

Effectiveness of Faculty Development Programme for the Young Faculty of Universities and Colleges

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Keywords Learning Outcomes, Learning Experiences, Assessment.

Abstract: Faculty members of Higher Educational Institutions are recruited with a mandatory qualification such as NET/SET/SLET/Ph.D. The effect of such recruitment without an overview of teaching attributes such as – Importance of Learning Outcomes, Learning Experiences and Learner's Appraisal, ways to connect with Gen Z community etc...leads to great damage to the learner's community and also to teacher's level of confidence. The emerging need was felt and thereby this package of FDP came into action. Young faculty members with an experience of less than 5 years in the teaching profession with a longingness for teaching are identified by the Heads of the institutions and are sent for this training programme. 70 faculty members from 32 higher educational institutions took part in the training extensively. A pre-test was conducted before the commencement of the training programme. After a well-planned schedule of technical sessions and training sessions are over, a post-test is conducted to verify the effectiveness of the training programme. The data collected were analysed with SPSS and found that the training programme provided was very useful for the faculty members. The study revealed that the FDP was very effective.

1 INTRODUCTION

In the modern era, the role of young faculty of colleges and universities are multidimensional and challenging. It is important these days for teachers to update their teaching skills and pedagogical skills to teach GenZ learners. It is necessary for teachers to stay relevant and connected to the needs of learners. Hence, the rapidly changing world needs upgraded and updated teachers who are willing to learn. Teachers of Higher Education Institutions need to identify the innate abilities of students and channelize their energy appropriately. Therefore, the teachers should be knowledgeable in different teaching methods, the dynamics of the classroom and teaching-learning process. The primary objective of this program is to enable the young faculty of Colleges and Universities to acquire knowledge and skills to improve teaching teaching-learning process. It will serve as an instrument to prepare them for the present-day classroom and they will be able to plan suitable learning experiences for their students. The objective of this program is to enable the young faculty of Colleges and Universities to enrich on the use of Backward Design in the Teaching Learning Process, to understand, Universal design for

Learning, to acquire basic teaching skills through Micro-teaching technique, to get familiarized with different active learning methods, to develop an understanding on techniques of evaluation and use them for fair assessment and to be equipped with the skills of handling student problems. 74 participants from 32 institutions situated in 8 different states of the country. 70 samples were taken for this study.

2 OBJECTIVES

To find out the significant difference between pre-test and post-test scores of the participants of the faculty development program.

To find out the significant difference between pre-test and post-test scores of participants below 35 years of age of the faculty development program.

To find out the significant difference between pre-test and post-test scores of participants above 35 years of age of the faculty development program.

To find out the significant difference between pre-test and post-test scores of participants of arts in the faculty development program.

To find out the significant difference between pre-test and post-test scores of participants of science in the faculty development program.

To find out the significant difference between pre-test and post-test scores of government-aided college participants in the faculty development program.

To find out the significant difference between pre-test and post-test scores of Private college participants in the faculty development program.

To find out the significant difference between pre-test and post-test scores of Women's college participants in the faculty development program.

To find out the significant difference between pre-test and post-test scores of Co-Education college participants in the faculty development program.

To find out the significant difference between post-test scores of the participants of the faculty development program based on age.

To find out the significant difference between post-test scores of the participants of the faculty development program based on department.

To find out the significant difference between post-test scores of the participants of the faculty development program based on type of management.

To find out the significant difference between post-test scores of the participants of the faculty development program based on gender type of institution.

3 HYPOTHESES

There is no significant difference between the pre-test and post-test scores of the participants of the faculty development program.

There is no significant difference between the pre-test and post-test scores of participants below 35 years of age in the faculty development program.

There is no significant difference between the pre-test and post-test scores of participants above 35 years of age in the faculty development program.

There is no significant difference between the pre-test and post-test scores of participants of arts in the faculty development program.

There is no significant difference between the pre-test and post-test scores of participants of science in the faculty development program.

There is no significant difference between the pre-test and post-test scores of government-aided college participants in the faculty development program.

There is no significant difference between the pre-test and post-test scores of private college participants in the faculty development program.

There is no significant difference between the pre-test and post-test scores of Co-Education college participants in the faculty development program.

There is no significant difference between the pre-test and post-test scores of Women's college participants in the faculty development program.

There is no significant difference between the post-test scores of the participants of the faculty development program based on Age.

There is no significant difference between the post-test scores of the participants of the faculty development program based on Department.

There is no significant difference between the post-test scores of the participants of the faculty development program based on Type of management.

There is no significant difference between the post-test scores of the participants of the faculty development program based on Gender type of institution.

4 METHODOLOGY

Sample: 70 participants from 32 institutions situated in different states of the country and from Sri Lanka.

Designing and Development of Training Programme on Teaching Skills for Whole Person Education

The curriculum for the virtual faculty development program on "Teaching learning process" was developed by the faculty of St. Christopher's College of Education. It has the following steps:

Demonstration of using various teaching skills with the necessary explanation.

Hands-on training for the participants to write learning objectives, apply various teaching skills and prepare teaching portfolios.

Designing teaching-learning process using Backward Design and Universal Design for learning.

Applying different active learning methods.

Framing test items which help in testing learning outcomes.

Doing tasks and assignments for hands-on experience to write learning objectives, apply various teaching skills and prepare a teaching portfolio.

Writing teaching philosophy

Identifying student problems and suggesting suitable solutions.

Justifying the role of research in the professional development of teachers.

Recalling different ways of managing student emotions.

Table 1: Schedule.

Date / Time	08.45 - 09.00	Session 1 09.00 - 10.30	10.30 - 11.00	Session 2 11.00 - 12.30	12.30-01.30	Session 3 01.30-02.45	Session 4 02.45 - 04.00	Session 5 4.00-5.00
DAY 1 11.04.2023	Registration	Inauguration & Orientation	COFFEE BREAK	Understanding Self Dr. Jemmy	LUNCH BREAK	Learning Outcomes Mrs. Jasmine J	Active Learning Techniques Dr. Nithila	Coffee with Mentor (Reflection)
DAY 2 12.04.2023		Universal Design for Learning Dr. Riddhi		Assessment & Feedback Mrs. Jasmine J		Understanding Gen Z Dr. Zarina	Teaching Philosophy Dr. Varbi & Dr. Riddhi	Coffee with Mentor (Reflection)
DAY 3 13.04.2023		Human Relations Dr. Spurgeon		Teaching Portfolio Dr. Hope		Teaching Skills Dr. Nithila	Backward Design Dr. Varbi	Coffee with Mentor (Reflection)
DAY 4 14.04.2023		Micro Teaching		Micro-Teaching		Micro-Teaching	Academic Research Dr. Wilson	Coffee with Mentor (Reflection)
DAY 5 15.04.2023		Presentation of Teaching Portfolio		Presentation of Teaching Portfolio		Digital Ethics Mr. Kevin Henderson	Feedback & Valedictory	Tea and Departure

Resource Person's feedback on the assignments submitted by the participants.

5 COURSE CONTENT

Active Learning Techniques, Assessment & Feedback, Backward Design, Human Relations, Learning Outcomes, Managing Emotions, Teaching Philosophy, Teaching Portfolio, Teaching Skills, Understanding Gen Z, Understanding Self and Universal Design.

5.1 Designing the Test

Multiple Choice Questions with four alternative answers with only one correct answer were constructed. 100 multiple-choice questions were prepared from the said topic. They were refined based on the diligent discussions that were made with subject experts. 45 MCQ were finalized to evaluate the previous knowledge of participants on the 'Teaching learning Process'. The same test was used to test the knowledge of the participants at the end of the program also.

5.2 Method

One - One-group pre-test - post-test design was adopted for this research.

Implementation of the faculty development program on "Teaching Skills for Whole Person Education":

The Faculty Development Programme has been scheduled exclusively for young faculty of Colleges and Universities from 11.04.2023 – 15.04.2023 at 09.00 am - 5.00 pm.

The participants were more in number; it was decided to divide them into two groups and conduct parallel sessions. Each day of the first four days ended with a session called Coffee with Mentor, during which the participants were divided into four different groups. The group members had coffee with their mentor from 4 pm to 5 p.m. During this session, the participants were encouraged to reflect on the sessions of that day and were free to express their thoughts or views regarding the sessions. The mentor helped the mentees to clarify their doubts regarding the activities given during the sessions. The session was enlightening and helped the participants to do their work related to different sessions easily and connect it with their Teaching Portfolio. The mentors facilitated them to prepare their Teaching Philosophy and teaching portfolio.

Statistical Tests:

Mean, Standard Deviation, Independent t-test, and Paired sample t-test.

6 DATA ANALYSIS AND INTERPRETATION

Ho 1: There is no significant difference between the pre-test and post-test scores of the participants of the faculty development program.

Table 2: ‘t’ – test to find out the difference between the pre-test and post-test scores of the participants.

Variable	N	Mean	Std. Dev.	t-value	P-value
Pre-test	70	25.47	4.954	15.039	0.000
Post-test	70	33.64	5.956		

Interpretation: In the above table p-value ($0.000 < .05$) is less than $.05$, therefore there is a significant difference between the pre-test and post-test scores of the participants of the faculty development program. Hence the null hypothesis is rejected. Post-test mean scores of the participants of the faculty development program are higher than that of the Pre-test mean scores of the participants.

Ho 2: There is no significant difference between the pre-test and post-test scores of participants below 35 years of age of the faculty development program.

Table 3: ‘t’ – test to find out the difference between pre-test and post-test scores of participants below 35 years of age.

Below 40 years of Age	N	Mean	Std. Dev.	t Value	p Value
Pre-test	33	26.88	4.622	9.316	0.000
Post - Test	33	34.18	6.262		

Interpretation: In the above table p-value ($0.000 < .05$) is less than $.05$, therefore there is a significant difference between pre-test and post-test scores of participants below 35 years of age in the faculty development program. Hence the null hypothesis is rejected. Post-test mean scores of the participants below 35 years of age in the faculty development program is higher than that of the Pre-test.

Ho 3: There is no significant difference between the pre-test and post-test scores of participants above 35 years of age of the virtual faculty development program.

Table 4: ‘t’ – test to find out the difference between pre-test and post-test scores of participants above 35 years of age.

Above 35 years of age	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	37	24.22	4.962	12.085	0.000
Post - Test	37	33.16	5.713		

Interpretation: In the above table p-value ($0.000 < .05$) is less than $.05$, therefore there is a significant difference between pre-test and post-test scores of participants above 35 years of age in the faculty development program. Hence the null hypothesis is rejected. Post-test mean scores of the participants above 35 years of age in the faculty development program are higher than that of the Pre-test.

Ho 4: There is no significant difference between the pre-test and post-test scores of participants of arts in the faculty development program.

Table 5: ‘t’ – test to find out the difference between pre-test and post-test scores of participants of arts.

Arts	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	38	26.11	4.958	10.377	0.000
Post Test	38	33.39	5.884		

Interpretation: In the above table p-value ($0.000 < .05$) is less than $.05$, therefore there is a significant difference between pre-test and post-test scores of participants of arts in the faculty development program. Hence the null hypothesis is rejected. post-test scores of participants of arts in the faculty development program is higher than that of the Pre-test.

Ho 5: There is no significant difference between the pre-test and post-test scores of participants of science in the faculty development program.

Table 6: ‘t’ – test to find out the difference between pre-test and post-test scores of participants of science.

Science	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	32	24.72	4.920	11.239	0.000
Post - Test	32	33.94	6.122		

Interpretation: In the above table p-value ($0.000 < .05$) is less than $.05$, therefore there is a significant difference between pre-test and post-test scores of

participants of science in the faculty development program. Hence the null hypothesis is rejected. Post-test scores of participants of science in the faculty development program is higher than that of Pre-test.

Ho 6: There is no significant difference between pre-test and post-test scores of government-aid college participants in the faculty development program.

Table 7: 't' – test to find out the difference between pre-test and post-test scores of Government Aided college participants.

Govt. Aided	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	42	24.67	4.647	13.824	0.000
Post - Test	42	33.88	5.819		

Interpretation: In the above table p-value ($0.000 < .05$) is less than .05, therefore there is a significant difference between pre-test and post-test scores of Government Aided college participants in the faculty development program. Hence the null hypothesis is rejected. Post-test scores of government-aided college participants in the faculty development program is higher than those of Pre-test.

Ho 7: There is no significant difference between the pre-test and post-test scores of Private college participants in the faculty development program.

Table 8: 't' – test to find out the difference between pre-test and post-test scores of Private college participants

Private	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	28	26.68	5.236	7.770	0.000
Post - Test	28	33.29	6.247		

Interpretation: In the above table p-value ($0.000 < .05$) is less than .05, therefore there is a significant difference between pre-test and post-test scores of Private college participants in the faculty development program. Hence the null hypothesis is rejected. Post-test scores of Private college participants in the faculty development program is higher than that of Pre -test.

Ho 8: There is no significant difference between pre-test and post-test scores of Co - Education college participants in the faculty development program.

Table 9: 't' – test to find out the difference between pre-test and post-test scores of Co-Education college participants.

Co - Ed.	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	29	26.34	4.245	9.557	0.000
Post - Test	29	35.45	5.761		

Interpretation: In the above table p-value ($0.000 < .05$) is less than .05, therefore there is a significant difference between pre-test and post-test scores of Co-Education college participants in the faculty development program. Hence the null hypothesis is rejected. Post-test scores of Co-Education college participants in the faculty development program is higher than that of the Pre-test.

Ho 9: There is no significant difference between the pre-test and post-test scores of Women's college participants in the faculty development program.

Table 10: 't' – test to find out the difference between pre-test and post-test scores of Women's college participants.

Women's College	N	Mean	Std. Dev.	t - Value	p - Value
Pre-test	41	24.85	5.36	11.967	0.000
Post - Test	41	32.37	5.83		

Interpretation: In the above table p-value ($0.000 < .05$) is less than .05, therefore there is a significant difference between pre-test and post-test scores of Women's college participants in the faculty development program. Hence the null hypothesis is rejected. Post-test scores of Women's college participants in the faculty development program is higher than that of Pre -test.

Ho 10: There is no significant difference between post-test scores of the participants of the faculty development program based on Age.

Table 11: 't' – test to find out difference between pre-test and post-test scores of Participants based on Age

Age	N	Mean	Std. Dev.	t - Value	p - Value
Below 35	33	34.18	6.262	0.709	0.481
Above 35	37	33.16	5.713		

Interpretation: In the above table p value ($0.481 > .05$) is greater than .05, therefore there is no significant difference between post-test scores of the

participants of the faculty development program based on age. Hence the null hypothesis is accepted.

Ho 11: There is no significant difference between post-test scores of the participants of the faculty development program based on Department.

Table 12: ‘t’ – test to find out the difference between pre-test and post-test scores of Participants based on Department.

Department	N	Mean	Std. Dev.	t - Value	p - Value
Arts	38	33.39	5.884	0.377	0.708
Science	32	33.94	6.122		

Interpretation: In the above table p-value (0.708 > .05) is less than .05, therefore there is no significant difference between the post-test scores of the participants of the faculty development program based on Department. Hence the null hypothesis is accepted.

Ho 12: There is no significant difference between the post-test scores of the participants of the faculty development program based on the Type of Management.

Table 13: ‘t’ – test to find out the difference between pre-test and post-test scores of Participants based on Type of Management.

Type of Management	N	Mean	Std. Dev.	t - Value	p - Value
Govt. Aided	42	33.88	5.819	0.401	0.690
Private	28	33.29	6.247		

Interpretation: In the above table p-value (0.690 > .05) is greater than .05, therefore there is no significant difference between the post-test scores of the participants of the faculty development program based on Type of Management. Hence the null hypothesis is accepted.

Ho 13: There is no significant difference between the post-test scores of the participants of the faculty development program based on Gender type of institution.

Table 14: ‘t’ – test to find out the difference between pre-test and post-test scores of Participants based on Gender type of institution.

Gender Type of Institution	N	Mean	Std. Dev.	t - Value	p - Value
Co-Ed.	29	35.45	5.761	2.195	0.032
Women’s	41	32.37	5.826		

Interpretation: In the above table p-value (0.032 < .05) is less than .05, therefore there is a significant difference between the post-test scores of the participants of the faculty development program based on Gender type of institutions. Hence the null hypothesis is rejected. Post-test scores of Co-Ed. College participants are higher than that of Women’s College participants.

7 MAJOR FINDINGS

There is a significant difference between the pre-test and post-test scores of the participants of the faculty development program. Post-test mean scores of the participants of the faculty development program is higher than that of Pre-test mean scores of the participants.

There is a significant difference between the pre-test and post-test scores of participants below 35 years of age in the faculty development program. Post-test scores of participants below 35 years of age in the faculty development program are higher than that of pre-test scores.

There is a significant difference between the pre-test and post-test scores of above 35 years of age participants in the faculty development program. Post-test scores of the participants above 35 years of age in the faculty development program is higher than that of pre-test scores.

There is a significant difference between the pre-test and post-test scores of participants of arts in the faculty development program. Post-test scores of the participants of arts in the faculty development program are higher than those of pre-test scores.

There is a significant difference between the pre-test and post-test scores of participants of science in the faculty development program. Post-test scores of the participants of science in the faculty development program is higher than that of pre-test scores

There is a significant difference between the pre-test and post-test scores of Government Aided College participants in the faculty development program. Post-test scores of government-aided

college participants in the faculty development program is higher than those of Pre-test.

There is no significant difference between the pre-test and post-test scores of Private college participants in the faculty development program. Post-test scores of the Private college participants in the faculty development program are higher than that of pre-test scores

There is a significant difference between the pre-test and post-test scores of Co-Education college participants in the faculty development program. Post-test scores of the Co-Education college participants in the faculty development program are higher than that of pre-test scores

There is a significant difference between the pre-test and post-test scores of Women's college participants in the faculty development program. Post-test scores of Women's college participants in the faculty development program are higher than that of pre-test scores.

There is no significant difference between post-test scores of the participants of the faculty development program based on age

There is no significant difference between the post-test scores of the participants of the faculty development program based on Department.

There is no significant difference between the post-test scores of the participants of the faculty development program based on Type of Management.

There is a significant difference between the post-test scores of the participants of the faculty development program based on Gender type of institutions. Post-test scores of Co-Ed. College participants are higher than that of Women's College participants.

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8 CONCLUSION

The findings revealed that the faculty development program on the teaching-learning process was effective. It has widened the understanding of young faculty of Colleges and Universities to use different teaching and evaluation methods, use different classroom management approaches and to conduct research using scientific methods.

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