# **Teacher Education in Global Era: Retrospect and Prospect**



Karanam Pushpanadham

Quality education has been the concern world over, and concerted efforts have been made to improve the quality of education at all levels as education is the source of development. Traditionally, education as an active change agent has been more pre-occupied and focused with the needs and pressures of the present rather than the anticipations of the future. But a new context is unfolding, in which the future has to be more deliberately thought of as ever before as the changes of the current century are rapid and unimagined due to various factors. Therefore, education must be visionary and future-oriented, in the face of disruptive scientific and technological innovations and changes, unprecedented socio-economic challenges and opportunities, surprising socio-political reforms, globalization and amazing cultural reawakening. In rethinking education to cope with rapid changes at the threshold of the twenty-first century, innovation, technology and research are indispensable tools of education. Failure to innovate in education means and repeating yesterday's educational programs and strategies tomorrow will further jeopardize education's reputation to development efforts. Educational innovations are imperative and would no doubt be effective if they are research-based and imbued with modern technology with human values and ethics.

Teachers' role is crucial in the process of education. The success of educational reforms has been decisively dependent on the 'will-to-change' as much as the quality of the teachers. No education system can rise too far beyond the level of the teachers. Educational reforms which have its roots in the commitment of the teaching force have not only prospect of success but also of constancy. Such change, like any human-based change, may appear to be slow, but its rate of obsolescence is also very low, compared to machine-based changes. Techno-pedagogic skills, Human-technology interface and transdisciplinary orientation are very important to address the future challenges of the human race.

K. Pushpanadham (🖂)

The Maharaja Sayajirao University of Baroda, Vadodara, India e-mail: pushpanadham@gmail.com

<sup>©</sup> Springer Nature Singapore Pte Ltd. 2020

K. Pushpanadham (ed.), *Teacher Education in the Global Era*, https://doi.org/10.1007/978-981-15-4008-0\_1

It is also important to realize that the role of education is not to follow and react to the emerging social trends but to be the lead and play a major role in social reconstruction for future development. The future is not some place where we will go; it is the one that we are creating. Creation implies a vision and choice. It redefines knowledge; no longer is it sufficient that to know is only to distil from the past; to know is also to question and to exercise choice and discernment about the future and to act accordingly. A new vision for education and its practices has been in the intellectual debate in recent times. Teachers are the torch bearers of education, and therefore, quality teacher education is the key for global development. The quality and standard of an educational system largely depends on the quality, characteristics and commitment of the teachers to their profession. The Education Commission 1964–1966 observes 'For the qualitative improvement of education a sound program of professional education of teachers is essential. It is essential for developing the teacher education system with due importance to best teacher professional practices.'

Teachers are the key for any education system. Teacher quality is therefore crucial and has been globally accepted to be significantly associated with the quality of education in general and students' learning outcomes in particular (Jason, 2010). In order for teachers to influence the learners, they must successfully demonstrate appropriate behaviors. Those behaviors can be observed, adjusted, replicated, internalized and applied appropriately to learners of all levels and styles. Teacher modeling is necessary in the teaching and learning process. According to Kauchak and Eggen (2005), modeling means exhibiting behavior that is observed and imitated by others. Effective modeling of desired practices is at the heart of successful teacher education programs at pre-service and in-service levels. Teachers are the powerful and meaningful role models for students at all levels, and the way they act influences both learning and motivation (Bandura, 1989). Delors report (1996), UNESCO report on Teacher and Educational Quality: Monitoring Global Needs for 2015 (2006) and the European Commission Report 'Communication on Teacher Education' (2007) are all observed that teacher quality is significantly and positively correlated with pupil attainment, and it is the most important within school aspect that explains students' performance.

The UNESCO Report of the International Commission on Education in the twenty-first century envisages that the rethinking of teacher education is necessary in order to bring future teachers with human and intellectual qualities that will facilitate a fresh approach to teaching (UNESCO, 1999).

Teacher education across the world has undergone a sea change amidst a range of developments associated with globalization. Global transformations, which are economic, political and cultural, include the growing global mobility of people; the impact of rapid technological change such as Internet access and the use of social media; related increasing knowledge and information flows; as well as rapid economic changes that necessitate the development of skilled, flexible and mobile labor forces worldwide. Teacher education cannot be understood without consideration of the broader processes associated with globalization. These global transformations have influenced and, to some degree, driven a range of international initiatives implemented in teacher education including the internationalization of curricula; the growth of international service, field and internship experiences; cross-border initiatives and the increasing use of English as a medium of instruction (EMI) in higher education.

The infusion of multicultural, global and comparative education content and discourse into teacher education programs and increasing cross-border mobility of teacher education students have provided as examples of how teacher education programs are internationalized across the globe. As a result, an increasing attention has been paid to a wide range of strategies that enable teacher education institutions to develop and strengthen relations across national borders. These include the recruitment of international students, internationalizing the curriculum, study abroad and other international experiential experiences, faculty and student mobility, international research partnerships, global rankings, and international and intercultural extracurricular programming.

### **Traditions of Teacher Education**

It is very interesting to review the developments in teacher education. A wide range of literature is available and the synoptic view of various traditions of teacher education include as follows.

#### The Knowledge Tradition

This reform focused on the importance of disciplinary knowledge for pre-service teacher education that has been gained through a classical liberal arts education combined with an apprenticeship in schools. Here, the mastery of subject matter is considered to be the most important goals in educating teachers (Zeichner & Liston, 1990). Knowledge tradition reforms advocates that teachers need to be educated not only in their subject matter at specific institutions, but also learn how to teach in the presence of more experienced teachers.

# The Social Context Tradition

This tradition believed in the concept that classroom teaching provides the basis of building repertoire and teacher's education curriculum. The important task from this point of view is to enhance teacher's capabilities to exercise judgments about the use of teaching skills in a specific social setting. The success of a teacher lies in the understanding of classroom context and applies appropriate methods to engage the learners in the teaching and learning process.

#### The Tradition of Progressivism

Progressivism emphasizes the progressive nature of learners and believes that it is the base for determining the content and methodology. Teachers are described in the twenty-first century as a facilitator that implies that teachers are the enablers for students learning, as an Edutainer that implies that teachers continuously inspire and motivate learners by creating joyful learning experiences and as a lifelong learner that implies that the necessity of teachers' continuous professional development and upgradation of knowledge and skills in the area concerned.

#### The Social Transformation Tradition

Social transformation tradition highlights the social responsibility of schooling and teacher education for a more equal, happy and healthy society. This tradition believes that novice teachers be exposed to social order, issues and challenges that are related with education. Teacher is a social reformer, and he empowers learners to understand their rights and responsibilities. Teachers as a change agent are highly believed in and therefore teacher education needs to go beyond class rooms and work closely with the social fabric of the society.

The above traditions help us to conceptualize teacher education and understand that there are different perspectives of teacher education and institutions adapt the best possible approach looking into their socio-cultural context. If we understand the teacher education systems in different countries from these perspectives, we come across the teacher education reforms centered on the knowledge base of teachers, and similarities can be observed in teacher education programs across various countries.

#### **Perspectives of Teaching: Didactic and Evocative**

The review of the literature on teacher education provides two broad perspectives of teaching—didactic and evocative (Axelrod, 1973). Didactic teaching believes in passing on traditional knowledge. Teachers use teaching methods/lecture to inculcate traditional knowledge about teaching and demonstrate a model action by which students learn. In this context, learning implies the replication of what has been taught or demonstrated. Seeing teaching as a process of passing on knowledge has persisted. The oldest form of teacher education is the observation and emulation of a master. Plato learned to teach by sitting at the feet of Socrates. Aristotle, in turn, learned from Plato. Teaching was initially highly didactic. Teachers taught both the processes of learning to read and the morals attendant to a proper life through moralistic texts.

The evocative type of teaching advocates the intellectual dialogue and questioning in the classrooms for in-depth understanding of the phenomena. The teacher's role is to ignite, encourage questions, elicit conclusions and formulate hypotheses from the students in the classrooms by posing questions.

Didactic and evocative teaching perspectives are the two modes of teaching among other related ways in which teachers teach and learners learn. Teacher education must provide opportunities for prospective and practicing teachers to master a range of teaching modes that enable the learners to enjoy the learning process.

Teacher education programs across the world have very specific characteristics. Most of the teacher education programs generally tend toward one of several theories—behaviorist or competency-based, humanistic and developmental. The most promising models of teacher education are the competency-based teacher education and performance-based teacher education programs. These models have isolated the discrete tasks of teaching and developed protocols for training teachers to master the tasks, and produced tests to assess whether or not the teachers could perform the tasks. As a result, several teacher competencies were identified and efforts were made to train them in the teacher education programs systematically.

The roles of teachers are changing so are expectations about them. The professional context of teachers has drastically changed and is dynamic. Teachers are teaching in increasingly multicultural classrooms, students with special needs, use ICT for teaching effectively, engage in evaluation and accountability processes, and involve parents in schools (OECD, 2009). Teachers need to help students acquire not only 'the skills that are easiest to teach and easiest to test' but more importantly, ways of thinking (creativity, critical thinking, problem-solving, decision making and learning); ways of working (communication and collaboration); tools for working (including information and communications technologies); and skills around citizenship, life and career and personal and social responsibility for success in modern democracies (OECD, 2011).

Professional learning is a continuum starting in initial teacher education, carrying on through the induction phase and continuing throughout the rest of the career. Two basic requirements are fundamental in the preparation of quality teachers: the capacity to systematically assess one's own knowledge base and professional practices, on the basis of a wide range of criteria coming from practice, theory and research; and critical and responsive attitudes to innovation and professional improvement (Hagger & McIntyre, 2006). The professional standards of teachers are important to focus on the specific competencies with regard to the assumptions about learning and the purpose of education. Listing out the competencies of teachers, the following are the task responsibility areas of teachers:

- Information: Teachers need information regarding the various aspects of human life and content knowledge to share with the diversified learning groups.
- Guidance: Teachers are constantly engaged in guiding and mentoring the learners.
- Modeling: Teachers display ideals of professional quality in terms of thinking, doing and being.

- Management: Teachers as managers need to handle variety of tasks within the classroom context and school. Managerial competencies are necessary for the teachers to perform effectively.
- Monitoring: Teachers need to be familiar with the developments taking place in academic domain and continuously monitor self, students and the institution where works.

Teacher education programs must provide adequate inputs on the above task responsibility areas so that the novice teachers are well trained and will be able to perform the tasks effectively and efficiently.

# **Global Teacher Education: Emerging Models**

Teacher education programs over the years have undergone developmental changes due to technological, economic and cultural forces. More fundamentally, the access to digital information and network technologies prompted the need for new competencies for teachers.

- Pedagogical content knowledge is essential for the teachers for effective practice in diverse, multicultural, inclusive learning environments as it directly influence students learning (Bierema & Hill, 2005). Techno-pedagogic skills and even the integration of content, techno-pedagogic skills became essential for teachers to perform their duties effectively in the classrooms. Preparing students for their complex and increasingly technological futures were probably never thought of in any teaching methodology or policy.
- Adaptive expertise is essential for teachers as they need to adapt their teaching plans and practices to meet the dynamic and diversified students learning needs (Hatano & Oura, 2003; Vogt & Rogalla, 2009).
- Classroom negotiation skills are very important for teachers as teachers need to
  mediate with the stake holders regarding the content, methodologies and values
  and choices. Whatever their level of competences, teachers' actions and effectiveness are bounded by the social, cultural, institutional opportunities and constraints
  of their professional settings (Putnam & Borko, 2000).
- Research and a practice of inquiry are necessary for teachers to generate new body of knowledge and continuously work for the pursuit of knowledge (Cochran-Smith & Lytle, 1993, 2009; Hagger & McIntyre, 2006).
- Reflective, interpersonal skills for learning in professional communities are important, together with research skills. Teachers need to have critical, evidence-based attitudes to their own practices, grounded in input from different sources students' outcomes, theory and professional dialogue—in order to engage in innovation (Wenger & Lave, 1991; McLaughlin, 2001; Wenger, 1998).

With yesterday's knowledge, tomorrows' problems can never be addressed. Students in the twenty-first century are well equipped with the Internet instant messaging, video games,

video conferencing and networking. Therefore, key questions need to be addressed by the teacher's education program such as how teachers learn and refine knowledge, skills and proficiency to teach such a digital literate audience.

Cross-cultural and multicultural social settings are increasing day by day with the international mobility and employability. There is a need to develop a comprehensive framework for global teacher education program in which the skills and competencies for twenty-first-century educators are focused.

## Discussion

Teacher education is at cross-roads and emerging on an evolutionary path to meet the ever changing needs of the society. Teacher education in this knowledge-based society should emphasize on reconstructing the professionalism of a teacher and stress on humane teacher.

A new teacher education system must evolve by redefining itself in the spectrum of modern age. Getting teachers prepared and getting prospective teachers with mentors into real classroom settings are two important variables in this teacher's education model. There is research that supports such a teacher's teaching model. If anyone asks teachers what is most important to them in developing competencies to teach, the first is that they are acquiring competencies by teaching and secondly, that they are working with other experienced teachers to bring it to a newer level. This indicates that a field-based teacher's education model with mentor and teachers needs to be advocated in the future days.

To prepare more teachers to teach in underdeveloped and developed regions, a professional collaboration between universities and schools should be created. The seasoned veterans should be groomed and hired and appropriately compensated to bear this great responsibility. It will not only serve the quality school teaching for the present generation in those communities but also serve as an effective means to help and induct new-generation qualified teachers. The best teaching hubs and schools are mostly located in urban areas, serving youngsters and adults from that community only. Teacher education programs should take care and make ample opportunities to implement such models in the interior parts of the country. That would propagate quality education among the next generation by the expert educationists and teaching professionals in the absolute grooming of the next-generation teachers.

Teaching is a complex activity, and it requires complex and dynamic combinations of knowledge, skills, understanding, values and attitudes. The acquisition of these is a career-long endeavor that requires a reflexive, purposeful practice and high-quality feedback. Effectiveness of the teacher education system largely relies on a shared understanding of the competences that teachers need to deploy in different levels of schooling, or at different stages in their career. Such a profile or professional standard framework of teacher competences helps to improve the effectiveness teachers who can create joyful learning organizations.

## References

- Axelrod, J. (1973). *The professor as artist at teaching*. New Directions for Higher Education. Wiley Online Library.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of Child Development* (Vol. 6, pp. 1–60). Greenwich, CT: JAI Press.
- Bierema, L. L., & Hill, J. R. (2005). Virtual mentoring and HRD. *Advances in Developing Human*. Journals.sagepub.com.
- Cochran-Smith, M. (2000). Editorial: The question that drive reform. *Journal of Teacher Education*, 51(5), 331.
- Cochran-Smith, M., & Fries, M. K. (2001). Stick, stones and ideology: The discourse of reform in teacher education. *Educational Researcher*, *30*(8), 15.
- Cochran-Smith, M., & Lytle, S. L. (1993). *Inside out: Teacher research and knowledge*. New York: Teachers College.
- Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions—Rethinking Education: Investing in skills for better socio-economic outcomes. (2012).
- Conway, P. F., Murphy, R., Rath, A., & Hall, K. (2009). Learning to teach and its implications for the Continuum of teacher education: A nine-country cross-national study. Report Commissioned by the Teaching Council. University College Cork and Teaching Council of Ireland.
- Corwin, R. G. (1965). A sociology of education: Emerging patterns of class, status, and power in the public schools. Appleton-Century-Crofts, Original from the University of Michigan.
- Council of Europe. (2008). White paper of intercultural dialogue: Living together as equals in dignity. Strasbourg: Council of Europe.
- Delors, J. (1996). Learning the treasure within: UNESCO.
- Francesca, C., Ana, L. N., & Jérôme, M. (2011). Providing and paying for long-term care. books.google.com.
- Hagger, H., & McIntyre, D. (2006). *Learning teaching from teachers: Realising the potential of school-based teacher education*. books.google.com.
- Hatano & Oura. (2003); Vogt & Rogalla. (2009). Aligning teacher competence frameworks to 21st century challenges: The case for the European Digital Competence Framework for Educators. *European Journal of Education*.
- Hazelkorn, E. (2009). *Rankings and the battle for world-class excellence*. Higher education management and Policy. oecd-ilibrary.org.
- Jason, M. H. (2000). The role of principal as transformational leader in a multicultural learning community. *High School Journal*, 83(3), 1–9.
- Judyth Sachs, J., & Groundwater Smith, S. (1999). The changing landscape of teacher education in Australia. *Teaching and Teacher Education*, 15(2), 215–227.
- Kauchak, D., & Eggen, P. (2005). *Introduction to teaching: Becoming a professional*. Upper SaddleRiver, NJ: Pearson Education Inc.
- Kothari Education Commission. (1964–1966).
- Lampert, M., & Ball, D. L. (1999). Aligning teacher education with K-12 reforms vision, 33.
- OECD. (2011). Pathways to success: How Knowledge and Skills at Age 15 Shape Future Lives in Canada. Paris: OECD.
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*. journals.sagepub.com.
- Sachs, J. (1997). Reclaiming the agenda of teacher professionalism: An Australian experience. *Journal of Education for teaching*, 23(3), 264.
- Smith, R. (1999). *The future of teacher education: Principles and prospects*. Paper presented at the American Education Research Association Symposium, Montreal.
- Stuart, C., & Thurlow, D. (2000). Making it their own: Preservice teachers' experiences: Beliefs and classroom practices. *Journal of Teacher Education*, 51(2), 113.

- Taylor & Francis. (1999). Bandura's theory of self-efficacy to the teaching of research. *Journal of Teaching in Social Work*.
- Temmerman, N. (1997). An investigation of undergraduate music education curriculum content in primary teacher.
- UNESCO. (1999). Report of the International Commission on Education for the Twenty first Century. France: UNESCO.
- UNESCO. (2006). Teachers and educational quality: Monitoring global needs for 2015.
- Wenger & Lave, 1991; McLaughlin, 2001; Wenger, 1998. (2006). Communities of practice theory and the role of teacher professional community in policy implementation. books.google.com.
- Zeicher, K. M., & Laston, D. P. (1990). Theme: Restructuring teacher education. *Journal of Teacher Education*, 41(2), 3–20.
- Zeichner, K. M., & Liston, D. P. (1990). Traditions of reform in US teacher education. *Journal of Teacher Education*. sagepub.com.