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Evaluating Refresher Training on Masters' Course of Rural Development Subject

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Abstract

The refresher course training is pivotal for strengthening teachers' commitment, sharing knowledge, increasing self-confidence, and keeping them up to date on current teaching learning activities. With this consideration, the aim of this paper is to assess the present syllabus of MA in Rural Development and evaluate the refresher course training program based on four levels of evaluation such as reaction, learning, behavior and result of the program. For that purpose, we purposively selected 25 participants who were associated in 21 campuses including Central Department. We applied survey based evaluation research method and Kirkpatrick four levels (reaction, learning, behavior and result) training evaluation model for assessing and examining outcomes of trainings. It reveals that the training program has evolved into an academic platform for students to share their personal experiences with course structure, teaching learning practices, and student performance. It has increased the capacity of the subject coordinators/teacher in terms of networking, course structure/function, performance assessment and constructivist pedagogy. Besides, they have developed a good network amongst the participants and resource persons. The major outputs of the program are SWOC analysis of course structure, 3Rs (Revisit, Revision and Restructure) course concept as well as list of lesson learn and new possible papers (course of study). Therefore, this short term training might brought long term impact improving course structure/function including pedagogical practices. Finally, course function scale, conceptual learning scale, Constructivist Pedagogy/learning theory scale, level four result/outcomes scale and characteristics of the participants are interlinked and associated significantly.

Keywords: *Capacity development, Refresher course training, Masters of Arts, Rural Development, Course structure/function*

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Introduction

Performance of any institution can be assessed by evaluating its potential for development. A robust institutional foundation is important for accomplishing sustainable development goal-16, which was highlighted in Agenda 2030. (UN, 2015). This demonstrates unequivocally that, in order to enhance performance and guarantee the sustainability of any specific institution, capacity development must be more comprehensive and take into account institutional system changes.

Teachers' knowledge should be updated in a variety of ways, including refresher courses, orientations, inductions, training and seminars, and so on (Partap, 2018). Teachers frequently perform their duties without adequate pedagogical training; even when qualified in their discipline, they are frequently unprepared for management roles at work (Walshe, 1998). This aspect becomes more critical as the universities are increasingly being exhorted to cooperate in the nation's development. This might be reason, universities all over the world, have started paying more attention to the training of the academic staff (Rastogi, 2022). The refresher course actually kept the teachers abreast of current events, boosted their self-esteem, and solidified their dedication to imparting their knowledge and skills to both teachers and students. In the case of Nepal, Tribhuvan University including faculties and central departments are not yet paying more attention to the training of academic staffs which is one of the issues for upgrading academic excellence. In this line, University Grants Commission (UGC) has been providing short term capacity development trainings to the institutions offering higher educational services throughout the country.

The University Grants Commission (UGC) has given 267 short-term capacity development training programs (such as 25 national conferences, 33 workshops/seminars, 24 refresher courses, 79 trainings in research methodology, 14 lab trainings, 77 capacity development trainings, and 15 dialogues between the academy and industry) to higher educational institutions in this fiscal year 2021–2022 (UGC, 2022). Of the total 24 refresher course training, Central Department of Rural Development (established in 2001) also carried out a five-day refresher course training for the MA course in Rural Development (RD) subject instructors/coordinators associated with 21 different campuses/colleges across the nation (15 constituent + 6 affiliated). This interactive training or academic workshop evolved into a venue for participants to network, establish rapport, form teams, and share experiences. The training was also successful in guiding the revised MA in RD course material and providing training in constructivist pedagogy based on several learning theories. Additionally, the training course evolved into an academic forum for exchanging advice on course design and function, student performance evaluation, academic writing, and training course evaluation.

Academically speaking, the Faculty of Humanities and Social Sciences includes RD as one of its transdisciplinary programs. This program is urgent because it is an investigation into the social and economic transformation of the nation, including the rural community and society. Rural Development subject program has been offering semester basis course structure for seven years. There are total 18 subjects in which each subject contains 15 credit hours and 48 lecture hours. More specifically there are five subjects (Development: Theory and Discourse; Economic Dimensions of Development; Socio-cultural Dimensions of Development; Local Governance and Development; Measurements in Development) in first semester, five subjects (Community Development in Nepal; Policy, Strategy and Planning in Development; Rural Urban Linkage; Project Management; Agriculture and Development) in second semester, five subjects (Political Economy of Nepal; Tourism and Development; Sustainable Development; Gender and Development; Research Methodology) in third semester and three subjects (Population, Migration and Remittance; Human Resource Management; Natural Resource Management) in fourth semester including 6 credit hours thesis. Professionally, the training is relevant for sharing teaching, learning and performing related activities of the students among the subject coordinators/ teachers including HoD and former HoDs of CDRD, teaching faculties and subject experts.

Objectives

The following objectives for the study have been intended to be achieved:

- To evaluate the present syllabus of MA in RD in terms of course structure and function, pedagogy and performance evaluation of the students
- To assess and examine refresher course training program based on four levels of evaluation such as reaction, learning, behavior and result of program.

Method and materials

We applied survey based evaluation research method and Kirkpatrick Model, a widely renowned tool for assessing and examining the outcomes of educational training program. The model consists of four levels of evaluation such as reaction, learning, behavior, and results (Baskin, 2001). In doing so, we tried to analyze effectiveness of our workshop precisely at each level of the model. In doing so the focus was given to analyze multiple cases (Yazan, 2015) such as course structure and functions, performance evaluation of the students, constructivist pedagogy /learning theories as well as economic and critical perspectives of Rural Development in Nepalese context. The unit of analysis were 25 participants (Rural Development subject coordinators or teachers) purposively selected from constituent and affiliated campuses located in Kathmandu Valley and outside the Valley. The idea of participatory workshop intended to value academic culture work-integrated learning process (Brink, 2014).

We purposively selected 25 participants for the program who were associated in 21 campuses and colleges including Central Department. Of the total, 14 were constituent campuses and remaining 7 were affiliated colleges as well as 11 were located inside the Kathmandu valley and remaining 10 were located in outside the Kathmandu valley. In the case of resource person, 12 academic staffs (the Head of the Central Department, 3 former Heads of the Department, 5 core faculties of the department and 3 visiting faculties) who were involved in professional duties as resource person (Awang, 1981).

Program evaluation tools and measurement framework

We applied self-administered questionnaires to evaluate training program. The questionnaires consists four sections. The first section deals with course structure and function related information through 4 indicators (course structure, lecture hours, and course function and performance evaluation of the students) and 16 item variables (4 for each). The section presented performance assessment related information through 4 indicators (thematic linkage, conceptual learning, critical understanding and reflective/illustrative writing practices of the students) and 16 item variables (4 for each). Third section deals on Rural Development subject and Pedagogy related information through five indicators (content, session plan, slide sharing, interaction and presentation) and 20 item variables (5 for each). Finally, fourth section presents training evaluation related information through 4 indicators (reaction, learning, behavior and outcomes/results of the refresher course training program) and 20 item variables (5 for each). The item variables were developed based on seven points Likert scale (Chakrabartty, 2014; Likert, 1932). Our questionnaire was highly reliable as Cronbach's alpha for measurement 74 item variables found 0.96, 16 indicators wise items found 0.90 and 4 index wised items found 0.79 <0.78 (Taber, 2017). Besides, to establish the content validity of the scales, four mechanisms were used: computed 16 items variables and 4 indicators of course structure/function, computed 16 item variables and 4 indicators of performance assessment, computed 25 items variables and 5 indicators of RD subject and constructivist pedagogy and computed 25 items variables and 5 indicators of overall training evaluation (Margaryan, Albert & Charlton-Czaplicki, 2022). The correlation coefficients between course structure/function and performance assessment scales found (r=.52**), course structure/function and RD and Constructivist pedagogy scale found (r=.62**) and course structure/functions and training evaluation scale (r=.40*) also found significant at the 0.01 level and there is no issue of content validity (Cohen et al., 2007).

Methods of data analysis

We used SPSS version 25 to organize, summarize, describe and generalize the collected data. In doing so, we applied descriptive and inferential statistical tools such as central tendency, summative/Likert scale (7: strongly satisfy, 6: satisfy, 5: somehow satisfy, 4: neutral, 3: somehow dissatisfy, 2: dissatisfy, 1: strongly dissatisfy) analysis and developed

the composite indices (Chakrabartty, 2014; Sava, 2016). Agreeing with Perrin et al. (2003) who points out that 'it can be at least as important for an evaluator to have interpersonal and communication skills as to have technical research skills' (p. 236), we also tried to establish multivariate associations between the measurement indicators. We have used multiple regression models (Field, 2009) for describing measurement associations between dependent variables (course function index, conceptual learning index, constructivist pedagogy index and level four result/outcomes index) and independent variables characteristics of the participants.

Results and discussion

Program structure and discussions

A five-day training program was held in Central Department of Rural Development from June 22 to June 26, 2022. We conducted 4 sessions per day and each session contained 90 minutes which was mandatory according to UGC criteria which was highly favored and appreciated by the training participants. First session of the first day was conducted by former head of the department. He applied actor and lecturer methods to deliver his title "*Rural Development Subject in Tribhuvan University: Emergence and New Trend".* He happily shared about historical background of the department, resources and facilities available in the department as well as MPhil-PhD program offering in Rural Development subjects to the interested scholars belonging to multidisciplinary subjects. He also shared national identity of the country in terms of biodiversity and cultural richness. Finally, he concluded that:

> *Rural development knowledge has significantly expended over the last twenty years in Nepal. Today rural development program is taught right from the school education system to the University level in many schools and campuses/colleges of Nepal. CDRD has no doubt played a key role in the expansion of rural development as an academic discipline throughout the country*.

The remaining three sessions on this day were conducted by the subject teachers using Power Point slides, lecture and groups discussions methods. Interestingly, the visiting faculty resource person for gender and development subject has shared importance of gender analysis in research and development. He also shared latest publication on gender – feminism for all and also shared gender workshop practicing in international conference and seminar applicable to all.

The first session of the second day was conducted by former head of the department. He also applied actor and lecturer methods to deliver his title *Critical Perspective on Rural Development in Nepal*. He briefly shared some of the popular Rural Development Program such as Tribhuvan Village Development Program (TVDP), Integrated Rural Development Program (IRDP), Local Governance and Community Development Program and Build

Own Village Ourselves Program and also presented recent data on population distributions, foreign employment and poverty. Finally, he concluded that:

> Rural Development program in Nepal is highly influenced by exogenous factors. Because of that features of Nepali development becoming demand driven, donor imposed and donor guided. The long term development vision of Nepali government prosperous Nepal and Happy Nepali cannot be fulfilled as the politicians and development experts have lacks of theoretical knowledge on development and geo-political. Therefore CDRD must produce critical and skilled manpower for ensuring prosperity of the country.

The third session of the second day was also conducted by former head of the department. He also applied actor and lecturer methods to deliver his title economics of rural development. He briefly introduced about economics, branches of economics, economic growth and development, major schools of economics and development and theories and models of development. Finally, he concluded that:

> Condition of rural economy is critical as an overwhelming majority of population is dependent on agriculture sector. There is lack of irrigation, banking and credit, marketing, transport facilities etc. The income of rural households are less than income of urban households. A wide spread poverty, seasonal and disguised unemployment are the features of rural area. Educational, health and human resource status remains poor. And suggested to improve such economic condition through rural development as rural development is process of bringing change among rural communities from traditional way of living to progressive of living. It is an action plan for the economic and social upliftment of rural areas. It aims at improving quality of life and economic well-being of people living in the rural area addressing to the above said condition of rural economy.

The remaining three sessions of the day were conducted by the subject teachers by applying PowerPoint slides, lecture and groups discussions methods.

The first session of the third day was conducted by principal author head of the Department. He started his session by using warmup method and distributed knowledge test checklist to the participants. The participants were requested to choose right option from the multiple choice questions related to research method and methodology. He then applied actor and lecture methods and briefly shared his lived experience on Research related issues and also shared importance of genetic and cultural context while believing on nature of reality and ways of reasoning. Finally, he concluded that:

> Research is not only cyclic, it is more helical process of construction and re-construction of knowledge. Hence it is easy to define research, compare and contrast between qualitative and quantitative research design but it is very tuff

job to complete research project on right topic, right time and right way. And he also suggested participants to develop research culture in their campuses for the generation of contemporary knowledge on Rural Development. .

The remaining three sessions of the day were conducted by the subject teachers by applying PowerPoint slides, lecture and groups discussions methods.

The first session of the fourth day was conducted by principal author head of the Department. He applied actor and lecture methods and shared exam evaluation process and thesis writing guideline among the participants through PowerPoint. He showed complete format of thesis consisted with preliminary pages and chapter wise components of thesis and reference sections. He also raised plagiarism related issues and possible solutions. The remaining three sessions of the day were conducted by other subject teachers by applying PowerPoint slides, lecture and groups discussions methods.

The first session of the fifth day was conducted by corresponding author and focal person of this training program. He started his presentation with couple of the statement- "Low morale, depressed, feeling unfairly blamed for the ills of society? You must be a teacher" (Times Education Supplement, 1997, p. 1) and "Changing meaning of education is motivation, motivation is energy, energy is engagement and engagement is life" (Fullan, 2007). He also shared his thoughtful school education life and higher education life fond of power and pedagogy. He delivered his session entitled Constructivist Pedagogy and Learning Theories on six outlines: education for development, academic standpoint, education and knowledge, philosophies on education (e.g. perennialism, essentialism, behaviorism, progressivism, existentialism and postmodernism) and learning theories (e.g. constructivism, Blooms' taxonomy and cone of learning) and reflections.

Similarly, the last session of the day was conducted by Associate Prof. Bishnu Bahadur Khatri (Head of the Department). He applied group discussions method to provide feedbacks, suggestion and lesson learned from the participants' perspectives. The participants also provided specific feedbacks, suggestion and lesson learned. The remaining two sessions of the day were conducted by other subject teachers by applying PowerPoint slides, lecture and groups discussions methods.

Characteristics of the participants

Of the total majority of 21 participants' age falls between 40 and 49 years and least 1 participant's age is found 36 years. The range of age found 16 years with Min 36 years and Max 52 years. The mean age is 44 years with 3.61 standard deviation and 0.06 skewness which shows the consistency of the age group. Female participation and permanent address of the participants found almost equal or 20 percent each (see in Appendix E). The majority 19 participants were associated in constituent campuses equally located in outside and inside Kathmandu Valley. The majority 17 participants also completed Educational Degree

from faculty of education. Very interestingly only one participant completed MPhil Degree from Tribhuvan University. However, 6 participants have been doing PhD Degree in Rural Development subject and 9 other participants have been planning to enroll in PhD Degree in coming years. Likewise, the majority 22 participants have >7 years of teaching experience whereas only one participant has <4 years of teaching experience. This mean the majority of the participants are well experienced as it takes only four years for becoming teacher (https://bit.ly/3nuG75j).

Course structure and function

Total four indicators four items variables such as course structure (numbers of units, numbers of sub-units, theoretical aspects and practical aspects), lecture hours (first to fourth units), course function (first to fourth units) and performance evaluation of the students (attendance, assignment, midterm exam and final exam results) have been developed and analyzed based on seven points Likert scale. The summative method was applied to analyze denser views and mean values of the participants.

The denser views of the participants in four indicators: Course structure, lecture hours, course function and performance evaluation of the students are the consistently with somehow satisfy, satisfy and strongly satisfy points (except practical aspects item of course structure). The descriptive statistics of the four indicators: Course structure ($\bar{x}$ 4.82, σ'3.39 and Skewness -1.07), Lecture hour ($\bar{x}$ 5.06, σ' 3.95 and Skewness -0.74), Course function ($\bar{x}$ 4.97, σ' 3.27 and Skewness -0.97) and Performance evaluation of the students ($\bar{x}$ 4.93, σ' 5.45 and Skewness -1.16) also indicate that the data are consistent and normally distributed.

We also developed multiple regression models that serves for the dependent variable (index data) through the help of multiple independent variables (nominal and scale) in a certain value (Field, 2009). For that purpose, the dependent variable course function index (N 25, Min 1, Max 7, $\bar{x}$ 4.97, σ'3.27 and Skewness -0.97) was calculated by computing four Likert scale variables; orientation class, complete on time, revision on time and faculty cooperation. The regression model for the dependent variable concerning 6 independent variables (Opening and closing ceremony, having education degree from faculty of education, institutional affiliation, having MPhil/PhD Degree, teaching experience and permanent address) is given below.

Results of the multiple linear regression as presented in Table 1 and Table 2 indicated that there was a collective significant effect between the independent variables (Opening and closing ceremony, having education degree from Faculty of education, Institutional affiliation, having MPhil/PhD Degree, Teaching experience and permanent address) with the dependent variable course function index with $F(6, 18) = 2.24$, $p<0.05$, $R^2 = 0.42$ (42 percent).

Table 1. Model summary 1

	SS	df	Mean Square	F	Sig.	R= 0.65 R^2 = 0.42 Adjusted R^2 = 0.23 Std. Error of the estimate = 2.85 Durbin-Watson =1.57
Regression	109.71	6	18.28	2.24	.00[b]	
Residual	146.92	18	8.16			
Total	256.64	24				

Source: Refresher course training program, 2022

Table 2. Coefficients 1

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	9.0	6.40		1.40	.17		
	Permanent address	.43	.57	.15	.76	.45	.82	1.21
	Institutional affiliation	1.3	1.42	.18	.97	.34	.88	1.12
	Teaching experience	-.74	1.08	-.13	-.68	.50	.86	1.15
	Having Degree from Faculty of Education	-.71	1.23	-.10	-.58	.56	.98	1.01
	Having MPhil/PhD Degree	-.52	.70	-.13	-.74	.46	.91	1.09
	Opening and closing ceremony	2.24*	.69	.62	3.23	.00	.84	1.17

Source: Refresher course training program, 2022 *$p < .05$, **$p < .01$

Table 2 depicts that all the predictor variables were not found significant. Among them opening and closing ceremony (t= 3.23, p<0.05) is the significant predictor in the model. Similarly, the variables permanent address and institutional affiliation are positively described the model whereas the variables teaching experience, having degree from faculty of education and completed MPhil/PhD degree are negatively described the model. The model presented in Table 6 has no issue of multicollinearity as VIF for each of the predictors was less than 1.5. Moreover, the accepted level of the auto correlation (Durbin-Watson = 1.57) (Table 1) signifies that the practice index is well explained by the above-mentioned predictor variables.

Performance assessment of the students

The four indicators wise four items variables such as thematic linkage practices (between RD and development, course and RD, unit and unit, sub-unit and unit), conceptual learning practices (contextualize, visualize and develop conceptual framework), critical

understanding (analyze strength, weakness, opportunity nd challenges) and reflective/ illustrative writing practices of the students (develop thesis statement, topic sentence, figurative writing, conclusion/suggestion) have been developed and analyzed based on seven points Likert scale. The summative method was applied to analyze denser views and mean values of the participants.

The denser views of the participants in four indicators: Thematic linking, conceptual learning, critical understanding and reflective writings are the consistently with somehow satisfy, satisfy and strongly satisfy points (except visualize item of conceptual learning practices). The descriptive statistics of the four indicators: Thematic linkage ($\bar{x}$ 4.65, σ' 3.25 and Skewness -0.51), Conceptual learning ($\bar{x}$ 4.62, σ' 2.61 and Skewness -0.71), Critical understanding ($\bar{x}$ 4.44, σ' 3.12 and Skewness -0.20) and Reflective writing ($\bar{x}$ 4.82, σ' 3.30 and Skewness -0.59) also indicate that the data are consistent and normally distributed.

For the multiple regression models, the dependent variable conceptual learning index (N 25, Min 1, Max 7, $\bar{x}$ 4.62, σ' 2.61 and Skewness -0.72) was calculated by computing four Likert scale variables; concept clarity, contextualize, visualize and developing conceptual framework on subject matter. The regression model for the dependent variable concerning 9 independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address , Institutional affiliation, Sex group, Degree from education faculty, Opening and closing ceremony and teaching experience) is given below.

Results of the multiple linear regression as presented in Table 3 and Table 4 indicated that there was a collective significant effect between the independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address, Institutional affiliation, Sex group, Degree from education faculty, Opening and closing ceremony and teaching experience) with the dependent variable conceptual learning index with $F(9, 15) = 0.66$, $p<0.05$, $R^2 = 0.28$ (28 percent).

Table 3. Model summary 2

Model		SS	df	Mean Square	F	Sig.	R= 0.53 $R^2 = 0.28$ Adjusted $R^2 = -0.14$ Std. Error of the estimate = 2.79 Durbin-Watson =1.81
1	Regression	46.77	9	5.19	.66	.00[b]	
	Residual	117.46	15	7.83			
	Total	164.24	24				

Source: Refresher course training program, 2022

Table 4. Coefficients 2

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	8.73	14.37		.60	.55		
	Permanent address	.50	.58	.21	.86	.40	.74	1.33
	Institutional affiliation	2.89*	1.59	.48	1.81	.05	.67	1.47
	Teaching experience	2.07	1.34	.45	1.53	.14	.54	1.85
	Education degree from Faculty of Education	-.93	1.52	-.17	-.61	.54	.62	1.60
	Having MPhil/PhD Degree	.21	.69	.07	.30	.76	.91	1.09
	Opening and closing ceremony	-.10	.74	-.03	-.14	.89	.70	1.41
	Age	.14	.18	.19	.75	.46	.69	1.43
	Sex group	-1.16	1.59	-.18	-.72	.47	.77	1.29
	Institutional location	-2.56	1.73	-.49	-1.47	.16	.42	2.36

Source: Refresher course training program, 2022 *$p < .05$, **$p < .01$

Table 4 shows that all the predictor variables were not found significant. Among them institutional affiliation (t= 1.81, p<0.05) is the significant predictor in the model. Similarly, the variables permanent address, teaching experiences, having MPhil/PhD Degree and age are positively described the model whereas the variables having educational degree from faculty of education, opening and closing ceremony and sex group of the participants are negatively described the model. The model presented in Table 6 has no issue of multicollinearity as VIF for each of the predictors was less than 2.50. Moreover, the accepted level of the auto correlation (Durbin-Watson = 1.81) (Table 3) signifies that the practice index is well explained by the above-mentioned predictor variables.

Rural development and pedagogical learning theory

This section deals with four indicators such as emergence of rural development subject, critical perspective on rural development in Nepal, economics of rural development and constructivist pedagogy/learning theories. Each indicators consists five item variables like; topic content, session plan, quality of PowerPoint slide, group interaction and presentation which were developed and analyzed based on seven points Likert scale. The summative method was applied to analyze denser views and mean values of the participants.

Table 14 represents information on assessing and examining perceptions of the participants on Rural Development and pedagogy related issues delivered in the workshop. The denser views of the participants in four subject matters: emergence of Rural Development subject in Tribhuvan University, Critical Perspectives of Rural Development in Nepal, Economics of Rural Development and Constructivist Pedagogy/learning theories are the consistently with somehow satisfy, satisfy and strongly satisfy points. The descriptive statistics of the four sessions: Rural Development Emergence ($\bar{x}$ 5.20, σ' 4.89 and Skewness -1.62),

Critical perspective on Rural Development in Nepal ($\bar{x}$ 4.97, σ' 4.90 and Skewness -0.59), Economics of Rural Development ($\bar{x}$ 4.92, σ' 4.83 and Skewness -0.54) and Constructivist pedagogy and learning theories mean ($\bar{x}$ 5.47, σ' 5.61 and Skewness -1.32) also indicate that data are consistent and normally distributed.

For the multiple regression models, the dependent variable constructivist pedagogy/learning theories index (N 25, Min 1, Max 7, $\bar{x}$ 5.47, σ' 5.61 and Skewness -1.32) was calculated by computing five Likert scale variables; topic content, session plan, slide sharing, interaction and presentation. The regression model for the dependent variable concerning 9 independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address, Institutional affiliation, Sex group, education degree from faculty of education, opening and closing ceremony and teaching experience) is given below.

Results of the multiple linear regression as presented in Table 5 and Table 6 indicated that there was a collective significant effect between the independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address, Institutional affiliation, Sex group, education degree from faculty of education, opening and closing ceremony and teaching experience) with the dependent variable constructivist pedagogy/learning theories index with $F(9, 15) = 2.06$, $p<0.05$, $R^2 = 0.55$ (55 percent).

Table 5. Model summary 3

Model		SS	df	Mean Square	F	Sig.	R= 0.74 $R^2 = 0.55$ Adjusted $R^2 = 0.28$ SE of the estimate = 4.74 Durbin-Watson =1.57
1	Regression	418.16	9	46.46	2.06	.00[b]	
	Residual	337.60	15	22.50			
	Total	755.76	24				

Source: Refresher course training program, 2022

Table 6. Coefficients 3

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.49	24.36		.18	.85		
	Permanent address	.95	.99	.19	.95	.35	.74	1.33
	Institutional affiliation	1.91	2.70	.14	.70	.49	.67	1.47
	Teaching experience	2.85	2.28	.29	1.25	.23	.54	1.85
	Education degree from faculty of education	2.16	2.57	.18	.83	.41	.62	1.60
	MPhil/PhD Degree	.60	1.17	.09	.51	.61	.91	1.09
	Opening and closing ceremony	3.11**	1.26	.50	2.46	.01	.70	1.41
	Age	-.34	.32	-.21	-1.06	.30	.69	1.43
	Sex group	1.79	2.70	.13	.66	.51	.77	1.29
	Institutional location	.10	2.93	.00	.03	.97	.42	2.36

Source: Refresher course training program, 2022 *$p < .05$, **$p < .01$

Table 6 highlights that all the predictor variables were not found significant. Among them opening and closing ceremony ($t= 2.46$, $p<0.05$) is the significant predictor in the model. Similarly, the variables permanent address, institutional affiliation, teaching experiences, completed any degree from faculty of education, having MPhil/PhD Degree, sex group and institutional location are positively described the model whereas age group of the participants is negatively described the model. The model presented in Table 6 has no issue of multicollinearity as VIF for each of the predictors was less than 2.50. Moreover, the accepted level of the auto correlation (Durbin-Watson = 1.57) (Table 5) signifies that the practice index is well explained by the above-mentioned predictor variables.

Overall training evaluation

This section presents four indicators wise five items variables such as reaction (Organize workshop, Date and venue, Participant selection, Learnings tips and training activities), learning, (develop knowledge, learn skill, internal motivation, external motivation, commitment build), behavior (Possible faculties support for sharing tips, possible students support for applying tips, Having enough time for practice, Level of personal change/ transform, level of satisfaction) and outcomes/results of the refresher course training program (known to faculties, network build, experience sharing, academic dialogue and refreshed level) developed and analyzed based on seven points Likert scale. The summative method was applied to analyze denser views and mean values of the participants.

The denser views of the participants in four levels: one-reaction, two-learning, three-behavior and four-outcomes are the consistently with somehow satisfy, satisfy and strongly satisfy points. The descriptive statistics for level one reaction ($\bar{x}$ 5.60, σ' 3.34 and Skewness -0.91), level two learning ($\bar{x}$ 5.45, σ' 4.36 and Skewness -0.52), level three behavior ($\bar{x}$ 5.30, σ' 3.89 and Skewness -0.47) and level four outcomes ($\bar{x}$ 5.57, σ' 4.08 and Skewness -0.47) also indicate that data are consistent and normally distributed.

For the multiple regression models, the dependent variable level four result or outcomes index (N 25, Min 1, Max 7, $\bar{x}$ 5.57, σ' 4.08and Skewness -0.47) was calculated by computing five Likert scale variables; know to faculties, network build, experience sharing, academic dialogue and refreshed level. The regression model for the dependent variable concerning 9 independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address, Institutional affiliation, sex group, completed any Degree from faculty of education, opening and closing ceremony and teaching experience) is given below.

Results of the multiple linear regression as presented in Table 7 and Table 8 indicated that there was a collective significant effect between the independent variables (Institutional location, MPhil/PhD Degree, Age, permanent address, Institutional affiliation, sex group, completed any Degree from faculty of education, opening and closing ceremony and

teaching experience) with the dependent variable constructivist pedagogy/learning theories index with F (9, 15) = 3.26, p<0.05, R^2 = 0.66 (66 percent).

Table 7. Model summary 4

Model		SS	df	Mean Square	F	Sig.	R= 0.81 R^2 = 0.66 Adjusted R^2 = 0.46 SE of the estimate = 2.98 Durbin-Watson =1.80
1	Regression	266.88	9	29.65	3.32	.000[b]	
	Residual	133.75	15	8.91			
	Total	400.64	24				

Source: Refresher course training program, 2022

Table 8. Coefficients 4

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	21.70	15.33		1.41	.17		
	Permanent address	-.27	.62	-.07	-.43	.67	.74	1.33
	Institutional affiliation	-.00	1.70	.00	.00	1.00	.67	1.47
	Teaching experience	1.44	1.43	.20	1.00	.32	.54	1.85
	Education degree from faculty of education	-.74	1.62	-.08	-.46	.65	.62	1.60
	Having MPhil/PhD Degree	-.87	.73	-.18	-1.18	.25	.91	1.09
	Opening and closing ceremony	1.48	.79	.33	1.87	.08	.70	1.41
	Age	-.24	.20	-.21	-1.22	.23	.69	1.43
	Sex group	5.73*	1.70	.57	3.37	.00	.77	1.29
	Institutional location	-.87	1.84	-.10	-.47	.64	.42	2.36

Source: Refresher course training program, 2022 *$p < .05$, **$p < .01$

Table 8 presents that all the predictor variables were not found significant. Among them sex group (t= 3.37, p<0.05) is the significant predictor in the model. Similarly, the variables teaching experiences and opening and closing ceremony are positively described the model whereas permanent address, institutional affiliation, completed any degree from faculty of education, having MPhil/PhD Degree, age group and institutional location are negatively described the model. The model presented in Table 6 has no issue of multicollinearity as VIF for each of the predictors was less than 2.50. Moreover, the accepted level of the

auto correlation (Durbin-Watson = 1.80) (Table 7) signifies that the practice index is well explained by the above-mentioned predictor variables.

Opening and closing ceremony

The opening ceremony was chaired by chief guest Prof. Dr. Shiv Lal Bhusal (Rector of Tribhuvan University) and guest Prof. Pradeep Kumar Khadka (former head of the Rural Development Department). In the beginning flash welcome speech was delivered by Head of Department Associate Prof. Bishnu Bahadur Khatri. After that the chief guest unpacked importance of this refresher course training program among the participants through his speech. Besides, he unpacked importance of Rural Development Subject in Nepalese context and also appreciated to the Department for conducting participatory refresher course training workshop. At the same time he could not forget to acknowledge university Grants Commission for providing financial supports to conduct this program. Owing to that the participants including resource persons seem happy with this formal opening ceremony.

This training program has also attracted media reporter of Kathmandu Television who captured closing ceremony events and shared the feature news- *CDRD organize grand workshop for revising its curricula*. More specifically, the denser views of the participants on opening and closing ceremony were consistently with somehow satisfy, satisfy and strongly satisfy points. In this respect, during the closing ceremony one of the participants happily shared that he got a chance to involve in such training program first time in his seventeen years of teaching experience. However, 3 and 2 participants presented neutral viewpoints on opening ceremony and closing ceremony respectively. This data clearly indicate successfulness of refresher training program from the viewpoints of the participants. The successfulness of program not only motivated to the organizer but also motivated to the participants who suggested to organize such types of capacity development training in coming years.

Major outcomes of training, challenges and way forward

Academic and subjective orientations of the teachers on RD course structure was key focus of the training workshop. The program has increased the capacity of MA RD subject coordinators/teacher in terms of networking, course structure/function, performance assessment and constructivist pedagogy. Through the training program, participants not only developed a good network amongst all other participants and resource person but also appraise whole course structure and function. The SWOC related information have been enlisted in Table 9.

Table 9. SWOC analysis

Strength	• Relevant course structures interlinked with nation development • Proper linkage between courses of the study • Timely revision • Theoretically sound • Uniformity of the units or four units in each subject • Highlights Nepal section in each subject
Weakness	• Poor practical aspects and lack of internship opportunity • Unit wise vertical linkage is insufficient • Sub-unit wise horizontal linkage is insufficient • Not offering market oriented skill development subjects • Not offering capacity/skill development training packages • Course revision without industry-academia dialogue
Opportunities	• Impart holistic knowledge on rural development • More orient on poverty alleviation issues • Few subjects similar with course of public service commission exam • Higher possibility to grab job opportunity in I/NGOs • Possibility to works as development experts/novice researchers • Offer writing and presentation skills for professional development
Challenges	• Fundamentalism of politics in the University • Rural development vs Development studies debate in University • Complete semester basis degree within academic calendar • Effective implementations of internal evaluation system • Students' high priority in abroad study • Graduates' less interest on working in rural area of the country

Source: Refresher course training program, 2022

Likewise, we also collected participants' feedbacks on this training program on three indicators course structure, lesson lean and add new possible papers. In the case of course structure, they suggested to apply 3Rs (Revisit, Revision and Restructure) approach on nine major areas such as course descriptions, course goals/objectives, learning objectives/ outcomes, contents (extended contents/micro syllabus), specific objectives (unit-wise), designing assignments, assessment system/evaluation method, assignments, mid-term, final

exam and instructional method & materials (pedagogy) and required course materials/unit wise/reading/reference materials. For the second indicator, they enlisted nine key lesson learned like; Mapping out the course structure, Using research driven rubric to review the course, Should discuss with wider community & stakeholders, Consult, communicate & share with peers, discuss on quality control measures, course orientation/dissemination, consider optional subjects, address market demand/new trends in the subject, Practical knowledge & skills transfer. Finally, they suggested to add few subjects from 12 possible areas such as Cooperatives, Rural finance/Development finance, Computer application, Rural technology/Alternative energy and sustainable development, Academic writing, Internship, NRM, Disaster management, Development management, Rural psychology, Philosophy of development, Project monitoring & evaluation as well.

Conclusion and recommendations

The study comes to the conclusion that this short term refresher course training has brought long term outcomes. We applied participatory based training which intended to value academic culture work-integrated learning process among the Rural Development subject coordinators/teachers selected from constituent/affiliated campuses located inside and outside Kathmandu Valley. During the training the participants discussed and shared personal viewpoints and experiences on course structure and function, performance assessment of the students and importance of Rural Development subject in Nepalese context. The participants not only felt refreshed from the workshop activities but also got academic tips on academic discipline of Rural Development subject, critical perspectives on rural Development, Economics of Rural Development and Constructivist pedagogy/ learning theories too. Besides, this training program also helped to establish good network and cooperation among the resource person and participants representing Rural Development subject teachers working throughout the country.

The results of measurement framework as developed is based on Kirkpatrick four levels of evaluation (reaction, learning, behavior and result) aligned with research questions/ objectives and helped to established significant relationships between course function index, conceptual learning index, constructivist pedagogy/learning theories index, level four result index and characteristics of the participants. This might be reason that most of the participants suggested to organize such kind of participatory training workshop in coming future. This study also comes to the conclusion that this five days refresher course training served good message in University Campus and other Campuses offering Rural Development program in Bachelor and Master Levels. The grand opening ceremony of refresher course training program was chaired by chief guest, Rector of the Tribhuvan which becomes feature news to the Media reporter also. This refresher training successfully appraised MA course structure and function of the Rural Development subject by applying SWOC method which will be a roadmap for upgrading academic excellence. Furthermore,

it has also coined 3Rs (Revisit, Revision and Restructure) course concept, enlisted lesson learn and new possible papers (course of study) for future implications. Besides, in order to ensure a balance between development theory and practice, the participants suggested to offer credit basis internship packages to the students and offer market driven capacity and skill development oriented papers in the course structure.

Finally, capacity development training program is an important aspect for career development of the academicians involving in teaching learning activities. Therefore, such training program might support the future and therefore destination should continue to be characterized by principles of participatory and result oriented practice: detailed training needs assessment, appropriate participant selection, learning outcomes, content and methods, and focused evaluation.

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