



Original Research Article

CONCEPTIONS OF TEACHING AND LEARNING AND GOAL ORIENTATION OF PROSPECTIVE TEACHERS

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Abstract:

The present research focuses on the relationship between conceptions of teaching and learning and goal orientation of prospective teachers. The present study was conducted in Mumbai, India and the data was collected from the student-teachers pursuing B.Ed. from University of Mumbai. The purpose of this study was to determine number of prospective teachers in teacher education institutions having constructivist conceptions of teaching and learning and whether goal orientation and gender would influence their conceptions. The data collection method was done using quantitative approach's descriptive research using ready-made research tool. There were two research tools used namely, teaching and learning conceptions questionnaire (TLCQ) by Chan & Elliott (2004) and achievement goal questionnaire revised (AGQ-R) by Elliot and Murayama (2008). TLCQ had two dimensions i.e. traditional conceptions and constructivist conceptions. AGQ-R had four dimensions i.e. mastery approach, mastery avoidance, performance approach and performance avoidance. The TLCQ and AGQ-R tools were administered on three hundred and twenty seven prospective teachers selected by applying probability sampling technique. The Pearson correlation coefficient technique was applied for inferential analysis. Findings revealed a significant relationship among goal orientation (performance approach & mastery approach and performance avoidance & mastery avoidance) and conceptions of teaching and learning (traditionalist and constructivist). The result indicated a clear relationship between female prospective teachers' conceptions of teaching and learning and goal orientation whereas there was no significant relationship of male prospective teachers' conceptions of teaching and learning and goal orientation. Thus, those female prospective teachers showed higher inclination towards constructivist conceptions of teaching and learning had a positive influence of goal orientation as compared to male prospective teachers. From the preceding, it is clear that the prospective teachers would need to be aware of their goals as it has a significant relationship with the conceptions of teaching and learning, especially the male prospective teachers must be clear with their goals. Implications of these results for the improvement of conceptions of teaching and learning of prospective teachers and for further research have been drawn.

Keywords: Constructivist Conceptions, Traditionalist Conceptions, Quantitative Data Analysis, Pearson Correlation Coefficient, Conceptions of Teaching And Learning, Goal Orientation, Prospective Teachers.

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Introduction:

Research has shown from the past three decades that goal setting is a powerful and effective motivational technique to achieve the pre-determined objectives. From literature reviews it is understood that setting up goals is important for individual's performance. It is especially true while acquiring knowledge and skills. This can be directly related with the prospective teachers are enter the teaching field with an intention to acquire knowledge and teaching skills. The question arises does having a goal oriented mindset promotes or supports to have a constructivist conceptions of teaching



and learning. Does focusing on goal orientation can have positive influence on the prospective teachers' conceptions of teaching and learning? These are some of the questions that arose and thus, the researcher of the present study attempted to answer it with empirical research. It is believed that teachers with constructivist conceptions of teaching and learning displays positive attitude towards the teaching and learning process in order to promote two-way communication and understand their role as a facilitator in the teaching and learning process.

Research suggests that there are majorly two main conceptions of teaching and learning i.e. traditional conceptions of teaching and learning & constructivist conceptions of teaching and learning. Generally, the traditional conceptions of teaching and learning are more prevalent in classrooms. It places much emphasis on teaching as transmission of knowledge from authoritative sources like teachers and textbooks and considers the students as passive recipients of the knowledge. Whereas the constructivist conceptions of teaching and learning predicates that it is a process of assisting and guiding the learner during her or his attempt in constructing meanings from a series of experiences in her or his environment. The constructivist conceptions of teaching and learning are very important for developing competent teachers. There exist studies that compare novice and expert teachers. Dunkin (2002) suggests that "expert teachers differ from their less experienced colleagues in the complexity and sophistication of their thoughts about teaching" (p.43). It is possible that the higher inclination toward constructivist conceptions of teaching and learning may aid new teachers in successfully achieving the learning outcomes. Despite their importance, to our knowledge, there is no previous published study on conceptions of teaching and learning and goal orientation of prospective teachers as per researcher's knowledge. Hence, the researcher of the present study is keen to study the conceptions of teaching and learning and goal orientation of the prospective teachers admitted to teacher education institutions in Greater Mumbai affiliated to the University of Mumbai.

Acquisition of knowledge and skills before setting up goals can be critically important whereas not setting up goals may create confusions and chaos, it may also lead to demotivation as the individual may not be able to guide self. It may look like you have begun the journey and selected the route without finalizing the destination. It is always suggested to have pre-defined goals from the beginning as it may help the prospective teachers to be focused on discovering and mastering the ability to have constructivist conceptions of teaching and learning.

It is believed that the purpose of setting up goals is to achieve them and in order to achieve these goals the prospective teachers' imagination needs to be stimulated and to let them engage in discovery and allow them to think out of the box. The purpose of goal is to choose to exert effort and to be persistent in the attainment of desired outcomes of objectives using the knowledge. Thus, it may motivate the prospective teachers to systematically search of new ideas, active seek feedback and reflect upon it, and to execute these insights in the teaching and learning process. In short, allowing the prospective teachers to learn and explore by themselves coincides with the basis of constructivist conceptions of teaching and learning. Thus, in order to verify this belief the researcher of the present study is interested in studying the conceptions of teaching and learning and goal orientation of the prospective teachers. The study also aimed to understand whether goal orientation influences the prospective teachers' conceptions of teaching and learning.

Rationale of the Study:

The construction of knowledge involves a higher order thinking skills that stimulates constructivist conceptions toward teaching and learning. A prospective teacher needs to be highly motivated to develop a mindset that supports constructivist conceptions of teaching and learning. One of the factors for keeping the prospective teachers highly motivated is their perspective toward goal orientation. As conceptions of teaching and learning shape teaching practices

and therefore it is important to understand the conceptions of teaching and learning of the prospective teachers. There is abundant research about conceptions of teaching and learning in general but research on the conceptions of teaching and learning of prospective teachers in relation to goal orientation is very limited. Furthermore, it is the need of the hour to understand the prospective teachers' conceptions of teaching and learning it is so because the beliefs of the prospective teachers with respect to teaching and learning play an important role in their self-learning (Uzuntiryaki & Boz, 2007). The pedagogical understanding as well as their teaching methods and classroom practices are important to understand (Bryan, 2003). Therefore, the researcher of the present study undertook a research on the conceptions of teaching and learning and goal orientation. The aim is to determine whether goal orientation influences the constructivist conceptions of teaching and learning positively. Hence, the researcher is keen to study the conceptions of teaching and learning and goal orientation of prospective teachers.

Perhaps if the constructivist conceptions of teaching and learning and goal orientation of prospective teachers are correlated positively then the insights of this study might play a pivotal role in achieving the objectives of the national education policy (NEP, 2020). As teachers are one of the important stakeholders in achieving the objectives of this policy it is important to understand the conceptions of teaching and learning of the prospective teachers. Thus, the present study attempts to come up with the insights that may be helpful in understanding the future teachers' perspective towards conceptions of teaching and learning considering the influence of goal orientation as one of the major factors.

The following is the research hypothesis and null hypothesis that was tested for the present study:

Research Hypothesis:

H₁: There is a significant relationship of conceptions of teaching and learning with goal orientation on the basis of gender of prospective teachers.

Null Hypothesis:

H₀: There is no significant relationship of conceptions of teaching and learning with goal orientation on the basis of gender of prospective teachers.

Method:

The present study purported to examine the conceptions of teaching and learning of the prospective teachers in relation to goal orientation. The descriptive research method of correlation included under the quantitative paradigm was used for the present research. The correlation method was used to determine the relationship between conceptions of teaching and learning of the prospective teachers and their goal orientation.

Participants:

The data were collected from a total sample of three hundred and forty two prospective teachers and out of which fifteen incomplete tools were rejected. The final sample size for the present study was three hundred and twenty seven prospective teachers pursuing B.Ed. from colleges affiliated to University of Mumbai located in Greater Mumbai.

Instrument:

Data on prospective teachers' conception of teaching and learning were collected using Teaching and Learning Conceptions Questionnaire (TLCQ). It was designed by Chan and Elliott (2004) and they validated the scale by administering it to a sizeable sample of teacher education students in Hong Kong. It includes thirty items which are scored on a Likert scale of five points (1 = Never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always). It is a two-factor, 30-item questionnaire designed to measure the Traditionalist Conception and Constructivist Conception of teaching and learning. It consists of an 18 – item traditionalist conception (TC) and a 12 – item constructivist conception (CC).

Constructivist conception advocates the use of the learner-centered instructional approach in teaching and learning whereas the traditional conception advocates the use of the teacher-centered instructional approach in teaching and learning. The total internal consistency of the scale using Cronbach's alpha was 0.84.

Data for goal orientation was collected using the Achievement Goal Questionnaire Revised by Elliot and Murayama (2008). They conducted study to measure structural validity and predictive validity. The four components of the tool are performance approach, performance avoidance, mastery approach and mastery avoidance. It contains 12 items and the response category and scale values of items are rated on a five-point Likert scale. The minimum possible score obtainable is 12 while the maximum obtainable score is 60. The four components of the tool along with their reliability co-efficient of Cronbach's alpha are as follows respectively; performance approach (0.92), performance avoidance (0.94), mastery approach (0.84) and mastery avoidance (0.88). The reliability co-efficient of the tool is adequate in magnitude. In other words the tool is said to be adequately valid and reliable.

Sampling Techniques:

For the present study the researcher used a three stage-sampling technique, firstly, B.Ed. colleges were selected through stratified random sampling wherein the strata were North, Central and South Mumbai. At the second stage, stratified random sampling technique and the strata were government, private-aided and self-financed colleges. Finally, at the third stage, the B.Ed. colleges were selected from these strata using simple random sampling procedures. Both the data collection instrument viz, TLCQ and AGQ-R were administered on the participants by the researchers. The participants responded and returned the questionnaire to the researchers immediately. This guaranteed maximum retrieval of the research tool and maximum participation. Frequency counts and percentages of responses under each response option were determined. Data were analyzed using Microsoft Excel 2007 and VassarStats: Website for Statistical Computation. (<http://vassarstats.net/>)

Analysis:

1. The null hypothesis states that there is no significant relationship of conceptions of teaching and learning (CTL) with goal orientation (GO) on the basis of gender. To test this hypothesis, Pearson's co-efficient of correlation technique was used. Table 1 represents statistics on the CTL with GO in prospective teachers on the basis of gender

Table 1.1: CTL with GO on the basis of gender

Gender	N	Groups	Mean	'r'	P	Coefficient of Determination
Female	296	CTL	-59962	0.1448	0.012610	2.096704
		GO	1.3142			
Male	31	CTL	-10.1613	0.0413	0.82713	Not Significant
		GO	1.1935			

From table 1 it can be stated that in the case of female prospective teachers, the obtained 'r' is 0.1448 (P=0.012610) for CTL and GO. It is significant. Hence, the null hypothesis is rejected in the case of female prospective teachers. The magnitude of the relationship is negligible as the 'r' is 0.1448. Since, 'r' is positive it shows that there exists a direct relationship in CTL with GO for female prospective teachers. The coefficient of determination is 2.096704%. It means that around two percent of the variance in CTL of female prospective teachers is associated with GO. It can be concluded that higher the GO score, higher is a teacher's ontological relativism implying that higher is likely to her inclination towards constructivist conception. Whereas in the case of male prospective teachers, the obtained 'r' is 0.0413



($P=0.82713$) for CTL and GO. It is not significant. Hence, the null hypothesis is accepted in the case of male prospective teachers.

Conclusion:

The results indicate clear relationships between female prospective teachers' conceptions of teaching and learning and goal orientation. The finding of the present study concludes that the conceptions of teaching and learning of prospective teachers with goal orientation is influenced in the case of female prospective teachers and same is not true for male prospective teachers. The present paper gives insight about how constructivist conceptions of teaching and learning are positively correlated with goal orientation in the case of female prospective teachers. Thus, those female prospective teachers showed higher inclination towards constructivist conceptions of teaching and learning had a positive influence of goal orientation. No significant relationship was found for male prospective teachers' conceptions of teaching and learning and goal orientation. Therefore, male prospective teachers must be clear with their goals as it has a positive influence on the conceptions of teaching and learning.

Discussion:

In today's world the focus is on producing tangible results that applies in the teaching field also. The teachers are perpetually in a "performance mode". Thus, when a known performance routine is seen as an effective one and then the prospective teachers become highly goal oriented, as seen in the present study the findings shows that female prospective teachers are highly motivated and more goal oriented as compared to male prospective teachers. The possible reason for such result could be the workload and responsibility laid on females in Indian context is immense. While doing so they develop skills that are essential to be a multi-tasking individual and attain required skills for increasing their effectiveness. This fosters the conditions to be a highly motivated individual because high-performing workforce is a function of ability and motivation. For instance countless studies in the behavioral sciences supported the significant motivational benefits for the setting up of specific, challenging performance goals. It can also be stated that such experiences helps the female prospective teachers in understanding the importance of setting up goals in their life. These could be some of the reasons that the findings of the present study shows the inclination of female prospective teachers is high towards goal orientation as compared to male prospective teachers.

Implications:

Goals help people progress to the point where it increases one's effectiveness in achieving mastery and performance on the content and bring out desired outcomes. In the teaching and learning process, the focus of a mastery goal is to increase teacher's knowledge and to make the conceptions clear whereas the focus of a performance goal is to increase teacher's motivation to implement that knowledge. Therefore, both mastery and performance goals are needed to have constructivist conceptions of teaching and learning. In sum, a prospective teacher's quest to be an effective teacher i.e. having constructivist conceptions of teaching and learning is influenced by the ability and motivation to achieve their aim in life i.e. their goal orientation are highly and positively correlated. Those prospective teachers who are not goal oriented have scored low in constructivist conceptions of teaching and learning that can be seen in the case of male prospective teachers in the present study. Thus, setting up goals can actually help in having a mindset that promotes constructivist conceptions of teaching and learning. The present paper gives insight about the relationship of conceptions of teaching and learning and goal orientation of prospective teachers. The conclusion suggests prospective teachers to reflect upon their goal orientation and also, about conceptions of teaching and learning is the need of the hour. It is necessary because the future generation will be shaped and influenced by these prospective teachers. Also, the



prospective teachers need to be focused and goal oriented as these prospective teachers are the stakeholders where majority of the responsibility to achieve the objectives of National Education Policy (NEP, 2020) are laid upon them. However, it must be mentioned that the fragmentary nature of data presented in this study although drawn on the principles of representativeness, can only lead to suggestions rather than conclusions. And that is why the implication drawn from it is restricted on to the population from whom the data was collected and used in this study. It is hoped that the present study had generated inquisitiveness adequate enough to simulate further studies of understand this phenomenon in depth.

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