

Chapter – 6

Findings, Interpretations and Educational Implications

CHAPTER 6

FINDINGS, INTERPRETATION AND EDUCATIONAL IMPLICATIONS

The present chapter dwells on the major findings of the research and implications thereof. A few areas of study have been suggested for further research. The chapter ends with a note on personal benefits of this research as experienced by the researcher.

6.1 Findings

The researcher has arrived at the following findings through the current research study.

- 54.55% i.e. thirty respondents of both the institutes showed improvement in their overall scores. This indicates that the programme proved to be fruitful for more than half the sample.
- 30.91% i.e. seventeen respondents from both the institutes showed reduction in their overall scores. It can be assigned to a casual approach and lack of communication skills on the part of the respondents as well as short span of the time available to develop such implicitly difficult skills.
- 14.55% i.e. eight respondents from both the institutes scored evenly in the pre-test and post test. This reflects their inability to express their view in written form what they have learnt because the respondents were able to participate quite effectively during discussions.
- As against the previous observations, 20.00% i.e. eleven respondents from both the institutes improved their scores by more than sixteen % of their previous scores. One of the respondents doubled his/her score over pre-test. It is reflective of their keen interest in the programme.
- Looking at the average scores from all the respondents, majority of the respondents have presented their better learning from the sessions of the programme in their pre-test and post test scores. However, we have to stress upon the following.

1. A limited exposure of thirteen sessions cannot bring about dramatic change in people's cognitive abilities and attitude. Hence we need a longer period.
 2. As problem solving and decision-making skills require a great deal of prior knowledge and experience, interpersonal skills, intra personal skills, creativity, communication skills, critical thinking skills, empathy, coping with stress and emotions, one needs to take care of these skills also to firmly embed in their day to day behavior.
 3. It was also observed that the improvement does not have gender-bias though the female respondents showed better expression in their written answers.
- Respondents realized a sense of responsibility as teachers and a need for teachers' code of conduct though the concepts (problem solving and decision making skills) were theoretical till these sessions were conducted. Their active participation reflected that they had understood the concepts thoroughly due to these sessions.
 - Respondents' overall oral communication was found to be lucid, fluent, and comprehensive leading to lively discussion.
 - The exposure to the programme led to generation of creative ideas with regard to decision making and problem solving skills.
 - There was always a closure at the end of the sessions which means they understood what they were expected to do and within the allotted time frame. It is a sign of understanding.
 - Divergent views were accepted which is reflective of their democratic and positive attitude.
 - Simulations, role-play, reflecting over the video materials, strip stories and the other activities helped them in understanding the concepts and imbibed them so well that they got interested in doing so in their career.
 - The session clarified the allied life skills to the respondents/participants which they were able to identify later.

- Their responses during the sessions revealed that decision making and problem solving skills can be developed through a conscious attempt, rather than an automatic event resulting from maturation.
- The best part of the sessions was that the respondents got an idea about their SWOT (Strengths, Weaknesses, Opportunities and Threats).
- Instead of getting to the extremes, majority of the respondents preferred to be flexible to find a middle path, which again, reflects their problem solving attitude.
- The researcher is of the view that the way they felt free to discuss matters with the researcher, they would provide similar opportunities to their students.
- **Null Hypothesis: H_0 1=** There is no significant difference between the mean scores of pre-test and post test among Pre-Service Teachers (both male and female) of Waymade College of Education.

Table no. 6.1: Pre-Test And Post-Test Scores Of WMCE with average scores					
Sr. No.	Name	College	Gender	Pre-Test scores	Post-Test Scores
1.	Bhavik A. Vahgela	WMCE	Male	10	17
2.	Farhan Mafat	WMCE	Male	15	8
3.	Hitesh D. Raulji	WMCE	Male	10	14
4.	Milan P. Parmar	WMCE	Male	13	16
5.	Rajnikant S. Vaniya	WMCE	Male	8	14
6.	Sam J. Christi	WMCE	Male	15	11
7.	Shrikant Panchal	WMCE	Male	19	16
8.	Soheb Shaikh	WMCE	Male	16	16
9.	Suhag Dave	WMCE	Male	15	11
10.	Utkarsh A. Parikh	WMCE	Male	19	19
11.	Vivek D. Desai	WMCE	Male	19	16
12.	Bhumika Jogi	WMCE	Female	15	16
13.	Hardika Trivedi	WMCE	Female	16	11
14.	Hinal D. Patel	WMCE	Female	20	21
15.	Hiral Raj	WMCE	Female	15	21
16.	Jigna Ahir	WMCE	Female	19	21

Sr. No.	Name	College	Gender	Pre-Test Scores	Post-Test Scores
17.	Jeenu John	WMCE	Female	15	20
18.	Juhi Bhavsar	WMCE	Female	16	17
19.	Khushbu D. Joshi	WMCE	Female	14	12
20.	Kinjal Bhatt	WMCE	Female	13	16
21.	Komal M. Macwan	WMCE	Female	12	15
22.	Lakhbeer D. Parmar	WMCE	Female	10	15
23.	Poonam A. Kripalani	WMCE	Female	16	16
24.	Richa Tripathi	WMCE	Female	13	19
25.	Ritu singh	WMCE	Female	18	17
26.	Sejal V. Bhagat	WMCE	Female	9	17
27.	Shradha Kumari	WMCE	Female	18	19
28.	Suryanka	WMCE	Female	19	19
Average scores				14.89286	16.07143

1. p-Value for t-test = 0.061032
2. As the p-value is greater than 0.05, the null hypothesis is accepted i.e. There is no significant difference between the mean scores of pre-test and post test among Pre-Service Teachers (both male and female) of Waymade College of Education.
3. The average scores of pretest and posttest among the respondents of WMCE are not significantly different i.e. there is no improvement in whole group of Waymade College.
4. Going beyond the statistics, it becomes imperative to clarify that an add on programme like this study can never bring about a dramatic change in the respondents in a short span of time. Long term exposure and opportunities to practice are needed to hone these skills.
5. Further, the respondents are required to possess several connotative skills associated with decision making and problem solving skills, so that better comprehension could be attained.

6. Apart from all these aspects, ease in expression plays a vital role in developing these skills. As observed in the sessions the respondents showed a good amount of participation but were lacking in expressing their ideas and understanding in the tests.
 7. Such skills cannot be taught to the learners in an isolated manner. Hence learners need to be helped to develop ability to co-relate and connect other related life skills.
- **Null Hypothesis: H_0 2=** There is no significant difference between the mean scores of pre-test and post test among Pre-Service Teachers (both male and female) of H.M.Patel Institute of English Training and Research

Table no. 6.2: Pre-Test And Post-Test Scores of H.M.P.I.E.T.R. with average scores					
Sr. No.	Name	College	Gender	Pre-test Scores	Post-test Scores
1.	Ashish Meckwan	H.M.P.I.E.T.R	Male	16	21
2.	Dilip P. Sutariya	H.M.P.I.E.T.R	Male	15	19
3.	Hemankumar G. Rana	H.M.P.I.E.T.R	Male	11	15
4.	Leo Stephan A.	H.M.P.I.E.T.R	Male	15	23
5.	Mehul A. Agrawal	H.M.P.I.E.T.R	Male	15	13
6.	Mitesh H. Adhvaryu	H.M.P.I.E.T.R	Male	13	19
7.	Parthiv V. Patel	H.M.P.I.E.T.R	Male	20	17
8.	Pritesh Z. Patel	H.M.P.I.E.T.R	Male	9	18
9.	Sigeon Kumar A.	H.M.P.I.E.T.R	Male	12	16
10.	Ami P. Bhatt	H.M.P.I.E.T.R	Female	19	14
11.	Anushree Shah	H.M.P.I.E.T.R	Female	13	14
12.	Bhumika Y. Suthar	H.M.P.I.E.T.R	Female	14	8
13.	Darshita R. Patelia	H.M.P.I.E.T.R	Female	16	16
14.	Deepika C. Makwana	H.M.P.I.E.T.R	Female	15	18
15.	Deepika R. Parmar	H.M.P.I.E.T.R	Female	15	18
16.	Divya B. Rajput	H.M.P.I.E.T.R	Female	15	14
17.	Harnakshi S. Vaghela	H.M.P.I.E.T.R	Female	12	17
18.	Hetal Makwana	H.M.P.I.E.T.R	Female	12	9

Sr. No.	Name	College	Gender	Pre-test Scores	Post-test Scores
19.	Jinal J. Rami	H.M.P.I.E.T.R	Female	18	13
20.	Kruti Desai	H.M.P.I.E.T.R	Female	13	11
21.	Nancy N. Amodkar	H.M.P.I.E.T.R	Female	20	20
22.	Pooja D. Virola	H.M.P.I.E.T.R	Female	12	18
23.	Rachana Vaghela	H.M.P.I.E.T.R	Female	21	23
24.	Swapna Gamadia	H.M.P.I.E.T.R	Female	10	11
25.	Vaidehi J. Thakar	H.M.P.I.E.T.R	Female	18	18
26.	Vaishali G. Pandya	H.M.P.I.E.T.R	Female	16	16
27.	Yogina B. Patel	H.M.P.I.E.T.R	Female	13	12
Average Scores				14.74074	15.96296

1. p-Value for t-Test= 0.061498
2. As the p-value is greater than 0.05, the null hypothesis is accepted i.e. There is no significant difference between the mean scores of pre-test and post test among Pre-Service Teachers (both male and female) of H. M. Patel Institute of English Training & Research.
3. The average scores of pretest and posttest among the respondents of H. M. Patel Institute of English Training & Research is not significantly different i.e. there is no improvement in whole group of H. M. Patel Institute of English Training and Research.
4. It suggests that the respondents of H. M. Patel Institute of English Training and Research are not benefited significantly by the programme.
5. Defending the present finding, it becomes imperative to clarify that a programme can never bring dramatic change in comprehension level of respondents until provided with sufficient exposure and time and hence it is necessary to provide more exposure to these skills.

6. Further, the respondents are required to possess several connotative skills associated with decision making and problem solving skills, so that better comprehension could be retained.
 7. Apart from all these aspects, the participation plays a vital role in comprehension of some topic. As observed in the sessions the respondents showed good amount of participation but were lacking in expressing in the tests.
 8. Such skills cannot be taught to the learners in an isolated manner and hence it must enable learners to develop ability to co-relate and connect other related life skills as well as equip them with adequate communication skills that may enhance their expression and writing skills.
- **Null Hypothesis: H_0 3=** There is no significant difference between the mean scores of pre-test and post test among all Pre-Service Teachers (combined group of two institutes) i.e. H.M.Patel Institute of English Training and Research and Waymade College of Education.

Table no. 6.3: Pre-Test And Post-Test Scores with average scores					
Sr. No.	Name	College	Gender	Pre-test Scores	Post-test Scores
1.	Ashish Meckwan	H.M.P.I.E.T.R	Male	16	21
2.	Dilip P. Sutariya	H.M.P.I.E.T.R	Male	15	19
3.	Hemankumar G. Rana	H.M.P.I.E.T.R	Male	11	15
4.	Leo Stephan A.	H.M.P.I.E.T.R	Male	15	23
5.	Mehul A. Agrawal	H.M.P.I.E.T.R	Male	15	13
6.	Mitesh H. Adhvaryu	H.M.P.I.E.T.R	Male	13	19
7.	Parthiv V. Patel	H.M.P.I.E.T.R	Male	20	17
8.	Pritesh Z. Patel	H.M.P.I.E.T.R	Male	9	18
9.	Sigeon Kumar A.	H.M.P.I.E.T.R	Male	12	16
10.	Ami P. Bhatt	H.M.P.I.E.T.R	Female	19	14
11.	Anushree Shah	H.M.P.I.E.T.R	Female	13	14
12.	Bhumika Y. Suthar	H.M.P.I.E.T.R	Female	14	8
13.	Darshita R. Patelia	H.M.P.I.E.T.R	Female	16	16
14.	Deepika C. Makwana	H.M.P.I.E.T.R	Female	15	18

Sr. No.	Name	College	Gender	Pre-test scores	Post-test scores
15.	Deepika R. Parmar	H.M.P.I.E.T.R	Female	15	18
16.	Divya B. Rajput	H.M.P.I.E.T.R	Female	15	14
17.	Harnakshi S. Vaghela	H.M.P.I.E.T.R	Female	12	17
18.	Hetal Makwana	H.M.P.I.E.T.R	Female	12	9
19.	Jinal J. Rami	H.M.P.I.E.T.R	Female	18	13
20.	Kruti Desai	H.M.P.I.E.T.R	Female	13	11
21.	Nancy N. Amodkar	H.M.P.I.E.T.R	Female	20	20
22.	Pooja D. Virola	H.M.P.I.E.T.R	Female	12	18
23.	Rachana Vaghela	H.M.P.I.E.T.R	Female	21	23
24.	Swapna Gamadia	H.M.P.I.E.T.R	Female	10	11
25.	Vaidehi J. Thakar	H.M.P.I.E.T.R	Female	18	18
26.	Vaishali G. Pandya	H.M.P.I.E.T.R	Female	16	16
27.	Yogina B. Patel	H.M.P.I.E.T.R	Female	13	12
28.	Bhavik A. Vahgela	WMCE	Male	10	17
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31.	Milan P. Parmar	WMCE	Male	13	16
32.	Rajnikant S. Vaniya	WMCE	Male	8	14
33.	Sam J. Christi	WMCE	Male	15	11
34.	Shrikant Panchal	WMCE	Male	19	16
35.	Soheb Shaikh	WMCE	Male	16	16
36.	Suhag Dave	WMCE	Male	15	11
37.	Utkarsh A. Parikh	WMCE	Male	19	19
38.	Vivek D. Desai	WMCE	Male	19	16
39.	Bhumika Jogi	WMCE	Female	15	16
40.	Hardika Trivedi	WMCE	Female	16	11
41.	Hinal D. Patel	WMCE	Female	20	21
42.	Hiral Raj	WMCE	Female	15	21
43.	Jigna Ahir	WMCE	Female	19	21
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Sr. No.	Name	College	Gender	Pre-test scores	Post-test scores
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46.	Khushbu D. Joshi	WMCE	Female	14	12
47.	Kinjal Bhatt	WMCE	Female	13	16
48.	Komal M. Macwan	WMCE	Female	12	15
49.	Lakhbeer D. Parmar	WMCE	Female	10	15
50.	Poonam A. Kripalani	WMCE	Female	16	16
51.	Richa Tripathi	WMCE	Female	13	19
52.	Ritu singh	WMCE	Female	18	17
53.	Sejal V. Bhagat	WMCE	Female	9	17
54.	Shradha Kumari	WMCE	Female	18	19
55.	Suryanka	WMCE	Female	19	19
Average scores				14.82	16.02

1. p-Value for t-Test = 0.013383
2. As the p-value is less than 0.05, the null hypothesis is rejected i.e. There is significant difference between the mean scores of pre-test and post test among all Pre-Service Teachers (combined group of two institutes) i.e. H.M.Patel Institute of English Training & Research and Waymade College of Education.
3. The programme indicates overall improvement as regards the understanding of problem solving and decision making skills for the whole group of pre-service teachers i.e. the programme/training proved to be fruitful
4. A certain question may come to an individual/observer that how could it become possible that both the individual institutes showed no significant difference but when combined they presented significant difference. The answer to this question is that
 - The average scores of pretest and post test of female respondents of Waymade College of Education exhibit a significant difference, similarly the male students of

HMPIETR exhibit significant difference in the average scores of pre-test and post-test.

- This ultimately leads to the significant difference between the averages of pre-test and post-test scores among combined results of students of the two colleges.

6.2 Suggestions for further study

In view of the insights developed through the present study, the following suggestions have been put forth to carry out further research in this particular area.

1. Effectiveness of a Programme to develop Self Awareness and Communication Skills among Pre-Service Teachers
2. Effectiveness of a Programme to develop Skills of Empathy and Coping with Stress among Pre-Service Teachers
3. Effectiveness of a Programme to develop Creative and Critical Thinking Skills among Pre-Service Teachers
4. Effectiveness of a Programme to develop Empathy and Interpersonal Skills among Pre-Service Teachers
5. Effectiveness of a Programme to develop Critical Thinking Skills and Coping with emotions among Pre-Service Teachers
6. A comparative study of awareness of life skills among pre-service teachers in vernacular medium colleges and those in English medium colleges
7. A Critical Study of the Course on Life Skills offered by the Prajapita Brahmakumari Vishwa Vidyalaya
8. A Critical Study of the Textbooks to develop Life Skills in CBSE schools
9. The same course can be extended with a larger sample and spread over a longer stretch of time (a term or a year)
10. Study of awareness of life skills among in-service primary teachers
11. Study of awareness of life skills among Teacher Educators
12. A comparative study of awareness of life skills among teachers in Gujarati medium schools and those in English medium schools

13. A comparative study of awareness of life skills among pre-service teachers and in-service teachers
14. Study of awareness of life skills among secondary teachers
15. Study of awareness of life skills among college/ university teachers

6.3 Educational Implications

Many people rise to the top of their profession because they have a passion and an innate talent. They seem to be born to do what they do. We cannot make a great sport person or violinist out of someone who does not have passion. Can we teach life skills to people who just do not care about their behavior? They love being mere accountants, engineers, lawyers or architects or management personnel.

The good news is that life skills are a set of abilities that may not be measurable but are improvable through practice, proper application and teaching learning strategies. The bad news is that these abilities cannot be imparted within a limited time frame i.e. ten to fifteen sessions. It must be learned through conscious self efforts in real life situations. There must be real life constant coaching, guidance, counseling, motivation, exposure to role models and feedback so that positive behavior can be learnt.

So, life skills need to be nurtured and used by teacher educators in their classroom teaching, for enhancing their own and student-teachers' teaching-learning competency and professional performance as well as to sustain enlightened and satisfactory life. As Pre-service teachers are associated with adolescent students, it is very essential that they take care to be stable, possess varied life skills and incorporate activities that facilitate a sound and responsible tone of the school and the society. Institutions and government should provide facilities for enhancing the Life Skills awareness among the Pre-service and In-service teachers through refresher courses, seminars, workshops etc. to upgrade teachers and teacher training courses. Schools and educational institutes should provide more time, exposure and effort for developing Life skills which in turn will lead to the holistic development of individuals. Some of the ways through which one can inculcate life skills in the students include

- Co-operative learning Strategies
- Transformational learning
- By developing programs as Mastering Life skills programme
- Customized Leadership programs
- Celebrations of various kinds
- Value weeks celebration
- Intra-class competitions
- Curriculum development programs
- Workshops
- Awareness programs (rally, excursions, picnic)
- Defining and redefining work ethics, and institutional activities
- Co-curricular and curricular activities

Life skills in general and Decision Making and Problem Solving skills, specifically, play a vital role in shaping teaching style, behavior and creating conducive psycho-social environment in the classroom by deciding among variety of decisions of teaching learning methodology such as Selecting methods/techniques/approaches/creative tasks/learning & teaching models and so on. Teacher, who is ignorant of various life skills, will not attach values or life skills which may mar the students' holistic development. On the contrary, teacher who considers life skills and is equipped with life skills, will probably inculcate life skills in empathic and democratic teaching styles as favorable to the all round development of students. A Pre-service teacher with accurate self-assessment competency becomes aware about his strengths and weaknesses and depicts his/her capacity of self-criticism, interrogation, introspection and willingness to learn from experience and feedback.

To be an effective teacher is a tough challenge because each and every child has a different psychology, attitude and aptitude, so the teacher must make them prepared to face the different situations. A teacher is a sculpture of the society and produces civilized individuals through providing various exposures.

It is said that **Teacher is a potter who moulds the behavior of the students.** Such high responsibility is laid upon the future teachers who in present are found to be ethically wrong hence if given exposure to such situations, Pre-

service teachers will be able to develop their as well as child's learning. This equips them with a theoretical base but, they lack the practical one. Though they have to visit a number of schools at the time of delivering their practical lessons, they do not get enough of exposure and time to incorporate life skills in the classroom. They do their job just for the sake of completing it and getting marks/money. But if they are well equipped with different life skills such as critical thinking skills, interpersonal skills, and so on and are exposed to professional orientation, social awareness and self-awareness may again prove to be helpful to them in their Planning, Presentation, Evaluation, Managerial and Closing of their classes. In short they can develop their Teaching Competence and be an Effective teacher.

6.4 Conclusion

The research undertaken with a view to fulfilling a formality has led to a great deal of learning on the part of the researcher. Apart from the insights developed into what, how and why people learn, the experience has helped the researcher appreciate disciplined and rigorous efforts needed to carry out research.