

ADEQUACY OF TEACHER EDUCATION PROGRAMME IN ENHANCING TRANSVERSAL COMPETENCIES AMONG PROSPECTIVE TEACHERS

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Abstract

Competencies have vital role in 21st century for successful personal and professional life. Certain good practices and educational experience of teachers serve as a basis for the design of procedures for the development of competencies in students. Teachers are the role models for the emerging student community. Transversal competencies are considered necessary for teachers to function within today's complex and increasingly interconnected world. Present study is an attempt to evolve a teacher transversal competency grid which could be used in benchmarking teacher preparation courses. Through document analysis, data collection from teacher educators and expert validation relevant transversal competencies are identified. A survey was then conducted among teacher educators to explore the adequacy of the existing teacher education programmes in developing the transversal competencies among prospective teachers. The findings revealed that core competencies of knowledge management and thinking; personal competencies of emotional management and physical management and social competencies of career management in interpersonal skills and social system management are essential for prospective teachers. However, the survey showed that the existing programmes are not satisfactory in promoting linguistic competencies, stress management, impulse control, health management, financial literacy and entrepreneurial skills of prospective teachers. Hence the teacher education programmes need revamping with planned strategies for training in transversal competencies.

Keywords: *Transversal competencies, Teacher education, Prospective teachers*

Introduction

Rapidly changing society, job market and workplace necessitate that broad range of skills and competencies are essential for students to successfully navigate the changing global landscape. Concerted curricular and pedagogical initiatives added with updated tools and strategies are needed to equip teachers to guide learners towards the attainment of these skills. Skills have become the global currency of 21st century economies (UNESCO, 2015). Learning is a process that takes place inside and outside the school. While widespread changes are

occurring in society the goals of education are to be redefined. The methods of education should be changed to acquire the competencies students need to thrive. Teacher expertise and proficiency related to specific pedagogical tools and techniques are to be reframed. Life skills, soft skills, employability skills and entrepreneurial skills are various terms that we generally use in educational context. The term, transversal competencies while not new, is re-emerging as a popular way of describing these broad-based skills, knowledge and understandings. Every student needs to be equipped with the skills and knowledge to face challenges of a rapidly changing world (Gonski, 2018). Strengthening the teacher community is a deciding factor in empowering learners of all levels to demonstrate proactive skills.

The preservice training is vital in deciding the excellence of teachers. Teacher training programmes are to be revamped to prepare teachers for utilizing and integrating transversal competencies in their profession. Teaching and assessing the general capabilities, particularly in an embedded form, is a highly complex task requiring teachers to have a sound understanding of how to teach these capabilities and to interweave their teaching into different learning areas. (Gonski, 2018). Requisite transversal skills equip teachers to transform learners from passive information listeners to active knowledge constructors. Theoretical understanding of the transversal skills added with alternative pedagogical practices are essential in teacher training programmes. Each learner is to be identified in the skill context and skill enhancement strategies are to be implemented for unraveling challenges faced by learners. The teacher preparation courses are to be strengthened by equipping the prospective teachers in using the transversal skills in their personal and social spaces.

Need and significance

The training of teachers happens in insular, intellectually impoverished environments that are severed from ground realities as well as the aims of education they espouse. Such an intellectual isolation actively discourages educational theorization and the growth of disciplinary and interdisciplinary enquiry (Batra,2005). Certain good practices and educational experience can be used as a basis for the design of procedures for the development of competences in students (Tsankov,2017). A greater insight into one's aims of life, one's strengths and weaknesses and the dynamics of identity formation provides the base for developing a professionally competent teacher who is sensitive to issues of equity, democracy and social justice (NCTE,2009). Training of highly qualified specialists in the school education is necessary for developing the human resources and the creation of knowledge base.

When teacher transacts the curricular components aiming at attainment of higher marks without attending the affective components that may affect the social and emotional development. The teacher as an information transmitter and learners as information receivers is the conventional model of education. Teacher with effective transversal skills help learners to become better performers in their future. The transversal competencies help teachers to demonstrate skilled behavior and inspires learners to internalize those skills. Present paper tries to evolve a transversal competency grid to be used in benchmarking teacher education programme. The study also explores the adequacy of teacher preparation programme in developing the transversal skills among prospective teachers. The study reveals that teachers need to be trained to propagate the transversal skills to the entire academic streams which is instrumental for the social development.

Transversal competencies and teacher education

The notion of competency refers to the outcome of education; preparedness, adaptability, achievability of objectives, and competence is most often understood as an integral personality quality, manifesting itself as a general ability and willingness to work based on knowledge and experience which are acquired in the process of education and socialization and are oriented towards independent and successful participation in the activity.(Selevko,2004).Transversal competencies are considered necessary for people to function within today's complex and increasingly interconnected world. According to McKinsey (2017) workers of the future will spend more time on activities that machines are less capable of, such as managing people, applying expertise and communicating with others and less time on predictable physical activities and collecting and processing data. The skills and abilities required will also shift to more social and emotional fields and more advanced cognitive abilities such as logical reasoning and creativity. Integrating transversal competencies also into teaching and learning is viewed by many as the best way to achieve the expected outcomes from learners..

Tuning Project (González and Wagenaar,2003) normalized the following transversal skills; Instrumental skills: cognitive skills, methodological skills, technological skills and linguistic skills. Personal skills: individual abilities and social skills, Systemic skills: skills regarding the understanding of complex systems. The most comprehensive definition is given by European Skills/Competences, qualifications and Occupations (ESCO). "Transversal skills and competences (TSCs) are learned and proven abilities which are commonly seen as necessary or valuable for effective action in virtually any kind of work, learning or life activity. They are

“transversal” because they are not exclusively related to any particular context. (ESCO,2021). Teaching is a job to be performed in a social context and teachers have multiple roles and responsibilities to perform. Teachers who add interdisciplinary concepts and processes, serve as members of multiple service groups, relate the work of the classroom to the world outside the school and model their performance towards competent citizens are required in the 21st century. A teacher who possesses transversal skills can enhance the personal, social, cognitive and emotional skills and competencies for successful life. Transversal skills such as flexibility, adaptability, and resilience will enable teachers to thrive in a dynamic educational environment. Skills such as communication, collaboration, and critical thinking are essential for promoting student-centered learning. By encouraging students to engage in discussion and collaborate with their peers, teachers can help students to develop these skills. Transversal skills such as self-directed learning, curiosity, and a growth mindset are essential for promoting lifelong learning.

Transversal competences call for new ways of learning and teaching which go beyond conventional subject boundaries, and educational decision makers have become acutely aware of this reality. (Tilea, 2015). Employers of all sectors get their initial education and training from schools. If the schools have proper policies and strategies to develop linguistic skills, digital skills and entrepreneurial skills, thinking skills and social skills naturally the students become equipped to meet the demands of the dynamic job market. Institutions which offer educational programmes that allow our students to have the best opportunities to gain employment and develop their transferable skills are needed for harnessing the entrepreneurial, research, creative, enterprising skills of our learners. Hence the development of frameworks and tools to operationalize transversal skills in education is a major responsibility of all governments.

Methodology

The present study is aimed at evolving a comprehensive set of transversal competences significant for teacher education programmes. Development of these competences are to be ensured in all teacher education courses. Major documents on transversal competences published globally were analyzed to list down the relevant competences. The curriculum of B.Ed. proposed by National Council for Educational Training and Research (NCERT,2014) which is the base of all B.Ed. Curriculums of India is reviewed in terms of the provisions to learn and practice transversal competences. The primary list containing 42 skills were circulated among 22 teacher educators to choose the most appropriate transversal skills to be ensured

through teacher education programme. Based on the responses and suggestions, a competency grid was prepared. Six experts in Education reviewed it and thus a final grid was formed. Using a rating scale for teacher educators, the adequacy of teacher education programme was analyzed by collecting the responses from 80 teacher educators. The results are discussed below.

Findings

All universities of India follow two-year B.Ed. curriculum based on the framework proposed by NCERT. It claims that the major changes of the two-year curriculum include components for professional development. Health, Yoga and Physical Education, Gender School and Society and Creating an Inclusive School, have been assigned a prominent place in the course structure by making them compulsory core courses as part of the first component, that is, Perspectives in Education. The component 'Engagement with the Field' includes both school internship and Enhancing Professional Capabilities courses. Recognizing the importance and need of using ICT as a pedagogical tool, it has been included in the curriculum of first semester. In addition, there are three other EPC courses namely, Arts in Education, Reading and Reflecting on Texts and Understanding the Self. All these courses have a strong component of practicum and are expected to enhance the competencies of teachers they need for working as professionals i.e., working as reflective practitioners, researchers and generators of knowledge in the field of education and pedagogy (NCTE.2016). These components are helpful for getting awareness regarding professional competencies. The professional competencies included in the curriculum doesn't mention transversal competences and its development. However, the curriculum doesn't ensure that the future teachers become competent in applying all the significant skills.

Analyzing the various documents in transversal skills published during the period 2006 to 2019, Dr.Martin Noack (2021) modified the ESCO: European Skills/Competences, qualifications and Occupations to three layers. Core, Mantle and Crust with 24 clusters of skills. Based on the highly comprehensive Noack framework, a competency grid was prepared and distributed among 22 teacher educators to choose and categorize according to the relevance in teaching career. The selected competences in the order of percentage of priority, categorized to three; Core competencies, Personal competencies and social competencies. Core competencies are the most essential competencies for success in any profession; especially in teaching. Language, numeracy and digital skills are needed for all. But advanced literacy indicates the best use of language, numbers and digital technology that leads to effective communication. Such refined and accurate communication is a prerequisite for effective teaching.

In classrooms or in any other workplace, the purpose of meaningful communication is to enhance thinking for innovative applications. Hence thinking skills need to be placed in the core skills. Those skills are (i)Critical Thinking (ii) Creative Thinking (iii) Problem solving (iv) Reflective thinking and (v)Decision Making

The second category deals with personal competencies; classified to self-management in the emotional field and self-management in the physical field. Struggles related to social anxiety, self-worth, handling of social media and interpersonal conflicts endanger the future of humanity itself. Emotional competencies are vital for personal success and professional performance. Hence the emotional competencies that fosters self-management are identified as (i)Self-confidence (ii)Impulse control (iii)Self-discipline (iv) Intrinsic motivation (v) coping with stress and (vi) Time management. Health enhancing physical environment, physical activity efforts and nutrition are integral for sustaining self-efficacy of individuals. (WHO,2005). So physical competencies related to self-management includes(i)Health responsibility(ii)Physical activity (iii) Nutritious food and (iv) Hygiene.

The social competencies of a teacher determine the professional efficiency. This includes the career management competencies of interpersonal relationship and social system management. The traits that underpin interpersonal relationship are i) Civility (ii) Building relationships (iii)Teamwork and (iv) Conflict management. While performing in a social environment, social system management is increasingly important in today's complex and interconnected society. Teachers need to navigate the social systems within and around them, and contribute to a more sustainable, equitable, and prosperous society. The social system management competencies help to maintain harmonious relationship with people, places and materials. These traits include (i) Cultural competence (ii)Social sensitivity (iii) Civic responsibility (iv)Financial discipline (v)Entrepreneurial skills and (vi)Environmental responsibility and (vii)Environmental responsibility. Thus, three core competencies with six subcategories of twenty-eight traits forms the competency grid for teachers. All these competencies are to be transferred in the classrooms through various curricular and cross curricular interventions for equipping learners for facing the challenges.

Fig 1 The Teacher’s Transversal Competency Grid



The draft competence grid is circulated among five experts in the field of education. All opined positively endorsing the importance of these competence among teachers with suggestions for implementing it for all academics. Thus, the final framework is prepared as above in fig 1.

The teacher educator’s perception regarding the adequacy of teacher preparation programme in developing these skills among prospective teachers is analyzed and the findings are given in the following tables.

Table 1. Adequacy of teacher preparation programme in developing Core Competencies among prospective teachers.

S. No	Competency	Fully adequate (%)	Partially adequate (%)	Not Adequate (%)
1	Language	43.75	37.5	18.75
2	Numeracy	56.25	37.5	6.25
3	Digital	65	22.5	12.5
4	Critical thinking	62.5	23.75	13.75
5	Creative thinking	72.5	26.25	1.25
6	Problem solving	61.25	27.5	11.25
7	Reflective thinking	68.75	18.75	12.5
8	Decision making	63.75	23.75	12.5

Table 1 shows that teacher educators have the opinion that the curriculum is helpful to some extent in developing creative thinking, reflective thinking, decision making, problem solving and critical thinking (>60%). The inadequacy of the curriculum in developing language skills (43.75%) is a major issue to be emphasized.

Table 2. Adequacy of teacher preparation programme in developing Personal Competencies among prospective teachers

S. No	Competency	Fully adequate (%)	Partially adequate (%)	Not Adequate (%)
1	Self confidence	75	18.75	6.25
2	Impulse control	37.5	37.5	25
3	Self-discipline	37.5	35	27.5
4	Intrinsic motivation	40	40	20
5	Coping with stress	15	13.75	71.25
6	Time management	30	37.5	32.5
7	Health responsibility	43.75	12.5	43.75
8	Physical Activity	31.25	35	33.75
9	Nutritious food	33.75	27	39.25
10	Hygiene	93.75	6.25	0

Table 2 shows that the curriculum is adequate to develop self-confidence (75%). However, the curriculum is not satisfactory in developing stress coping skills, time management, impulse control, self-discipline, intrinsic motivation and physical health management skills.

Table 3 Adequacy of teacher preparation programme in developing Social competencies among prospective teachers

S. No	Competency	Fully adequate (%)	Partially adequate (%)	Not Adequate (%)
1	Civility	75	18.75	6.25
2	Building relationships	77.5	15	7.5
3	Teamwork	85	10	5
4	Conflict management	47.5	30	22.5
5	Cultural competence	83.75	15	1.25
6	Social sensitivity	81.25	10	8.75
7	Civic responsibility	83.75	8.75	7.5
8	Financial Discipline	31.25	24.5	44.25
9	Entrepreneurial skills	45	22.5	32.5
10	Environmental responsibility	83.75	8	8.25

Table3 shows that the teacher education programme is adequate in developing teamwork, cultural competence, civic responsibility, environmental responsibility, building relationships

and civility. The curriculum is not sufficient to develop financial discipline, Entrepreneurial skills and Conflict management.

Thus, the study reveals that the teacher education programme is suitable to develop social competencies related to interpersonal management and social system management except in promoting financial discipline, entrepreneurial skills and conflict management. The personal competencies and language competencies are not properly ensured through the present teacher education programme.

Conclusion

To develop students' transversal competencies, teachers need to adopt student-centered instruction methods such as project-based learning, problem-based learning and design-based learning. Such methods equip students with the skills to learn and inquire for themselves, while also encouraging student teamwork, drawing on complex real-world problems and questions that students are concerned about and enabling lifelong learning (Schleicher, 2012) Training for transversal skills can be approached through active learning, collaborative learning, self-directed learning, coaching and mentoring, reflection and feedback. These approaches can be combined in different ways to create a comprehensive training program that meets the needs of learners and helps them develop the skills necessary for success in the 21st century. Strategies are to be planned for helping teachers to become better communicators and understand the linguistic needs of students. Future teachers should be exposed to cultural immersion experiences that help them learn about the cultures of their students. This can help them understand the cultural nuances of communication and adapt their teaching practices to better support their students.

Improving the emotional competencies of teachers is essential for creating a positive and supportive learning environment for students. This can be achieved through developing self-awareness, enhancing emotional regulation, building empathy, fostering positive relationships, developing effective communication skills, implementing stress management strategies, and providing ongoing support. Teachers need to learn how to integrate transversal competencies across the traditional academic curriculum and, in some contexts, deliver these competencies as standalone subjects in the classroom and/or as extra-curricular activities outside the classroom (Voogt and Roblin,2012). Being the key stone of personal development, the transversal skills are to be integrated in the teacher preparation programmes. Hence, teacher preparation programs need revamping by current research on effective teaching practices, educational psychology, learning sciences and skill enhancement.

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