study. The data prepared based on the final study were fed into the computer for necessary analysis. Based on the analysis the interpretations are made.
3.12. RELIABILITY

Test reliability refers to the consistency of a test. A good psychological measure should find the same results each time, given the same input and circumstances. Just as we would not trust a thermometer that reported significantly different results on two separate days that seemed to be of similar temperature, we should not trust psychological measures that find different results for the same individual in similar circumstances.

There are several ways to measure reliability, but some of the most common and most useful ways include test-retest reliability and internal consistency. Test-retest reliability is done by administering a test to a group of individuals and then re-administering the test to the same individuals at a later date and comparing the two results. The test-retest reliability is measured as the correlation between the results of the two administrations. This method is most appropriate for measures of constructs that are believed to be stable, as measures of less stable characteristics would be expected to change over time. The second method, internal consistency, is most commonly accomplished by measuring the similarity of responses across all items within the same individuals. Theoretically the characteristics of the construct present in the individual causes them to respond consistently across items, assuming the items are good measures of the construct. Internal consistency is most commonly presented as a correlation coefficient based on a statistical procedure known as coefficient alpha. Reliability coefficients between .70 and .89 are considered adequate for more research analysis based on group rather than individual means and scores below .69 suggest that caution should be used in making any analysis/decisions (Guilford & Fruchter, 1978; Nunnally & Bernstein, 1984). To clarify this, on a test with a reliability of $r = .69$, an individual's true ability on the concept being measured only
accounts for roughly 48% of the person's actual score on the test. The rest is error. The reliability of the Soft Skills Assessment tool established through split half method, where \( r = 0.82 \), which is highly reliable.

### 3.13. VALIDITY

The general concept of validity is that the test measures what it is intended to measure. There are many ways to test this, but with measures of soft skills, discriminant validity, concurrent validity and predictive validity are used most often. Discriminant validity is intended to show that the measure of interest differs from measures that it should not be related to (e.g., a measure of love should not be strongly related to a measure of cognitive intelligence). Discriminant validity is also used to establish whether a new measure for predicting something overlaps with previously established measures that already are known to predict the issue of interest. If a new measure overlaps too much with previous measures, it does not contribute significantly new information. Concurrent validity measures how much the measure relates to other measures with which it is expected to correlate. Predictive validity measures how well the measure predicts other behaviors/constructs that it is supposed to predict. When multiple measures are used in combination to predict another variable, the extent to which variable B predicts variable C, beyond what is predicted by variable A is called incremental validity. In the present study content validity and expert validity of the tool has established.

### METHOD USED IN SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE

Training is essentially the act of instructing others in information new to them and its application. It may and often does, involves the teaching of new skills, methods and procedures. Training methods are two types. They are formal training,
which is directed by others and informal training which is self directed. The decision about what approach to take to training depends on several factors; funding that available, specificity and complexity of the knowledge, skills needed, and timeliness of training needed, the capacity and motivation of learner. Highly complex and challenging roles often require for more complete and formal means of development, which can be very expensive as a result. Informal learning is self directed and can be of very low cost, however the learner should have the capability and motivation to pursue their own training.

The method that followed in Soft Skills Praxis Pedagogic Package (SPPP) is formal, being pedagogic. Still the approach is highly flexible. The period of training is four sessions with 15 hours each. The duration of time is sixty hours. The intended subjects of the package are secondary students. The activities that suggested on different phases are comprehensive. The teacher has to select the appropriate strategies for the definite skills on the time.

3.14. DEVELOPMENT OF SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE

The investigator reviewed books, periodicals and other descriptive material dealing enhancement of soft skills and the preparation of the package. The investigator attended 5 days workshop at national level and many seminars at the international level. The pool of statements, activities, and strategies for developing soft skills was given to experienced and qualified experts of the field. This ensured the validity of Soft Skills Praxis Pedagogic Package. The language was checked by the language experts. It was also ascertained that the vocabulary used in the package was appropriate for IX class students. An evaluation matrix was given to the experts and the necessary correction was done. The Process of developing the Soft Skills
Praxis Pedagogic Package was done in three steps. The steps involved in this process are illustrated in figure.

- **PRE-PRODUCTION**
- **PRODUCTION**
- **POST PRODUCTION**

The steps involved in the development validation of the Soft Skills Praxis Pedagogic Package are the following.

1. Identifying the soft skills that are minimal among secondary students
2. Finalizing the soft Skills to be measured in secondary students
3. Finalizing the strategies and activities suitable for enhancing soft skills considered for measurement
4. Preparation of the script and phases
5. Discussion with Experts, Correction and Validation
6. Production
7. Try out I
8. Post Production
9. Editing
10. Try Out II
11. Revision

### 3.14.1 PRE PRODUCTION

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The pre production process was done in three steps.

- **Identifying and finalizing the soft skills that are minimal among secondary students**

  To begin with, the soft skills that are minimal were identified and listed down by the investigator.

- **Identifying and finalizing the soft skills strategies, techniques, process and activities for solving the above said limitation among secondary students.**

  The soft skills that lacks among secondary students were taken by the investigator and the results were taken to the experts in the field. With their guidance, the skills that were need for secondary students were finalized. They are as follows;

  *Figure 3.14.1 Soft Skills Clusters in the Package*

<table>
<thead>
<tr>
<th>COMMUNICATION SKILLS</th>
<th>INTERPERSONAL SKILLS</th>
<th>ASSERTIVE SKILLS</th>
<th>PROBLEM SOLVING SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening skills</td>
<td>Adaptability skills</td>
<td>Personal integrity skills</td>
<td></td>
</tr>
<tr>
<td>Interview skills</td>
<td>Team working skills</td>
<td>Learning skills</td>
<td></td>
</tr>
<tr>
<td>Written communication skill</td>
<td>Emotional Intelligence skills</td>
<td>Positive attitude skills</td>
<td></td>
</tr>
<tr>
<td>Presentation skills</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Finalizing the soft skills praxis package process and pedagogic activities.**

  The details of the strategies, activities and their process were identified and discussed with soft skills and English language experts. The necessary techniques needed for the study which can be easily acquired by secondary students was finalized.
with their guidance. The finalized Soft Skills Praxis Package was planned to include some the reflective sessions, which will take approximately half an hour. The major activities include speech, interview, news reporting, letter, conversation, role play, panel discussion, debate, chat show, seminar, journalist, impersonation, skit etc. The process of these activities was discussed and the strategies for linking those with the skills were determined. The process and phases of the package appended in the Annexure F. The syntax and the scheme and content of the package shown in the figures 14.4.2 and 14.4.3.

**SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE SYNTAX**

All phases except the second, the package follows the same syntax for all skills. The package allows 2-5 minutes break in every 40 minutes. Brain dancing and stress busting activities are preferable during the break time. Brain dancing and stress busting activities are preferable during the break time.

**SUGGESTED REFLECTIVE PEDAGOGIC ACTIVITIES**

- Analysis on the responses of learners
  (Mostly done by the teacher)
- Evolving common weaknesses
  (The weaknesses that can be remedied through classroom practices)
- Reflective remedial practices
Figure 3.14.2 SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE SYNTAX

<table>
<thead>
<tr>
<th>Phase I</th>
<th>Process Phase II</th>
<th>Phase III</th>
<th>Phase IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher facilitates a climate of involvement, a ‘felt need’ for a suitable issue up on the defining learning intentions and success criteria for definite skills.</td>
<td>(emphasizing process) Role Rotation... Cross Pollination of Answers SWOT analysis …etc (It is preferable to generate ideas through a tip activity )</td>
<td>Individual Brain Storming Mind mapping... Fogging (Start from personal vantage points)</td>
<td>Think -Pair-Share Discussion Praising Reflection Description (Avoid commands, questions, Criticism or correction.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase V</th>
<th>Phase VI</th>
<th>Phase VII</th>
<th>Phase VIII</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socio Metric Group Discussion Negotiation(win-win negotiation) Selection Presentation… Appropriate prompts are used... (Reminding,Scaffolding ,Example) Tailor up to target of the interests... Drafting... Editing...</td>
<td>Rehearsing. Reflecting. Revising &amp; Balancing presentations (Circle Voice Views)</td>
<td>Review and Analogy… Expert Group Presentation Selection. Providing Self, Peer &amp; Group Check lists... Constructive Feedback</td>
<td>Self assessment check list on definite soft skills. Skill wheel exhibition</td>
</tr>
</tbody>
</table>
3.14.3 **SOFT SKILLS PEDAGOGIC PACKAGE SCHEME AND CONTENT**

<table>
<thead>
<tr>
<th>SL.NO.</th>
<th>SOFT SKILLS</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communication skills (Listening, Presentation, Interview, Written communication)</td>
<td>15 hrs</td>
</tr>
<tr>
<td>2</td>
<td>Interpersonal Skills, Adaptability, Team working, Emotional Intelligence.</td>
<td>15 hrs</td>
</tr>
<tr>
<td>3</td>
<td>Assertive skills; Learning skills, Personal integrity Positive attitude skills.</td>
<td>15 hrs</td>
</tr>
<tr>
<td>4</td>
<td>Problem solving, Decision making, Conflict resolution, Interaction skills.</td>
<td>15 hrs</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>60 hrs</strong></td>
</tr>
</tbody>
</table>

3.14.3 PRODUCTION

As soon as the contents of the SPPP have been finalized the script was prepared. All the training aids including audio and video clips were either collected or prepared. Some audio clips were prepared in the investigator’s voice. The activities such as speech, interview, news reporting, letter, conversation, role play, panel discussion, debate, chat show, seminar, journalist, impersonation, and skit were selected for the enhancement soft skills. The process and praxis strategies were determined.
3.14.4 POST PRODUCTION

The package is prepared by the investigator with the proper guidance of the research supervisor and the experts of the field. It took approximately around 4 months to complete the work. When the package is ready the evaluation process of the tool was done.

Figure 3.14.4 Time taken for the activities of SPPP

<table>
<thead>
<tr>
<th>Name of Activity</th>
<th>Time taken for Praxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mock Interview/ Interview</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Speech</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Letter (Personal / Official )</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Announcement</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Conversation</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Panel Discussion</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Skit</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Group Discussion</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Debate</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Seminar Paper/Presentation</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Journalist</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Role Play</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Chat Show</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Impersonation</td>
<td>3 ½ hrs</td>
</tr>
<tr>
<td>Skit/Role Play/ Dramatisation</td>
<td>9 ½ hrs</td>
</tr>
<tr>
<td>Reflective practices</td>
<td>1 ½ hrs</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60 hrs</strong></td>
</tr>
</tbody>
</table>
3.15. VALIDATION OF SOFT SKILLS PRAXIS PEDAGOGIC PACKAGE

Initially the investigator studied in depth the various soft skills and training methodologies. Review of related literature in this area also gave insight to the investigator with regard to the methods and techniques of transacting soft skills in the classroom setting. Based on the work done; at this stage, the investigator developed a draft of the proposed package.

At the next phase, the draft package was subjected to the expert opinion for the purpose of validation. The Soft Skills Praxis Pedagogic Package was taken to the following personnel and its content validity was checked with the help of the Evaluation Matrix prepared by the investigator. The evaluation matrix is given in Annexure F.

- English Experts
- Soft skills trainers
- Administrators and teachers from different levels
- Contemporary researchers in the same domain
- Educational thinkers

All the experts were given the draft package of the study. All their observations and comments were recorded. Their valid ideas, modifications and corrections were incorporated leading to the final form of the package. Thus developed package was validated through Focus Group Discussion by establishing content validity and face validity. The package is conceived as a praxis package for enhancement of soft skills among secondary students. The content, the clarity of ideas, the language and vocabulary, appropriate activities and strategies for enhancing soft skills were discussed with the above personnel and the validity of Soft Skills
Praxis Pedagogic Package was checked and confirmed (annexure E). The investigator himself is the trainer for 80 working days.

3.16 INTERNAL AND EXTERNAL VALIDITY

In the present study attempts were made to identify the possible variables that could pose threats to internal and external validity of the experiment. An experiment is valid if the results obtained are due only to the manipulated independent variable and if they are generalizable to individuals or contexts beyond the experimental setting. Internal validity is concerned with threats or factors other than the independent variable that affect the dependent variable. External validity is concerned with the extent to which the study results can be generalized to groups and settings beyond those of the experiment. In order to conduct a valid experiment is to maximize internal and external validity. Too much experimental control to achieve internal validity may reduce external validity. So some compromise between internal and external validity is inevitable Best & Kahn., (1989).

History can’t be a threat here. Regarding maturation; the 80 days training is fairly a short span of time. So maturation can be easily controlled. Testing is more likely to be a threat when the time between pre test and post test is too short. The present study extends 80 days duration from the pre test. In order to assure the fairness of the data the responses of the tests were scored immediately after the administration of the test. The study controls mortality as no subject was losing during the experimental period. All the scores kept confidential and the subjects were selected from IX class only with same age group. The location is same for both groups. The duration of treatment, teacher factor, the social competence levels are equalized among 80 students and selected the students randomly for the experimental and control group.
3.18 PROCEDURE OF THE STUDY-DATA COLLECTION

The dates were finalized for the soft skills training with the school headmistress and the treatment conducted using soft skill pedagogic package also has three phases.

PHASES

- PRE-TRAINING
- TRAINING
- POST TRAINING

3.18.1 PRE TRAINING PHASE

Keeping in view of the experimental nature of the study and its demands and limitations, the investigator selected the students from standard IX. A Soft Skills Assessment Scale was administered to the students to gather their personal attitude towards soft skills. In the pre training session, the investigator made them feel a ‘felt need’ for soft skills through appropriate strategies and learning environment.

3.18.2 TRAINING PHASE

Once the date and timings of soft skills training have been fixed, preparation for training was made. Time is adjusted to English period of the school time table to get the real pedagogical effect. Since the investigator herself a life skills trainer, it is easy to interweave pedagogy of the time with the English language. Since the skills introduced in the package were complementary to each other, the following days provided a much more positive impact for the other skills.

Though some students while doing the activities felt difficult to grasp some ideas, they have taken to the reflective session and measures were taken to get
remedied. As they move on with regular training and as the days passed their difficulties were vanished. They enjoyed the activities and empowered with a kind of self confidence. In the training 16 skills were tailored, extending 4 months exclusive of Sundays and Saturdays. At the end of the training of one skill; self peer and group assessment has done and the score of individual performance was exhibited on the skill wheel.

3.18.3 POST TRAINING PHASE

The post training session was almost a reflective session, where the scores of each student were analyzed and inferential remedies are given. At the end the investigator administered the Soft Skills Assessment Tool once again and the post scores were sought.

3.15 INSTRUCTIONAL MATERIAL BASED ON EXISTING METHOD

In the present study, the effectiveness of Soft Skills Praxis Pedagogic Package was compared with the existing method practiced in the schools which follow the curriculum designed by the Board of Secondary Education in Kerala State. For providing routine treatment using Existing method to the control group the investigator prepared the teaching manual on the same contents. Existing method is activity oriented in which students taught the content through activities.

CONCLUSION

The investigator had done systematic work regarding the construction of the tools, selection of the sample and data collection. The collected data were analyzed and interpreted using descriptive and inferential statistics. The next chapter deals with analysis and interpretation of the present study.