

Research Article

**Factors affecting teaching engagement in higher educational Institutions of Uttarakhand**

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**Abstract**

The primary focus of this research is to explain hypothetical queries “what are the important factors affecting the teaching engagement in higher education of Uttarakhand? What impact do these factors have on teacher’s engagement in the institution? A cross-sectional exploratory study was done to explore the factors, their associations, and their impact on each other. Data collection was done through standardized questionnaires from 265 teachers working in different higher educational institutes situated primarily in Uttarakhand. Data were analyzed by using SPSS-23. The study revealed that appraisal and rewards were positively correlated with teacher’s engagement and had a significant positive impact as well. Along with this, a significant positive association was analyzed between the faculty development program and workshops with class engagement as had a significant influence on the class engagement.

**Keywords:** Higher education, Teacher’s engagement, classroom, rewards and appraisal, FDP.

**Introduction**

Educational institutes are considered the other most significant place for students where they learn and develop both academically as well as socially under the guidance of effective and efficient teachers. Teachers are believed to have a critical contribution to the mental as well as emotional development of students that is why institutes select good, qualified, and effective teaching staff to impart brilliant education to the students. It is believed that well-qualified, dedicated, and efficient teachers are capable enough to give effective results by shaping and transforming students into quality students, who can further participate in the growth and development of their country. Therefore, for providing excellent value-based education there is a need for quality teachers (Edgar & Pair, 2005). But if the qualified teachers are not happy and satisfied with the kind of engagement, they have in their workplace they may be distressed, and their teaching may also get impacted leaving an adverse effect on students and also impact the overall performance of the school (Liu & Meyer, 2005).

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The teachers can be engaged effectively through various methods and techniques to enhance their job satisfaction and happiness level followed by high productivity and excellent performances Tigchelaar, Brouwer, & Korthagen, 2008). It is observed that regular motivation

## **Factors affecting teaching engagement in higher educational Institutions of Uttarakhand**

mechanism can act as a catalyst for encouraging teachers to give their best in the form of active teaching in the classrooms and also by helping students to develop life skills. Therefore, constant motivation via appreciation rewards both monetary and non-monetary along with chances to develop their teaching skills and intellectual levels can help institutes to engage teachers more significantly (Choi & Tang, 2009). Teachers have a crucial role to play in the development of any economy by educating and shaping budding leaders hence, needed to keep satisfied in their jobs and careers (Smith, 2003). There are many researchers specifying various factors that impact the satisfaction level of teachers in higher education institutes which leads to the turnover of teaching staff. According to Stinbrickner, 1998 teacher satisfaction or engagement can be evaluated by his/her demographical details, individual features. But according to Liu, 2007; Mary, 2010 both intrinsic and extrinsic motivation factors like salary, rewards or appreciations, grants, recognition, etc. along with other aspects like school characteristics, governance, professional development opportunities, working conditions, and facilities contributes to the teacher's engagement and positively impact their satisfaction level resulting into extraordinary performances. These aspects should be taken seriously by the educational institutes to dodge any issue with teachers.

### **Objectives**

Researcher want to address the following objectives in this study:

1. To study the impact of appraisal and reward on faculty engagement working in the higher academic institutes of Uttarakhand.
2. To study the impact of faculty development program and workshops on class engagement by faculty members of the higher academic institute of Uttarakhand

### **Problem Statement**

Teaching staff in higher education institutions is undergoing low or less teaching engagement. The main reason backing this is low morale and shrunk attitude is lack of stimulating aspects. Low morale leads to low satisfaction and poor performances which further impacts the student's performance in the classroom. Teachers' poor performance has been emerged as a significant issue globally and cannot be ignored in any culture or economy. Teachers' poor performance becomes the root cause of many other issues like quality teaching-learning atmosphere, decreased students' satisfaction, student turnover, teacher turnover, hiring new staff, etc. in all educational institutes and may also impact the future of the country. Teaching engagement and teacher's satisfaction performance depends upon many factors any upsurge can change the scenarios.

### **Research Question**

On the basis of the objectives developed, this study tries to respond and explore; what factors influence teachers' teaching engagement in higher academic institutes? Also, what is the impact of these factors on teaching engagement?

### **Impact of the study**

This research will emphasize important contributing factors influencing teachers' teaching engagement in higher educational institutes of Uttarakhand and the impact of those factors in increasing teaching engagement. Factors categorized from the literature will help institutional

administration to develop guidelines and policies for increasing teaching engagement and teachers' performance.

### **Literature Review**

Research indicates that there are several factors that have positive effects such as increased teaching engagement, job satisfaction level, and performance and productivity of teachers in educational institutes. According to their definition, teaching engagement consists of high energy and mental flexibility, commitment, sense of pride, along with involvement, absorption, and concentration. In the absence of these aspects, it is difficult to maintain teaching engagement high in well competent and experienced teachers to impart value-oriented education in higher institutes. High-level teaching engagement and performance of higher education teachers is only imaginable by their level of job satisfaction which leads to high performances. Hence, it is of utmost importance to measure all the aspects affecting the degree of teaching engagement in teachers. This paper intends to explore and examine the effects of essential motivational factors affecting the teachers' teaching engagement. As stated by Shann (1998) job satisfaction in teachers is a must for an effective educational restructuring and highlighted the importance of teacher and mentioned by Pearson & Moomaw (2005) that job dissatisfaction is the main reason for stress and exhaustion in teachers. There exists a substantial correlation between teachers' job gratification and teachers' backgrounds, institution's infrastructure, reimbursement, and working conditions like managerial support and management, institutes' environment, and teacher self-sufficiency (Perie, Baker, 1997). Teaching engagement through recognition, career development opportunities like Faculty development programs, workshops, competitive and challenging work environment recognized as intrinsic factors plays a vital role. Not only this but there are many other factors like salary or rewards, casual leaves, accommodation, meals, bonus, and medical facilities also are the contributor in teaching engagement chiefly known as extrinsic factors also equally significant. Previously done research in a similar area showed that extrinsic factors like appraisal and reward influencing the teaching engagement and intrinsic factors like faculty development programs and workshops under career development impacting class engagement and student behavior. These are the antecedents that laid the foundation of the higher level of job happiness among teachers and excellent outcomes in terms of academic productivity in educational institutes. Further to this Sansone & Harackiewicz (2000) added that the external motivational factors like rewards, remuneration, earnings, salaries, status, information control, and a constructive or encouraging assessment by the management as well as parents and students have appeared as the common factors to improve teaching engagement of teachers. Not only this but free meals and accommodation, free medical care, leave and allowances for extra teaching also keep teachers engaged and satisfied. Motivation is not only an external phenomenon is a well-proved fact obtained as motivation is also an internal aspect and comes from within the person (Loeb et al., 2005). This may have both positive or negative effects on the attitude, productivity, and well-being of a person. Internal motivation comprises of professional development in their specialized field of study like faculty development programmes, workshops, seminars, conferences, symposiums, etc, authority, work challenges, competitive environment, career development opportunity are the main aspects affecting class or teaching engagement in teachers (Mary, 2010). Motivational rewards lead to great performance. Bennel (2004) argued that teachers from the higher educational institutes get high respect from the guardians and parents because of their hard but less paid work and still they manage to achieve better learning outcomes. It is also believed and proved that ineffective teachers' management really has ill effects on teachers' engagement activities (Liu and Meyer (2005). Effective

## **Factors affecting teaching engagement in higher educational Institutions of Uttarakhand**

management, proper training is very much required to make substantial signs of progress in teachers' behavior and performance in class (Torrington et al. 2002). Armstrong (1996) and Wayne, (1998) also emphasized on monetary appreciating and rewarding to have a significant influence on teaching and classroom engagement. Whereas Maicibi (2003), claimed in his study that the monetary rewards act as strong job satisfier in the case of teachers teaching at junior levels as compared to that of other academic and non-academic staff working in the same institution. Although he also stated that both intrinsic and extrinsic aspect of motivation has positive impact teaching engagement as well as performance. Regular appraisals and rewards are significant contributors to effective teaching engagement (Ingersoll and Smith, 2003). It has been found by many authors and researchers that lack of regular appraisals and rewards systems in higher educational institutes are the predictor of low teaching engagement activities and finally causing teachers turnover (Stinbrickner, 1998). Regular appreciations and rewards may decrease the turnover intentions of teachers and can increase engagement in the classroom (Kelly, 2004; Liu, 2007). Perie et al. (1997) and Shann (1998) have also explored a significant association of salary with teachers' engagement and stated that no or fewer rewards lead to dissatisfaction. Steuteville-Brodinsky, Burbank, & Harrison, 1989 mentioned in their research that facilities like the availability of physical resources also have a significant association with class engagement and teaching performance. Further to this, researcher like Darling-Hammond, 2003; Buckley, Schneider, & Shang, 2005; Boyd et al. 2011) also identified the role and effect of availability of facilities in context to teacher's career development has a major contribution to classroom engagement.

### **Theoretical Framework**

The concept of dependency of teacher's engagement on different institutional factors is well supported by Herzberg Two factors theory stating the need for motivation and hygiene factors. Teaching Engagement of teachers working in higher educational institutes predominantly depends upon external as well as internal or more technically rely on intrinsic and extrinsic inspiration. Mary, (2010) mentioned that higher educational institutes capable of providing good facilities, and proper teacher management systems are less affected by the issue of poor teaching engagement of teachers as the teachers are highly motivated with both intrinsic and extrinsic aspects which further improve the performance and productivity. Many factors such as student's characteristic (Scafidi et al., 2005), teachers geographical as well as cultural background (Boyd et al., 2011), and institute related factors (Hirsch & Emerick, 2007), also have a positive effect to improve the engagement level of teachers' engagement. In this study salary and reward are considered as external motivation factors for improved teaching engagement and professional development factors like faculty development programmes and workshops are considered primarily to understand how these career development opportunity impacts class engagement. Teacher engagement is the main dependent variable in this study and an effort is made to describe the modification in teacher's engagement caused by four independent variables of (1) appraisal (2) rewards, (3) faculty development programmes, (4) Workshops. A less paid teacher is not a self-motivated one and hence bigger is the chance to become unproductive and less engaged. Also, if teachers are not appreciated for their efforts in terms of taking extra pain to teach students also results in dissatisfaction and declined engagement. Inadequate opportunities for skill development, career, and professional growth through training, workshops, seminars, conferences, etc. also affect the intellectual growth of the teachers. Hence, we can hypothesize that:

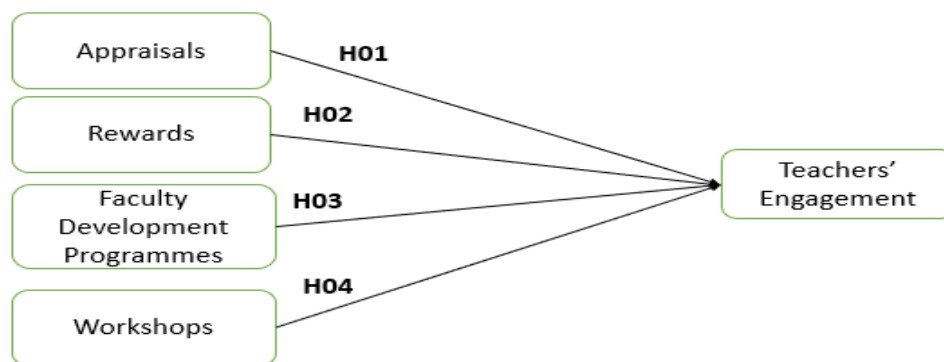
H01: There is a positive impact of appraisal on the degree of faculty engagement in the higher academic institutes of Uttarakhand.

H02: There is a significant impact of rewards on the degree of faculty engagement in the higher academic institutes of Uttarakhand.

H03: There is a direct significant effect of faculty development program on the degree of faculty engagement in the higher academic institute of Uttarakhand.

H04: There is a positive influence of workshops on the degree of faculty engagement in the higher academic institutes of Uttarakhand.

**Figure 1 Conceptual Model**



**Source: Authors' Creation**

### **Research strategy**

The research Design developed for this study was exploratory as well as illustrative in nature. Primary as well as secondary data was collected and used, secondary data helped to develop a theoretical background and primary data for statistical analysis for the study. The population selected for the study included full-time permanent teachers working in different higher educational institutes of Uttarakhand. Non-probability (snowball sampling and purposive sampling) along with convenience sampling (easy accessibility) for the selection of educational institutes was used as a sampling technique. The sample size decided was 370 and total 370 questionnaires were distributed from which 306 were received back on time but only 265 filled responses were considered as the final data for further analysis. The survey questionnaire to measure the association and impact of appraisal rewards, Faculty development programmes, and workshops on teaching engagement was designed with the help of literature available. Likert-5-point scale scales were used for data collection and each of the items ranged from 1 (strongly disagree) to 5 (strongly agree), and the respondents showed their agreement on the same. Data was examined on SPSS-23 and AMOS-21 to test the projected statistical assumption. Various tests like descriptive analysis and frequency distribution, normality, and reliability, EFA, CFA,

## Factors affecting teaching engagement in higher educational Institutions of Uttarakhand

and linear regression were applied for explaining the nature and behavior of the data collected from the teachers.

### Results and findings

#### Data screening

Primary data collected for the study were screened for variables considered for research and cases collected. Case screening was done and found no missing value in rows, along with no unengaged responses based on standard deviation. Data was free from outliers No outliers. The variable screening was done and found no missing value in columns.

#### Descriptive and frequency distribution

Demographic details of the teachers working in higher educational institution participated in this study are as per Table 1, out of 265 teachers, 115, i.e., 44% were male teachers, and 150, i.e., 56% were female, whereas concerning the marital status, 59, i.e., 22% of were single and 206, i.e., 78% were married.

Table 1

*Frequency Distribution of Respondents*

		<i>Frequency</i>	<i>Percent</i>	<i>Valid Percent</i>	<i>Cumulative Percent</i>
Valid- Gender	Male	115	44	44	44
	Female	150	56	56	100
	Total	265	100	100	
Valid- Martial Status	Single	59	22	22	22
	Married	206	78	78	100
	Total	265	100	100	

**Source: Authors' computation**

#### Test of assumptions

In this study, all assumptions related to normality and multicollinearity were checked. A mild skewness and kurtosis were observed for independent variables. These values ranged up to .150–3.0 that violates the strict normality rule but, Sposito et al. (1983), recommended 3 as the upper limit for normality. Therefore, the data was approximately normal. There was no issue in the value of the multicollinearity and tolerance was less than 0.10 and VIF > 5 or 10 for the models (O'Brien, 2007).

#### Reliability and Exploratory factor analysis

According to Joseph et al., 2003 it is very essential to measure the value of Cronbach's alpha for reliability and consistency in Likert scales. According to which George and Mallery, 2003 the value of alpha must be more than 0.70 and the value of Cronbach's alpha was 0.801 for the combined scale used for the study, indicating a high level of internal uniformity. Exploratory factor analysis (EFA) of complete-scale shows that Kaiser-Meyer-Olkin measure of sampling adequacy is 0.804 and Bartlett's test of Sphericity = 0.000, which is < 0.005. Chi-square (666) = 6,148.311  $p < 0.005$ . The value of communalities varies in the middle of 0.677 to 0.933. Five

components with eigenvalue > 1 isolated explaining 79.44% of the total variation, which means five components obtained.

### Measurement model

The measurement model projected in this study was analyzed for two types of invariance assessments; metric invariance and configure invariance. Outcomes of the configural invariance test showed an acceptable model fit computation of degree of freedom [chi-square (98) = 149.653,  $p < 0.05$ ], GFI = 0.94; RMSR = 0.067; RMSEA = 0.041; adjusted GFI = 0.924; CFI = 0.939 parsimony GFI = 0.681; parsimony CFI = 0.767; parsimony normed fit index = 0.690) all the values fall within suggested range therefore, this model was a good fit (Hair et al., 2010, Aggarwal et al., 2018). Findings also illustrated that average variance explained (AVE = appraisals 0.754; rewards 0.665; FDP's 0.537; workshops 0.508, teaching engagement 0.64) composite reliability (CR = appraisals 0.924; rewards 0.887; FDP's 0.822; workshops 0.838; teaching engagement 0.81). The correlation coefficient for all the inter items related to appraisals, rewards, FDP's, workshops, and teaching engagement were < 0.3 (Hair et al., 2010), recommending a low inter-variable correlation and existence of discriminant validity. Whereas the regression weights of items were > 0.5 indicating a high inter-item correlation, establishing convergent validity. Furthermore, the existence of configural invariance was validated throughout the subgroups, and all the factor loadings were statistically significant. Harman's single factor test was applied to check metric invariance. Kaiser-Meyer-Olkin's measure of sampling adequacy is 0.686 and Bartlett's test of sphericity is 0.000, which is < 0.005. Chi-square (666) = 8,167.457,  $p < 0.005$ . 1 component was isolated, describing 16.327% of the total variance, which is less than the maximum value of 50% as proposed. Therefore, the results of configural invariance and metric invariance disclosed that the proposed model is significant.

### Structural model

Findings of the model fit of the structural model also illustrated satisfactory values with  $\chi^2 = 100.362$ , DF = 41,  $p > 0.001$ , CMIN/DF =  $2.448 \leq 3$ , GFI =  $0.967 \geq 0.80$ , CFI =  $0.973 \geq 0.90$ , RMR =  $0.51 \leq 0.10$ , AGFI =  $0.904 \geq 0.80$  and RMSEA =  $0.061 \leq 0.08$  (Aggarwal et al., 2018). Results of Table 2 and Figure 2 support H01 the teaching engagement of the teachers improves, with an upsurge in the teachers' appraisals. Results also supported H02 that with an increase in rewards and appreciation there is an escalation in teacher teaching engagement. The structural model also validated H03, claiming that teachers keep on performing high with effective classroom engagement if they are provided with effective training through faculty development programs. Another finding that was developed after data evaluation was the acceptance of H04 indicating that sending teachers to attend workshops and seminars has a significant positive effect on teachers teaching engagement as well as performance.

Table 2  
*Result of the structural model*

<i>Hypothesis</i>	<i>Relationship</i>	<i>Standardised estimate</i>	<i>C.R.</i>	<i>Hypothesis accepted</i>
H01	Appraisal → TE (+)	0.821	23.163***	Yes
H02	Rewards → TE (+)	0.432	7.767***	Yes
H03	FDP's → TE (+)	0.824	23.569***	Yes

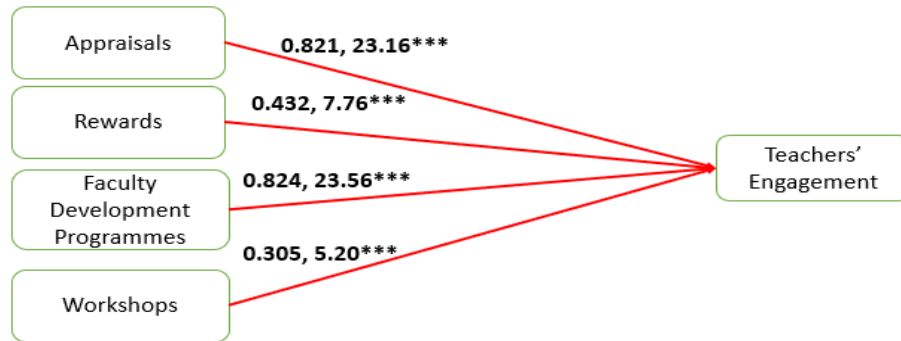
## Factors affecting teaching engagement in higher educational Institutions of Uttarakhand

H04	Workshops→ TE (+)	0.305	5.202***	Yes
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Notes: \*\*\* p-value < 0.01; \*\*p-value < 0.05; \*p-value < 0.1.

Source: Authors' computation

Figure 2



Source: Authors' Creation

### Discussion

From the above results, it was found that all four extrinsic i.e., appraisal and rewards have a significant direct effect on the teaching engagement in teachers working in higher educational institutions of Uttarakhand. Not only this but intrinsic factors like FDP's and workshops put a significant constructive impact on the classroom engagement of teaching staff. Results of the research are well supported by Herzberg's Two Factor theory which states that for improving employee performance organizations must have a high level of motivation as well as a high hygiene level. A literature review has also suggested that to improve the performance and engagement of the teachers, also to make them more satisfied with their work they must have fewer issues with educational institutes. Institutes must keep their teachers motivated by providing both intrinsic as well as extrinsic factors mentioned above as independent variables to keep the engagement high. Institutes must keep a regular discussion with their staff to cater to their emotional and psychological needs.

### Conclusion

In the present study, a novel effort has been made to comprehend the concept of Herzberg two factor theory in which both motivation and hygiene factors act as contributing to increased satisfaction and performance. Similarly, in satisfaction and engagement of teachers teaching in higher educational institutions are also influenced by proper availability of motivation factors (FDP's and workshops) and hygiene factors (appraisal and rewards) has played a significant role. balanced motivation and hygiene factors contributed to high job satisfaction which further caters in getting more engaged in their teaching work resulting in high performance.

### Limitation

The first limitation of this study is that it is a cross-sectional study as according to Pedhazur and Schmelkin, (2013) in a cross-sectional study, it is difficult to analyze a causative association between the established variables. Another issue is that a linking relationship between these factors cannot develop but according to (Serlin, 1987) if estimations are grounded on theories,



then the poor effects of this issue can be managed to some level as it permits the investigator to develop an outline based on theory and not on the population selected. Other limitations of the study are a smaller number of respondents along with geographical limitations to collect data from various locations to generalize the results. Another major challenge was getting excess to institutions for data collection, and some of the questionnaires not received on time.

### **Implications of the study**

The main implication is that it is a must for institutes to keep a balanced approach by providing good growth opportunities both in terms of rewards and appreciations as well as training if they expect their teachers to perform and engage extraordinarily especially in higher educational institutes located in Uttarakhand. If not handled properly and timely may ultimately lead to the poor performance of the teachers, students, and the overall institute. These results pinpointed that to have more engagement institutes must act more sensibly. This study enables institutes to develop proper standards for creating an effective, appreciative, and growth-oriented work environment.

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### **References**

1. Allyn & Bacon Edgar, E., & Pair, A. (2005). Special education teacher attrition: it all depends on where you are standing. *Teacher Education and Special Education*, 28(3-4), 163-170.
2. Armstrong, M. (1996). *A handbook of Human Resource Management practice* London,
3. Borman, G. D., & Dowling, N. M. (2008). Teacher attrition and retention: a meta-analytic and narrative review of the research. *Review of Educational Research*, 78(3), 367-409.
4. Boyd, D., Grossman, P., Ing, M., Lankford, H., & Wyckoff, J. (2011). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48(2), 303-333.
5. Boyd, D., Lankford, H., Loeb, S., & Wyckoff, J. (2005). Explaining the short careers of high-achieving teachers in schools with low-performing students. *American Economic Review*, 95, 166-171.
6. Boyd, D., Lankford, H., Loeb, S., Ronfeldt, M., & Wyckoff, J. (2010). The effect of school neighbourhoods on teacher retention decisions (Working paper). Retrieved July 10, 2010, from <http://www.stanford.edu/~sloeb/papers/Neighborhoods%2006Jan2010.pdf>
7. Bryman, A. 1992. *Charisma and leadership in organizations*. London: Sage.
8. Buckley, J., Schneider, M., & Shang, Y. (2005). Fix it and they might stay: School facility quality and teacher retention in Washington, D.C. *Teachers College Record*, 107, 1107-1123.
9. Carroll, S. J., Reichardt, R. E., Guarino, C. M., & Mejia, A. (2000). The distribution of teachers among California's school districts and schools (No. MR-1298.0-JIF). Santa Monica, CA: RAND.

## Factors affecting teaching engagement in higher educational Institutions of Uttarakhand

10. Cohen, J., McCabe, L., Michelli, N. M., & Pickerels, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111, 180–213.
11. Corcoran, T. B., Walker, L. J., & White, J. L. (1988). *Working in urban schools*. Washington, DC: Institute for Educational Leadership.
12. Darling-Hammond, L. (2003). Keeping good teachers: Why it matters, what leaders can do. *Educational Leadership*, 86, 42–51.
13. DeAngelis, K. J., & Presley, J. B. (2007). Leaving schools or leaving the profession: Setting Illinois' record straight on teacher attrition (IERC 2007-1). Edwardsville: Illinois Education Research Council.
14. Dinkes, R., Kemp, J., & Baum, K. (2009). Indicators of school crime and safety: 2009 (NCES No. 2010-012/NCJ No. 228478). Washington, DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice.
15. DuFour, R., & Eaker, R. (1998). *Professional learning communities at work*. Reston, VA: Association for Curriculum and Development.
16. Duke, D. L. (2002). *Creating safe schools for all children*. Boston, MA: Duke University Press.
17. Dungu, L. (2000). Accommodation and job performance of primary school teacher in Rakai district. Unpublished (Master of education) dissertation Makerere University, Kampala, Uganda.
18. Elam, S. M. (1989). The second Phi Delta Kappa poll of teachers' attitudes toward public schools. *Phi Delta Kappan*, 70, 785–798.
19. Glaser, K. W. (2003). Four ways to sustain all teachers. In M. Scherer (Ed.), *Keeping good teachers* (pp. 153–158).
20. Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32(6), 857–874.
21. Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76, 173–208.
22. Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and Policy in Schools*, 4(3), 1–20.
23. Hanushek, E., Kain, J., O'Brien, D., & Rivkin, S. (2005). *The market for teacher quality* (Technical report). Cambridge, MA: National Bureau of Economic Research.
24. Harrell, P. E., & Jackson, J. K. (2004). Redefining teacher quality: myths of No Child Left Behind. *Teacher Education and Practice*, 17(2), 131–145.
25. Hornby, A., S. (2000). *Oxford Advanced Learners Dictionary of Current English*. Oxford University Press.
26. Ingersoll, R. M. (2003). The teacher shortage: myth or reality? *Educational Horizons*, 81(3), 146–152.
27. Ingersoll, R. M., & Smith, T. M. (2003). The wrong solution to the teacher shortage. *Educational Leadership*, 60(8), 30–34.
28. Kelly, S. (2004). An event history analysis of teacher attrition: salary, teacher tracking, and socially disadvantaged schools. *Journal of Experimental Education*, 72(3), 195–220.
29. Ladd, H. (2009). Teachers' perceptions of their working conditions: How predictive of policy-relevant outcomes (National Center for Analysis of Longitudinal Data in Education Research Working Paper No. 33). Washington, DC: CALDER.
30. Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for largescale reform: effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201–227.

29. Liu, X. S. (2007). The effect of teacher influence at school on first-year teacher attrition: a multilevel analysis of the schools and staffing survey for 1999-2000. *Educational Research and Evaluation*, 13(1), 1-16.
30. Liu, X. S., & Meyer, J. P. (2005). Teachers' perceptions of their jobs: a multilevel analysis of the teacher follow-up survey for 1994-95. *Teachers College Record*, 107(5), 985-1003.
31. Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turnover in California schools. *Peabody Journal of Education*, 80(3), 44-70.
32. Lueken's, M. T. (2004). Teacher attrition and mobility: Results from the teacher follow up survey. 2000-01. Washington, DC: National Center for Education Statistics, U.S. Dept. of Education, Institute of Education Sciences. E.D. Tabs.
33. MacDonald, D. (1999). Teacher attrition: A review of literature. *Teaching and Teacher Education*, 15, 839-848.
34. Maehr, M., and C. Midgley. 1996. *Transforming school cultures*. Boulder, Colo.: Westview Press. Minarik, M. M., Thornton, B., & Perreault, G. (2003). Systems thinking can improve teacher retention. *The Clearing House*, 76(5), 230-234.
35. Maicibi N.A (2003). Pertinent issues in employee's management: human resource and educational management. Kampala. Net Media Monitor Publishers.
36. Marry, A. (2010). Motivation and the performance of primary school teachers in Uganda: A case of Kimaanya-Kyabankuza division, Madaka Disrict. unpublished (Master of arts) dissertation Makerere University, Kampala, Uganda.
37. Marvel, J., Lyter, D. M., Peltola, P., Strizek, G. A., Morton, B. A., Rowland, R., et al. (2007). Teacher attrition and mobility: Results from the 2004e05 teacher follow up survey. NCES 2007-307: National Center for Education Statistics.
38. Mayer, M. J., & Furlong, M. J. (2010). How safe are our schools? *Educational Researcher*, 39, 16-26.
39. Murnane, R. J., & Olsen, R. J. (1989). The effects of salaries and opportunity costs on length of stay in teaching: Evidence from North Carolina. *Journal of Human Resources*, 25, 106 – 124.
40. Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 38-54.
41. Perie, M., Baker, D. P., & American Institutes for Research. (1997). Job satisfaction among America's teachers: Effects of workplace conditions, background characteristics, and teacher compensation (NCES Publication No. 97471). Washington.
42. Pierce, M., and L. Fenwick. 2002. Principal leadership: Maybe less is more. *Principal*, 82(1), 31.
43. Sansone, C., and Harackiewicz, J.M. (2000). *Intrinsic and Extrinsic motivation: The search for optimal motivation and performance*. San Diego: Academic Press.
44. Scafidi, B., Sjoquist, D. L., & Stinebrickner, T. R. (2005). Race, poverty, and teacher mobility (Research Paper Series No. 06-51).
45. Shann, M. H. (1998). Professional commitment and satisfaction among teachers in urban middle schools. *The Journal of Educational Research*, 92(2), 67-73.
46. Shen, J. (1997). Teacher retention and attrition in public schools: Evidence from SASS91. *Journal of Educational Research*, 91, 81 – 88.
47. Spreitzer, G. 1995. Psychological empowerment at the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38, 1442-465.

## **Factors affecting teaching engagement in higher educational Institutions of Uttarakhand**

48. Steuteville-Brodinsky, M., Burbank, M. R., & Harrison, C. (1989). Selecting, recruiting and keeping excellent teachers. Arlington, VA: American Association of School Administrators.
49. Stinbrickner, T. R. (1998). An empirical investigation of teacher attrition. *Economics of Education Review*, 17, 127 – 136.
50. Stockard, J., & Lehman, M. B. (2004). Influences on the satisfaction and retention of 1st-year teachers: the importance of effective school management. *Educational Administration Quarterly*, 40(5), 742-771.
51. Weiss, E. M. (1999). Perceived workplace conditions and first-year teachers' morale, career choice commitment, and planned retention: a secondary analysis. *Teaching and Teacher Education*, 15(8), 861-879.
52. Woods, A. M., & Weasmer, J. (2004). Maintaining job satisfaction: engaging professionals as active participants. *Clearing House*, 77(3), 186-189.
53. Worthy, J. (2005). "It didn't have to be so hard": the first years of teaching in an urban school. *International Journal of Qualitative Studies in Education*, 18(3), 379-398.
54. Siddiqui, Kalim. "Higher education in the era of globalisation." *International Journal of Humanities and Social Sciences* 3.2 (2014): 9-32.
55. OLIBIE, EYIUCHE IFEOMA, PATIENCE NDIDI EGBOKA, and WENCESLAUS NDUBEZE OFOJEBE. "Secondary Education Policy and Curriculum Provisions in Nigeria: Matters Arising and Enhancement Strategies." *International Journal of Library & Educational Science* 3 (1) (2017): 53-66.
56. Kavitha, L., and O. T. V. Latasri. "A STUDY ON MEASURING FACULTY ENGAGEMENT OF COLLEGE TEACHERS IN TIRUCHIRAPPALLI DISTRICT." *International Journal of Business and General Management (IJBGM)* 6.5, Aug - Sep 2017; 33-38
57. Imonje, Rosemary, and Grace Nyagah. "INFLUENCE OF CAPACITY BUILDING OF ACADEMIC TEACHING STAFF IN MAINSTREAMING DISABILITY INTERVENTIONS FOR STUDENTS WITH SPECIAL NEEDS IN PUBLIC UNIVERSITIES IN KENYA." *International Journal of Humanities and Social Sciences (IJHSS)* 7.6, Oct - Nov 2018; 55-68
58. Khatoon, Nuzhath. "Emotional stability, self professional development and its role in effective teaching." *International Journal of Business and General Management* 4.4 (2015): 9-14.