



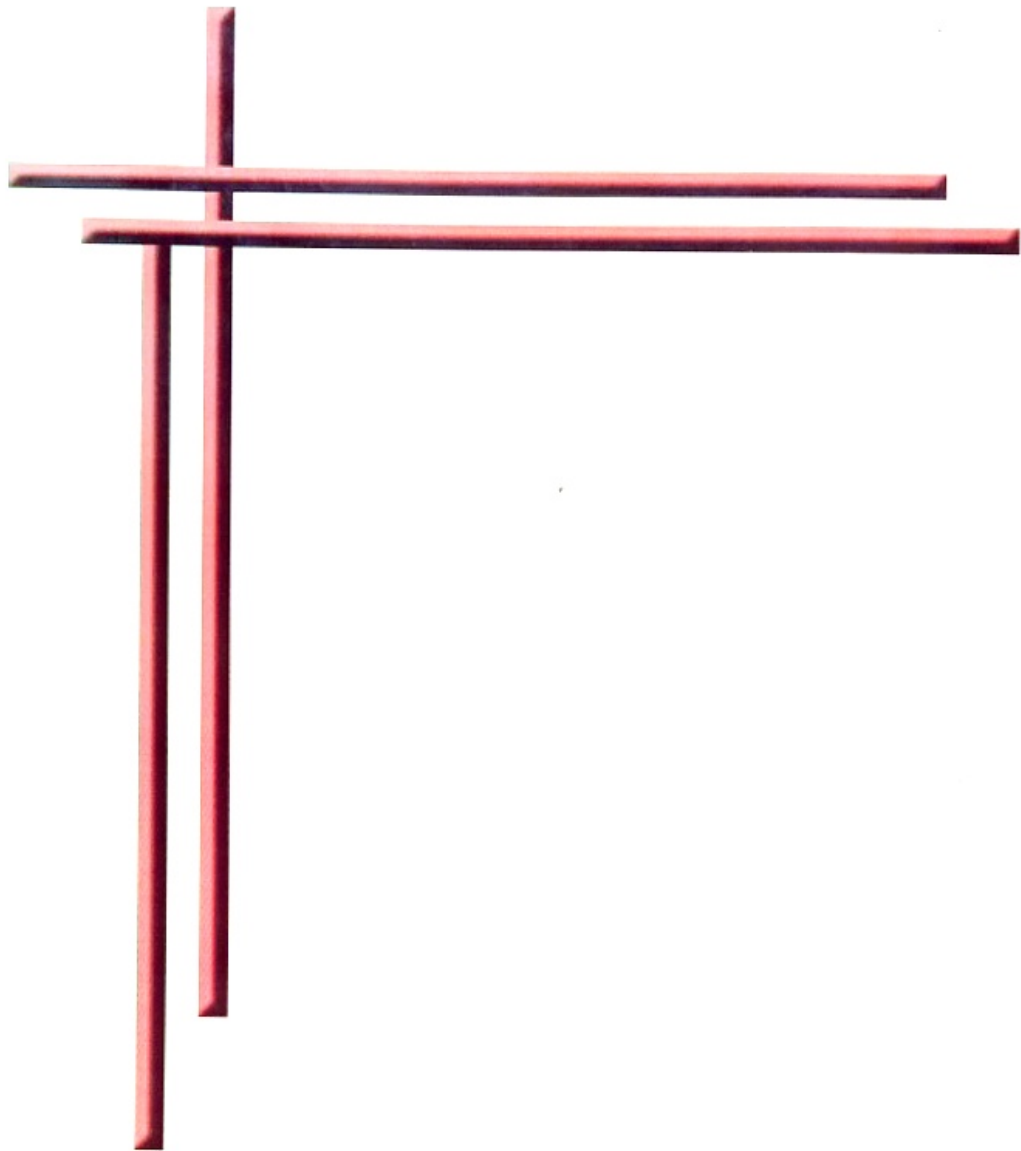
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INNOVATIONS IN EDUCATION



Dr. Jayan Erancheri Illam
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Price: ₹ 450

ISBN: 978-93-89740-80-6



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**INNOVATIONS
IN
EDUCATION**



Innovation is often the hidden thing,
because we can't put numbers to it.
And yet it's the thing that defines
the way we live, the things we'd like
to have for everyone whether it's
health or education.

— *Bill Gates* —

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NEW DELHI

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INNOVATIONS IN EDUCATION

Chief Editor : Dr. Jayan Erancheri Illam

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First Edition : 2021
(Hardback)

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ISBN: 978-93-89740-80-6

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website : www.neelkamalbooks.com; www.neelkamalonline.com

Published by *Suresh Chandra Sharma* for
Neelkamal Publications Pvt. Ltd., New Delhi, Hyderabad
and printed at *NKPL*, New Delhi, India.

Preface

This book "Innovations in Education" is a collaborative initiative by Sreekrishnapuram V.T. Bhattathiripad College, University of Calicut. This aims to comprise the research perspectives of E-teaching and E-Content development. Researchers are from different educational backgrounds and they all are here to express their innovative ideas. Now, there is a lot of researches going on in this area of E-teaching and E-Content development. This book aims at motivating beginners in E-teaching by introducing new methodologies, going through discussions about the impact of digital teaching in the higher education area, and also provides new insights about E-teaching and E-learning. It is the need of the present day scenario. We extend our sincere gratitude to all who stood along with us in this great venture. We congratulate all the authors for their contributions to this volume.

This book suggests some approaches that they can adopt to manage this sudden shift of teaching and learning from physical classrooms to digital classrooms. Even though the internet and all the E-teaching technologies are around us for a long time, we were hesitant of implementing these into our Teaching-Learning process. This book aims to walk along with the teachers and guides them to a new era of E-teaching.

We must thank our publisher Mr. Suresh Chandra Sharma, Managing Director of Neelkamal Publications Pvt. Ltd., New Delhi-Hyderabad, who has taken a lot of interest in this book. His efforts to bring out the Book in the excellent form will always be remembered.

We feel happy to entertain any suggestions and additions for refinements of this book and all such modifications will be taken care of in the next issue of the book.

Editors

Dr. Jayan Erancheri Illam

Dr. Saritha Namboodiri

Bhavya P.V.

Acknowledgements

Thanks to everyone on our publishing team and our publishing partner Neelkamal Publications Pvt. Ltd., for their sincere cooperation.

The technical support given by EMMRC, University of Calicut for our teachers and contributors to the book in related to educational technology is highly appreciated. We express our sincere gratitude to the team EMMRC for this successful endeavour.

We are extending our gratitude to all the contributors of the book.

Thank all those who contributed to the success of the physical creation to completion of this book.



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INNOVATIONS IN EDUCATION

Contents

1. Experimental Use of Blended Learning Instructional Strategy for Effective Teaching at Higher Secondary Level	...	1
1.1 Introduction	...	2
1.2 Need and Significance of the Study	...	2
1.3 Objectives of the Study	...	2
1.4 Hypotheses of the Study	...	3
1.5 Methodology of the Study	...	3
1.6 Analysis and Interpretation of Data	...	4
1.7 Findings of the Study	...	6
1.8 Conclusion	...	6
2. Artificial Intelligence Its Impact on Employment and the Workforce	...	8
2.1 Introduction	...	8
2.2 Application Areas of Artificial Intelligence	...	10
2.3 Impact of Artificial Intelligence on Employment and Work Force	...	11
2.4 Conclusion	...	12
3. Remodelling Educational Sector, Revolutionized by the Disruptive Decentralized Blockchain Technology	...	14
3.1 Introduction	...	15
3.2 Blockchain – The Open Distributed Decentralized Ledger	...	16
3.3 Blockchain Use Cases in Education Sector	...	16

3.4	Challenges of Adopting Blockchain Technology	...	20
3.5	Conclusion	...	21
4.	Sentiment Analysis of Animated and Non-animated E-learning Content	...	23
4.1	Introduction	...	24
4.2	Literature Review	...	24
4.3	Proposed Approach	...	24
4.4	Conclusion	...	27
5.	E-resources and Coconut Sector	...	29
5.1	Introduction	...	29
5.2	Objectives	...	30
5.3	Methodology	...	30
5.4	Need of E-resources	...	30
5.5	Types of E-resources	...	31
5.6	E-resources Related to Agriculture and Coconut in India	...	32
5.7	Problems	...	35
5.8	Conclusion	...	36
6.	Information Communication Technology (ICT) as a Learning Tool in Commerce among Students at Higher Secondary Level	...	39
6.1	Introduction	...	40
6.2	Significance of the Study	...	40
6.3	Statement of the Problem	...	40
6.4	Operational Definitions	...	41
6.5	Objectives of the Study	...	41
6.6	Hypotheses	...	41
6.7	Methodology	...	42
6.8	Findings of the Study	...	44
6.9	Educational Implication	...	46
6.10	Conclusion	...	46

7. Importance of Leadership	...	48
7.1 Introduction	...	48
7.2 Meaning and Importance of Leadership	...	49
7.3 Leadership Nature and Leadership Importance	...	49
7.4 Why is Leadership Important for Students?	...	49
7.5 The 3 Most Important Roles of a Leader	...	49
7.6 Importance of a Good Leader	...	50
7.7 Qualities of a Good Leader	...	51
7.8 Conclusion	...	52
8. Making Teaching–Learning Effective Through ICT	...	54
8.1 Introduction	...	54
8.2 Components of ICT	...	55
8.3 ICT in Education	...	55
8.4 Advantages of ICT in Education	...	56
8.5 Role of ICT in Teaching Learning Process	...	56
8.6 Usage of ICT in Teaching Learning Process	...	57
8.7 Conclusion	...	57
9. Magic Tricks as a Powerful Teaching Tool in College Classrooms	...	59
9.1 Introduction	...	60
9.2 Operational Definition	...	61
9.3 Review of Related Literature	...	61
9.4 Magic Tricks as a Teaching Tool	...	63
9.5 Theoretical Bases for Use of Magic Tricks as an 'Ice-breaker' in Classroom	...	64
9.6 Benefits of Use of Magic Tricks in the Classroom	...	65
9.7 Guidelines for Appropriate Use of Magic in the Classroom	...	65
9.8 Limitations of Use of Magic Tricks in the Classroom	...	66
9.9 Magic Trick E-Resources	...	66
9.10 Conclusion	...	66

10. Social Media Competence of Prospective Teachers in Relation to their Academic Self-efficacy	...	70
10.1 Introduction	...	71
10.2 Need and Significance of the Study	...	71
10.3 Objectives of the Study	...	72
10.4 Hypotheses of the Study	...	72
10.5 Methodology of the Study	...	73
10.6 Data Analysis and Interpretation of Data	...	73
10.7 Findings of the Study	...	75
10.8 Educational Implications of the Study	...	75
10.9 Conclusion	...	76
11. Fostering of Socially Responsible Leadership among Undergraduate Students through NSS	...	77
11.1 Introduction	...	78
11.2 Review of Related Literature	...	79
11.3 Objectives of the Study	...	80
11.4 Hypotheses	...	80
11.5 Methodology Used	...	80
11.6 Results and Discussion	...	81
11.7 Findings	...	82
11.8 Conclusion	...	83
12. Facial Expression Recognition Using Convolution Neural Network for Adaptive Learning in Mooc	...	84
12.1 Introduction	...	85
12.2 Literature Survey	...	85
12.3 System Architecture	...	88
12.4 System Implementation Using CNN	...	90
12.4.1 Dataset	...	90
12.4.2 Convolution Neural Network	...	91
12.4.3 Testing and Evaluation	...	92
12.4.4 Analysis	...	93
12.5 Results	...	93
12.6 Conclusion and Future Work	...	93

13. Memory Techniques for Students	... 95
13.1 Introduction	... 95
13.2 Definition	... 96
13.3 Memory Types	... 96
13.4 How We Form Memories	... 97
13.5 Ways to Better Remember Our Lessons	... 99
13.6 Conclusion	... 105
14. Google Classroom as a Tool for Effective Learning	... 107
14.1 Introduction	... 107
14.2 Google Classroom as an Effective Tool of Learning	... 111
15. Remote Online Proctoring - Paving Way to Secure Digitalized Education	... 114
15.1 Introduction	... 114
15.2 Statement of the Problem	... 115
15.3 Objectives of the Study	... 115
15.4 Significance of the Study	... 115
15.5 Research Methodology	... 116
15.6 Limitations of the Study	... 116
15.7 Review of Literature	... 116
15.8 Concept of Proctoring	... 116
15.9 Conclusion	... 120
16. Blended Learning: An Overview	... 121
16.1 Introduction	... 121
16.2 Literature Review	... 122
16.3 Advantages in Blended Learning	... 122
16.4 Disadvantages	... 124
16.5 Types of Blended Learning	... 124
16.6 Conclusion	... 126

17. A Study on the Effectiveness of Swayamprabha Channel Lectures for Promoting the Self-Learning Skills of College Students	... 128
17.1 Introduction	... 129
17.2 Conceptual Framework: About Swayam, Swayamprabha and Self-learning Process	... 129
17.3 Importance of the Study	... 131
17.4 Statement of Problem	... 131
17.5 Objective of the Study	... 131
17.6 Hypothesis	... 132
17.7 Methodology of the Study	... 132
17.8 Major Findings and Discussions	... 133
17.9 Suggestions for Using Swayamprabha Video Lectures	... 134
17.10 Scope for Future Research	... 134
17.11 Conclusion	... 134
Index	... 136



CHAPTER

11

Fostering of Socially Responsible Leadership among Undergraduate Students through NSS

- Rathi K.N.*

Sathyabhama N.**

ABSTRACT

Socially responsible leadership is defined as a "purposeful, collaborative, values-based process that results in positive social change"- Komives, Wagner & Associates (2009). The model situates leadership as inherently tied to social responsibility and manifested in creating change that benefits the common good (HERI). The social change model of leadership development (HERI, 1996) was designed specifically for college students and merits particular attention given the significant degree to which it influences collegiate leadership programs nationally- Kezar, Carducci, & Contreras-McGavin (2006). National Service Scheme (NSS). NSS is an Indian government-sponsored public service program conducted by the Department of Youth Affairs and Sports of the Government of India. NSS was launched in Gandhiji's Centenary year, 1969. It is aimed at developing student's personality through community service. NSS is a voluntary association of young people in Colleges, Universities and at +2 level working for a campus-community linkage. The cardinal principle of NSS are to prepare the students to organize themselves, and both students and teachers through their combined participation in community service, and get a sense of involvement in the tasks of nation building. The major

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objectives of the study are to study the role of NSS in developing Socially Responsible Leadership among volunteers, the perception of volunteers on their leadership skills and social commitment, identify the important leadership qualities for Socially Responsible Leaders, the differences of Male and female on their perception and to study the differences of Male and female on their attitude on group work. The methodology used were survey method and the investigators have collected data from fifty seven NSS volunteers from Palakkad district to study the perception on leadership skills and social commitment. The major findings of the study are: There is no significant difference between Male and female on their perception. There is no significant difference between Male and Female on their attitude on group work. There is a significant association with the readiness to contribute to community and perception of volunteers. It is concluded that the community initiative education programmes like NSS will be helpful in developing the Socially Responsible leadership skills among graduate students. Hence inclusion of such programmes in the curriculum of graduate courses is highly recommended.

11.1 Introduction

Leadership is an ability pertaining in an individual to influence in the activities and attitudes of another person or a group. According to Keith Davis, "Leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group together and motivates it towards goals." There are several types of leadership like student leadership, political leadership, institutional leadership. Social leadership and do on. In recent days there are a number of studies related to leadership and new terms are developed in related to leadership like Responsible leadership and socially responsible leadership. Socially responsible leadership is comparatively new in India and it was developed in United States in the year of 1996 by HERI. It is defined as a "purposeful, collaborative, values-based process that results in positive social change" by Komives, Wagner & Associates (2009). The model situates leadership as inherently tied to social responsibility and manifested in creating change that benefits the common good (HERI). The social change model of leadership development (HERI, 1996) was designed specifically for college students and merits particular attention given the significant degree to which it influences collegiate leadership programs nationally, by Kezar, Carducci & Contreras-McGavin (2006).

According to HERI 1996 there are three levels of values in socially responsible leadership they are: Individual values like consciousness of self, congruence and commitment, group process values like collaboration, common purpose and controversy with civility and societal values like citizenship and change. The investigators intended to study the development of socially responsible leadership behaviour of students undergoing their graduate course. The social interaction programmes may help them to develop this type of leadership and thus the investigators tried to study about the role of National Service Scheme in fostering the socially responsible leadership among undergraduate students. National Service Scheme is the largest educational programme in India as social interaction to students which was started in the centenary birth year of Mahatma Gandhi in 1969. NSS is conducted by the Department of Youth Affairs and Sports of the Government of India as Indian government-sponsored public service program. It is the voluntary association of young people in colleges, universities and plus two level aimed at personality development of students through social service. The major objectives of NSS is to enable the students to understand the community in which they work; to understand themselves in relation to their community; to identify the needs and problems of the community and involve them in problem solving process; to develop among themselves a sense of social and civic responsibility; to utilize their knowledge in finding practical solutions to individual and community problems; to practice national integration; to acquire leadership qualities and democratic attitude; and social harmony and so on. There are several community related programmes like literacy programmes. Cleaning programmes, waste management, and building home for home-less, work related to natural calamities, serving the weaker section of society and other socially relevant activities. The programmes are done by adopting of a village. The student volunteer can get the competency to know the pulse of the community and being a good citizen by doing the variety of community interactions.

11.2 Review of Related Literature

Mydin, K.F. & Amran, M.S. (2019) had studied the development of Socially responsible leadership among students of Malaysia by developing a social change model of leadership development. The proposed the universities in Malaysia to include this model in their curriculum to foster the socially responsible leadership among graduate students.

Hall, Heather N. (2018) explained that the socially responsible leader should direct his or her social interaction in such a manner that the

community around them are benefitted and make the ethical decisions for them.

Johnson, M. R. and Mincer, G. (2017) studied the Multi institutional study of leadership to foster the socially responsible leadership among student leaders. They used quasi experimental design and statistically proved the difference between the groups of students in different demographic and institutional background.

Johnson, M. R. Johnson, E. L. , and Dugan, J. P. (2015) studied the development of socially responsible leadership in a multi institutional background. The study was concluded that the role of different community level programmes and social interaction programmes are useful in developing the Socially responsible leadership among students.

11.3 Objectives of the Study

- To study the role of NSS in developing Socially Responsible Leadership among volunteers.
- To study the perception of volunteers on their leadership skills and social commitment.
- To identify the important leadership qualities for Socially Responsible Leaders.
- To study the differences of Male and Female on their perception.
- To study the differences of Male and Female on their attitude on group work.

11.4 Hypotheses

- There is no significant difference between Male and Female on their perception.
- There is no significant association with the readiness to contribute to community and perception of volunteers.
- There is no significant difference between Male and Female on their attitude on group work.

11.5 Methodology Used

The methodology used was survey among NSS volunteers from Palakkad district, Kerala and the investigators prepared a questionnaire for getting data on perception of volunteers on leadership skills and social commitment and collected data from fifty seven NSS volunteers. The data

were analysed by using the statistical techniques like Mann Whitney U test, student t test and Kruskal Wallis H test.

11.6 Results and Discussion

Table -11.1: Descriptive Statistics

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Perception of Volunteers	57	41	50	46.44	2.044
Valid N (listwise)	57				

NSS Helped to Community Work

	<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid Yes	57	100.0	100.0	100.0

Table-11.2: Genderwise Analysis of Perception – t test

<i>Genderwise</i>		<i>Levene's Test for Equality of Variances</i>				
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig. (2-tailed)</i>
Perception of Volunteers	Equal variances assumed	2.245	.140	-.142	55	.887
	Equal variances not assumed			-.133	36.655	.895

T value is not significant at 0.05 level. Thus Accepted the null hypothesis ie. there is no significant difference between Male and Female on their perception.

Mann Whitney U test

Table-11.3: Test Statistics^a

	I enjoy working with others toward common goals
Mann-Whitney U	374.500
Wilcoxon W	650.500
Z	-.505
Asymp. Sig. (2-tailed)	.614

a. Grouping Variable: Gender

Table-11.4: Ranks

	<i>Gender</i>	<i>N</i>	<i>Mean Rank</i>	<i>Sum of Ranks</i>
I enjoy working with others toward common goals	Male	23	28.28	650.50
	Female	34	29.49	1002.50
	Total	57		

z value is not significant at 0.05 level and thus Accepted the null hypothesis ie. there is no significant difference between Male and Female on their attitude on group work

Kruskal Wallis H test

Table-11.5: Test Statistics^{a,b}

	<i>Perception of Volunteers</i>
Chi-Square	14.008
df	1
Asymp. Sig.	.000

- Kruskal Wallis Test
- Grouping Variable: I utilize opportunities that allow me to contribute to my community

Table-11.6: Ranks

	<i>I utilize opportunities that allow me to contribute to my community</i>	<i>N</i>	<i>Mean Rank</i>
Perception of Volunteers	Agree	7	9.07
	Strongly Agree	50	31.79
	Total	57	

Chi square value is significant at 0.05 level. Thus Rejected the null hypothesis ie. there is no significant association with the readiness to contribute to community and perception of volunteers

11.7 Findings

- Hundred percentage of NSS volunteers are of the opinion that NSS helped them to involve in Community services
- There is no significant difference between Male and Female on their perception

- There is no significant difference between Male and Female on their attitude on group work
- There is a significant association with the readiness to contribute to community and perception of volunteers

11.8 Conclusion

The investigators conclude that the National Service Scheme is very useful to develop socially responsible leadership among undergraduate students. The community initiative education programmes like NSS will be helpful in developing the Socially Responsible leadership skills among graduate students. Hence inclusion of such programmes in the curriculum of graduate courses is highly recommended. Now in the curriculum of University of Calicut included the social service programme as a compulsory basis and Amrita university included the rural ervice as part of their curriculum. These initiatives may also direct towards the development of socially responsible leadership

References

1. Mydin, K. F., & Amran, M. S. (2019). Socially Responsible Leadership Capacity among Student Leaders. *Creative Education*, 10, 29552967. Retrieved on 10th December, 2019 from <https://doi.org/10.4236/ce.2019.1012220>
2. Hall, Heather N. (2018), "Changing the World by Being a Personally and Socially Responsible Leader: A Scholarly Analysis of Educating Leaders of Social Change" . University of Tennessee Honors Thesis Projects. Retrieved on 11th December, 2019 from https://trace.tennessee.edu/utk_chanhonoproj/2196
3. Johnson, M. R. and Mincer, G. (2017) Fostering Socially Responsible Leadership in College Students: Insights From the Multi-Institutional Study of Leadership. *NEW DIRECTIONS FOR STUDENT SERVICES*, no. 159, Autumn .Wiley Periodicals, Inc. Published online in Wiley Online Library (wileyonlinelibrary.com) • DOI: 10.1002/ss.20226
4. Johnson, Matthew R.; Johnson, Erica L.; and Dugan, John P.. Developing Socially Responsible Leadership and Social Perspective-Taking in Fraternities and Sororities: Findings From a National Study. *Oracle: The Research Journal of the Association of Fraternity Advisors*, 10, 1: 1-13, 2015. Retrieved from Loyola eCommons, School of Education: Faculty Publications and Other Works.

