

## Research in Teacher Education in 21st century

**Sanjay K. Shinde**

K.T.H.M College Nashik, MS, India

### Abstract

In this paper principal responsibility of reforming teacher education institutes, research improves efficiency, research needed on immediate problems, research reflective learning from teaching, and research to Support teaching to learning is discussed clearly.

**KEYWORDS:** TEI, reflective learning, supported teaching

### Introduction

First, I would like the audience to reflect on the way TE in India has evolved last forty or so years. Last day I had a privilege to go through one syllabus for teacher training course, Master of College Teaching, the content of which was not largely different from what we have for M.Ed. in our universities. Likewise, generally Teacher education can be described as in adormant state which will make to describe it as “TE in Cocoon: Forty Years of Stagnant Metamorphosis from 1975 to 2014” (Gafoor, 2014). I urge you to reflect on what changes have occurred to content and practice of school education, higher education, and TE post-independence, or post Kothari report. May be there are visible changes in policy owing to LPG, and improvement in infrastructure with a more economically healthy nation, and ICT revolution. 10+2+3 pattern, three-languages, science, social studies, mathematics, Arts and crafts, physical education, three-year degrees, affiliating universities, lecture, chalk board, textbooks. And, then talks about activity, discovery, and paedocentrism, conventional teacher training.

Changes had taken place in communication technology, electronics, in economic situation of the nation, society and the students, with empowerment of women, and backward classes. Was TE been able to match these changes that occurred in the bases of education? The emphatic answer is no. Except for NCTE regulations in infrastructure and student intake, ICT topics in the content and a little reduced amount of weightage to written exams at the end, TE has not changed much after 1970s. Have we changed according to the times and requirements?

Yes, one theme I have delved and try to prick your conscience is to make you aware- how we have not changed.

### Principal responsibility of reforming TEI's

In this prestigious institution named after a great reformer, Sree Narayana Guru who famously said, Reform the practices yourselves or else rules will replace you, I title this address as Status of research in TE- Go ahead or chase, or cherish or perish.

Then who is to bell the cat? And,bring in changes to the system of education- primary, secondary or tertiary. It is teachers and teacher educators. Teacher educators have an

advantage. They are in touch with all the three subsystems. Then, why are we not leading? There lies the answer to the question, why should we Research?

Now, in talking about educational research I have limitations. I cannot escape the reality of being a teacher educator, an educator of educators. I cannot escape the love for my students who pursue their careers as teacher educators. Hence you may feel that I am intensely inclined towards TE. High quality teaching is a widely acknowledged and the most important school-level factor influencing student achievement. This in turn focuses our attention on the importance of TE - TE from initial training and induction for beginning teachers, to on-going professional development and in-service education. Educators require research to cope with the change as I alluded in the beginning, Society is changing fast. Teacher education and its practitioners are going to change. May be education is following the societal changes, and hence, education is changing somewhat in content of education, design of education. Unfortunately, TE change even less. We have to change fast. That is why I say Go ahead or chase, or cherish or perish.

### **Role of research**

We have to do research as the nation wants us to do so. There is democratic angle to the research in education. As public personnel we are duty bound to serve the nation to meet the constitutional requirements. Our Education is centralized. Our education is Rigid and our education is scripted. It is often scripted by persons and professionals who are much distant from the field and practice of education in schools and colleges. Who will solve problems of quality and those emerging out of daily practice? Individual teachers need to tackle the problem in classroom. Because, problems will be solved only where they exist. Individual teachers doing research to solve their practical problems are a requirement of democratizing the education system of this nation. Who suffers most from low quality teaching? It is deprived children-Who shall the low quality of education and schooling affect most? Teaching and Teachers matter most especially for deprived students.

### **Research improves efficiency**

Research informs us on how to set environments. Research informs us on specific instructional practices. The quality of understanding among our teachers and teacher educators of the concepts strategies and practices that were tried to improve the learning systems is very little. This though it seems an over-statement, is an unhappy reality. Why did the models of teaching fail? Why did the blooms" taxonomy fail? Because we don"t know them, we have not studied them enough to adopt them, adapt them and evolve them.

### **Research needed on immediate problems**

Teacher educators are most reflexively focusing their attention on secondary schooling. Who will inform primary sector. What are the special problems of teaching learning Malayalam? Who will research and find solutions to these problems other than

teachers and teacher educators in Kerala? Don't we have our on issues of teaching Malayalam than we have specific problems of our own on the teaching of ESL? Then, why we research more on teaching ESL than we research teaching of Malayalam. Is Secondary education more important than primary education for human development? What is our immediate goal? Then why we have more research on secondary education than primary?

Problems abound in schools. We must research because we have problem aplenty in our schools. CCE, FA and the like are in place. How shall we evaluate co scholastic areas? - Personality, punctuality, industriousness, courtesy. For that matter how shall we judge a project, seminar, drawing, handwriting?

Why should we have separate methods of teaching Hindi, Sanskrit, and Arabic and Urdu, or English? Why methodology of teaching these languages is considered specialization? Are there differences in methods and techniques employed in teaching these languages? Or do they differ only in content, vocabulary and a little in grammar; in content teaching; don't we have far big difference between methodology of teaching geography and methodology of teaching history, than the differences between methodology of teaching physical sciences and that of social sciences?

How much of teaching practice we need to have? At what interval? Does teaching practice add to students teaching competence? To what extent?

Yes, we will say that it is policy. Should research and education not inform policy? Did we show the way for the policy? If teachers and teacher educators and other educational practitioners don't convey the policy makers on important issues in education, who else will do? If every teacher and teacher educator of us feel that I am not responsible, who else are responsible?

### **Research reflective learning from teaching**

We have to research because we are not really learning. The other day one of my students came to my cabin and raised a simple question. Sir, will you please tell me some recent books (he meant original works) that discourse on educational philosophy in India?

I was perplexed. Sure he did simplify the question, Sir at least tell me some Malayalam books which reflects on education.

Then, haven't we lakhs of educational practitioners? Why is it that at least some of them sit down and pen what they have learned from decades of educational career? Is it that they did not have any experience to share? Or is it that we have not learned anything from experience? Is it that we haven't time to reflect on and integrate the simple principles.

Teachers and teacher educators must research because there is no fundamental difference between teaching and researching. The most prominent part of teachers' professional work is done in classrooms, designing, managing, and evaluating content-related and social learning processes of students, dealing with a broad range of interactions, communications, assessments, pedagogical situations....

Teachers develop lesson plans, evaluate student work, and share outcomes with students. Teacher research is simply a more intentional and systematic version of what good teachers already does. Design and implement a plan of action, observe and analyse outcomes, and modify plans to better meet the needs. Yes, we have to infuse research into education. Education need to be informed by research and reflection.

Yes, which teachers have to bell the cat? Teachers and teacher educators. Can teachers do research without their teachers doing the same? Teacher-educators are in better position. Haven't they got more education and preparation for the profession than anyone else in this field?

Research alters perspective and view of practice. Research is often presented as a means of generating insight for colleagues in the wider field of TE. A common aspect of researching teaching about teaching is that new findings and teachings become interwoven.... In teaching there is a sense of the need to act immediately on new possibilities and to adjust one's teaching in accord with these possibilities (Loughran, 2002).

### **Why research ?**

Education practice is to be researched. Fortunately we have many practices in TE. Teaching practice, Classroom practice, Teacher practices, TE practices. We have to develop teachers and teacher educators with practical wisdom, technical knowledge and critical reflection. Because this far we were simply relying on common sense or „what works“ protocols.

A close examination shows that Value of research in TE has arguably diminished over time. In addition, critics of the recent reforms to initial TE have expressed serious concerns that the shift away from university and college -led programmes. TE as a learning environment

What should we research in TE? “TE” itself. We understand TE as an interaction process (embedded in a social, organisational, and cultural context), mainly between teacher educators and (student) teachers. But there are also systematic interactions among teachers aiming at professional growth. At the same time, we can see TE as a learning environment for all people involved in this interaction process. Simply extending the amount of time spent by trainee teachers in the classroom is not associated with improved outcomes. Design, structure and content of TE

We have to find ways to boost the use of research to inform the design, structure and content of TE programmes. Bring Contribution of research in TE and examining the potential benefits of research-based skills and knowledge for improving school performance and student outcomes. What is missing among the teachers and teacher educators most is capacity for critical reflection, i.e. the type of deeper insight and understanding that comes from interrogating one's practice based on the wider research evidence and making explicit the assumptions and values that underpin it. Four research paths to TE

There are many ways that research can contribute to programmes of TE (Bamfield, 2014).

1. Content of such programmes may be informed by research-based knowledge and scholarship,
2. Inform the design and structure of TE programmes
3. Teachers and teacher educators can be equipped to engage with and be discerning consumers of research
4. Conduct their own research, individually and collectively, to investigate the impact of particular interventions or to explore the positive and negative effects of educational practice.
5. How to develop an integrated system of TE?

Now the different elements of TEs exist and work independently. We have to find ways to unite them.

### **TEI's and Research**

We need research to Manage Hierarchical triads that coexist during student teaching? There is no existent organizational structure for TE to support fundamentally needed cooperation among teacher educators, mentor teachers at schools, and the student teachers. Fissure between the change agenda of TE and the survival goal of pre-service teachers to fit into the day to day challenges raised by the real school and classroom requirements depicted and presented to them by mentoring teachers at schools, is real. Researchers on TE are becoming growingly conscious of the shifting hierarchical triads of relationships that coexist during student teaching. Research to Support student teacher practice comprehensive TE application of constructivism is still evolving. For example teacher educators still grope the dark when they come to explain and demonstrate their student teachers

on questions like how to include all students' needs in the planning of their teaching, what is the clearest way to represent a concept, what makes learning in a content area easy or hard, how to master new content and pedagogy and integrate them into practice, how to align pedagogy with instructional policies, and, how to create real opportunities for all students to master demanding learning goals

## **Research to Supports teaching to learning**

We need research to Support methodological shift from teaching to learning. If future teachers are to enable students' learning in their classrooms, teacher preparation has to provide them with an understanding of the principles of human development, including the attributes of hierarchically ordered, developmental stages; the ways to align these stages with the core content areas of the curriculum; and help them translate developmental principles into pedagogical decisions, judgment, and practices in school settings. This requires a spiral of learning, reflecting and re-learning that leads student-teachers to higher levels of understanding about their area.

Research on Environment of TE institutions If we want schools that are not instrumental in preserving social inequities and instead want schools that combine a progressive social vision having teachers with radical critique of schooling itself, TE must help in creating a learning community that promotes democratic values and practices. We need to develop teachers who participate in curriculum development and policymaking, teachers who work to improve school conditions and educational opportunities through community involvement and political activity. In order to equip future teachers to develop curricula around the traditions, histories, and forms of knowledge often ignored in school, student teachers themselves have to compile oral histories of the communities in which they teach and analyze the role of different community agencies. Hence, in addition to content learning and practice teaching through general education, professional preparation and laboratory experiences, TE must incorporate ethnographic studies, journal writing, and curriculum analysis and development (Gafoor, 2011). The shift from learning to teaching and vice versa has to be supported through research.

## **Research ensuring quality in TE**

We need research on Evaluation and ensuring quality in TE. The commonly reported remedies for improving TE are entrance examinations, exit examinations, national standards, a national teacher examination, and, recently, a trend in some places to wholly eliminate a TE courses or reduce the emphasize there on. The most widely reported method of teacher assessment in TE is observation where teachers are observed and rated on their lesson designs and teaching techniques. There is lack of agreement by TE colleges and other professionals on what constitutes good practices. There is wide acceptance on the observation that teacher evaluations tended to be inflated, with ratings tended to skew toward the high side; that there is little direct improvement in classroom instruction in parallel with changes in grading of student- teachers, and that nearly all methods are subjective. Observations do not take teaching differences into account; instead, observers tend to look for the same practices from different subject teachers.

In fact students are given training in the context of examinations. B.Ed. course has become a process of serving licence to teach. Majority of students do not want professional efficiency, they aspire for degree. If we want to develop accountability in our prospective teachers, the foundation is to be laid at least in their preparation level. It

is not a question of who internal or external-but the question of how? And, to serve what purpose? Evaluation, at least in teacher preparation, is to be meant for inculcating in prospective teachers a culture of self-evaluation, peer evaluation, self-improvement, and accountability to oneself and to the profession, students and society. Everyone accepts this, but is not reflected in our practice.

### **Research especially on elementary TE**

We need research especially on elementary TE. Many of us may not be acutely aware of the problems in elementary TE. Shall I share some of the observations on status of elementary TE in Kerala?

It is found (Gafoor, & Ragisha, 2012) that:

- Teacher trainees show “inadequate” “insufficient” “marked deficiency” in the content knowledge and poor “academic performance”
- Some unaided institutions are doing the pedagogic analysis of 1 or 2 units only which is necessary for practice teaching
  - Several teacher educators just “dictates” the facts and concepts
  - In some institutions students teachers are copying down from previous records
  - Unscientific allotment of time
  - Abundance of written works
  - Presently 55-60 files of written works
  - Unaided institutions give extra works
  - More importance to written examinations
  - Most of the teacher educators of unaided institutions are temporary, inexperienced

One more area is in-service TE, and preservice education

In preservice education the problem is translating theory into practice. In in-service development, the problem is putting experience and practice for learning, giving language to the practice. Yes, we have problems in abundance. Yes, it is our responsibility to solve problems in our field.

### **How shall teachers and teacher-educators research?**

What are the modes of research available to teacher educators for helping improve the TE practice? There are three or four ways in which research informs TE practice (Krainer, & Goffree, 1998; Zeichner & Cochran-Smith, 2005).

One is Research in the context of TE. It is the most frequent form of research in TE. One prominent example is the investigation of (student) teachers’ beliefs, knowledge, and practice. Researches on attributes of student teachers, infrastructure, teacher educators, - for example, EI, Social sensitivity, commitment to children, subject of teaching, it includes that innumerable studies on awareness, attitudes of student teachers, and few studies on pre-requisite knowledge of student teachers and the like.

Such research helps us understand the context better. It describes the context in which teacher-education works.

The second mode of research in TE is research on TE. Here, focus is directly on TE and means investigations on the interaction between e.g. teacher educators and (student) teachers, the achievements of the participants, side-effects for the school. It is to evaluate the success of TE courses or programmes, mostly with the intention to draw consequences from that internal or/and external evaluation (e.g. improving the course or stopping the programme). A special way of evaluation is self-evaluation on the basis of teacher educators' action research in order to improve their (TE) practice. Another reason is to understand better the interactions between teacher educators and student teachers. Investigating which kind of teacher educators' interventions or teachers' beliefs influenced the process.

The third is research as TE (or TE as research). A concrete form is teachers' action research, as the systematic and self-critical reflection of practitioners into their own practice. This involves a close interconnection between understanding and improving teachers' practice.

The joint reflection on the learning process (e.g. interactions, improvement of practice) plays a crucial role. Such TE programmes may be called TE with research and TE as research according to the extent of research component in the programme. The fourth is Meta-research to build upon whatever researches are occurring.

## Conclusion

There is no reason to be despondent. May be I focused a little intensely on local conditions, state of TE and education in Kerala. However, the problems are universal. Only a few countries like in the world, Finland, Singapore, and the like have developed a closely integrated system of TE firmly based on research. One theme I have delved and tried to prick your conscience is to make you aware how we have not changed. What shall we do immediately? Enquiry-oriented practice requires proven and scientific preparation, through carefully designed programmes of initial TE, which allow trainee teachers to integrate knowledge from academic study and research with practical experience in the school and classroom. The focus on proven practice then needs to be sustained throughout teachers' professional careers. I believe, rather I hope, this research oriented TE will bring a very constructive and progressive, yet realistic TE rooted in culture. This will raise the standard of this "mother profession".

## References

www.ereach.com

Gafoor, K.A. (2014). Teacher Education in Cocoon: *Forty Years of Stagnant Metamorphosis from 1975 to 2014*. National Seminar on Teacher Education in India: prospects and Challenges Farook Training College, March 29, 2014. In: *Endeavours in Education*, 5(3), in Press.

- Krainer, K., & Goffree, F. (1998). *On research in teacher education. From a study of teaching practices to issues in teacher education*. Osnabruck: For schungsinstitut fuer Mathematikdidaktik.
- Loughran, J. J. (2002). Effective reflective practice in search of meaning in learning about teaching. *Journal of teacher education*, 53(1), 33-43.
- University of Calicut (1974). *Master of College Teaching – Syllabus*. Department of Education, University of Calicut.