



Teacher Education And Its Importance: A Case Study In Birbhum And Burdwan District In West Bengal

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Abstract:

The present paper discuss about the importance of teacher education and few suggestion about teacher education to make it more interesting and more comprehensive. The study indicates a strong association between teacher education and teaching efficiency of teachers. Again several factors have been found to be strong positive influence on efficiency of teachers. The study further revealed that 60% teachers strongly agree about the emphasis on B. Ed. syllabus, where 40% teachers partially agreed i.e. more importance should be given to the method paper than in any other papers. Again in case of the improvement of teaching strategies, 70 – 80% teachers are strongly agreed where as 35 – 40% teachers are partially agreed. Only 50 – 55% teachers are strongly agreed against the formative evaluation process.

Keywords: Teacher education, B.Ed syllabus, teaching strategies, formative evaluation

Introduction

The demand for qualified and quality teachers has been continuously increasing all over the world. There has been an unprecedented expansion of school education especially in the developing countries, which has accentuated such a demand for teachers' training programme. Quite naturally, the teacher education programmes have acquired renewed significance. It has become imperative that the effort and resources mobilized towards teacher education are effective and field relevant in particular country's context (NAAC, 2007). The National Knowledge Commission (NKC) has observed that teachers are the single most important element of the school system, and the country is already facing a severe shortage of qualified and motivated school teachers at different levels (Reynolds et al, 1999). A teacher's job is a highly respected and specialized field, in the teaching of kindergarten, grade school, high school, college, or post-graduate courses. Teachers are necessary in all fields of education, and in order to be teachers themselves, they need to be educated by experts in their desired fields. Teacher education is a diverse field, covering numerous subjects and various methods of teaching. Teaching in any field is demanding and is a challenging task. Beyond regular education, some people choose to follow specialized paths, such as early childhood education or special education. These teachers need extra educational background in order to be certified to deal with their specific students (Kirby et al, 1992). These teachers need to have extensive patience and be friendly with students. Innovative play way methods need to be adopted to ensure continuing interest among kids. Another specialized educational field is Montessori teaching. This style of teaching appears to be simple, but in reality, it is highly demanding. As this is a specific style of teaching, aimed at gifted or advanced students, with a degree of flexibility and customization not found in traditional curriculums, teachers will need to learn the best ways to work within the Montessori structure, and apply their educational background to this style of teaching (Muijs & Reynolds, 2002). Elementary or primary school is the backbone for all people's education. Thus, these teachers have to be able to convey basic principles, such as reading, spelling, writing and math, as well as cover basic science, social studies, and sometimes foreign language courses. Of course, all of these have to be taught in an age-appropriate fashion. Elementary teacher education focuses on methods that work best for young students (Muijs & Reynolds, 2005). Usually, high school teachers face challenges unlike the elementary school teachers to perform their task. Because they teach teenagers who are dealing with the issues of adolescence and can often "act out," teachers need to learn how

to engage and motivate this difficult age group. Subjects are taught in greater depth in high school, as well, so the teacher will need more specific knowledge (Mortimore, 1993). They also sometimes have to be ready to compensate for any gaps in elementary education, particularly deficiencies in the three R's - reading, writing and arithmetic. Ultimately, the goal of teacher education is to provide future teachers or teachers looking to further develop their teaching ability with the skills they need to convey essential information to their students. The training they will require depends on many factors, including the age group, subjects, and type of school they will be teaching in. Teachers provides detailed information on teachers, teacher education, teacher resources, teacher gifts and more. Teachers are affiliated with teaching degrees. Teacher education refers to the policies and procedures designed to equip prospective teachers with the knowledge, attitudes, behaviors and skills they require to perform their tasks effectively in the classroom, school and wider community (Dinkelman, 2002). Although ideally it should be conceived of, and organized as, a seamless continuum, teacher education is often divided into these stages: initial teacher training / education (a pre-service course before entering the classroom as a fully responsible teacher), refresher training (i.e., training are given at the entry of new job) and orientation course/education (i.e., enrichment in new ideas or methods of teaching of the teachers) (William et al, 2005).

The NCF 2005 has described the current concerns of teacher education as follows:

Experiences in the practice of teacher education indicate that knowledge is treated as 'given', embedded in the curriculum and accepted without question; there is no engagement with the curriculum. Curriculum, syllabi and textbooks are never critically examined by the student teacher or the regular teacher.

Language proficiency of the teacher needs to be enhanced, but existing programmes do not recognize the centrality of language in the curriculum.

Teacher education programmes provide little scope for student teachers to reflect on their experiences.

Disciplinary knowledge is viewed as independent of professional training in Pedagogy.

Repeated 'practice' in the teaching of a specified number of isolated lessons is considered a sufficient condition for professional development.

It is assumed that links between learning theories and models and teaching methods are automatically formed in the understanding developed by student teachers.

There is no opportunity for teachers to examine their own biases and beliefs and reflect on their own experiences as part of classroom discourse and enquiry.

Theory courses have no clear articulation with practical work and ground realities. The evaluation system followed in teacher education programmes is too information-oriented, excessively quantitative and lacks comprehensiveness. Apart from conceptual and pedagogical aspects the programme needs to develop certain attitudes, dispositions, habits and interests in a teacher. The present evaluation protocol has no place for evaluating them.

Keeping in view the above facts the following objectives were under taken.

Objective

To examine the relationship between teacher education and teaching efficiency in school education.

To analyze the degree of relationship between teacher education and teaching efficiency among teacher educators over students.

To find out the effectiveness of B. Ed. Curriculum as per the views of teacher educators.

To compare the views of teacher educators regarding B. Ed. Curriculum.

To suggest the best possible outcome regarding effectiveness of B.Ed. Curriculum.

To find out the importance of B. Ed. Curriculum.

Hypotheses

The hypothesis selected in our study are-

Null Hypotheses

The null hypotheses is the following -

H₀: There exists no doubt about significant association between teacher education and teaching efficiency among teacher educators.

Alternative Hypotheses

The alternative hypotheses are –

H₁: There exists doubt about significant association between teacher education and teaching efficiency among teacher educators.

Methodology

The entire case study was done through a self-made questionnaire. The sample was taken from Tara Sankar B-Ed. College, Birbhum, Govt. College of Education, Burdwan and Institute of Science Education, Burdwan University. The entire question has five

dimensions including Content, Teaching Learning Process, Teaching Model / Teaching Aids, Teaching Strategies and Evaluation. Every dimension has five sub-dimensions and all the sub-dimensions presented as three point rating scale. They are strongly agree, partially agree and strongly disagree. After collecting the data from different teacher educators, these have been calculated as percentage (Hopkins, 1997).

The following factors have been selected to analyze the effect of teacher education on teaching efficiency of teacher educators:

- Content
- Teaching-learning Process
- Teaching Model & Teaching Aids
- Teaching Strategies
- Evaluation

A binary logit regression model has been used in order to analyze the effect of the above selected factors on teaching efficiency of the teacher educators.

Result & Discussion

Teacher Education And Teaching Efficiency: A Non-Parametric Analysis

The present study has attempted to make an assessment of perceptions of the students, teachers and school authorities about the importance of teacher education in enhancing the teaching efficiency of teachers among the school's students in terms of non-parametric 'Chi-square' analysis. The opinions of the respondents collected from the field survey can be expressed in the following table (vide table- 1).

| Respondents | Yes | Uncertain | No | Total |
|---------------------------------|------------|------------------|-----------|--------------|
| Students | 55 | 15 | 5 | 75 |
| Teachers and Authorities | 60 | 5 | 10 | 75 |
| Total | 115 | 20 | 15 | 150 |

Table No 1: Opinions Of Different Respondents Selected For The Study

Source: Field Survey, 2009-10

The calculated value and the observed value of 'Chi-square' are shown in the table below (vide table 2).

| Variables compared | Calculated value (χ^2) | Critical value (5% level) | Critical value (1% level) | Degrees of freedom | Remark | |
|--------------------------|-------------------------------|---------------------------|---------------------------|--------------------|-----------------------|-------------------------|
| | | | | | 1 % | 5 % |
| Education and Secularism | 6.88 | 5.99 | 9.210 | 2 | Significant (P< 0.01) | Insignificant (P> 0.05) |

Table 2: Testing of the Hypothesis

Source: Authors' calculation based on field survey, 2009-10

It should be noted (Vide table- 2) that the observed value of Chi-square (χ^2) i.e., 6.88 is less than the critical value at 1 % of significance (i.e., $\chi^2_{01, df 2} = 9.210$) for degrees of freedom 2 but more than the value at 5 % level of significance, therefore the null hypothesis is accepted and the alternative hypothesis is rejected at 1 % level of significance. So, we can conclude that there exists no doubt about significant association between teacher education and teaching efficiency of teachers among the school's students. This view is similar to the study of Allan (2003) which indicates that there is strong association between teacher education and teaching efficiency of trained teachers.

Teacher Education: A Case Study

From the case study it has been found that 55% are in strongly agreed (SA) and 45% are in partially agreed in favor of the dimension of 'relevance of syllabus in B.Ed. curriculum'. This means that the B.Ed. curriculum is mostly appropriate by most of the teachers (Vide table-3). Against the item number 1.2 (i.e., stress on method in B.Ed. syllabus) 60% teachers strongly agree about the emphasis on syllabus, where 40% teachers are partially agreed on method paper in B.Ed. This indicates that in B.Ed. curriculum more importance should be given to the method paper than in any other paper. Similarly against the item no. 1.3 (i.e., stress on effective teaching by reducing theoretical paper) teachers are more agreed on the effective teaching strategies than in the theoretical paper. Because they thought that theoretical paper has no impact on the students. In the dimension of teaching- learning process, it has been found that maximum teachers are strongly agreed whereas 20 to 30% teachers are partially agreed about it.

This means that practice teaching should be increased in the B.Ed. curriculum because it is not only enhance the teaching skill of the teachers but also help the teacher to make improved lesson plan before any classes (lower or higher). It also helps the teacher to maintain a constant relationship between lesson plan and classroom teaching. From teaching model / teaching aids, results analysis showed that 80 – 90% teachers are strongly agreed and 10 – 20 % are partially agreed about teaching models, teaching aids and improvised apparatus. This means that teaching model/teaching aids should demonstrate by every teacher in the class before the student. This models or aids help the student to understand easily. Moreover, it also helps the teacher educators to reach the matter up to the students understanding level. But, when it comes for using model or aids for every subject 5% teachers are strongly disagreed about it because it is not possible to make aids or model for every subject mainly in History, Bengali and English. In case of teaching strategies, it has been found that 70 – 80% teachers are strongly agreed and 35 – 40% teachers are partially agreed about the fact that group teaching, small group discussion, constructive teaching strategies which help the students to understand their own level of thinking or development of their cognitive structure and also help them to think divergently where 5 – 10% of teachers think that there is no use of object method in B.Ed. curriculum. Probably, these types of teachers have no idea about this project method or how to apply this method in classroom situation.

| Sl. No. | Dimension | Response of Teachers towards the questionnaire | | | Percentage (%) of teachers' response | | |
|---------|--|--|----|----|--------------------------------------|----|----|
| | | SA | PA | SD | SA | PA | SD |
| 1. | Content | | | | | | |
| 1.1 | Relevance of syllabus in B.Ed | 11 | 9 | | 55 | 45 | |
| 1.2 | Stress on method | 12 | 8 | | 60 | 40 | |
| 1.3 | Stress on effective teaching | 17 | 3 | | 85 | 15 | |
| 1.4 | Use of computer | 8 | 10 | 2 | 40 | 50 | 10 |
| 1.5 | Class test | 11 | 9 | | 55 | 45 | |
| 2. | Teaching Learning Process | | | | | | |
| 2.1 | More time in practice teaching | 14 | 6 | | 70 | 30 | |
| 2.2 | Simulated teaching before practice teaching | 16 | 3 | 1 | 80 | 15 | 5 |
| 2.3 | Uniformity between lesson plan and practice teaching | 17 | 3 | | 85 | 15 | |
| 2.4 | Practice teaching means teaching skill of teacher | 13 | 7 | | 65 | 35 | |
| 2.5 | Lesson plan as per table specification of Bloom's taxonomy | 13 | 7 | | 65 | 35 | |
| 3. | Teaching Model & Teaching Aids | | | | | | |
| 3.1 | Teaching model | 17 | 3 | | 85 | 15 | |
| 3.2 | Teaching aids | 16 | 4 | | 80 | 20 | |
| 3.3 | Improvised apparatus for effective teaching | 12 | 8 | | 60 | 40 | |
| 3.4 | Attain understanding level through teaching aids | 18 | 2 | | 90 | 10 | |
| 3.5 | Use of teaching aids in all subjects | 7 | 13 | | 35 | 65 | |

| Sl. No. | Dimension | Response of Teachers towards the questionnaire | | | Percentage (%) of teachers' response | | |
|---------|--|--|----|---|--------------------------------------|----|----|
| 4. | Teaching Strategies | | | | | | |
| 4.1 | Group teaching | 16 | 4 | | 80 | 20 | |
| 4.2 | Small group discussion for cognitive development | 11 | 9 | | 55 | 45 | |
| 4.3 | Constructive teaching strategy for divergent teaching | 12 | 8 | | 60 | 40 | |
| 4.4 | Introduction on project method | 11 | 7 | 2 | 55 | 35 | 10 |
| 4.5 | Introduction on concept making thinking | 14 | 5 | 1 | 70 | 25 | 5 |
| 5. | Evaluation | | | | | | |
| 5.1 | Formative evaluation | 10 | 10 | | 50 | 50 | |
| 5.2 | Grading system | 9 | 7 | 4 | 45 | 35 | 20 |
| 5.3 | Diagonistic evaluation | 13 | 7 | | 65 | 35 | |
| 5.4 | Acceptability of evaluation in present education | 11 | 9 | | 55 | 45 | |
| 5.5 | Usefulness of norm reference test/ criterion reference test | 8 | 12 | | 40 | 60 | |

Table 3: Percentage of response of teachers towards the questionnaire in different dimensions

Source: Authors' calculation from field survey, 2010-11

Note: SA: Strongly Agree; PA : Partially Agree; SD : Strongly Disagree.

Again from the dimension no. 5 i.e. evaluation process, it has been seen that 50 – 55% teachers are strongly agreed where 45 – 50% teachers are partially agreed about the fact that formative evaluation is always helpful for the student and for today's generation. The evaluation process is always helpful in teaching strategies in the B.Ed. curriculum. On the other hand, 10 – 20% teachers are strongly against for grading system. Probably,

they thought that grading system make the teaching strategies dull and ineffectiveness towards the student. This grading system makes the student inattentive, careless toward the class even for the examination (Houtveen et al, 1999).

Teacher Education And Achievement Of Professional Skill: An Analysis Of Binary Logit Regression

The teaching-efficiency of teachers among students is a multi-dimensional analysis. This depends on various kinds of school's infrastructural facilities as well as trained and competent teachers. For the sake of simplicity, we have selected a set of indicators influencing the concept of teaching efficiency of teachers among the students. These are (a) content (b) teaching-learning process (c) teaching model and teaching aids in the school (d) teaching strategies (e) evaluation. Now an attempt has been made to explain the determinants of the concept of teaching efficiency among students on the basis of a set of selected variables by a binary logit model.

| APS= C₀+C₁*C+ C₂* TP+ C₃*TMA + C₄*TS +C₅*E | | | | |
|---|--------------------|------------------------------|---------------|--------------|
| Variable | Coefficient | Std. Error | Z-Stat | Prob. |
| Constant (C₀) | -9.21331 | 2.301302 | 5.128725 | 0.0000 |
| Content (C) | 0.003212 | 0.003142 | 4.235461 | 0.0000 |
| Teaching-learning Process (TP) | 0.203451 | 0.532451 | 0.254658 | 0.8275 |
| Teaching model and teaching aids (TMA) | 4.315487 | 0.458631 | 6.258946 | 0.0000 |
| Teaching Strategies (TS) | 6.215486 | 1.257896 | 5.125486 | 0.0000 |
| Evaluation (E) | 1.586942 | 0.213459 | 4.486953 | 0.0000 |
| Mean dependent var | 0.154786 | SD dependent var | | 0.345786 |
| S.E. of regression | 0.214576 | Akaike info criterion | | 0.187964 |
| Sum squared resid | 12.124758 | Schwarz criterion | | 0.245687 |
| Log Likelihood | -42.142568 | Hannan-Quinn criter | | 0.145687 |
| Restr. Log liklelihood | -234.2546 | Avg. log likelihood | | -0.012365 |
| LR statistic(5df) | 517.9786 | McFaddenR- squared | | 0.475896 |
| Probability (LR stat) | 0.000000 | - | | - |

Table 4: Logit analysis explaining role of teacher education on achievement of professional skill of teachers

Source: Authors' calculation based on field survey, 2009-10

Note: Dependent Variable = Achievement of Professional Skill (APS)

Total number of observations = 300

It is evident from the results (Vide table 4) that all the factors (e.g., content of the course, teaching-learning process, teaching model and teaching aids, teaching strategies and evaluation system) have been found to be positively associated with the teaching efficiency of the teacher educators. But it is to be noted that the probabilities of all the factors except teaching-learning process have been estimated to be highly significant. This implies that the higher the scientific base of content, use of teaching models, modern teaching strategies and evaluation system, the greater will be the extent of teaching efficiency of teacher on students. Although the coefficient of the explanatory variable i.e., 'teaching-learning process' suffers the problem of insignificance. This suggest one important view that in order to enhance the extent of teaching efficiency of teachers among students, proper use of school's infrastructure and suitable home environment must be ensured. This study is consistent with the study of Prudente and Aguja (2001) which showed that not only teacher education but also school's infrastructures have strong positive impact on enhancing the extent of teaching efficiency of teachers among the students.

Conclusion

This paper highlights strong association between teacher education and teaching efficiency of teacher educators of Burdwan and Birbhum district in the state of West Bengal. The results of case study revealed that among the different dimensions of teacher education (as selected in our study) maximum teachers are agreed upon method papers, effective practice teaching through preparation of lesson plan, teaching model and formative evaluation system. Again there has been found significant positive influence on teaching efficiency of teacher of the factors like scientific structure of course content, teaching strategy, teaching model, teaching learning process and evaluation system. Although there exists some variation regarding the degree of impact of the factors associated in teaching efficiency of teachers over the students. The impacts of all the factors except teaching-learning process are found to be highly significant.

Policy Suggestion

Effective teaching of a teacher educator include- having a positive attitude, the development of a pleasant social / psychological climate in the classroom, having high expectations of what pupils can achieve, lesson clarity, effective time management, strong lesson structuring, the use of a variety of teaching methods, using and

incorporating pupil ideas, using appropriate and varied questioning. From the entire case study in B.Ed colleges of Birbhum and Burdwan district in West Bengal, few suggestions are given for improvement of teacher education courses. These are the following-

Method paper in B.Ed curriculum should be increased.

Inclusion of effective teaching strategies should be enhanced in B.Ed curriculum.

Emphasis should be given to stimulated teaching and practice teaching which help the teacher educator (in service) and would be teacher to enhance their teaching skill and also help them to understand the student problem easily.

Proper teaching models, teaching aids etc. should be used by the teacher educator in their classes.

Small group discussion, group teaching, constructive teaching strategy should be incorporated in B.Ed curriculum. However, effective teaching methods are context specific. What is needed for a teacher to be effective can vary depending upon factors such as: the type of activity in the lesson, the subject matter, the pupil backgrounds (such as age, ability, sex, socio-economic status and ethnicity), the pupils' personal characteristics (such as personality, learning style, motivation and self-esteem), the culture / organization of the department (Creemers and Reezigt, 1996).

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