UNIVERSITY GRANTS COMMISSION

BAHADUR SHAH ZAFAR MARG NEW DELHI – 110 002.

Final Report of the work done on the Major Research Project.

- 1. Project report No. Final
- 2. UGC Reference: No.F. 5-95/2014(HRP) dated 5 September 2015.
- 3. Period of report: from 01/07/2015 to 30/06/2018
- 4. Title of research project: Developing Blended Learning Model for Enhancing Entrepreneurial Skills among Women in Pune District
- 5. (a) Name of the Principal Investigator: Dr. Navnath Bhagchand Tupe
- (b) Deptt. Department of Lifelong Learning and Extension
- (c) University/College where work has progressed: Savitribai Phule Pune University
- 6. Effective date of starting of the project: 01/07/2015
- 7. Grant approved, and expenditure incurred during the period of the report: 05/09/2015 to 01/06/2018
- a. Total amount approved Rs. 11,18,300
- b. Total expenditure Rs. 6,66,800
- c. Report of the work done: (Please attach a separate sheet) Report Attached
- i. Brief objective of the project:
- I. To assess the entrepreneurial skills of women in Pune District.
- II. To develop the blended learning model with the help of Information and Communication technology for enhancing the entrepreneurial skills among the women.
- III. To develop the learning scenarios for entrepreneurial skills and launch them at the distributed learning center for women through BLM.
- IV. To test the effectiveness of the BLM.
- ii. Work done so far, and results achieved and publications, if any, resulting from the work (Give details of the papers and names of the journals in which it has been published or accepted for publication-
 - I. Blended learning model for enhancing entrepreneurial skills among women, Journal of Pedagogical Research, Turkey, 2(1), 30-45. e-ISSN: 2602-3717 https://ijopr.com/index.php/ijopr

- II. "A STUDY OF THE EFFECTIVENESS OF BLENDED LEARNING PROGRAMME FOR ENHANCING ENTREPRENEURIAL SKILLS AMONG WOMEN IN MAHARASHTRA", Journal of Education, Boston University Sage Journal, USA (Accepted) https://mc.manuscriptcentral.com/bujoe#
- iii. Has the progress been according to original plan of work and towards achieving the objective. if not, state reasons: Yes, the progress has been according to original plan of work and achieved.
- iv. Please indicate the difficulties, if any, experienced in implementing the project: Internet connection issues were there while implementing the model of blended Learning. The model was implemented on PC. If it is converted for mobile android version, it may be most useful.
- v. If project has not been completed, please indicate the approximate time by which it is likely to be completed. A summary of the work done for the period (Annual basis) may please be sent to the Commission on a separate sheet. Completed
- vi. If the project has been completed, please enclose a summary of the findings of the study. One bound copy of the final report of work done may also be sent to University Grants Commission.

Summary of the Findings:

- 1. Before intervention of BLM, most of the women respondents in pre-test results have low level of entrepreneurial competence It was around 40.48%; and most of the crucial point was that two-fifth girl students of total respondents had no level of entrepreneurial competence even they were learning in commerce faculty that are constituted of 40 % as well. Around 17% of women had average level of entrepreneurial competency and least of all only 2.38% women had moderate high level of entrepreneurial competency in pre-test. It is reported that women were not acquiring minimum level of entrepreneurial competencies even they were going to college regularly in commerce degree course. It means that traditional classroom not enough to develop the most needed skills for workforce into the labour market. If the BL intervention provides to the undergraduate women students, they can boost their level of entrepreneurial skills through self-instructional mode of learning. In present study researcher has made available the scenario-based learning course in blended mode of learning to the women students in Huzurpaga College of commerce for 52 days only as an experiment. The effect of BLM intervention shows that majority of 60% women had increased their entrepreneurial skills up-to moderate high level of competence. Subsequently only 38% of women had acquired the average level of entrepreneurial competency and 2% of women had got achievement up-to the high level of entrepreneurial competence with the help of BLM intervention.
- 2. The pre-test and post-test Experimental Group of Women Students, the paired samples t-test revealed that there was a significant difference between Entrepreneurial Skills (Communication, Decision making, Self-awareness, organization, Teamwork, problem solving, market evaluating) before treatment (**M** = 35.40, 34.31, 38.36, 34.64, 36.38, 37.26, 37.26 **SD** =7.21, 6.77, 7.42, 7.49,, 8.76, 7.43, 6.63) respectively after treatment (**M** =50.45, 48.86, 49.64, 49.79, 49.12, 50.43, 49.62 **SD** =3.58, 4.12, 3.81, 3.17, 3.16, 3.64, 4.83), df=41 and respectively 't' value = -13.60, -13.05, -10.77, -12.66, -9.81, -10.80, -12.20 with p = .000. Score of entrepreneurial skills after had a higher mean than entrepreneurial skills before treatment of blended learning. In addition, the mean difference between the score of before treatment and score of the after treatment is significant. In terms of the hypothesis testing the differences in means test is represented as follows:

 $\mathbf{H_0}$ (Null hypothesis): There is not a significant positive gain in the achievements of women students in post-test mean scores of Entrepreneurial skills as compared to Pre-Test mean scores before and after intervention of the Blended Learning programme for enhancing entrepreneurial skills.

H_A (Alternative Hypothesis): There is a significant positive gain in the achievements of women students in post-test mean scores of Entrepreneurial Skills as compared to Pre-Test mean scores before and after intervention of the Blended Learning Programme for enhancing entrepreneurial skills.

The test statistic was calculated by SPSS-Version 20. The data shows that the calculated t-test value which significant at 41 degree of freedom on tests mean scores of Entrepreneurial Skills. It demonstrates that the experimental groups mean scores of Post-tests are significantly higher than the Pre-Test mean scores in Entrepreneurial sub-skills as Communication, Decision making, Self-awareness, organization, Teamwork, problem solving, market evaluating skills respectively. These two scores of pre-test and post-test were differed significantly on Entrepreneurial Skills achievement of women students after studying through blended learning programme. It means that the null hypothesis was rejected, and the alternative hypothesis was accepted. It seems that the experimental group of women has gained reasonably much more in post-test with compared to pre-test as a result of BLM treatment.

- vii. Any other information which would help in evaluation of work done on the project. At the completion of the project, the first report should indicate the output, such as
- (a) Manpower trained (b) Ph. D. awarded (c) Publication of results (d) other impact, if any
 - I. Publication of results II Manpower trained

UNIVERSITY GRANTS COMMISSION BAHADUR SHAH ZAFAR MARG NEW DELHI – 110 002

PROFORMA FOR SUBMISSION OF INFORMATION AT THE TIME OF SENDING THE FINAL REPORT OF THE WORK DONE ON THE PROJECT

- 1. TITLE OF THE PROJECT: Developing Blended Learning Model for Enhancing Entrepreneurial Skills among Women in Pune District
- 2. NAME AND ADDRESS OF THE PRINCIPAL INVESTIGATOR: Dr. Navnath Bagchand Tupe, Department of Lifelong Learning & Extension, Savitribai Phule Pune University, Ganeshkhind Pune, Maharashtra.
- 3. NAME AND ADDRESS OF THE INSTITUTION: Department Of Lifelong Learning & Extension, Savitribai Phule Pune University, Ganeshkhind Pune, Maharashtra
- 4. UGC APPROVAL LETTER NO. AND DATE: No. 5-95/2014(HRP) dated 5 September 2015
- 5. DATE OF IMPLEMENTATION: 01/07/2015
- 6. TENURE OF THE PROJECT: From 05/09/2015 to 01/06/2018
- 7. TOTAL GRANT ALLOCATED: Rs.11,18,300
- 8. TOTAL GRANT RECEIVED: Rs. 6,66,800
- 9. FINAL EXPENDITURE: RS. 6,66,800
- 10. TITLE OF THE PROJECT: Developing Blended Learning Model for Enhancing Entrepreneurial Skills among Women in Pune District
- 11. OBJECTIVES OF THE PROJECT:
- I. To assess the entrepreneurial skills of women in Pune District.
- I. To develop the blended learning model with the help of Information and Communication technology for enhancing the entrepreneurial skills among the women.
- II. To develop the learning scenarios for entrepreneurial skills and launch them at the distributed learning center for women through BLM.
- III. To test the effectiveness of the BLM.
- 12. WHETHER OBJECTIVES WERE ACHIEVED: Yes
- 13. ACHIEVEMENTS FROM THE PROJECT:
 - I. Development of Valid and reliable Self- Assessment Scale of Entrepreneurial Skills

- II. Development of Blended Learning Model for Enhancing Entrepreneurial Skills
- III. Entrepreneurial Skills Training
- IV. International Publications

14. SUMMARY OF THE FINDINGS: (IN 500 WORDS)

- 1. Before intervention of BLM, most of the women respondents in pre-test results have low level of entrepreneurial competence It was around 40.48%; and most of the crucial point was that two-fifth girl students of total respondents had no level of entrepreneurial competence even they were learning in commerce faculty that are constituted of 40 % as well. Around 17% of women had average level of entrepreneurial competency and least of all only 2.38% women had moderate high level of entrepreneurial competency in pre-test. It is reported that women were not acquiring minimum level of entrepreneurial competencies even they were going to college regularly in commerce degree course. It means that traditional classroom not enough to develop the most needed skills for workforce into the labour market. If the BL intervention provides to the undergraduate women students, they can boost their level of entrepreneurial skills through self-instructional mode of learning. In present study researcher has made available the scenario-based learning course in blended mode of learning to the women students in Huzurpaga College of commerce for 52 days only as an experiment. The effect of BLM intervention shows that majority of 60% women had increased their entrepreneurial skills up-to moderate high level of competence. Subsequently only 38% of women had acquired the average level of entrepreneurial competency and 2% of women had got achievement up-to the high level of entrepreneurial competence with the help of BLM intervention.
- 2. The pre-test and post-test Experimental Group of Women Students, the paired samples t-test revealed that there was a significant difference between Entrepreneurial Skills (Communication, Decision making, Self-awareness, organization, Teamwork, problem solving, market evaluating) before treatment (**M** = 35.40, 34.31, 38.36, 34.64, 36.38, 37.26, 37.26 **SD** =7.21, 6.77, 7.42, 7.49,, 8.76, 7.43, 6.63) respectively after treatment (**M** =50.45, 48.86, 49.64, 49.79, 49.12, 50.43, 49.62 **SD** =3.58, 4.12, 3.81, 3.17, 3.16, 3.64, 4.83), df=41 and respectively 't' value = -13.60, -13.05, -10.77, -12.66, -9.81, -10.80, -12.20 with p = .000. Score of entrepreneurial skills after had a higher mean than entrepreneurial skills before treatment of blended learning. In addition, the mean difference between the score of before treatment and score of the after treatment is significant. In terms of the hypothesis testing the differences in means test is represented as follows:

 $\mathbf{H_0}$ (Null hypothesis): There is not a significant positive gain in the achievements of women students in post-test mean scores of Entrepreneurial skills as compared to Pre-Test mean scores before and after intervention of the Blended Learning programme for enhancing entrepreneurial skills.

H_A (Alternative Hypothesis): There is a significant positive gain in the achievements of women students in post-test mean scores of Entrepreneurial Skills as compared to Pre-Test mean scores before and after intervention of the Blended Learning Programme for enhancing entrepreneurial skills.

The test statistic was calculated by SPSS-Version 20. The data shows that the calculated ttest value which significant at 41 degree of freedom on tests mean scores of Entrepreneurial Skills. It demonstrates that the experimental groups mean scores of Post-tests are significantly higher than the Pre-Test mean scores in Entrepreneurial sub-skills as Communication, Decision making, Self-awareness, organization, Teamwork, problem solving, market evaluating skills respectively. These two scores of pre-test and post-test were differed significantly on Entrepreneurial Skills achievement of women students after studying through blended learning programme. It means that the null hypothesis was rejected, and the alternative hypothesis was accepted. It seems that the experimental group of women has gained reasonably much more in post-test with compared to pre-test as a result of BLM treatment.

15. CONTRIBUTION TO THE SOCIETY: (GIVE DETAILS)

In Indian context, prevailing modes of curriculum transaction in Arts, Commerce and Science education are insufficient enough to equip students in entrepreneurial skills. There are no any facilities of learning those who want to earn extra vocational credit courses other than regular specific courses like B.A., M.A., B.Sc., M.Sc., and B.Com. M.Com. in existing higher education system except SWAYAM UGC launched programme. This is a new demand of 21st century economy of India. The benefits of blended learning allow students to mix and match according to their needs.

In Indian scenario of education, there is a crucial problem of employability skills among the maximum students who are seeking the jobs after their graduation. The changed scenario of Indian economy demands the need to develop entrepreneurship skills and competencies of creativity to properly train and educate learners in accordance with the requirements of the business enterprise and service sectors as well. For this purpose, education system of higher education has to change the instructional design and try to involve the community of practices in learning system appropriately. It is only possible through the blended learning mode of delivery. In such a learning mode, Learner can interact with the practitioners from the place of learning and get the experiences of real life situation of practices as well as practitioners can get training of solving the day to day problems of practices and try to improve it systematically. Such a reciprocal situation of education was to be needed for changing through blended learning pathways of instructional strategies.

In present reality, various measures have been suggested to increase and sustain female participation in the Indian economy. To support meaningful female participation, education needs to be matched with corresponding job creation. There is a need to introduce government reforms to reduce gender inequality in access to employment in the labour market. Pathways from education to opportunity can be nurtured through deliberate, focused efforts to help young women minds to pursue their dreams, to transform their aspirations into reality and in turn revitalize, grow and achieve their goals by developing entrepreneurial attitudes and employability skills through the Blended Learning Model. Women those who are engaged in housekeeping or services and simultaneously they want to improve their entrepreneurial skills for participating in income generating activities; it is only possible through this Blended Learning Model.

The study revealed the enhancement and retention of entrepreneurial skills among the women after intervention of Blended Learning Programme. In this study, entrepreneurial skills are designed with the three layers of creativity components-expertise, intrinsic motivation and thinking styles; such design of entrepreneurial skills are so much effective for becoming creative entrepreneurs and it makes interesting to learn the skills rapidly as well.

Activity Based Learning is a new craze in education now a day; because doing, thinking, and feeling all the ways of learning are applied in such kind of learning. This research study has suggested the three approaches like Analytical Oriented Approach, Creative Oriented Approach, Practical Oriented Approach to do learning activities based on (Stenberg, 1999) "Triarchic Theory" of intelligence and creativity. This design of Learning Activities is found effective to create the intelligence in particular area of subject among women students.

The interactions play the vital role in the learning process. Creating effective interactions between leaner to learner, learner to instructors, learner to community of practices and learner to content is the major challenge in any academic programme. In present study, Story Based Learning Scenario provides online communication opportunities with instructors, experts, mentors, community of practitioners and other learners about learning tasks through the same. Arguably, in such an environment, maximum teaching-learning activities were carried out by computer-mediated online platform and some of them were completed through the face to face mode of learning. Both the benefits of face to face and online mode of learning had been taken into consideration for effective way of learning because it is so easy and always possible to interact with practitioners time to time in online mode of learning. Story Based Learning Scenario is very much effective for motivating to solve the day to day problems through interactions in their local situation.

- 16. WHETHER ANY PH.D. ENROLLED/PRODUCED OUT OF THE PROJECT: No
- 17. NO. OF PUBLICATIONS OUT OF THE PROJECT: Two International Publications (PLEASE ATTACH)