



REFLECTIVE TEACHING READINESS AMONG SECONDARY STUDENT TEACHERS IN RELATION WITH SOME VARIABLES

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Received 20th Oct. 2016, Revised 21st Oct. 2016, Accepted 22nd Oct. 2016

ABSTRACT

Reflective teaching is a most important constructs associated with the quality of teaching-learning process. It is more important for a prospective teacher to be a competent and successful. Reflective teaching is a process where teachers think over their teaching practices, analyzing how something was taught, what drawbacks were and how the practice might be improved or changed for better learning outcomes. This study was conducted to know the level of reflective teaching in relation with their gender, discipline of subject and academic qualification. The result of the study revealed that the level of reflective teaching readiness of secondary student teachers was high. More qualified secondary student teachers were showing higher readiness towards reflective teaching. There was found a significant difference in the level of reflective teaching readiness on the ground of their gender, educational qualification and discipline.

Key words: *Reflective teaching, teaching readiness*



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Teacher has a significant role to play in the reform and development of society. They have the responsibility to educate and train to the becoming citizens who has to discharge their noble duty in the society. So, teacher training program should be qualitative and updated. Quality of any activity depends at the sound research work, appropriate new programs, and implementation of

research findings. It is the research which discloses the relationship between different constructs, programs and activity related with teacher-training program's quality and effectiveness. Among these constructs, reflective teaching is most important constructs which is associated with the quality of teaching-learning process and academic achievement.

Reflective teaching

There are several definitions of reflective teaching in the literature. Usually this construct refer to the intentional thinking process of an individual in light of his/her experiences, leading to a new conceptual perspective or understanding. Sometime it is indicated no more than constructive self-criticism of one's action with a view to improvement (Calderhead, 1989). In fact, reflective teaching is a process where teachers think over their teaching practices, analyzing, how something was taught and how the practice might be improved or changed for better learning outcomes.

Reflection can be described as a generic term for those intellectual and effective activities in which individuals engage to explore their experiences in order to lead a new understanding and appreciation. Reflection is a forum of response of the learner to experience.

Reflective teaching readiness

Readiness is a psychological term which stands for an individual mental state of being fully preparedness for something. Reflective teaching is an approach to teaching characterized by a thorough understanding of students the way they learn (Ahmad ,2008, p.428). Readiness towards reflection in the concern of teaching is an individual's state of being fully prepared by knowledge, importance, attitude, skill and willingness to do reflective teaching.

Significance of the study

Several researches have been done to understand the relationship between reflective teaching and different constructs associated with teaching-learning process. Korthagen (according to Dervent, 2015) stresses the importance of promoting reflection within school-based teacher education programs, since reflective thinking helps to prevent prospective teachers from settling on existing traditional educational patterns in schools. It has been emphasized that reflective practice plays a vital role in the development of professional skills (Dervent, 2015). Reflective teaching positively affects professional growth and development because it leads to greater self-

awareness, new knowledge about professional practice and a broader understanding of the problems that confront practitioners. Related literature showed that reflective teaching is positively related with academic achievement, self-regulation strategies, creativity, and metacognitive skills(Andharia, 2003; Lew & Schmidt,2011; Dixit,2011; Dervent,2015).

But, there is a quite silence in Indian context, when we want to answer the question; what is the present scenario in the context of reflective teaching practices among secondary student teachers of Gujarat. Therefore, this study was conducted to find out the level of reflective teaching readiness and the effect of gender, educational qualification (PG and UG) and discipline (language, Science and Social Science) of secondary student teachers on the level of their reflective teaching readiness.

Objectives of the study

This study was conducted to achieve the following objectives -

1. To know the level of reflective teaching readiness of secondary student teachers.
2. To investigate if any difference in reflective teaching readiness of secondary student teachers in the concern of their gender, educational qualification (PG and UG) and discipline of subjects (language, Science and Social Science).

Hypothesis of the study

There were four null hypotheses in the study to examine. They are given follows-

1. There is no significant difference between the obtained mean scores on Reflective teaching readiness scale of female and male secondary student teachers.
2. There is no significant difference between the obtained mean scores on Reflective teaching readiness scale of PG (Post graduate) and UG (undergraduate) secondary student teachers.
3. There is no significant difference between the obtained mean scores of secondary student teachers on Reflective teaching readiness scale on the ground of their discipline of subject (Language, Science, and Social Science).
4. There will be no significant relationship between Reflective teaching readiness and academic achievement of secondary student teachers.

Methodology

The present study falls in the domain of descriptive study. Survey method was used in this study.

Population and sample

Secondary student teachers of teacher training Institute of Ahmedabad and Gandhinagar district of Gujarat were identified as the population of the study.

Cluster random sampling technique was used to select the sample from the population. Total 307 Secondary student teachers were selected from four randomly selected teacher training Institute as the sample in the study. There were 138 female and 169 male Secondary student teachers in the sample.

Tools

Reflective teaching readiness scale (RTRS) constructed and validated by Dixit (2015) was used to know the level of the reflective teaching of secondary student teachers. There were 30 items in the reflective thinking level scale. The Alpha and split-half reliability of the scale were 0.90 and 0.84 respectively. According to experts the scale has its content validity. First semester mark sheet of secondary student teachers were used to know the academic achievement.

Procedure of data collection

With the prior permission of the principal or head of department researcher visited the randomly selected teacher training institutes. The researcher explained the purpose for which the study was being conducted and secondary student teachers were requested to respond on the scales. After responding the secondary student teachers, responded scales sheet were collected by the researcher.

Analysis and interpretation of the data

Descriptive and inferential statistical techniques were used to analyze the data. Mean, median, mode, S.D. kurtosis and skewness, were calculated in descriptive statistics. Pearson-r correlation, t-ratio and F-test were used to examine the hypotheses of the study. All calculations were conducted with the help of Ms-Excel and SPSS computer programs. There were four hypotheses tested in the study. According to the objective of the study, data analysis and interpretation are given follows-

(1) The first objective of the study was to find out the level of Reflective teaching readiness of secondary student teachers. RTR scale was administered at the sample to know the Reflective teaching readiness of secondary student teachers. The responses on a five point scale; always, often, sometime, rarely, and never, were scored respectively as 4, 3, 2, 1, and 0. There are 30 items in the scale and the maximum and minimum score for each item was respectively 4 and 0. For each secondary student teacher, it was possible to score 0 to 120. The average score that could be achieved by each respondent at the scale was 60. The details of calculated measures of obtained scores on RTR scale by secondary student teachers are given in table -1.

Table -1

Statistical details of the scores obtained by secondary students teachers on RTR scale

Measure	Value	Measure	Value	Measure	Value
Mean	90.53	S.D.	14.057	Range	63
Median	92.00	Skewness	-0.452	Minimum	53
Mode	92.00	Kurtosis	-0.386	Maximum	116

Table-1 shows that the score on secondary student teachers ranged 53 to 116. The values of mean (90.53), median (92.00) and mode (92.00) were showed the normal distribution of the scores. Total 2.6 % secondary student teachers scored bellow than 50% marks on the scale. About 69.4%, 37.8% and 11.8% secondary student teachers scored above than 70%, 80% and 90% marks on the RTR Scale respectively. The value of skewness (-0.452) was showing slightly negative skewness of the data. It means the frequency of high scorer secondary student teachers was more than less score achiever in respect of mean(M=90.53) score of the data on RTR Scale.

On the basis of above discussion it can be concluded that the level of reflective teaching readiness of secondary student teachers was fairly high. Though, there was not a single secondary student teacher who could score 100% marks. This thing can be seen in figure-1

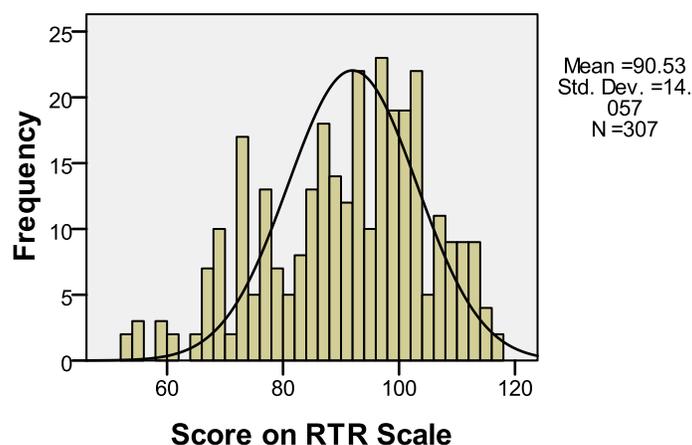


Figure 1: Frequency histogram for the level of Reflective teaching readiness

(2) To know the Reflective teaching readiness of secondary student teachers in the reference of their gender and educational qualification, null hypotheses Ho-1 and Ho-2 were tested. Mean, SD and t-ratio were calculated to test the H_{01} and H_{02} . Calculated result can be seen in table-2.

Table -2: Mean, SD, and t-ratio in reference to gender and educational qualification

Variable	Level	No. of secondary student teachers	Mean	SD	t-ratio
Gender	Female	138	93.96	12.76	4.68
Gender	Male	169	88.17	14.35	4.68
Educational qualification	UG	202	87.37	13.84	5.74
	PG	105	96.61	13.36	5.74

Table-2 shows that there was a significant difference ($t=4.68$; $P < 0.01$) in level of reflective teaching readiness of female ($M=93.96$, $S.D.= 12.76$) and male($M=88.17$, $S.D.=14.35$) secondary student teachers. So null hypothesis-1 was not accepted and it was found that the female secondary student teachers were significantly more ready to reflective teaching than male. So, it can be said that the gender has a significant effect on the level of reflective teaching readiness of secondary student teachers.

Table-2 also shows that there was a significant difference ($t= 5.74$ $P < 0.01$) in the level of reflective teaching readiness of PG secondary student teachers ($M=96.61$, $S.D.= 13.36$) and UG secondary student teachers ($M=87.37$, $S.D.=13.84$). So null hypothesis-2 was not accepted and it was found that the PG secondary student teachers were significantly more ready towards reflective teaching than simply UG student teachers. Therefore, it was concluded that the educational qualification has a significant effect on the level of reflective teaching readiness of secondary student teachers.

Objective-4: Null hypothesis- 3 was tested to know the effect of academic discipline on the level of reflective teaching readiness scale of secondary student teachers. The details of the calculation of Ho-3 were given in the table-3 and 4.

Table-3

The mean and SD of the obtained scores of different streams' secondary student teachers on RTR scale

Academic streams	Number of Secondary student teachers	Mean	SD
Language	152	90.56	13.79
Science	56	94.80	12.94
Social science	99	88.06	14.61

The table -3 shows that there were 152, 56 and 99 secondary students teachers of language, Science and Social Science discipline respectively in the sample. The details of F-test are given in table-4.

Table -4
Significance of the difference of mean values of different streams' secondary student teachers' obtained on RTR Scale

Source of Variance	Sum of squares	Df	Mean squares	F-ratio	Significance level
Between the streams(SSbgs)	1626.57	2	813.29	4.2	significant at 0.05 level
Within the groups (SSwgs)	58835.94	304	193.54		
Total	60462.52	306			

On the basis of table -3 and 4, it can be seen that there was significant difference ($F=4.2$; $P > 0.05$) found in the level of Reflective teaching readiness of Language ($M=90.56$, $S.D.= 13.79$)

Science ($M=94.80$, $S.D.=12.96$) and Social Science ($M=88.06$, $S.D.=14.61$) discipline's secondary student teachers. Therefore H_0-3 was accepted and it was concluded that the differences of academic discipline's (language, Science and social science) have significant effect on the level of Reflective Teaching readiness of secondary student teachers.

LSD was calculated to know in which discipline's students are significantly more ready towards reflective teaching with the help of SPSS. The result is given in table -5 and figure -2.

Table -5

Mean difference between different discipline's secondary student teachers

Disciplines	Mean Difference	Std. error	Significance level
Language x Science	4.24	2.16	0.151
Language x Social Science	2.49	1.79	0.381
Social Science Vs cience	6.74	2.32	0.01

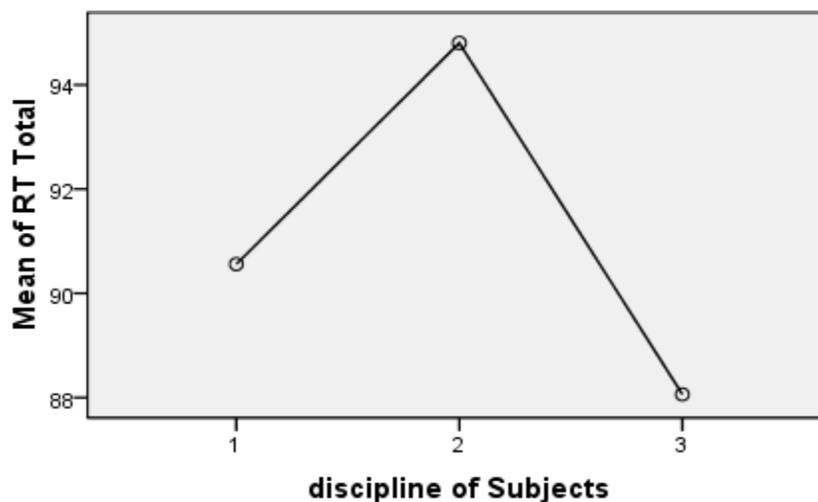


Figure-2: graphical representation of different discipline 1(language); 2 (Science) and 3(Social Science) student's mean score

Table-5 and figure -2 shows that there were no significant difference between readiness towards reflective teaching of language and social science students teachers as well as language and science discipline's secondary students teachers. Only science streams student teachers were significantly inclined towards reflective teaching than social science secondary student teachers.

Findings of the Study: Following findings were revealed from the study:

1. The level of RTR of secondary students teachers was high and above than average score.
2. Female secondary student teachers were significantly more inclined towards RTR than male secondary student teachers. Therefore, it was revealed that the gender has a significant effect on the level of RTR of secondary student teachers.
3. There was a science discipline's secondary student teachers were found more ready towards reflective teaching than social science students. There was no difference between the level RTR of language and social science students as well as science and language students.
4. A moderate level of positive relationship was found between RTR and academic achievement of secondary student teachers.

Educational Implication of the study

This study provides the new information and a platform to make teaching learning process more meaningful and reflective. Though, the result of the study showed that secondary student teacher's levels of RTR is satisfactorily high but there were not a single teacher who could achieve 100% score on RTR scale and there were only 11.8% secondary student teachers who could achieve more than 90% score on RTR scales. Previous researches have been showed that RTR is positively associated with academic achievement and good learning habits (Andharia, 2003; Lew & Schmidt,2011; Dixit,2011; Dervent,2015). So, student teachers should be motivated to be a reflective teacher and such an environment should be created to promote reflective teaching. Special Training and orientation programs should be organized for student teachers to incline towards 100% readiness, motivation and skill to be competent in reflective teaching.

It is also revealed that female student teachers were found significantly more inclined towards RTR. Therefore it is important to pay more attention towards male students teachers and research work should be conducted to find out the causes behind this situation. Social science secondary student teachers were showing significantly low level of readiness towards reflective teaching than science discipline's students. So, social science discipline's students should be motivated, trained, and skilled to increase their readiness.

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