

UNDERSTANDING TEACHER COMPETENCIES FOR EFFECTIVE TEACHING PRACTICES: A review of literature

Sikha Nayak, Research Scholar ,Centurion University, Odisha,
Dr.Prajna Pani,Dept.of English ,Centurion University, Odisha.

ABSTRACT:

This literature review compares all the relevant literature survey that has yet been done on teacher competencies and preservice and inservice teacher education, addressing two issues: (1) what literature identifies as key competencies required by quality beginning and practicing teachers in the current social, economic, and educational climate .

The report examines: competencies required for teaching (knowledge base, self competence, competencies derived from school curriculum requirements, competencies derived from assessment, competencies for entry to teacher education,, impact of changing environments, and complexity of teaching, and a broader view of competence and unresolved issues

INTRODUCTION:

Teachers need to improve knowledge and skills to enhance, improve and explore their teaching practices. Many of the studies on competencies of teachers focus on the teaching role of teachers in the classroom rather than teachers' competencies. Teachers' competencies have been broadening with respect to reform studies in education, development of teacher education, scientific results of educational science and other fields. Kress pointed out that "the previous era had required an education for stability, the coming era requires an education for instability" (133). Kress' ideas can explain why teachers' professional development should be redefined for sustainability. The aims of education change very quickly depending on the demands of the era requiring more capability. These demands directly affect educational system. Teachers are responsible for operating educational system and they need strong and efficient professional competencies.

Competence is a widely used term in field of education that refers to, "Appropriate prior knowledge, skills, attitudes, and abilities in a given context that adjust and develop with time and needs in order to effectively and efficiently accomplish a task and that are measured against a minimum standard".(Varvel, 2013, p.5)

According to the above definition competence refers to a wide variety of knowledge,information,skills,abilities,capabilities,attitude,that make a person able to get adjustment in job and perform well in his job by utilizing his knowledge and skills effectively to achieve school goals and objectives. Competence indicates sufficiency of knowledge and skills to enable the person to act in a various situations by using that knowledge efficiently to complete the requirements of his /her job or career.

The teacher has many tasks to perform in classroom e.g. managing and organizing classroom activities, maintaining record and discipline, contact with parents, creating conducive environmentfor learning with patience and touch of humor, arranging workshops, helping weak students, guiding intelligent students etc. The competent teacher can handle all above mentioned tasks confidently and effectively.

LITERATURE REVIEW:

Researchers have developed several competency frameworks for teachers of various categories. The facilitators need competencies not only for teaching their subject matter but also to innovate and adapt. Teacher competencies are a blend of knowledge, skills, understanding, values and attitudes, leading to effective performance in teaching (European Commission 2013). The paper reviews ten research papers published in the last ten years especially between 2009-2017, on teacher competency research. Moreover,the findings and recommendations derived from the review and the future scope are presented

The paper attempts to present a review of ten research papers on teacher competency . A brief data about the selected research papers are given below:

1. "The importance of academic teaching competence for the career development of university teachers: A comment from higher education pedagogy,"Marianne Merkt of Germany, published in GMS Journal of Medical Education 34(4),

2017. The article focuses on which conditions at universities need to be established so that academic teaching skills become relevant to the career of university teachers.

METHODOLOGY: Literature survey

RESULTS & DISCUSSIONS: The development of pedagogical competency in the institutional context of higher education has the following dimensions: individual, person specific development along a career path. Another dimension is the institutional anchoring of pedagogical competence through continuing education and training programs, assessments, and the development of cultural contexts promoting quality.

2. “A Suggested Model for Developing and Assessing Competence of Prospective Teachers in Faculties of Education” by Dalal A. Alqiawi&Sawsan M. Ezzeldin of Faculty of Education, Department of Curriculum and Instruction, University of Jeddah, Saudi Arabia published in *World Journal of Education* Vol. 5, No. 6; 2015. The study aimed at providing a model to assess the competencies necessary for teachers in the Faculties of Education.

METHODOLOGY: Literature review and professors, supervisors, and school teachers consulted

RESULTS & DISCUSSIONS: Good teacher competencies center on three main elements: Academic, Professional and Personal. The three dimensions are divided into a number of standards and under each standard there are a number of indicators; all organized in a model.

3. “Teacher Competencies through the Prism of Educational Research,” by Peklaj, Cirila of Faculty of Education, University of Ljubljana, published in *Center for Educational Policy Studies Journal*, v5 n3 p183-204, 2015. The study analyses the research on educational productivity in order to select the most important teacher competencies that are related to student achievement. A teacher competency model is developed that serves as a framework for understanding the synergetic effects of teacher competencies on achievement thorough promoting students' cognitive, affective and social processes.

METHODOLOGY: ERIC and PsychArticles database used. Research design: Descriptive, Quasi-experimental and experimental

RESULTS & DISCUSSIONS: A model teacher competency framework developed. The model organised into three sections: (1) teacher competencies for promoting students’ cognitive and metacognitive processes, (2) teacher competencies for promoting affective motivational processes, and (3) teacher competencies for promoting social processes

4. “Challenges and opportunities of teaching competence evaluation,” by Lena Levander, Laura Hirsto and MaireSyrjäkäri of Aalto University and University of Helsinki, Finland presented at ICED Educational Development in a Changing World Conferenced held at Stockholm, Sweden from June 16-18, 2014, available http://www.iced2014.se/proceedings/1214_Levander.pdf. The research evaluates the teaching competence at two large Finnish universities, considering the teaching experience and merits presented in the teaching portfolio, teaching skills shown at the teaching demonstration, and the issues arising during the interview concerning teaching competence.

METHODOLOGY: Evaluation considering teaching experience, merits in teaching portfolio, teaching skills and interview.

RESULT & DISCUSSION: Developing teaching through teaching competence assessment (scholarship of teaching, pedagogical leadership and educational/organizational development

5. “Impacts of teachers’ competency on job performance in research universities with industry characteristics: Taking academic atmosphere as moderator,” by Anguo Xu, Long Ye of Beijing Jiaotong University, China published in *Journal of Industrial Engineering and Management*, 7 (5), 2014. This paper examines the impact of teachers’ competency on job performance in research university with industry characteristics.

METHODOLOGY: Interview and questionnaire methods; empirical research

RESULTS & DISCUSSIONS: There exists a significant positive correlation between teaching performance, job performance, research performance, profession service performance and the teachers’ competency level and each dimensions in research universities with industry characteristics.

6. Faculty Perspective on Competency Development in Higher Education: An International Study by Paloma Julia Velasco et al, published in High. Learn. Res. Commun. Vol. 4, Num. 4, December 2014. The research tries to establish common ground on how faculty development should be instituted and the needs it should address on an international level, with its major focus being the development of competencies.

METHODOLOGY: Questionnaire and survey method. 729 faculty from Spain, Brazil & Malaysia surveyed.

RESULTS & DISCUSSIONS: Results show that 90% find that it is either important or very important to develop competencies in higher education, and that 73% find they are well or very well trained in developing and assessing competencies, particularly with regard to applying theoretical knowledge in practice, teamwork, and oral and written communication skills.

7. Teaching Competencies of Mathematics Professors in Higher Education Institutions (HEIs) In the Province Of Capiz: Basis for Instructional Enhancement Program by Analene V. Roxas of Capiz State University Main Campus, Roxas City, Philippines published in Journal of Research in Humanities and Social Science Volume 3 ~ Issue 6 (2015) pp:25-32. The main purpose of this study is to determine the teaching competencies of Mathematics professors in Higher Education Institutions (HEIs) in the province of Capiz for School Year 2013-2014.

METHODOLOGY: Questionnaire was used for data gathering. The respondents: 372 students of Mathematics; 82 Mathematics professors, and 70 supervisors. Data were analyzed using frequency counts, percentages, mean, Chi-square, Spearman rho, T-test and ANOVA

RESULTS & DISCUSSIONS: The relationship of communication skills of respondents was highly significant to those teaching Algebra and their evaluation techniques were significantly related to professors teaching Applied Mathematics. Classroom and teaching learning conditions were highly significant in mastery of subject matter, instructional skills, communication skills, and evaluation techniques were significantly related to management skills. An enhancement program was designed to further improve the teaching competencies of Mathematics professors of HEIs in some other subject areas.

8. "The Competencies of the Modern Teacher," by Nessipbayeva, Olga of *Bulgarian Comparative Education Society*, Paper presented at the Annual Meeting of the Bulgarian Comparative Education Society (10th, Kyustendil, Bulgaria, Jun 12-15, 2012) available in the **ERIC Number:** ED567059 2012. The study, in order to comprehend the teaching skills needed for the present age, researched the issues like: students' skills; levels of teachers' professional growth; teachers' pedagogical culture; pedagogical innovations, and 21st-century teaching competencies.

METHODOLOGY : Content analysis

RESULT & DISCUSSIONS: 1. Effective classroom management

2. Effective Teaching practices

3. Effective assessment

4. Technology Skills

9. The report by the Southeast Asian Ministers of Education Organization (SEAMEO) titled "Teaching Competency Standards in Southeast Asian Countries: Eleven Country Audit," (2012) focuses on the status of development, implementation, and monitoring of teaching competency standards in Southeast Asian countries. This report focuses on the status of development, implementation, and monitoring of teaching competency standards in Southeast Asian countries.

METHODOLOGY: The primary data was collected by distributing survey questionnaires to research experts in eleven Southeast Asian countries. The Survey on Teaching Standards in Southeast Asian Countries covered elements of teaching competence, process for developing teaching competency standards, presence of policy support for teaching competency standards, manner of implementation of teaching competency standards, and monitoring and assessment of Competency based teaching standards

RESULTS & DISCUSSIONS: The research came up with the following major outputs:

1) Regional Strands/Domains of Teaching Competency Standards in the Southeast Asian countries;

2) Common Approaches in Developing Teaching

10. "Developing a set of competencies for Teachers of English in Engineering Colleges in Tamil Nadu." G.Venkatraman, PhD thesis submitted to SASTRA University, India, awarded in 2009. The study has identified and validated a set of 65 competencies necessary for English teachers of engineering colleges in India. The identified competencies were put to two rounds of validation and tested in the real classroom atmosphere.

METHODOLOGY : Content analysis ,Survey and Interview,Percentage and Factor analysis.

RESULTS & DISCUSSIONS: A set of 65 competencies required for Teachers of English in Engineering Colleges identified and validated by a three stage process. The 65competencies were classified under i. General competencies and ii.Subject specific competencies. Subject specific competencies were grouped under 7 domains

FINDINGS:

The following are the findings obtained from the above ten studies:

- 1.The extensive study on literature review indicates that essential teaching competencies are very crucial to bring the desired outcomes.
2. Not much study has been carried out on factors affecting the teaching competencies. If the factors affecting teaching competencies can be understood clearly, the educational institutions can achieve success by recruiting the competent teachers, training them through proper need analysis, conducting an effective performance appraisal to enable them to deliver quality education to students.
3. Identification of competencies is necessary to bring in a well-trained workforce that will work for organizational goals effectively and efficiently.
4. Teaching competency standard is assessed even at a multi-country level.
5. An enhancement programme designed to improve the competency of mathematics teachers at the higher education level can be an effective method.
- 6.The researcher on teacher competency understands the theme and methodology of various studies done on teacher competency

4. RECOMMENDATIONS

Today, we are talking about internationalization of curriculum studies. Internationalization of curriculum ideas is a kind of reform study and teachers ensure changes by embracing new ideas. In this respect, teachers need to have more competencies than they had before. By taking the international developments into consideration, the teacher competencies should be discussed and updated. Teachers' competencies are highly important in both implementing the current curricula effectively and training people for future by developing these curricula. Teachers who are responsible from the training of the individuals of future need to be well equipped in order to fulfill this responsibility. Teacher competencies should continuously be the subject of research and analysis and should be developed by updating. Therefore, pre-service and in-service teacher education should focus on understanding and application of teachers' competencies..

Conclusion:

The field of teacher competency research is vast and varied. The research in the field is still evolving. Research must be made in all levels of the teaching profession - school, college, university, teachers of various professional institutions, trainers, teacher educators etc. – to map the competency needs for these teachers. The next level would be to convert the competencies into a full-fledged training curriculum that can be used to offer competency-based training programme. The results of all researches should be reviewed to update the findings based on the latest developments.

References

1. Analene, V.Roxas. (2015). Teaching Competencies of Mathematics Professors in Higher Education Institutions (HEIs) In the Province Of Capiz: Basis for Instructional Enhancement Program. Journal of Research in Humanities and Social Science Vol. 3- Issue 6.

2. Anguo Xu, Long Ye (2014). "Impacts of teachers' competency on job performance in research universities with industry characteristics: Taking academic atmosphere as moderator," *Journal of Industrial Engineering and Management*, 7 (5), 2014.
3. Dalal A. Alqiawi&Sawsan M. Ezzeldin. (2015). "A Suggested Model for Developing and Assessing Competence of Prospective Teachers in Faculties of Education" *World Journal of Education* Vol. 5, No. 6; 2015.
4. Hanesova, P. Hanes. (2017). *Current Trends and Trajectory of Research on Teachers*. INTED 2017 Proceedings. <https://library.iated.org/view/HANESOVA2017CUR>
5. Levander, Lena.et al. (2014) "Challenges and opportunities of teaching competence evaluation." http://www.iced2014.se/proceedings/1214_Levander.pdf.
6. Jaharsh and Lola Tejaswi, "Intrusion Detection System For Wireless Sensor NetworksMac Spoofing", *International Journal of Innovations in Scientific andEngineering Research (IJISER)*, Vol.1, No.3, pp.169-172, 2014.
7. Merkt, Marianne. (2017). "The importance of academic teaching competence for the career development of university teachers: A comment from higher education pedagogy," *GMS Journal of Medical Education* 34(4).
8. Nessipbayeva, Olga. (2012) *The Competencies of the Modern Teacher*. ERIC Speeches/Meeting Papers; Reports – Evaluative. <https://eric.ed.gov/?id=ED567059>.
9. Paloma Julia Velasco et al. (2014). *Faculty Perspective on Competency Development in Higher Education: An International Study*. *High. Learn. Res. Commun.* Vol. 4, Num. 4.
10. Peklaj, Cirila (2015). "Teacher Competencies through the Prism of Educational Research," *Center for Educational Policy Studies Journal*, v5 n3 p183-204, 2015.
11. The report by the Southeast Asian Ministers of Education Organization (SEAMEO). (2012) "Teaching Competency Standards in Southeast Asian Countries: Eleven Country Audit." http://www.seameo.org/SEAMEOWeb2/images/stories/Publications/Centers_pub/2012TeachingCompetencyStandards/TeachingCompetencyStd.pdf

