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What's New for 'Adult Education' in National Education Policy 2020? Some Critical Reflections

• M. V. Lakshmi Reddy¹

Abstract

Adult education is an important aspect of education, mandated by the country's Constitutional provisions and education policies. However, when the Constitutional directive for free and compulsory education to the citizens receives inadequate attention by the State and when the national education policies and programmes including adult education are not implemented fully in letter and spirit, it is quite natural that the processes of amendments, reviews and revisions of the same do happen periodically, if not with definite periodicity. At the same time, the latest developments in the field of (adult) education at global and national levels also do speed up these processes. Nevertheless, the success or otherwise of the efforts in education in general and adult education in particular, depends ultimately upon the vision, commitment and contributions of all those involved at all levels of policy-making and implementation, and more so those at the helm of affairs. An attempt is made here to highlight certain critical points of the educational journey of India in a crisp manner with special reference to the unfulfilled constitutional mandate for education, and the education policies that have cascaded over decades leading towards a realization of the need for the development of national curriculum frameworks for education, including adult education and the structural integration involving the formal and non-formal educational institutions at different levels across the country. It also seeks to highlight the crucial issues and aspects of institutionalization of adult education that require greater attention of the concerned towards its integration on long-term and permanent basis across all levels of the educational system in the country in the light of National Education Policy 2020.

Keywords: *adult education, lifelong learning, policy making and implementation, curriculum frameworks, institutionalisation, structural integration, professionalisation, critical reflections.*

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Reflections on Major National Level Commitments, Successes and Failures in the Educational Front

While independent India's journey started on 15th August 1947, the Constitution of India was adopted by the Constituent Assembly on 26th November 1949 which came into force on 26, January 1950. In 2022, after a long journey of 75 years since its Independence, India celebrated "*Azadi Ka Amrit Mahotsav*" to commemorate its freedom movement and freedom fighters. Meanwhile, the Constitution of India has got amended more than a hundred times (as of October 2021, there have been 105 amendments) since its inception. From an educational point of view, out of all these, the Constitution (Eighty-sixth Amendment) Act, 2002 is of great significance, whereby Article 21A (Right to Education) got inserted after Article 21 as a fundamental right. A new article (Provision of early childhood care and education to children below the age of six years) substituted Article 45, and Article 51A got an additional clause (k), added to it after clause (j), as a fundamental duty. Consequently, "The Right of Children to Free and Compulsory Education Act, 2009" is enacted, the spirit of which actually extends the right to free and compulsory education beyond the age group of six to fourteen. Thus, it encompasses the 'right of adults' to similar education, particularly for those adults who did not have or lost the opportunity for education and crossed the age for formal education, and now feel a need for pursuing it. Salutes to all the national endeavours with all the mixed results!

In the same long journey, the country witnessed a few national policies on education, viz. 1968, 1986 and the revised 1992, and is now witnessing National Education Policy 2020 (NEP 2020). All those people who remained outside or had dropped out or discontinued from conventional education system effectively formed the target groups for non-formal education or adult education of different levels and kinds. Starting with no national education policy, no common pattern of education with complex structure [(10/11)+(1/2)+(2/3)] and no common curriculum frameworks during 1947-67, the system moved on to 10+2+3 pattern/structure of education with common Curriculum for Ten-Year School: A Framework, 1975 during 1968-85 under 1968 policy, and to re-confirmed 10+2+3 structure during 1986-2019 under 1986 / 1992 policies, with National Curriculum for Elementary and Secondary Education: A Framework, 1988, National Curriculum Framework for School Education, 2000 and a National Curriculum Framework, 2005. Though 'Early Childhood Care and Education' and 'Adult Education' were stressed in these policies, there were no separate Curriculum Frameworks mandated/developed for these two areas since independence till 2020. The significance of NEP 2020 is that it mandated development of separate National Curriculum Frameworks for both 'Early Childhood Care and

Education’ and ‘Adult Education’ (MHRD, 2020:3). NEP 2020 emphasizes: “The highest priority of the education system will be to achieve universal foundational literacy and numeracy in primary school by 2025. The gap between the current state of learning outcomes and what is required must be bridged through undertaking major reforms that bring the highest quality, equity, and integrity into the system, from early childhood care and education through higher education. The aim must be for India to have an education system by 2040 that is second to none, with equitable access to the highest-quality education for all learners regardless of social or economic background”. Grand salutes to such a welcome policy commitment to highest-quality education for all learners!

The current policy further states: “The ability to read and write, and perform basic operations with numbers, is a necessary foundation and an indispensable prerequisite for all future schooling and lifelong learning. However, various governmental, as well as non-governmental surveys, indicate that we are currently in a learning crisis: a large proportion of students currently in elementary school — estimated to be over 5 crore in number -- have not attained foundational literacy and numeracy, i.e. the ability to read and comprehend basic text and the ability to carry out basic addition and subtraction with Indian numerals” (MHRD, 2020: 8). Given such state of affairs in the matter of learning outcomes of formal school students, it is needless to talk about the learning outcomes of target groups of adults of literacy and adult education programmes and missions of various kinds starting from Social Education Programme (SEP) through Farmers’ Functional Literacy Programme (FFLP), Workers’ Education, National Adult Education Programme (NAEP), National Literacy Mission (NLM), Saakshar Bharat (SB), and Padhna Likhna Abhiyan (PLA), among others, during the same journey. As per United Nations report (UNESCO, 2014, p.71): “India has by far the largest population of illiterate adults, 287 million, amounting to 37% of the global total.” Nevertheless, with just about 2 in 10 (18.33%) Indians being literate in 1950, now in 2022, the figures turned into opposite, i.e. 8 in 10 (77.70%) are literate (timesofindia.com), which is, no doubt, a great achievement. And, NEP 2020 aims to achieve 100% literacy in a few years ahead. It is truly a laudable goal aimed at raising the base-level to fully literate-India for moving towards irreversible, advanced adult education for all in the country.

Nature, Character and Potential of AE Institutional Structure in India during 1947-2019: An Overview

It is worthwhile here to have a brief overview of the potential structures of the past that played a crucial role in the promotion of adult education in India.

During 1947 to 1967: There was no uniform pattern of school education. So, it was too early to think of any common national curriculum framework for school education, let alone any such thing for adult education. However, the introduction of five-year plans began to pay significant attention to the promotion of adult education and there was a clear display of the Government's initiative to promote adult education in the form of social education to begin with. Janata Colleges, Community Centres, Farmers' Clubs and Mahila Samitis were launched. Social Education Officers' Training Centres took care of the training of the functionaries of social education programme at the grassroots level, while National Fundamental Education Centre (NFEC), established in 1956 discharged the functions of training, orientation and research, material production, clearing house activities, etc., in the field of adult education. NFEC was subsequently converted into Department of Non-Formal Education (DNFE) in the National Council of Educational Research and Training (NCERT). In the voluntary sector, Indian Adult Education Association (IAEA) which was established in 1938 as a voluntary organization continued to play its dynamic role in the field of adult education.

During 1968-1985: This period witnessed the first ever National Policy on Education 1968, which emphasized adoption of a broadly uniform educational structure (10+2+3 pattern) in all parts of the country, with the higher secondary stage of two years being located in schools, colleges or both according to local conditions. The Curriculum for Ten-Year School: A Framework, 1975 (NCERT, 1975) was developed covering 10 years of school education. The policy also laid emphasis on spread of Literacy and Adult Education. There were significant developments in the form of social education, farmers' education, workers' education, and education for youth, among others, for promotion of functional literacy linked with development. The Department of Non-Formal Education (DNFE) was taken over by Ministry of Education and Culture and renamed it as Directorate of Adult Education (DAE), which, in fact, was a turning point in the history of adult education in India because a separate resource support structure for adult education came into existence at the national level.

Subsequently, state and district level resource support structures such as State Resource Centres (SRCs) at state level, and District Resource Units (DRUs) as a part of District Institutes of Education and Training (DIETs) at district level emerged in the field of adult education. Of course, it is a widely known fact that a lot remained to be done to make the DRUs and DIETs fully functional in many districts across the country. The Departments of Adult, Continuing Education and Extension (DACEEs) have been established in certain Universities. Many Non-Governmental

Organisations (NGOs) came into existence and received adequate support from government to play their roles in different ways in promotion of literacy, adult education and continuing education. During this period, the first ever national level programme namely, National Adult Education Programme was launched in 1978 leading to very planned development of adult education resource support structures at different levels aimed at institutionalization of adult education and enhancing their potential contribution to adult education. It has also fostered the collaboration between formal educational institutions such as schools, colleges and universities and other implementing agencies of adult education. It was the period of collaboration of adult education institutions with various institutions in different sectors and thus brought in reforms in the field of adult education.

During 1986-2019: The National Policy on Education, 1986 (NPE, 1986) and the Programme of Action (POA) 1992 re-confirmed the common pattern of education (10+2+3) for the entire country, which came into operation extensively during this period. Three different national curriculum frameworks for school education followed in tune with the relevant policy requirements/directives. These are: National Curriculum for Elementary and Secondary Education: A Framework (NCERT, 1988) developed in response to NPE 1986; National Curriculum Framework for School Education (NCERT, 2000) as per the mandate of POA 1992; and National Curriculum Framework 2005 (NCERT, 2005) in the light of the report, “Learning Without Burden” (1993). Though ‘Early Childhood Care and Education’ and ‘Adult Education’ were stressed in all these policies, no separate Curriculum Frameworks were mandated/developed for these two areas in the process of their implementation. Thus, as far as adult education was concerned, there were no curricular frameworks for adult education or for training of adult educators/functionaries at different levels.

Of course, there was no dearth of programme-specific orientation and training of the functionaries by the specific resource support structures at different levels – DAE, SRCs, DIETs/DRUs, and Jana Shikshan Nilayams (JSNs), among others. National Institute of Adult Education (NIAE) was established in 1991 at national level, subsequently Jan Shikshan Sansthan (JSSs) at district level, Continuing Education Centres (CECs) at grassroots level were also established. More than hundred DACEEs came into existence at university level during this period. As a result, ample variety of literacy materials in the form of primers, including Improved Pace and Content of Learning (IPCL), post-literacy and continuing education materials as well as audio-video programmes were developed by DAE at national level, SRCs at state level, Zilla Saksharatha Samitis (ZSSs) and DIETs/DRUs at district level and Jan Shikshan Nilayams (JSSs), among others, at grassroots level in cooperation

with and support of other agencies including voluntary organisations involved in implementation of literacy missions or adult education programmes. It was the vibrant period of intensive and extensive campaigns and operations across the entire country for promotion of basic literacy, post-literacy and continuing education among adults.

Nevertheless, most undesirable development towards the end of second decade of 21st century is that the number of DACEEs got reduced drastically, and most of the existing ones have also been renamed as Departments of Lifelong Learning and Extension (DLLEs). Further, crucial resource support structures such as SRCs at state level received a death blow. Thus, as far as institutionalization of resource support structures is concerned, the absence of SRCs at state level is a big lacuna at present in the field of adult education. Establishment of DRUs as part of DIETs at district level remained an unfulfilled dream for decades.

Above all, the very nomenclature of adult education programmes too transitioned from National Literacy Mission to Saakshar Barat and, finally, to Padhna Likhna Abhiyan. Such 'Abhiyan' is conceptually a retrogressive step as it reduced the very concept of literacy to reading and writing (Padhna Likhna in Hindi) that purged arithmetic from literacy (Saaksharatha). Of course, Equivalency programmes with some acceptable mechanism for recognition of prior learning have gradually become popular during this period. Equivalency Programmes for Basic Education popularly called the Open Basic Education (OBE) has been on offer for both children in the 6-14 age-group and out-of-school adults in the 15+ age-group. It is implemented at the national level through the National Institute of Open Schooling (NIOS) and at state level by the different State Open Schools (SOSs) across the country. This Equivalency programme (OBE) has three levels, A, B and C, which are equivalent to classes 3, 5 and 8 respectively of the formal education system.

'Adult Education and Lifelong Learning' under NEP 2020: Some glimpses of the potential offerings

Here, it is appropriate to look at some of the general provisions of NEP 2020 that have implications for adult education, and Chapter 21 of NEP 2020 which specially focuses on 'adult education and lifelong learning'.

Current global trend in education is to promote lifelong learning. India too posited its new educational policy in the context of lifelong learning. For instance, the global education development agenda reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 seeks to "ensure inclusive

and equitable quality education and promote lifelong learning opportunities for all” by 2030. Such a lofty goal will require the entire education system to be reconfigured to support and foster learning, so that all the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be achieved (MHRD, 2020: 3).

Early Childhood Care and Education (ECCE) actually forms the true basis not only for childhood education but also for adult education and lifelong learning as it will have a strong effect on the education of adults in their later life. “The architecture of the brain forms from the prenatal period to age 5, and so this is an important stage for developing cognitive and socio-behavioural skills” (World Bank, 2018). Under NEP 2020, in the new 5+3+3+4 structure, a strong base of ECCE is also included, which is aimed at promoting better overall learning, development, and well-being (MHRD, 2020: 7). Further, the Policy states: The above four stages are purely curricular and pedagogical, designed to optimize learning for students based on the cognitive development of children; they will inform the development of National and State curricula and teaching-learning strategies at each stage, but parallel changes to physical infrastructure will not be required (MHRD, 2020: 12). But the emerging reality in implementation is already treading all together a different path in the field. For example, in the state of Andhra Pradesh which has taken a lead in implementing NEP 2020, there exist three types of institutions in the new education system – Pre-Primary Schools (PP1 and PP2), Foundational Schools (PP1, PP2, Preparatory Class I, Classes 1 and 2) and Secondary Schools (Classes 3 to 10/12). What sort of names of schools would appear in other states is interesting to watch!

Nevertheless, what is important to note under the new education policy is that the structure of new education system has great relevance to adult education infrastructure at grassroots level as the Government of India intends to use school systems also to reach out to the maximum number of non-literates under New India Literacy Programme (NILP). In addition, with growth in life expectancy and old-age population including the active superannuating people and to be in tune with the emerging global trend, it is also time to establish University of the Third Age (U3A) to enlist their effective engagement for their own welfare and of the society, as no prior qualifications and no subsequent certificates feature in this approach to ‘learning for its own sake’. This type of learning from ECCE through U3A, which can ‘prolong active life in old age’ also has the true potential to make lifelong learning a perfect reality engaging the people of all the ages in learning throughout the length and breadth of their lives.

Aligned with the recommendations of National Education Policy 2020 (Para 5.23) a new centrally sponsored scheme on ‘Education for All’ (Adult Education) –

New India Literacy Programme (NILP) has been designed. The scheme will cover five components of 'Education for All' as recommended by NEP, i.e. (i) Foundational Literacy and Numeracy, (ii) Critical Life Skills, (iii) Basic Education (Equivalency), (iv) Vocational Skill Development, and (v) Continuing Education. The scheme will use IT-Based platforms and school systems to reach out to the maximum number of non-literates. It is expected to cover 5 crore non-literate adults, in the age group of 15 years and above in both online and offline modes in the country within five years from 2021-22 to 2025-26 (Government of India, 2021: 102).

So, the trend expected to emerge in the field of adult education under the NEP 2020 is to integrate adult education infrastructure with formal school system and higher education institutions. For such integration of adult education with school system, it is essential to ensure that there comes into existence the prescribed structure of education (5+3+3+4) with uniform nomenclature of schools with appropriate combination of different levels/stages — Foundational School (3 years Anganwadi/Pre-school/Balvatika + classes 1-2), Preparatory School (classes 3-5), Middle School (classes 6-8), Secondary School (classes 9-12) across the country. The well-established pattern of 10+2+3 education system along with present nomenclature of schools as exists today – Primary (classes 1-5), Elementary (classes 1-8), Upper Primary/Middle (classes 6-8), Secondary (classes 1-10), Senior Secondary (classes 1-12), Intermediate/Junior College (classes 11-12) – calls for some standard realignment with new uniform nomenclature across the country. Accomplishment of such realignment of the school system with uniform nomenclature of schools is very crucial as it is also expected to reach out to the maximum number of non-literates through adult education.

Further, NEP 2020 intends to broad-base school education across all modes. Here, it is essential to note that school education includes equivalent adult education through ODL mode as well. "To facilitate learning for all students, with special emphasis on Socio-Economically Disadvantaged Groups (SEDGs), the scope of school education will be broadened to facilitate multiple pathways to learning involving both formal and non-formal education modes. Open and Distance Learning (ODL) Programmes offered by the National Institute of Open Schooling (NIOS) and State Open Schools will be expanded and strengthened for meeting the learning needs of young people in India who are not able to attend a physical school. NIOS and State Open Schools will offer the following programmes in addition to the present programmes: A, B and C levels that are equivalent to Grades 3, 5 and 8 of the formal school system; secondary education programmes that are equivalent to Grades 10 and 12; vocational education courses/programmes; and adult literacy and life-

enrichment programmes. States will be encouraged to develop these offerings in regional languages by establishing new/strengthening existing State Institutes of Open Schooling (SIOS)” (MHRD, 2020: 10-11). All adults who missed out education in their school age will have the full opportunity to accomplish the same now through NIOS and SOSs.

As per NEP, 2020, development of NCFs and SCFs (NEP Paras 1.3, 4.30, 5.28, 21.5) is very crucial for implementation of the policy. The four National Curriculum Frameworks, viz, National Curriculum Framework for Early Childhood Care and Education (NCFECCE) — in two parts, namely, a sub-framework for 0-3 year-olds, and a sub-framework for 3-8 year-olds, National Curriculum Framework for School Education (NCFSE), National Curriculum Framework for Teacher Education (NCFTE), and National Curriculum Framework for Adult Education (NCFAE) will provide broad guidelines in the area of ECCE, School Education, Teacher Education, and Adult Education for quality and equitable education. The most surprising lapse that needs to be noted here is that, unlike NCFTE, there is no separate National Curriculum Framework for Adult Educators (instructors/teachers) who are to work at Adult Education Centres (AECs) at the community level and those to serve at AECs to be set up in HEIs. Further, to note: “Vertical mobility of teachers based on merit will also be paramount; outstanding teachers with demonstrated leadership and management skills would be trained over time to take on academic leadership positions in schools, school complexes, BRCs, CRCs, BITEs, DIETs as well as relevant government departments” (MHRD, 2020: 22). However, it does not provide for any such job security and mobility of adult education instructors/teachers at the grassroots level, and also adult educators/educationists at higher levels.

Reflections on Chapter 21 under Part-III of NEP 2020: This chapter focuses on ‘adult education and lifelong learning’ as two key focus areas. The provisions (MHRD, 2020: 51- Paras 21.1, 21.2, 21.3 and 21.4) highlight: (i) the opportunity to attain foundational literacy, obtain an education, and pursue a livelihood as basic rights of every citizen and the significance of literacy and basic education vis-à-vis the progress of individuals, society and the nation; (ii) innumerable disadvantages that a non-literate member of a community suffers in different fronts in life and lists abilities required to overcome these disadvantages as an illustrative list of outcomes to be achieved through adoption of innovative measures for adult education; (iii) volunteerism and community involvement and mobilization as key success factors of (a) adult literacy programmes, in conjunction with political will, organizational structure, proper planning, adequate financial support, (b) high-quality capacity building of educators and volunteers, (c) contribution of successful literacy

programmes to the growth of literacy among adults, and (d) the increased demand for education for all children and to the greater community contribution to positive social change; and (iv) the need for strong and innovative government initiatives for adult education to facilitate community involvement and the smooth and beneficial integration of technology to expedite the aim of achieving 100% literacy.

What can be observed from these provisions is that the above conceptualization of literacy and basic education does not differ much from what has been defined in NAEP document or subsequently in NLM or Saakshar Bharat documents. However, what matters is the manner in which the policies are implemented. For instance, why was National Institute of Adult Education (NIAE) established in 1991 (in violation of the clearly laid down policy provision leading to litigation and finally to its closure as well) and also rendered it 'erstwhile' (including demolition of the very building where NIAE was located/established)? Was there any accountability fixed on the concerned implementers who flouted the policy provisions in a blatant manner? Why is it that the state-level resource support structures in adult education such as SRCs, which were strengthened during the NAEP period and 1986 policies, and POA 1992, have been weakened and made defunct in the field at present? Whether such undoing with NIAE and the SRCs was provided for in the very policies or was it done by any amendments to the policy/policies? If not, why and how all these arbitrary undoing of such structures did happen? In other words, why the same kind of consultation process as was done while making the policy was not followed while closing down or rendering them defunct? Now also (under the extant new policy), can there be any guarantee that there will be effective implementation of NEP 2020 as far as Chapter 21 (adult education and lifelong learning) is concerned? One has to wait and watch how the integration of adult education infrastructure with the formal school system and HEIs proceeds and with what kind of consequences and accountability on the concerned at the helm of (new) affairs.

When we read: "Strong and innovative government initiatives for adult education to expedite this all-important aim of achieving 100% literacy" (MHRD, 2020: 51, Para 21.4) in conjunction with Paras 21.5, 21.6, 21.7, 21.8, 21.9 and 21.10, some hope lurks. First, an outstanding adult education curriculum framework will be developed by a new and well-supported constituent body of the NCERT that is dedicated to adult education, so as to develop synergy with and build upon NCERT's existing expertise in establishing outstanding curricula for literacy, numeracy, basic education, vocational skills, and beyond. The curriculum framework for adult education will include at least five types of programmes, each with clearly defined outcomes: (a) foundational literacy and numeracy; (b) critical life skills (including financial literacy, digital literacy, commercial skills, health care and awareness, child care and

education, and family welfare); (c) vocational skills development (with a view towards obtaining local employment); (d) basic education (including preparatory, middle, and secondary stage equivalency); and (e) continuing education (including engaging holistic adult education courses in arts, sciences, technology, culture, sports, and recreation, as well as other topics of interest or use to local learners, such as more advanced material on critical life skills). The framework would keep in mind that adults in many cases will require rather different teaching-learning methods and materials than those designed for children (MHRD, 2020: 51-52, Para 21.5).

These provisions are not new in any way when compared with the earlier programmes such as: Literacy programmes (Total Literacy and Post-literacy), Equivalency Programmes (EPs), Income Generating Programmes (IGPs), Quality of Life Improvement Programmes (QLIPs), and Individual Interest Promotion Programmes (IIPPs). If at all there is any difference, it is all in renaming and re-ordering of these programmes with descriptions of the components that go into them. However, one can only hope that these innovative initiatives will put in public domain at least all the (basic) literacy, post-literacy and continuing education materials hitherto developed and used by different SRCs, among others, as a part of implementation of literacy and adult education programmes/missions since 1960s till date in the form of a dedicated portal for the benefit of adult learners, as a part of comprehensive e-resource bases under the new policy!

Second, suitable infrastructure will be ensured so that all interested adults will have access to adult education and lifelong learning. A key initiative in this direction will be to use schools/ school complexes after school hours and on weekends and public library spaces for adult education courses which will be ICT-equipped when possible and for other community engagement and enrichment activities. The sharing of infrastructure for school, higher, adult, and vocational education, and for other community and volunteer activities, will be critical for ensuring efficient use of both physical and human resources as well as for creating synergy among these five types of education and beyond. For these reasons, Adult Education Centres (AECs) could also be included within other public institutions such as HEIs, vocational training centres, etc. (MHRD, 2020: 52, Para 21.6). But the policy is silent about who will man these centres, and what kind of (additional) qualification such as Post-Graduate Certificate, Post-Graduate Diploma or Master's in Adult Education is required to be possessing/obtained by them for effective implementation of adult education.

Third, the instructors/educators will be required to deliver the curriculum framework to mature learners for all five types of adult education as described in the Adult Education Curriculum Framework. These instructors will be trained by the

National, State, and district level resource support institutions to organize and lead learning activities at Adult Education Centres, as well as coordinate with volunteer instructors. Qualified community members including from HEIs as part of each HEI's mission to engage with their local communities will be encouraged and welcomed to take a short training course and volunteer, as adult literacy instructors, or to serve as one-on-one volunteer tutors, and will be recognized for their critical service to the nation. States will also work with NGOs and other community organisations to enhance efforts towards literacy and adult education (MHRD, 2020: 52, Para 21.7).

As a part of this initiative, though National Centre for Adult Literacy (NCAL) has been established in NCERT, if similar structures are established in the State and district level formal institutions on permanent basis, that will be a fulfillment of the long-awaited boon to the field of adult education. Of course, in this context, all the Departments of Adult, Continuing Education and Extension (DACEEs) and/or the renamed Departments of Lifelong Learning and Extension (DLLEs) in different Universities also need to play an active and dynamic role to address the issues of professionalisation of adult education and protect the interests of their products (alumni) as well as the disciplines of 'adult education' and 'lifelong learning' by paving the way for the establishment of similar Departments in all the colleges across the country.

Fourth, all efforts will be undertaken to ensure the participation of community members in adult education. Social workers/counsellors travelling through their communities to track and ensure the participation of non-enrolled students and dropouts will also be requested, during their travels, to gather data of parents, adolescents, and others interested in adult education opportunities both as learners and as teachers/tutors. The social workers/counsellors will then connect them with local Adult Education Centres (AECs). Opportunities for adult education will also be widely publicized, through advertisements and announcements and through events and initiatives of NGOs and other local organisations (MHRD, 2020: 52, Para 21.8). It calls for active involvement of community-based organisations with community-specific mechanisms, the modalities of which are required to be worked out in clear terms for ensuring such participation. In this context, the now defunct SRCs in different states, which find no mention in the new policy, can also play their role as voluntary organisations by forming a 'National Consortium of SRCs' and by encouraging formation of 'State Consortium of NGOs' in each state and 'District Consortium of NGOs' in each district to chalk out their self-styled dynamic agenda to continue to serve as a crucial resource support system of its own kind and character to demonstrate their latent potential in appropriate manner in the larger interest of the nation.

Fifth, improving the availability and accessibility of books is essential to inculcating the habit of reading within our communities and educational institutions. This Policy recommends that all communities and educational institutions — schools, colleges, universities and public libraries — will be strengthened and modernized to ensure an adequate supply of books that cater to the needs and interests of all students, including persons with disabilities and other differently-abled persons. The Central and State governments will take steps to ensure that books are made accessible and affordable to all across the country including socio-economically disadvantaged areas as well as those living in rural and remote areas. Both public and private sector agencies/institutions will devise strategies to improve the quality and attractiveness of books published in all Indian languages. Steps will be taken to enhance the online accessibility of library books and further broaden basing of digital libraries.

For ensuring vibrant libraries in communities and educational institutions, it will be imperative to make available adequate library staff and also devise appropriate career pathways and Continuous Professional Development (CPD) for them. Other steps will include strengthening all existing libraries, setting up rural libraries and reading rooms in disadvantaged regions, making widely available reading material in Indian languages, opening children's libraries and mobile libraries, establishing social book clubs across India and across subjects, and fostering greater collaborations between education institutions and libraries (MHRD, 2020: 52, Para 21.9). These stipulations are also not new, and effective implementation of such provisions is long-awaited, as the same did not become a reality during the periods of the previous policies. However, if these provisions are translated into a reality on a sustainable basis at least during this policy period, that will be a remarkable contribution to the field of adult education.

Finally, technology will be leveraged to strengthen and even undertake the above initiatives. Quality technology-based options for adult learning such as apps, online courses/modules, satellite-based TV channels, online books, and ICT-equipped libraries and Adult Education Centres, etc., will be developed, through government and philanthropic initiatives as well as through crowd sourcing and competitions. In many cases, quality adult education could thereby be conducted in an online or blended mode (MHRD. 2020: 52-53, Para 21.10). While the quality technology-based options are always attractive, ultimately it is only effective implementation of this kind of provisions that will have a long-lasting impact on the promotion of lifelong learning among all adult learners in this ICT-driven world. Further, recognition and accreditation of prior learning of all categories of adults through effective integration of the formal, non-formal and informal systems of learning and education only can provide an effective mechanism for the realization of their dreams of lifelong learning.

In view of all the above, the significant place of adult education in NEP 2020 needs to be understood mainly from the critical point of view of its intended integration with formal educational institutions at different levels. “Fundamental principles of NEP 2020 include: synergy in curriculum across all levels of education from early childhood care and education to school education to higher education” (MHRD, 2020: 5). Towards this end, the policy exhaustively provides for not only national curriculum frameworks for different levels of school education but also for teacher education. To be precise, in addition to providing for NCFTE, it provides for training of workers/teachers of ECCE: (i) Current Anganwadi workers/teachers through a systematic effort in accordance with the curricular/pedagogical framework (NCPFECCE); (ii) Anganwadi workers/teachers with qualifications of 10+2 and above with a 6-month certificate programme in ECCE; and (iii) Those with lower educational qualifications with a one-year diploma programme covering early literacy, numeracy, and other relevant aspects of ECCE. On the other hand, though the policy also provides for NCFAE, it does not provide for any specific curriculum framework for training of adult educators/instructors, nor it provides for integration of their training components with NCFTE.

In other words, integration of ‘adult education’ and ‘lifelong learning’ components with NCFTE at all levels is a critical point worth serious consideration by all the teacher educationists and adult educationists and other concerned implementers of the policy. For instance, the 4-Year Integrated Teacher Education Programme (ITEP), a dual-major holistic Bachelor’s degree offering B.A. B.Ed., B. Sc. B. Ed., and B.Com. B.Ed. will be offered from the academic session 2022-23. By 2030, ITEP will be offered by multidisciplinary institutions and will become the minimal degree qualification for school teachers. Further, NEP 2020 proposes diverse teacher education programmes, both pre-service and in-service, including B.Ed. (2-year and 1-year duration), M.Ed., and Ph.D. degrees in education, in all multi-disciplinary institutions. Multidisciplinary higher education institutions offering the 4-year in-class integrated B.Ed. programme and having accreditation for ODL may also offer high-quality ITEP and B.Ed. programmes in blended or ODL mode. But regarding adult education, though it provides for NCFAE, it is silent about the curricular frameworks for adult educators/instructors. Since teaching adults is tougher than teaching children in the school, it would be more meaningful if NCTE can make it mandatory for all the institutions offering any of the teacher education programmes mentioned above, i.e. 4-Year ITEP, B.Ed. (2-year and 1-year duration), and M.Ed. to incorporate ‘adult education’ and ‘lifelong learning’ as compulsory courses in their curriculum.

Further, such integration would help in effective utilization of the services of the trained teachers during evenings, weekends and holidays for teaching of adults and

the community. In addition, even in all Bachelor of Arts (General Education), and Master of Arts (Education) programmes, which are not professional like B.Ed./M.Ed., it is more meaningful to mandate inclusion of the two courses — ‘Adult Education’ and ‘Lifelong Learning’ — as compulsory courses, or at least as optional/elective courses in their programme frameworks. Such mandates by NCTE to include ‘Adult Education’ and ‘Lifelong Learning’ as compulsory courses in the case of all professional teacher training programmes (i.e. 4-Year ITEP, B.Ed. 2-year and 1-year durations), and in all non-professional programmes [i.e. Bachelor of Arts (General-Education), and Master of Arts (Education)] would strengthen not only teachers’ understanding of adult education but also their role in effective implementation of adult education and lifelong learning programmes. Adult educators and educationists can only hope such a mandate follows from NCTE which can pave the way for ever-lasting and very sound integration of adult education with school education and higher education, and also various streams of the system in the country!

As per NEP, 2020 (Para 21.5), National Centre for Adult Literacy (NCAL) has been established in NCERT which is mainly responsible for the development of Primers, other online and offline learning resources and the development of the first National Curriculum Framework for Adult Education. Accordingly, Primer for Adult education is to be developed for non-literates of 15 years and above age group. The NCAL has prepared Primers on Foundational Literacy and Numeracy (FLN) in Hindi. Process for the preparation of E-Primers, E-contents and Audio-Videos of Adult Education is also going on.

The first Primer on foundational literacy and numeracy for adult learners was prepared by NCERT and circulated to States and UTs on 30th December 2020. AE Bureau, NCAL, NIOS, and DAE will collaborate with various Ministries/Departments to prepare Teaching-Learning materials (TLM)/Primers for Critical Life Skills, Basic Education, and Continuing Education under convergence. TLM/Courses for Vocational Skills Development will be provided by the Ministry of Skill Development & Entrepreneurship for the beneficiaries of NILP (Government of India, 2021: 72). However, it would be very useful if a special portal is developed by evolving an appropriate strategy for collecting and uploading of different types of literacy, post-literacy and continuing education material, among others including various audio and video programmes developed earlier by different SRCs and other institutions in different States/UTs. Such a portal can play a promising role in sustaining, promoting and enriching the skills of adult learners.

Marching Towards International Assessment – Need for robust demonstration

When the implementation of NEP 2020 is gearing up the country to become 'Vishwa Guru' in education, it is appropriate to take note of one very important development in this context. On January 28, 2019, the Government of India (GOI) signed an agreement with the Organization for Economic Cooperation and Development (OECD) to participate in the 2021 administration of its Programme for International Student Assessment (PISA). PISA is a triennial international survey based on competency assessment that aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students in Mathematics, Science, and Reading. In the similar way, the Government of India (GOI) needs to move further to sign another agreement with the same OECD for 'Programme for the International Assessment of Adult Competencies' (PIAAC) to put Indian adult learners' skills also for testing on international footing as this survey measures adults' proficiency in key information-processing skills — literacy, numeracy and problem solving. Further, all the adults of different ages need to be enabled to promote their learning, living and working environments with gender equity and equality to move on the path of sustainable lifelong learning. Since NEP 2020 is making its strides now, it is time to subject not only 15-year-old students but also all adult learners to the respective international surveys/assessment programmes so as to enable them to compete and shine in the international arena.

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Understanding the Culture of Sports: A Study of Malabar Region in Kerala

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Abstract

Shared values, assumptions, and beliefs within a geographical area form part of culture. Sports fall under the purview of entertainment in all the definitions given to culture. What if a single sport could connect every human being in a region? What if, like religion and customs, this sport also brought people together? Then that sport itself can be called the culture of that region. This research examines the culture of sports in the Malabar region through the perspectives and experiences of professional football players. Documenting the culture of sports, the coexistence of sports and community, sports for individual benefits and as social capital, the evolution of sport in a region, and factors that favour its wide popularity, would better help showcase it and use it as a role model for the entire country. This paper tries to define sports culture as a subtheme in the definitions given to culture.

Keywords: *sports, culture of sports, Malabar.*

Introduction

“O sport, you are peace! You forge happy bonds between the people by drawing them together in reverence for controlled, organised, and self-disciplined strength. Through you, the young of the entire world learn to respect one another, and thus the diversity of national traits becomes a source of generous and peaceful emulation.”

- Pierre de Frédy, Baron de Coubertin

Football is the primary source of happiness and enjoyment for the majority of Malabar’s youth and children. Residents of Malabar consider football more than a game to them; it is intangible and challenging to convert into a state that a person can understand by reading a research paper. Nevertheless, there is a need to document

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it so that people who have not experienced it can understand how a sport and community can coexist.

Sport is an organised, competitive, and skilled physical activity which requires devotion and fair play. It is regulated with rules to display with utmost discipline. This physical activity requires skills, techniques, and sound mental health (Kulki, 2019).

Sports is an activity bound by rules and regulations. Even though it was just a leisure activity in ancient days, sports later had implications ranging from poverty alleviation to a medium for international relations. Sport is all about presenting an individual, sometimes within a team or alone within the limits of a playground.

Sport is defined differently in all definitions. Any physical activity carried out in a competitive environment demands mental or physical work, is bound by some rules and regulations, and may or may not entertain spectators. Sport has been considered an essential part of a group or a city's activity since historic and prehistoric times. Sport is both a science and an art. Well-known in classical Greece and the Roman era and epitomized in *mens sana in corpore sano* (a healthy mind resides in a healthy body), the sport has a beneficial physical, emotional, and educational impact on the individual. Sport is one of the few things that transcends social and economic barriers and brings people together. It prompts people to let go of their couches and engage in activities that demand both mental and physical work. The United Nations recognized the need for sport long ago and included it as one of the agenda to achieve sustainable development by 2030.

The United Nations Office of Sports for Peace and Development listed some unique ways to utilize sports for more extensive benefits; these are the goals that sports can contribute to achieving the SDGs.

- Sports principles such as fairness and equality can serve as examples of an economic system that relies on fair competition and promotes a level playing field. By strengthening skills and principles such as teamwork, collaboration, fair play, and setting goals, sports can teach and practice transferable job skills that encourage job readiness, productivity, and income-generating activities. Sports provide a platform to raise funds to alleviate poverty. Sports itself has grown into an international industry that provides employment opportunities directly and indirectly.
- For participation in Sports, the right to adequate food is necessary. Sport can encourage balanced diets, inform individuals about sustainable food production,

and promote better nutrition that discards foods produced by industry and replaces them with natural and healthy foods.

- Physical inactivity is the fourth risk factor for global mortality, identified by WHO. Participation in sports is the most accessible and economic countermeasure against this threat.
- Sports can encourage inclusion and promote equal participation for girls, women, and physically challenged personnel. Sports can nurture leadership skills and focus capabilities—sports and physical education help increase students' attendance in educational institutions.

Football, called soccer in some parts of the world, is a team game that acquired its current form in England in the mid-nineteenth century. Looking back to history, playing with balls, including kicking, was started in China in the third and second centuries BC. Football is played with a spherical ball, and a team consists of eleven players. It is played on a rectangular field with two goalposts at each end. Each team will try to move the ball to the opposition's post while they defend the opposition from moving the ball to their post. Two hundred teams participate in the World Cup qualifier, an international competition conducted by FIFA (the International Federation of Association Football). People in most countries admire, watch, and play football, making it the world's most popular sport.

When the Gulf Migration began, people in Malabar essentially relocated to Arabian countries in search of work. The money that flowed from there transformed the four districts that became part of Malabar. People started investing in their favorite game, which led to the introduction of day-night Seven's tournaments in every part of Malabar. It continues in this region; players from different countries come to play in seven tournaments as they realize that it offers a better income. The Sevens tournament's acceptance in Malabar is understandable by the number of spectators, and it is more than double the number coming for an Indian Super League (ISL) match in Mumbai Stadium.

Sports and Society

As a tool, sports have the potential to promote a sense of belonging in society and encourage integration between majority and minority communities. It is crucial in establishing identity and providing a mechanism for breaking down the barriers imposed based on socio-cultural identities. Sports associations, with equal inclusion and appreciation, are considered to provide new radical environments (Rao, 2014). Sports have been recognized as one of the most relevant institutions for creating

inclusivity. In Rwanda, a country in Africa, when the government planned to rehabilitate people, the tension between the two ethnic groups, Tutsi and Hutu, was one of the most threatening problems.

The Rwandan government invested a large share in sports, which showed a change in a positive direction. The results were gradual. To achieve a goal in sports, one must be disciplined and show team spirit. Social inclusion is the process of creating a fair and equitable system that makes it easier for people to choose and engage in a wide range of activities, including sports (Frisby and Ponic, 2013)

Sports can unite the community if any conflict occurs within it. By keeping all kinds of personal issues and challenges, people forget about playing as one unit; when they match with other communities, teams come together and play as one (Hussain, 2018)

Sports and Health

Sport constitutes a subset of physical activity. Physical activity is a critical behavior in health. It can improve health and reduce disease and disability in the population (Pate, 2019); studies have considered sports as a single entity and a subtopic of the larger one, physical activity. Not all physical activities are considered activities that qualify as sports because certain conditions are needed to be satisfied. Sports and health have an inevitable relationship; a sport demands both physical and mental work most of the time. In the present scenario, there is a shift in diseases from communicable to non-communicable. Musculoskeletal disorders are the most prevalent cause of chronic disability in industrialized nations. Chronic low back pain (CLBP) is an increasing disability, more rapidly than any other form of disability. It imposes an enormous financial strain on healthcare systems worldwide and causes personal suffering. Studies have said that regular exercise (a relatively inexpensive and easily administered approach to therapy) could address the increasing incidence of low back pain (Dvorak, 2009).

The players achieve motivation as individual development results in a willingness to work harder. Football is a potent tool where coaches and players collectively exchange their own beliefs simultaneously, improving the distance between them (Sangria, 2017); mental health is also essential, other than the physical aspect of health. Sports, more than entertaining the participants and spectators help motivate and instil confidence, and they also create unity and understanding between the people who are part of them. Sports are more acceptable and loved among children

and youth. Studies have proven that being involved in school sports helps children nurture some basic skills and creates hardworking behaviour. Also, sporting competition plays a vital role in developing a teenager's character (Bowen and Hitt, 2016). Football also promotes social interactions that impact the quality of life and demonstrates the potential to support active lifestyle adherence (Khan, 2012).

Sports in India

Sports like kabaddi and football are increasingly popular in India. In viewership, this sport has increased by over 65 percent year after year. However, they are in no way close to cricket. In India, we can see the hegemony of cricket; Indian sports are all about cricket. Both from the citizens and the state, cricket has received high-level recognition. The Indian cricket team is number one among the cricket-playing countries. The BCCI (Board of Control for Cricket in India) is the richest among all other countries' cricket governing bodies. Cricket has been promoted and fed to children from their childhood days; at the same time, all other sports are neglected due to a lack of results and limited possibilities. So, studying the state of other non-cricket sports in the country is important, as is contextualizing their emergence as a battle against cricket hegemony (Thomas, 2015)

Cricket was introduced chiefly in cities; infrastructures like ground and all built-in major cities opened them more opportunities for cricket. India's attitude towards sports was always at stake, politicians always captured its authority, and their approach towards sports and sports persons has been neglectful and apathetic. Neither sufficient infrastructure nor basic facilities were provided to the athletes of the country.

Half of the Indian population is under the age of 25; the country is young, which is impressive because this is happening when the rest of the world is aging. Young people require places and facilities to engage in sports. Danes are the world's happiest people, and Sport has much to do with that. India, too, could learn a few lessons and change its sporting landscape. It would be more competitive for a sporty society, less likely to get sick, and cause a drain on the exchequer. Its old people are likely to be fitter (Kumar, 2013)

Sports and Malabar

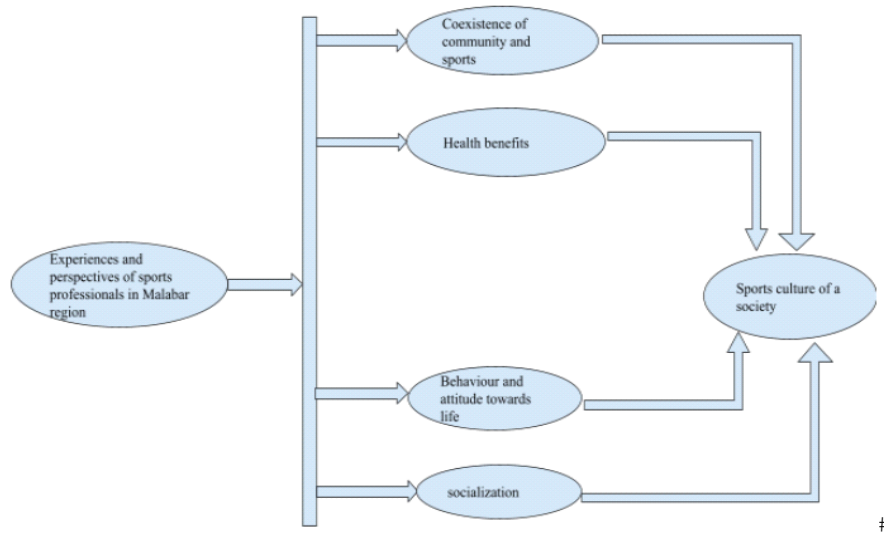
Football's story cannot be seen as a mere leisure activity by dislocating it from the socio-cultural world in which this game is played. This game attracted Malabari

people because of its easily understandable rules and less expensive nature—convictions reduced the gap between them (Ali, 2016). A study of 4 years, that is from 2000 to 2004, in the districts of Kerala shows that Malappuram has the least number of suicides in a year (Mathews, 2006). The study reveals that religious orientation in childhood is one of the prominent factors in reducing suicide rates in the Malappuram district of Kerala (Mohammed, 2013). People in Malappuram consider football a part of life; it acts as a uniting factor among them. They have the habit of facing life situations in a let it go manner, which helps them to stay out of depression and despair.

Field of Study

Malabar region of Kerala, before dividing into five different districts in 1957, formed the northern part of Kerala. Kannur, Wayanad, Kozhikode, and Malappuram were the areas chosen for this study.

Conceptualization of Study: Theoretical framework Conceptual framework



Ecological Systems Theory

The Ecological Systems theory treats individuals as active agents who constantly shape and are shaped by their environments. It attends to how multiple systems'

roles, norms, and rules shape behaviour. According to Bronfenbrenner's theory, Perception plays a vital role as he emphasizes the importance of perceptual factors in understanding behaviour and human development (Bronfenbrenner 1979). Football and community co-exist in Malabar, and they both contribute to each other. Individuals are shaped by the values given by football, and in turn, individuals play a role in developing football in society.

Research Objectives of the Study

- To understand the intersection between sports and health
- To understand the perspectives and experiences of the sports professionals
- To understand influence of sports in shaping behaviour and attitudes towards life
- To identify the role of sports in the process of socialization

Design of the Study

The study was conducted using a qualitative research design. This methodology helped understand how individuals were transformed into professional footballers. The narratives provided an understanding of how the participants experienced the coexistence of football and community.

Sampling and Sample Size

Participants were chosen through purposive sampling. For this study, the key informants were sports professionals living in Malabar.

Data Collection

The data was collected till saturation. In all eight in-depth interviews were conducted in the study region. *Panthuparanja Malappuram Kissa* and *Salam Football* published two related works on local football history, contributing secondary data for the study.

Tools for Data Collection

In this study, the researcher used an interview guide consisting of open-ended questions to gather the information surrounding the role of Sports, perceived benefits of its social model, and strategies and experiences in reaching out to the community to cover each objective, respectively.

Findings and Conclusion

Evolution of Football as a Popular Game

“British took everything except *Thiruvathira* (a local festival in Kerala) and *Njattuvela* (an ancient system prevailed in Kerala to calculate the suitable period for cultivation),” is a saying in Malayalam. However, the British gave back something in return; English and Railway were vital; football was something Malabarians (Malabar people) appreciated equally.

Football was first propagated on this soil by the Malabar Special Police (MSP), formed in 1852 with its headquarters in Malappuram to suppress the anti-British riots. They also introduced volleyball, basketball, and hockey. Following the Malabar Uprising of 1921, the natives distanced themselves from the whites. The rationale behind these ‘games’ was that this strategy drew people closer to them, looking at them with only fear. Malappuram natives run into the vast meadow of football because they watched the game from outside the field in the early days, then learned the game and got ready for a friendly match with the whites over time. The game nests flourished in and around Malappuram, Pondicherry, and Areekode, where the Malabar Special Police camps were set up.

“In those days when we were afraid of whites, we first saw the game of football hidden in the bushes around the army barracks in Nilambur. We did not get the ball they were playing, so we started the game with a thick ball wrapped in rubber.”

- Khan (2018)

To the British, who wore boots, the natives clashed barefoot. In the early days, the people of Malappuram used to use football as a turban made and beautifully covered with banana leaves. Later, it became a rubber ball and became real football at a very late stage. All other three games other than football had vanished from the ground. The Malabar football association was formed even before forming the state of Kerala. There are three different stories of three different legends to understand the evolution of football in Malabar. Firstly, Moideen Kutty, an international player in Young Indians, a former football club in Malabar, a remote village resident, and one of their favourite players in the study region where football has become an intrinsic part of their lives.

Kulamaattikkalathil Moideenkutty also known as “Malappuram kutty” was the first football hero of Malappuram. After the partition, he was born in Malappuram and became a football marvel in British India and Pakistan. He would kick the ball to

the goal post with the strength of iron and was so popular with the name ‘Iron Man’ in the playground. He became famous from even early years of his life by playing in local clubs. In 1944, at the age of 17, he joined the Indian Royal Air Force team as the British were amazed by his play. Moideenkutty was the only Indian in the Air Force team to become a striker with ten English players. In major cities, including Bangalore, the Air Force team won with the help of Moideenkutty’s goal. Moideenkutty, who went to Pakistan after the partition of India, became an Air Force star player there too. In 1952, Kutty became a member of the Pakistan national team for the first time. He made his debut at the Asian Quadrangular Cup in Ceylon. In 1953 (Rangoon), 1954 (Calcutta), and 1955 (Dhaka), Moideenkutty became Pakistan’s top scorer in the Quadrangular Cup. In 1962, Moideenkutty scored two goals in the second half against the hosts Ceylon (Sri Lanka) in the woods, perhaps the record in world football today.

Young Indians were the team of florists and porters and were the football team of Kozhikode, especially Palayam in the 1980’s. The club was born out of the love of football of ordinary workers. It included the then famous players, including T Surendran, M Balakrishnan, M Kumaran, KP Rajappan, KP Venugopal, VC Ashok Kumar, Usman Koya, and others. The club became a hit. A large number of workers and traders from Palayam, the major center of the city, would come to watch the game of the Young Indians.

The third story is about the Chennamangaloor village, the Grameena Vayanasala, Local football team. Then football was shifted to the fields. After the harvest, modified rubber balls were brought, which could dance on the remaining sharp paddy. With gradual development, the people of this village, which was almost isolated, started going to the surrounding villages for competition. For others, the village organised football championships. The village and the locals joined hands with the players. It grew into a stage of enjoyment and pride with charm.

“In those days, finding the cash to buy boots was a big problem. Only a few have boots. Then I went to a bucket fund collection to buy boots for the rest. When that was not enough, we relied on the areca nuts at Oramkuzhi garden in Pottassery without our father’s knowledge. Finally, the locals treated us with paratha and beef when we won the match.”

-Salam Football

For the next decade, that is in 1980’s, the Youth Library (The local football club of Chennamangallur) went undefeated in most of the tournaments in the Kozhikode district. Chennamangallur stood with the team like a single soul on a single wheel.

“There will be one or two elders called “moons” in the playground every day. They are the main characters of the games. They will step up to the ground borders and be qualified at the game’s early start. Everyone else will stand in front of these locals as a group of two. Slogans affirmed earlier in secret will be called out aloud. Then they would ask, “who wants jackfruit or mango ... America and Russia do not want any”. Thus goes the part joining. The elders would think cleverly, show the signs, and tell me that it was Russia and mango for me. The elder’s side, which is called Russia, is open, and the Russian is on the side, and the other is on the side of the other elder. This is the auction call-up of the day. Abdul Salam stood unique among us as amazed as he fried mustard in the playground with the football ball. He has always been a star player in this call-up.”

-Salam Football

For the past 30 years, cricket has been a hot topic in India, and while media and commercial monopolies such as television have made cricket the main and only Sport of Indians, irrespective of their rural affiliation, the Malappuram football field is in full swing. Malappuram district hosts over a thousand tournaments with and without tickets.

i. Factors that Favoured the Growth of Football

Anti-imperialist sentiments, love, brotherhood, fearlessness, compassion, and the desire for freedom are all ingrained in the blood of the people of Malappuram. These unique virtues and their crazy passion for football are the same. They rotate unrecognizably like the top and bottom of a ball. The topography of Malabar is very relevant for this Sport; it has a flat area, long paddy fields, and large compounds resulting in the conversion of these spaces into small and extensive grounds. When the summer season comes, all paddy fields will be free after harvesting in every village; these are later converted to stadiums to conduct tournaments. According to one of the respondents, the situation of spaces availability and accessibility can be observed as:

“There were several reasons why football received more acceptance than other regions in India and why football, not any other games. Less expensive as compared to other games and easy to learn. The topography of Malabar was congenial for making numerous grounds; almost all football associations in Malabar started from any paddy fields or compounds. Compared to other places of Kerala, Malabarians consume a considerable amount of non-veg (Beef, Chicken, and Mutton), which increases the heat in the body contrary to other games played at that time; football aids in burning it out.”

-NiyasKunnamangalam, Santhosh trophy winner, Karnataka

Joint family culture existed in Malabar until the beginning of the 21st century, with approximately 20 to 30 members in every family. Out of them, there used to be a player who could inspire every youngster in the family. Like that, there used to be a local celebrity in every village, the best player in the area. He could be the past or present international or state, or district level player; the recognition and respect he received motivated the entire masses.

It is more convenient than other games to play, with just one ball as a tool and less complexity keeping the financially backward people familiar in football. In addition, the possibility of the inclusion of 22 people helped popularize football. Inspiration from the recognition and acceptability received by senior and former players is also a major motivating factor.

ii. Popular Game

Football has become more popular than any other sport because of its democratic values and morals dissolved in it. Like the country, each village had its own game and players' heritage and pride to remember and cherish. Some played the game, those who had given their lives to the game, those whom the game gave life to, those whose life has become a game, those who have been pushed out of the realm of life by playing, those who have climbed to heights, those who have fallen. Also, many people have become outcasts on the playing field of fate. *Creekside* is a village that has contributed many football talents to the country and the Malayalam land. These are the people who took the game seriously. So for footballers, life is not just a game; it is a life and soul.

Football documentary director Madhujanardhanan, who became helpless to compile a list of players who played for the state from the district, said it was impossible. That much is the wealth of football there.

2. Coexistence of Football and the Malabar Community

i. Football and Malabar

“Now I run a sports store. I have seen many parents buy a pair of boots, a jersey, and books and uniforms.”

-Nishad Mavoor

Many true revolutionaries were killed and hanged by the British, but they could not defeat them. People of Malabar who had played on the same soil were well-known social reformers. Variyan Kunnath and many unknown reformers fought

bravely against the British. It is not the same football played in Manipur or Germany; it is discrete. If football has the same meaning in the entire world, Malabar has a different one. Football has no language; football itself is a language. Every football player in Malabar is an asset to society.

They built grounds by investing their money and time; they discovered novel versions of footballs, Sevens (seven players in a team), Fives, and Threes, and formed new rules and regulations because limitation of space or lack of several players should not restrict them from playing. They started Mud football (played in wet and marshy lands) to play in the rainy season. After harvest, every field will be converted into football grounds. With that, schooling and football will be not only parallel but also equal.

“While I was teaching a part of the Adhyatmaramayanam Kilipattu of Ezhuthachanin class, Nasser Chalakkal came up with a notice. The paper was empty when I looked. I asked him with my eyes what had happened; Nasser whispered in my ear that “Today there is a match at Panikkarapurayu, right? It is with Mavoor; we should rock it”. Unknowingly a smile appeared on my face. I tried to escape from students by saying that it was not for them. It was a time when holding the position of assistant manager of the Brazil Chennamangallur team. This is not just the story of Nasser. When it became the season of Sevens, football was the only thought of the people of Chennamangallur during food and sleep.”

-Salam Football

Today, the game has found its way into popular culture with films and stories made about it. Football has always become a game of the masses. So, it is little wonder that the game has made its way into popular culture. Malayalam films have been made on the game. Stories have been written. Moreover, one can safely assume that the trend will just go on, considering how Seven's form of football is gaining popularity across the state.

“In Hartals, you can see people playing football by placing a pair of stones in two ends on the public roads of Malabar. The success of every football tournament indicates the bond between Malabar and football.”

Suhail Thiruthiyad, Calicut Interzone winner, Farook College (2016)

If a man takes a ticket of 20 rupees to watch a match, 2 rupees will directly go to any human welfare activity, and everyone knows it; this also motivates people to watch football from galleries. This humanitarian aspect also plays an inevitable role in linking football and Malabarians. In an official sevens tournament a minimum of

five thousand spectators used to be there; it crosses more than 20 thousand for finals and semi-final matches.

When we talk about the players' glory, we need to remember the football lovers and organizers who make the football ground exciting. It is these players who instil confidence and enthusiasm in the players. Furthermore, those people sitting near the border of the ground who are concerned about the pride of their land and team often remain unrecorded nowhere in the history of football. For them, football is a blood-soaked thing more than just entertainment. The passion behind this game is not the slight thought of localism but the great excitement of humanity. They will be present near the borderline of the ground with lime wherever the tournaments are participated by the team of their home country or club by giving inspiration and excitement to the players. They will be present in every village and country, making every victory a celebration of the country and turning every competition into a festival. Football would not be so exciting and beautiful without these people who spend their own time and money to reach the ground.

ii. Football as a Social Capital

The social values and social capital that football in Malabar passes to the community are different from other regions. Football aids in being more social rather than selfish; it teaches individuals some qualities like the value of hard work, punctuality, commitment, teamwork, respecting opponents, and also physical and mental health benefits.

Football is one of the fundamental contributors to community development. The ground itself is a society; players irrespective of religion, race, and caste will be there in your team or opposite team. Essential learning from football is if your teammate commits any mistakes, the team will motivate him and try to compensate for it as a team; this team feeling transfers to Malabar people because the majority are either players or once played. To love and compete with each other simultaneously, understand everyone's flaws, and try to compensate for them as a team. It aids in nurturing a society that reacts when any wrongdoings are spotted.

Football connected them, brought them together, and led to socialization. This led to the formation of many associations and clubs. In the 2018 and 2019 Kerala floods, when official rescue forces were unable to reach the remote areas of Malabar, it was these associations of youngsters led by elders that saved the lives of thousands; it is just a single example to cite their work. Every tournament conducted puts aside

a considerable share of its profit for welfare activities. Seven tournaments conducted in Malabar provide jobs for thousands of players and people who sell food items in the galleries. In Malabar, there are around 60 official Seven's tournaments and approximately a thousand local tournaments conducted in a single season.

“The basic aim of football is building a healthy mind and body; it makes a healthy society”.

-Shareef Areekod, Santhosh trophy winner kerala (2017)

To join government services or any professional jobs, not just competitive exams or educational qualifications but also sports, is an option.

Training of children who can transmit positive energy to society. Football is one of the primary contributors to community development. Qualities like commitment and team feeling help us sustain relationships with family, friends, and society. If a player in the losing team gets frustrated, winning team members, instead of celebrating, console him/her, it happens mainly on the playgrounds only.

“There are around 63 registered camps in Kozhikode district (a district in Malabar region) only, the lion's share of parents who bring their child to camps are very well aware that not every child will become professional players but what prompts them to do is other benefits it gives to a child.”

- JiyadKaruvanthiruthi, (2017) Santhosh Trophy winner (Kerala)

Malabarians conduct numerous tournaments; not a single tournament is conducted for any monetary benefit; it is either for collecting funds to run their football club or for any welfare activities. Sevens Tournament Committees in Malappuram contribute more development work and funds to the country than a district Panchayat member. Such committees run everything from charitable activities to ground construction. Sports professionals spread positive messages and encourage welfare activities through social media handles.

iii. Individual Benefits

These include hard working mentality, punctuality, game spirit, commitment, respect to teammates and opposite team players; planning short-term and long-term goals and working to achieve them; and ability to change oneself as per the demands of the situation. They understand the situation, have quick decision-making, skills to implement those decisions, capacity to act when wrongdoings are spotted.

When a striker loses a ball by his mistake, a defender investing all his efforts tries to retrieve it and gives it back to the same striker, the confidence we are passing to him, and when he scores the goal, the confidence he is passing to us—appreciating and supporting each other on the ground.

“Consider a situation in football, conceding a goal in the 92nd minute to make the score a draw, and in the final minute, we are either conceding a goal or scoring a goal—the capacity of the mind to develop from zero. Situations change instantly in football. A commoner faces ups and downs in life, numerically approximately twice or thrice in a day, but in football, it happens hundred times in a single match. We may win today, lose tomorrow, and vice versa. We may lose to the same team we won last time by a high margin. This instability, ups, and downs situation trains you to face any situation in life. If a human being takes 100 decisions in a day, a football player takes more than 1000 decisions in a 90-minute match.

If a player receives the ball while playing, he examines its speed and height, using which side he wants to control it, to which he wants to pass, using which part of the body, and at what speed. A player takes these decisions and implements them. If a person can act and react to this much in a short period, it equips him to overcome any struggles in social life. If a player can use these skills in his education and social life and transmit them to others, it contributes to community development.”

-NiyasKunnamangalam, Santhosh Trophy Winner, Karnataka

The most important factor to developing resilience and peace is the capacity to face defeats. Most often, struggles are breaking the equilibrium of our life and mind. For a player, he faces it almost every day. Sometimes, he wins or loses, but he continues playing with more confidence and putting more effort.

iv. Role of Institutions

Religion, family, educational institutions, and government were the four institutions mentioned by participants. All participants had the same views that religion played no role in shaping an individual into a football player and the prevalence of sports culture in Malabar. However, they pointed out that faith in any god helps to have a hopeful and peaceful mind.

“Religion gives a positivity, peace and hope to commit hard work.”

-Suhail Thiruthiyad, Calicut Interzone champion (2016)

Combining every institution, Family, Religion, educational institution, and government produces a player. A single institution cannot do that. I cannot mention a single person but a group of people from family, educational institutions, and the village who motivated and stood beside me to raise me as a football player.

Every participant received his initiation for a football career either from family or educational institutions. Sports quota is a reservation in every college for sports players. Also, the government offers jobs for those who excel in sports. Both these provisions motivate players to remain in the profession of sports. Every Panchayat in the Malabar region owns a stadium; they utilize every possible fund available from the government for the growth of football. Politicians who want to influence the vote bank of youngsters, consider it worthwhile in investing in the sports infrastructure.

Conclusion

From time immemorial, the passion shared by Malabar is football, and the festivals celebrated are football matches, in which there is no difference between the players and the spectators. The experience is that people take pride in discussing this game in every household. Such conversations are not new anymore. It is an emotional tradition that has been growing for generations.

Kerala is rapidly becoming a middle class and moving towards the path of racism, fascist orientation, and socialist allegiance through apolitical arguments or reactionary politics. Malappuram is sure to be the last place in that line as the proclamation of colourful popularity and the effects of Carnival culture are rippling through the playgrounds. Football associations in each place are the best antidote as the country moves towards the path of racism, fascist orientation, and socialist allegiance through rapid apolitical arguments or reactionary politics.

We need to focus on football; those football grounds have taught us eternal friendship and survival lessons. That is how the place was inextricably linked and united, no matter how hard it tried to divide. The poorest people worldwide play football; tangible change in the world is the change in the poorest people, and they are the neediest in this Culture. That is where football can interfere; that is the success of football. Identify the driving forces of this Culture and ensure its sustainability.

Sports remain essentially a neglected topic for research in the country. A sport has limitless capacities, as highlighted by its power to unite young people of diverse backgrounds and provide them the means for a more fantastic future. Like food

culture, football culture is an excellent indicator of the socioeconomic and even political conditions of a place where it is practiced. Sports as a field of study is significant because it aids in understanding and critiquing many elements of a society and its Culture.

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Effectiveness of Experiential Learning as a Pedagogy in Higher Education: A Study of SFIMAR

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Abstract

With the change in the teaching style to develop engagement among students and let them enjoy learning, experiential learning is gradually gaining momentum. ‘Rote Learning’ is getting replaced by more pragmatic ‘Learning by Doing’ in a controlled environment, which is more a learner-centred approach. The main focus of the study is to capture the practices followed at SFIMAR and its outcome to gauge the effectiveness.

This study takes SFIMAR (St. Francis Institute of Management & Research) as a case study where few teachers used certain proven or innovative experiential learning activity as a pedagogy for their respective subjects. At the end of semester/trimester, faculty submitted their report on the activity and students submitted their descriptive feedback. These materials were taken as data source to check whether outcomes expected by teachers are experienced in similar manner by students.

Studies found that innovation in teaching is the prerequisite for a novel learning environment. The study captured the objectives of the activity/project, implementation of the approaches they followed, and the learning outcomes achieved. Feedback from a few students were taken to validate the effectiveness of the experiential learning method. Activities which were repeated over years took care of students’ feedback to modify the approach next year and get better result.

It is grounded that experiential learning helps in stimulating curiosity of the students and make them more capable in understanding and approaching the problem in a

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more pragmatic way benefiting them both in their academics as well as in their professional lives.

Keywords: *Experiential learning, decision making, problem solving, innovative pedagogy.*

Introduction

The extent of student engagement in higher education has increased tremendously in the last decade. Teacher-centric approach is taking a back foot while the learner-centric approach is coming to the forefront. In this context many new experiments are done to measure the effectiveness of various pedagogical initiatives and how they could be related to various subjects. The phase-wise implementation of National Education Policy (NEP) 2020 in India considers ‘Foster Experiential Learning and Critical Thinking for Employability’ as one of its major objectives. Experiential Learning encourages ‘Learning by Doing’. Many management education institutions are now trying out various forms of experiential learning as an innovative pedagogy, which is also an important criterion for getting institute and course accreditation. St. Francis Institute of Management & Research (SFIMAR) is a management education institute founded by ‘The Society of the Congregation of Franciscan Brothers’ to impart quality and value-based management education. Organisations are focusing on applied learning with emphasis on individual immersion (Rodríguez and Morant, 2019). Necessitated by global upheavals, SFIMAR realized that there is a need for a high level of cross-cultural awareness and an understanding that education is considerably more than memorizing data about certain fields and varied people while sitting in a classroom. SFIMAR motivates its faculty members to bring in innovative experiential learning ideas into teaching and is quite flexible to provide required support.

Literature Review

Organisations and educational institutions are mainly concentrating on teaching and training approaches that emphasize students’ active immersive experience and involvement throughout the course. Theory like experiential learning focuses on how managers are able to process and adapt novel experiences into essential knowledge assets, and how such experiences improve their levels of fulfillment, motivation, or performance at the management level. When aiming to give students with essential practice-based information and learning by doing insights, applying this paradigm to the classroom setting becomes critical (Rodríguez and Morant, 2019). To respond to the needs of the environment, higher education institutions should have flexible curricula. With projectbased learning, students participate in

multidisciplinary applied research and development under the supervision of teachers, whereby collaborative and networked education often answers to the needs of working life. These projects may encourage entrepreneurial activities within a higher education institution while also assisting students in pursuing their own business ventures. Because many research and development initiatives involve worldwide collaboration and finance, international activities are also important components of networking (Kettunen & et al., 2013).

For students, educators must arrange learning activities. Students' confidence in their skills to execute in the real-world which will improve themselves when they have opportunities to encounter aspects related to cognitive and affective domains of learning in a controlled environment (Murphy & et.al., 2011). Innovative pedagogy can give chances for the educator and his or her students to grow as individuals in connection to one another. The use of information and communication technology (ICT) is becoming more vital in education for long-term growth. New pedagogies, including inquiry-based learning, problem-based learning (first adopted in 1969 at McMaster University School of Medicine), play-based learning, and design-based learning, have been presented in accordance with these concepts (Zhao & et al. 2021).

Educational systems, including curriculum, must be reformed in order to produce critical and creative thinkers who are committed to contributing to the knowledge society. Knowledge construction, problem-solving, and innovation, as well as skilled communication, collaboration, self-regulation, and the use of technology for learning, are the 21st-century learning outcomes. These put the student at the centre of educational processes. Students participate actively in the learning process, paving the way for them to become knowledge builders. As the name implies, and in contrast to traditional educational settings, innovation in education will change students from "knowledge consumers" to "knowledge creators" by placing them at the centre of creative educational environments (Fýndýkođlu & et al., 2016).

Knowledge of various cultural competency aspects, development of culturally competent communication skills, acquiring culturally competent nursing practices, increasing self-awareness of cultural competence, and developing self-efficacy in a variety of cultural circumstances were all built (Marja & et al., 2021). Although the physical environment of teaching has changed to some extent, the core pedagogical method and underlying assumptions about learning and knowledge transfer are essentially unchanged. In these circumstances, there's a chance that broad adoption of simple learning technologies like Virtual Learning Environments (VLEs) will be misinterpreted as educational innovation. However, in the second phase, learning

technologies are employed in novel ways to go beyond what was achievable in the classroom, or to blend old procedures with ineffective and valuable e-learning modes to satisfy new teaching and learning objectives and purposes (G. Salmon, 2005). Learner-centered and problem-centered techniques are frequently considered as having higher potential to transfer to the next generation than subject-centered ones. Flexibility is essential for meeting the different learning demands of diverse student cohorts. Technology, a diversity of instructional techniques, and choice and flexibility in assessment are all necessary to enable flexibility, variety, and choice while maintaining adequate standards. Teachers at various higher levels of education utilize a variety of techniques, including customization, small learning communities, student advisors, interdisciplinary curriculum, peer tutoring, peer instruction, and team teaching (Naz & et al., 2017).

Innovative pedagogy is defined as a proactive effort to more creatively incorporate instructional ideas and methodologies into classroom learning. The goal is to guarantee that students accept full responsibility for their education and actively pursue their goals. Simultaneously, the instructor serves as a facilitator in attaining the specified learning goals. Students' engagement, motivation, and critical thinking improve as a result of innovative teaching, providing them a reason to stay in school and complete their education. It may be claimed that successful use of creative teaching is critical to increasing student engagement and enthusiasm in skills-based courses like computer craft, as well as lowering school dropouts, truancy, and poor academic performance (Fýndýkoglu & et al., 2016).

Universities are increasingly focused on providing cutting-edge research and increasing their social presence and impact. Teaching and professors are not at the top of their priority list. To execute change, you'll need an institutional plan. Institutions must adopt a new mindset when it comes to their procedures and beliefs (Peredes & Freitas, 2018).

Research Question Development

In experiential learning (EL) individuals become noticeably more accountable for their own learning under this experience-based learning framework, and there appears to be a strong relationship between the learning experience and reality (e.g., role playing, business games, computer-based simulations, virtual reality, etc.). According to Peris Otiz et al. (2016) fostering an experience-based learning environment combined with educational, technical, and pedagogical tools is becoming increasingly important to universities.

Project Based learning (PBL), which is another popular form of EL, is known for promoting deeper learning of knowledge-in-use. PBL is based on four main theoretical concepts: activity building, contextual learning, social interactions, and cognitive tools (Bransford, Brown, & Cocking, 2000). PBL comes in several forms (Barron et al., 1998; Krajcik et al., 1998), but they all have the following characteristics: PBL employs a motivating question that is relevant to the students. This question piques students' interest and keeps them motivated over time. Teachers and communities have embraced project-based learning as an energizing method for motivating students to study (Beneke & Ostrosky, 2009; Chu, Tse, & Chow, 2011). Student-driven projects can get off topic, resulting in missed teaching time, failure to meet academic requirements, and ineffective participation (Blumenfeld et al., 1991). Barron and his colleagues (1998) feel that PBL has been shown to be motivating for students in studies, and preliminary data suggests that it improves student learning of difficult subjects as well as other abilities such as problem solving and confidence (Kokotsaki, Menzies, & Wiggins, 2016).

Many models were developed to streamline experiential learning over a period of time. David Kolb was the first to introduce the ELT (Experiential Learning Theory) Model in 1984, who was highly influenced by John Dewey, Kurt Lewin, and Jean Piaget. This model focuses on describing the process of how to transform experience and knowledge. Kolb's Model has been criticized by many people on the ground that enough attention is not given to reflection (Bond, Keogh and Walker, 1985), culture-based difference (Anderson, 1988) or context and emotion (Bond, Keogh and Walker, 1996). Bergsteiner et al., (2014), in an endeavor to develop a more concrete model, based on various criticisms of Kolb's model, introduced two learning cycles (popularly known as Twin-cycle Model of EL), one for CAP (Concrete-Active-Primary) domain and other for APS (Abstract-Passive-Secondary) domain. The paper inferred that the intention of a student to learn from an activity depends on how he judges about what is to be learned, which will ascertain his experience whether it is concrete, abstract, active, passive, primary or secondary.

According to Radovic et al. (2021), EL process is influenced by personal factors like demographics or personal characteristics such as integrity, openness and commitment (Chi, 2013), and organizational factors related to learning tasks and processes. Another study done by Gustafson and Branch (2002) suggested the hybrid method by combining theory and practice driven approaches. Influenced by this mARC, this model was developed. This model gives a structure to help develop an effective EL environment. The model emphasizes on the use of critical elements which have a fostering role and a strengthening role. This also gives importance to reflective and collaborative learning activities (Radovic et al., 2021). Most of the

studies were examined through experimentation in engineering colleges, nursing colleges or at school level, but very few studies were administered at MBA college level though many institutions are practicing it either in a formal or informal way. Therefore, this paper tries to address the questions:

1. What are the effects of these EL activities on students' learning experience?
2. Can these EL activities support a subject specific, as well as a holistic curriculum?

Context, Method Design and Results

At SFIMAR every month IDEA (Innovation and Development for Excellence in Academics) Committee meeting is held to brainstorm various innovative pedagogies and report on the activities conducted. As a part of Project Based Learning (PBL) it was decided that in every semester/trimester each student should get an opportunity to work on at least two PBLs. Depending on the requirement of the subjects, faculty members decided on the type of EL methods. For some subjects, simulation games were chosen, while for some other subjects, certain other activities were designed. Some of these were followed over years, and some were taken as odd activities during the semester or trimester. Out of many EL programmes, 6 were chosen for this study which followed mARC Model (Radovic et al., 2021), where critical elements were used to discuss and explain the concepts. Teachers played the fostering role in going through the EL process thereby applying Gustafson and Branch's (2002) hybrid method of combining theory and practice driven approaches.

The ELs followed a three-stage approach suggested by Dogantam (2020), i.e. preparation; implementation; evaluation and reflection. The major objective of all these ELs was to develop students' employability skills in the form of increase in confidence, better communication skills, group dynamics, decision making ability, etc.

Table 1 summarizes the activities conducted, objectives behind each activity and the teachers' inference on the achievable Learning Outcomes (LO). Faculty as educators played the role of contributing instructional support in the learning process of the student with the expectation of some achievable LOs. These LOs support the active learning style and in turn stimulate intellectual curiosity, individual creativity and enhance the performance of psychomotor skills (Murphy et al., 2011). At the beginning of the semester/trimester, faculty submitted the objectives of the EL activity in their session plan, and at the end they submitted a report mentioning their inference on achievable LOs.

Table 1: Subject-wise ELs and Teachers' Expected Los

Sl. No.	Subject & Experiential Learning Pedagogy	Description of the activity	Teacher's inference on achievable Learning Outcome
1	Marketing Management – Marketing Plan	<p>Description: It is a 3 month activity. Students are shared with guidelines to make the marketing plan and the marking scheme. The plan outline includes situation analysis (competition, market condition, socio-political environment, etc.), problems and opportunities, objectives, budgeting, strategy and action plan. At the beginning, groups are formed and a product choice is given for which the marketing plan to be developed. The activity is monitored regularly and assistance facilitated by the subject faculty for better understanding. It focuses on all elements of Marketing Management like 4P's, marketing research, pilot run of the product, etc.</p> <p>Objective: to develop conceptual knowledge and explain the applicability of theory in a real marketing/business situation.</p>	<p>–The project based study enabled students to assess and improve their ability of problem solving and creative suggestion along with innovation, in a business scenario through the preparation of a marketing plan. It helped them identify key wants and needs of stakeholders involved in the plan development based on the principles of Marketing Management.</p> <p>–The project also imparted soft skills like effective communication including presentation skills, listening skills, persuading, pitching etc., and present the solution as a well formulated marketing plan with financials, in an orderly manner.</p>
2	Public Relations— SFIMAR Brand Development	<p>Description—Public Relation helps in the development and maintaining of a favourable brand image and builds instrumental relationships with various stakeholders of the organization. This activity helped students to get a platform to work on a real-time scenario and showcase a public relation activity for SFIMAR. Every year new ideas are generated through a brainstorming session by students and then groups are formed to work on various responsibilities. Examples of such activities are—Street Play performed at many shopping malls at Mumbai in association with NGO Green Yatra to create awareness on 'Padh Lagao, Jeevan Bachao', or, running a '#SelfieWithGuru' campaign to increase the visits in college social media pages.</p> <p>Objectives: --To learn how to practically conduct a PR campaign and monitor for smooth performance of the activity --To understand the importance of measuring the outcome and learn how to improve --To study how to gain recognition, develop sustainability and get accepted by various publics</p>	<p>–Students got the exposure/experience to conduct a real time PR campaign for the institute and the institute also benefited out of it. From which students got the sense of achievement,</p> <p>–Many times, while running the campaign, students faced certain difficulty and learnt how to do crisis management, an important component of PR.</p> <p>–Students learnt the importance of measurability of an activity to gauge its success.</p> <p>– Students gained the learning about marketing, budgeting, developing and execution of an activity.</p> <p>– Students learned various managerial skills like time management, stress management, people management and group dynamics, sense of accountability, etc.</p>

3	Financial Management— Bean Game	<p>Description—Managing money means making choices. There is never enough money available for all of the things anyone would like to have or do. This game helped students to decide what is most important to them</p> <p>This game may be played individually, but optimum results come from playing in a group of 2 or more. Divide participants into groups of at least 3 and not more than 6. Each individual/group receives 20 beans and a set of spending category sheets. The individual/group must decide how to spend their “income” based on life circumstances, values and goals. Each item has a set number of squares which indicates how many beans are needed to “pay” for that item. The game is played in rounds followed by discussion questions:</p> <p>Round 1- Why did you choose the items you did? In what ways were you influenced by your values? Your goals? Your previous experiences? Compare what you spent your beans on with another individual/group.</p> <p>Round 2- Your income has just been cut to 13 beans. What will you give up? What changes will you make? Make changes until you only have 13 beans on your spending sheets. DQ: What kinds of items did you choose to give up? Why? What did you learn about yourself and money in this process? Compare your budget-cutting choices with another individual/group.</p> <p>Objectives</p> <ul style="list-style-type: none"> --To analyze the difference between want and need --To understand the importance of budgeting --To analyze the allocation of money --To evaluate the effectiveness of financial planning and saving 	<ul style="list-style-type: none"> --Realization of self-identity towards purchasing behavior of a ‘fad’. --Preparation of a Budget. --Allocation of money for future life’s choices. --Utilize judgment in spending financial planning and saving.
4	Rural Marketing— Making of Documentary Video	<p>In Marketing, the knowledge of the target consumer is a very crucial factor. The subject Rural Marketing in Indian context is having a very high importance as 70% of the population resides in rural areas and constitute a big market. To fight competition many renowned companies are doing various types of rural marketing activity to reach out to this target group. Students need to understand this group separately as a segment and how they differ from urban crowds. As a part of experiential learning activity, student groups are formed (preferably 3 to 4 students in one group), who decide on a business line, study in detail about it from the available information, then visit rural areas to take interviews of related people, shoot video and make a documentary film. This is an ongoing activity during the semester. At the end of the semester, groups showcase the documentary and give a presentation on their overall learning from the activity.</p> <p>Objectives</p> <ul style="list-style-type: none"> --To develop a foundation to apply knowledge and concepts for understanding rural consumers --To bring about the understanding of how to differentiate between urban and rural consumers --To expose students to the rural market environment and understand the opportunities and challenges 	<ul style="list-style-type: none"> --Students learn the perception building process of rural consumers. --With the ethnographic approach of data collection, students learn the purchase behavior pattern of rural consumer. --Students got the opportunity to compare 4 P’s and 4 A’s of rural marketing.

5	Marketing Research and Analysis— Research Project on a given topic with empirical evidence	<p>Understanding a concept by doing is always higher than that of just by learning. Keeping this in view, a project was conceptualized on the Marketing Research Process which is a part of the syllabus of the subject Marketing Research and Analysis. The entire class was divided into 11 groups and the project was undertaken as per the description as appended below:</p> <p>1. Background/Introduction 2. Problem/ Opportunity statement 3. Research Questions 4. Research Objectives and Hypotheses 5. Methodology 6. Developing questionnaire and Data Collection 7. Data Analysis and Interpretations 8. Summary of Findings 9. Suggestions/Recommendations 10. Limitations 11. Future scope of research 12. Conclusion of Project 13. References 14. Appendix</p> <p>The evaluation of the project was done in a phased manner with 3 initial progress evaluations at the end of each month from project commencement. The final evaluation was done through a group presentation on the completion of the project.</p> <p>Objectives: -- To make the student participants to gain insights from firsthand information obtained through field research and interaction with stakeholders --To make the students to get involved in a teamwork as the project is group based project and intra group activities are more emphasized</p>	<p>-- The students will gain understanding on field research and interaction with stakeholders.</p> <p>-- The students will also get involved in teamwork as the project is a group-based project and intra group activities are more emphasized.</p>
6	Social Media Marketing & Digital Marketing— Business Website development	<p>Students were divided in groups of 2 for this project. They were asked to choose the theme and design the website using webs.com interface (free website designing application). Students were asked to design 5 pages on the product and services, payment option and company details, contact details and maps etc.</p> <p>Using various social media channels such as Facebook, Instagram, etc., helps in creating business brand awareness and attracting target customers. So each group was then asked to create a Facebook promotion Page for the website designed and link the website to the Facebook Page. Students were also asked to design promotional posters for a demo social media campaign as a part of the project. This involves creating multimedia content to engage the customer base, running campaigns on social media for specific offers or promotions. The promotional Material was designed using Canva.com (free designing software application)</p> <p>Objectives: --To explore trends in website designing w.r.t interactive UI/UX features --To design web content for website and webpages popularly used on social media platforms --To promote web posts, blogs, social media pages, e-content using various social media platforms</p>	<p>--To create web elements like buttons, banners & Bars and User Interface designs. --Setting up page layout, colour schemes, contract, and typography in the Website designs. --Best use of social media and payment portals for revenue generation. --Setting up a perfect landing page for business, clients and yourself. --Understand what social media is, the various channels through which it operates, and its role in marketing strategy --Designing Social Media Pages and Campaign, Posts, Events etc. for promotion related activities.</p>

Table 2: Student Insights

Sr. No.	Subjects and ELs	Subject-specific LOs as felt by students	General LOs as felt by students
1	Marketing Management – Marketing Plan	<ul style="list-style-type: none"> - How to develop marketing strategies - How 4Ps/7Ps are inter-related and how to create, communicate and deliver value to customers through product development 	<ul style="list-style-type: none"> - Learning from one another (Boulton, 2020) - Higher order critical thinking and synthesis skills (Lee et al., 2009; Liaw et al., 2009; Keane et al., 2013)
2	Public Relations—SFIMAR Brand Development	<ul style="list-style-type: none"> - Crisis management & measurability - The activity showed how a PR activity can help a business, as the college social media pages received plenty of likes and follows in a week and helped build better relationships with its stakeholders (#SelfieWithGuru Social Media Campaign) - Learnt about the challenges in executing the PR campaign (Street Play-‘PedhLagao, JeevanBachao’ in shopping malls) 	<ul style="list-style-type: none"> - Application of knowledge in real life situation - Problem solving and decision making (Keane et al., 2013) - Better understanding of the subject - Review and Evaluation of decisions through learning from experiences - Effective communication skills (Keane et al., 2013) - Increased student engagement (Boulton, 2020)
3	Financial Management—Bean Game	<ul style="list-style-type: none"> - Financial Planning and Budgeting - Learning about spending and savings, and how to manage with limited funds 	
4	Rural Marketing—Making of Documentary Video	<ul style="list-style-type: none"> - Opportunity to explore how various marketing related activities, process and institutions function in a rural or semi-urban settings - Followed and traced each and every step along the value chain right from the villagers who produced the items to the end consumer or the institutional customer - The field visit in group provided great insights on the role of various stakeholders associated with marketing in non-urban settings 	
5	Marketing Research and Analysis—Research Project on a given topic with empirical evidence	<ul style="list-style-type: none"> - All steps of marketing research process was clearly understood, including the development of the report - Use of market research data in strategy development 	
6	Social Media Marketing & Digital Marketing—Business Website development	<ul style="list-style-type: none"> - Use of various web elements - Usage of various digital marketing strategies for a Business Website. 	

Sample and Demographics

The case study reflected on classes where each of these subjects was taught, with an average age range of 23 to 26 years. All of them were SFIMAR management course students. They worked on these EL activities during their semester/trimester within a predetermined timeline. Throughout the semester/trimester regular interaction between students and faculty members took place, which followed mARC Model of EL. Marks were assigned with each task as a component of internal assessment which was added in the final exam of that subject. After the completion of the semester/trimester students were told to briefly mention their experience and evaluation with each activity. Randomly 4 responses from each subject area were picked up to form a sample size of 30.

The responses were then analyzed and categorized under two headings: Subject-specific LOs and General LOs. These are listed in Table 2 as students Insights. A comparison is made after this between teachers' expected achievable LOs and students' perception towards achieved LOs.

Discussion and Findings

Incorporating EL in higher education for MBA students to teach practical approaches was definitely challenging, but it fetched a better result, as perceived by SFIMAR faculty members and students. The research strongly supports the positive impact of pedagogy as it created more student involvement and engagement, which is in line with Boulton's (2020) study. It encourages learners to explore the situation and apply the skills required (Edwards, 2016), moving beyond the teacher's expectations. Teachers also felt it was easier to give quick feedback to the students and relate the learning again in classroom teaching for better understanding (Boulton, 2020). It was observed that students' self-learning pace through the activities was seen to be visibly improved as compared to the previous batches, which again supports Boulton's (2020) views.

The study found that students embraced the activities with high enthusiasm, which is also a finding of Heurtas-Valdivia (2021) and contradicts Armstrong's (2003) experience. Our study is more aligned to Ozogul et al. (2020), as it reported an increase in confidence level while giving students the feeling of being happy and comfortable. The 'teaching methodology' factor in the faculty feedback form also received a high score of 4.7 out of 5. One typical observation from the study is that the ELs which got repeated over years gained better results in each consecutive

year, giving a signal that while conducting the activity even teachers could note certain areas of improvement and worked on it for better learning of the students. Teachers realized that students should be clearly informed about the objectives and evaluation guidelines to have a clearer picture of how to perform. Also, it was noticed that since marks were assigned with the activity, students took it more seriously as 'Learning and Performing through Fun'. One-time activities for subjects like PR were highly accepted by students where faculty member used his critical thinking to develop the project and students used their creative skills to execute the activity.

Conclusion and Future Scope

As a higher education practitioner, it is important that best pedagogical tools should be adopted for expected results. With the flexibility given by SFIMAR management to impart the best education, faculty members are committed to serving the student community with either proven EL techniques or developing a new one based on the subject requirement. This approach has undoubtedly complemented teaching related to real-world scenarios and enhanced the teaching-learning process. Though the study highlighted many findings, possibly there is a limitation with the sample size. A large sample would have offered a more detailed and reliable result. The study also opened another avenue of thinking as to how students process these learnings in future days. Embedding EL in higher education as a pedagogical tool may extend collaborative learning opportunities for students of different courses.

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Reflective Practices in Adult Education for Life Long Learning

• Seema Yadav¹

Abstract

Reflection is a central idea in many teaching-learning theories. It has varying connotations and degrees of importance depending on the situation. The idea of reflection is essential to discourses on experiential learning and, more specifically, to adult education theory. A perspective that prioritises inventive concepts and more innovative discussion may benefit reflective practice. Mentees may develop greater autonomy in their teaching and begin the process of developing an authentic and independent teaching practice by engaging in a more structured reflection process that incorporates adult learning assistance. In order to strengthen their mentees' autonomy and competency as instructors, mentors may have the opportunity to practice self-reflection, engage in intellectual discourse, and debate difficulties with their mentees via supporting adult learning in teacher education. Reflective practice focuses primarily on using the imagination to create new scenarios. It is a method to sort through the surrounding turmoil to fully understand what is happening. Reflective practice enables students to visualise and comprehend their professional lives, which helps them comprehend an issue or be able to view several possibilities or techniques of thinking and learning. Knowing about their knowledge and experiences can be beneficial to students.

Keywords: *adult education, adult learner, life-long learning, reflective practices.*

Introduction

In adult education theory, and more specifically, in discourses on experiential learning, reflection is a crucial idea. It can be taken to mean the “activity in which people recall their experience, think about it, reflect on it, and assess it (Boud & Walker, 2006). John Dewey initially saw reflection as a form of critical inquiry into

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“primary experience” that was required for cognitive “meaning-making” and for examining the veracity of presumptions (Dewey, n.d.).

David Kolb created his well-known “learning cycle,” which identified “reflective observation” as a stage in the human learning process in which we step back to understand and conceptualise our experience. Kolb heavily drew on the work of Dewey, Piaget, and the action research model of Kurt Lewin (Mezirow, 1990).

According to Stephen Brookfield, for such a transition to occur, we must engage in a process of “critical reflection” in which we question our presumptions (Brookfield, 1998). Reflection’s worth as a technique for learning is debatable. Cognitive reflection is the primary method through which people draw information from their concrete experience, according to the prevailing “constructivist” approach to experiential learning (Kawalilak & Groen, 2019). A common educational tool used in both formal and informal learning processes and activities for individuals and organisations is reflective practice. He claimed that in order to improve pupils’ learning through reflective practice, one must, first and foremost, be able to grasp the imaginative aspect within oneself (Elidóttir, 2019).

Reflective Practice: The Basic Concept of Professional Growth

Reflective practice is ingrained in many adult learning techniques and is based on paradigms that see learning as a self-regulatory process (Knowles, 1970).

Reflective practices can help our implicit bodily experience and conceptual components of consciousness engage in a learning dialogue (Jordi, 2011). Reflective practice is a pedagogical tool that is frequently utilised in formal, informal, individual, and organisational learning activities and processes. The definition and use of reflection have undergone significant development and modification (Mezirow, 1990).

The concept of reflection is crucial to adult education theory and, more particularly, to discourses on experiential learning. It can be understood that it refers to the “activity in which people recall their experience, think about it, consider it, and assess it (Boud & Walker, 2006).

Reflective practice is a pedagogical tool that is frequently utilised in formal, informal, individual, and organisational learning activities and processes. The definition and use of reflection have undergone significant development and modification (Mezirow, 1990).

Reflective teaching and learning strategies have the capacity to incorporate a variety of cognitive and non-cognitive components that constitute human experience and consciousness (Jordi, 2011). It examines contemporary methods to competency-based training (CBT) and reflective practice after first examining the theoretical underpinnings of each. The objective of reflective practice is addressed if these two can coexist in educational practice and in an instructional or training setting. In adult education and training, CBT and reflective practice are not seen as being mutually equivalent (Hackett, 2001).

According to Brookfield (1998), reflective practice involves recognising one's evaluation competence and areas for improvement, as well as knowing oneself as an evaluator, determining one's own requirements for improved practice, and pursuing professional development to achieve those needs.

Practitioners in many professions have come to the conclusion that theory belongs in an ivory tower since it is neither practical nor relevant to those who are in practice. Education is no exception due to the recognised gap between theory and practice (Kaufman, 2019).

In all facets of education, the author contends, reflective practice might profit from a viewpoint that emphasises imaginative ideas and more innovative conversation. In order to improve students' learning through reflective practice, one must first and foremost be able to grasp the imaginative element within oneself (Elíóttir, 2019).

In four interconnected stages of assessment practice, (Archibald, 2021b) claimed that evaluative thinking encourages reflective practice. This framework can act as a guide for practice when teachers and facilitators select activities and subjects to promote reflection, as teaching and training in evaluation should ideally provoke critical reflection among all learners. Early exposure to a methodical strategy to encourage thought is necessary to take advantage of the chance. Reflection involves not just describing an experience but also analysing it. It is not a skill that comes naturally or intuitively; instead, it must be learned via repetition. Being an excellent lifelong learner requires it (Kaufman, 2019).

Reflective Practice in Adult Education

A variety of teaching-learning theories share the idea of reflection, which has multiple meanings and varies in importance depending on the setting. Reflection as a process is typically described within theories of adult education as the logical analytical process through which people draw information from their experience

and create meaning for learning. In adult education, reflective techniques can help us learn how to communicate with both our implicit bodily experience and our conceptual parts of awareness (Jordi, 2011). The autonomy of mentees in their teaching and teacher preparation is encouraged, but only to the extent that the mentor sees it as having a good impact on the students' learning (Dorner & Káplár-Kodácsy, 2020).

The idea of reflection bears extremely distinctive genetic material in the notion of adult education. The elevation of the mind and soul above nature and the human body in Cartesian and Christian traditions has resulted in a swollen head ever since reflection was born (Jordi, 2011). (Elíóttir, 2019) claimed that the most effective method of learning is through reflective practice. Teachers and teacher educators must be aware of the use of imagination in reflective practice and must not be afraid of the creative spirit by developing their own voice, their own vision, and breaking free from rigid and out-dated conventions.

Reflective mentoring requires a planned, on-going process of participant observation, monitoring, reflection, planning, and cooperation. (Dorner & Káplár-Kodácsy, 2020) undertook a study to investigate how mentor instructors conceptualise mentoring for reflective practice in qualitatively diverse ways, as well as how they transfer this into real mentoring practices. At primary and secondary schools in Hungary, ten of us senior mentor teachers had interviews. With varied degrees of incorporating the idea of reflective practice and engaging mentees as adult learners, mentor instructors were found to oscillate between fragmented and coherent conceptions of mentoring for teaching.

Reflective practice is a method of mutual learning that is distinguished by fragmentation rather than a continuous flow of collaboration between mentors, mentees, students, and faculty and staff in schools and universities (Dorner & Káplár-Kodácsy, 2020).

Given the complexity of the authentic teaching self, mentors' self-reported reflective strategies that are, to some extent, in line with mentees' adult learning processes appear to be dependent on students' actual, frequently ad hoc needs and academic obligations. As a result, they are hardly reconciled. These methods can be used in various ways whether in mentoring adult learners or instructing students (Dorner & Káplár-Kodácsy, 2020).

An overall framework for facilitating adult learning in teacher education could be advantageous to mentors. With the ultimate goal of developing mentees' autonomy

and competency in teaching, this would present possibilities for self-reflection practice, idea exchange, and problem-solving. There are conceptual and practical connections between critical thinking, critically reflective practice, and evaluative thinking that can encourage more explicit engagement with ideals that support social justice in evaluative thinking and evaluation (Archibald, Neubauer, & Brookfield, 2018).

In order to position themselves, acquire clarity, organise and carry out instruction in a purposeful and understandable manner, and reflect on their own professional theory and practice, professors and staff must: When working as an education professional, directed reflection is both a tool and a responsibility (Wilhelm, Förster, & Zimmermann, 2019). When adult learners were discussing complex ideas, creative strategies that had the ability to establish rapport, provide time and space for deeper reflection, and allow thought to be made visible proved invaluable. It is now more important than ever to create and maintain spaces for discourse in order to enable effective navigating through and reduction of present issues and tensions experienced. It was determined that taking a step back to pause, think, examine, and understand is necessary in order to go forward with work in intelligent, intentional, and meaningful ways of reflective practices (Kawalilak & Groen, 2019).

According to Parker & Roumell (2020), workforce disruption has serious effects on both workers and global economies, frequently necessitating that adults change careers or upskill in order to keep their jobs. Parker & Roumell (2020) recommended deliberate practice, mental simulation, and reflective meaning making as techniques to achieve efficiency and transfer learning outcomes pertinent to a changing workforce.

Individuals can participate in self-directed learning, independent or group experiments with theories in their teaching practice, and departments can offer formal professional development. Faculty members can also gather in informal learning groups like journal clubs (Dong, Lio, Sherer, & Jiang, 2021).

Reflection can assist in sorting through the complex web of deeply ingrained personal conceptions about teaching and learning that are based on a set of principles, theories, and practices. For thinking about how to go beyond traditional conceptions of reflection and make reflection relevant to professional growth and lifelong learning, reflection can offer a useful framework.

Importance of Reflective Practice in Adult Education

In order to grasp the essence of comprehending teaching and learning practice,

(Elídóttir, 2019) discusses the significance of thinking beyond the box. The purpose of this self-study is to design a method of professional development for teacher educators that the author can use with teacher students.

Archibald (2021a) came to the conclusion that theory-informed case reflections indicate that evaluative thinking plays a significant part in both educational contexts.

Parker & Roumell (2020) suggested mental simulation and reflective meaning making as appropriate techniques to build on fundamental domain knowledge and attain efficiency and transfer outcomes.

Elídóttir (2019) explains how reflective practices can bring together a dialogue between the lived experience and understandings based on imaginative meanings. Reflective practice could benefit from a perspective that focuses on imaginative thoughts and more creative conversation in all facets of education.

In order to increase students' learning through reflective practice, it can be claimed that it is necessary to be able to understand the imaginative element inside oneself in order to improve adult students' reflective learning. In-depth personal views about teaching and learning that are rooted in a system of beliefs, theories, and practises can become tangled in the process of reflection.

An Adult Learner: Reflective Practices

The best way to categorise adult learners is based on their unique personal and contextual characteristics as well as their level of self-regulated learning capacity. Self-regulated learning, in the context of mentoring, refers specifically to the capacity of the mentee to understand new information constructively at his or her own pace through self-reflection supported by the mentor's on-going reflective practice (Dorner & Káplár-Kodácsy, 2020).

Supporting adult learning in teacher education could provide mentors with opportunity to practice self-reflection, engage in intellectual conversation, and discuss challenges with mentees in order to increase their mentees' autonomy and competency as teachers.

The debate of complicated ideas among adult learners was extremely beneficial when using creative methods that have the potential to establish rapport, provide time and space for deeper reflection on issues, and enable thought to be made visible (Rainford, 2020).

New directions for the fundamental education and on-going professional growth of evaluation practitioners and academics are based on a constant critical introspection, research, and action that examines one's own paradigmatic assumptions (Archibald et al., 2018).

A skilled environmental adult educator, according to the participants' perceptions, must demonstrate a strong knowledge foundation in terms of subject-matter and pedagogical issues as well as specific competencies in communication or in the management of group dynamics (Gavrilakis, Daskolia, & Blintziou, 2020). It is also important to note that the majority of participants support the aspects of the co-learner and reflective practitioner when describing their work as environmental adult educators.

The objectives of andragogy and self-directed learning, (Jennings, 2007) said, were honourable. These should be explored in continuing medical education in a reasoned, knowledgeable, and evidence-based manner, recognising complexity and avoiding unsupported assertions, academic orthodoxy, and political expediency.

Adult education concepts and methods can also assist students in focusing on the potential for social justice evaluation while also preparing them for on-going professional growth and making them lifelong students of evaluation (Archibald, 2021b).

Archibald (2021a) recommended that doing exercise some critical thought and meta-reflection on the reflections offered here, which adult learner may do by compiling a short list of takeaways and implications for the practice of teacher evaluation.

Reflective practices would provide opportunities for practising self-reflection, exchanging ideas, and sharing challenges with the ultimate goal of developing mentees' autonomy and competency in teaching. Mentors in this teacher training could benefit from such a structure (Dorner & Káplár-Kodácsy, 2020).

Teachers should approach theories and ideas with a critical eye and be prepared to verify them through real-world experience and study, even when theoretical insights can help guide practice (Dong et al., 2021). Kawalilak & Groen (2019) came to the conclusion that in our classrooms, we may engage students in reflective discussion by purposefully designing areas where they can discuss concepts, see how they might be applied to their own professional life as educators, and write about their experiences.

Reflection can be a useful framework for considering how it is possible to go beyond conventional notions of reflection and to make reflection relevant to professional growth and lifelong learning. Adult teachers and educators will continue to advance in their responsibilities as educators by applying reflective practise theories in practice, collecting feedback from students and peer observers, and reflecting on practice. Reflection and practice are necessary for applying reflective practise ideas to adult education.

Conclusion

The process of reflection is typically characterised in terms of the logical analytical process by which people derive information from their experiences and create meaning for learning in theories of adult education. Reflective exercises can help us to better integrate the many, frequently disjointed components of awareness and human experience (Boud, 2001). The instructor can create a more comprehensive understanding and practice of reflection by recognising and interacting with characteristics that are typical of the integrative and meaning-making path of experiential learning (Jordi, 2011).

Understanding educational theory can improve curriculum development, teaching, and learning by allowing for its practical application in the classroom. In the course of adult learners' discussions of challenging ideas, creative approaches that have the capacity to establish rapport, provide time and space for in-depth reflection, and make thinking visible have proven useful. Mentees should start working on an authentic and independent teaching practice by performing a more structured reflection process that incorporates adult learning support. Reflective practice is largely about utilising the imagination to come up with new scenarios. In order to completely comprehend what is happening, it is a technique to sort through the surrounding chaos. In order to better understand a problem or to be able to see various options or methods of thinking and learning, reflective practice enables students to visualise and understand their professional lives. Students can get benefit from knowing about their knowledge and experiences.

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Status of Government Elementary Schools and Community Participation in Longleng District of Nagaland

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Abstract

The present study attempts to examine the status and prevailing condition of government elementary school education in Longleng District of Nagaland. In this study, a descriptive survey method was used. The study sought: (i). To examine the status of government elementary school education in EBRC Longleng Block; (ii). To identify the issue confronting elementary schools; (iii) To investigate the changes in school education that has occurred thus far; and (iv) To offer some suggestions for the improvement of schools. From the study, it was found that the elementary school education in the beginning was not properly functioning, but over the years, the number of schools increased, and at present, the government elementary schools have become quite satisfactory as a result of the communitization process and SSA programmes. However, despite the improvement seen in recent years, there were still some problems like the lack of properly trained teachers, inadequate TLM funds, insufficient sports equipment, and shortage of teachers, particularly in science and mathematics, as well as the lack of fourth grade staff in the schools. The participation of the community, EBRC, and some other mass-based organisations of NGOs has contributed towards the enhancement of school education in both urban and rural areas.

Keywords: *status, challenges, elementary schools, communitization, Nagaland.*

Introduction

Longleng District is also considered as the ‘Land of Handicraft’ where people indulged and involved in craftsmanship to fulfill needs and aspiration of the individuals,

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family and economic progress. Longleng District, the home to the Phom Naga Tribe is located in the North Eastern part of Nagaland.

The educational system during the pre-British period was in the form of dormitory system also known as Morung system, which served as centre for learning for unmarried men. Young people were trained in many different types of activities. Elders of the Morung gave instructions in all aspects of life and imparted knowledge of tribal tradition, basket making, folk-song, folk-dance, story narration, discipline, hard work, norms, rules and regulations of village festivals and celebration, art of warriors, etc.

The first formal school in Phom area was established way back in 1884 at Tamlu by the British Gorkha Troops in which Alphabets and numbers were taught in Assamese medium. But the school closed down after one year. It was only in 1931, after a gap of more than 45 years, with the help of one native teacher from Tamlu village, the school restarted, which was later upgraded to upper primary school i.e. up to class IV. The first school with middle school stage (class-VIII) was established at Longleng only in 1953 while it was still subdivision of Tuensang district. A full-fledged High School (up to class X) was opened in 1972 and at Tamlu in 1963. Thereafter, primary schools were established in almost all the villages and later five Middle schools were established at Yachem in 1966, Shakshi in 1967, Bura Namsang in 1968, Namching in 1969 and Yogam in 1980.

Hence, it may be said that indigenous form of education existed among the Phom community in Phom dominated areas till 1951. For the first time in 1953 a school came into being which marked the beginning of modern education in this area. Till the seventies, the students of Phom community attained only up to Middle School and for the further study, students were sent to other neighboring Districts or places.

The Sarva Shiksha Abhiyan (SSA), flagship programme of Government of India aimed at universalization of elementary education for the children in 6-14 age group, is being implemented through a district level decentralized management framework involving local bodies, namely, Village Education Committee (VEC)/ Town Education Committee (TEC)/ Ward Education Committee (WEC), etc., under communitization process since 2002-03.

In Longleng, there are two Educational Block Resource Centres (EBRCs) such as EBRC Longleng Block and EBRC Tamlu Block. These two blocks under

Longleng district play an important role in improving quality of education. The EBRCs under SSA conduct in-service teacher training and provide academic support to teachers and schools on a regular basis as well as help in community mobilization activities. Supervision and monitoring on all activities including academic and finance are carried out by the District Mission Authority and the EBRC Coordinators and reports are submitted to the State Mission Authority (SMA).

There are some studies on elementary education and community participation. Sharma R.C (2002) on Elementary Education, Non-formal Education and Operation Blackboard dwelt on the problems faced by the rural areas. This study showed that though many changes were brought about in the primary schools, they still faced shortage of teachers, lack of quality education and other facilities unlike the urban areas.

Buno L & Rukhono Iralu (2011) studied quality achievement in elementary education in Nagaland under Sharva Shiksha Abhiyan and recommended to promote children to be active participants in a knowledge society and for implementation of educational interventions with involvement of stakeholders, especially teachers, parents, community and Panchayat Raj institutions and voluntary organisations. This study underlined another important observation that is to make primary and middle school curriculum content relevant and appropriate for the pupils. The study also stated that awareness and skill development in areas of school supervision and inspection, maintenance of register, finance accounting, knowledge of rights and responsibilities are all essential for effective functioning.

Keithellakpam, B (2016) pointed out that there were many Government primary schools but they were not developed adequately and also not maintained properly. Many defects existed as compared to private schools.

Sentimenla Jamir (2022) found that most of the people in the community were aware of the communitization process implemented in the elementary schools. However, some of the problems revealed by the study were illiteracy, excessive personal responsibilities at home and lackadaisical attitude of the parents towards education. These were still the major causes of hampering active community participation in elementary education in Nagaland.

Looking to the state of Nagaland, it requires good research studies on Government elementary school education and in this context the present study was taken up.

Statement of the Problem

The study examines the status of Government elementary school education under EBRC Longleng block, the emerging issues and the role of Head-teachers, teachers, students and parents in the elementary schools and thereby suggests measures for strengthening the schools and its functioning.

Objectives of the Study

The study focused on four objectives, viz., (i) To examine the status of government elementary school education EBRC Longleng Block; (ii) To identify the problems faced by the elementary Schools; (iii) To study the changes made so far in the government elementary schools particularly after implementation of communitization process; and (iv) To suggest measures for the improvement of government elementary schools

Research Questions

The study set certain research questions, such as: (i). What is the status of Government Elementary School Education in EBRC Longleng Block?; (ii) What are the problems faced by the government Elementary schools?; (iii) What are the changes made so far in government elementary schools since the implementation of communitization process?; and (iv) What are some suggested measures for the improvement of government elementary schools?

Methodology

For the present study Descriptive Survey Method was used. The sample of the study comprised of fifteen schools - ten primary/middle schools from villages and five primary/middle schools from Longleng town and within it 150 students - 100 students in the village schools and 50 students in the town schools; 45 teachers - 30 from the village schools and 15 from town schools and all the 15 school heads, 45 parents - 15 from town and 30 from the village. Simple random sampling technique was used for selecting the schools and convenience sampling was used for teachers, students and parents. The present study used 3 questionnaires and 1 interview schedule for collection of data and information from the given population. The questionnaire for the head-teachers was structured with 18 questions; that for the teachers was structured with 17 questions, and for students, 10 questions. One structured interview schedule was used to get information from parents. The responses were analyzed by the calculation of percentages and presented in the tabular form.

Analysis and Interpretation of the data

Table 1: Total number of schools under EBRC Longleng Block

Sl.No	Categories	No. of Schools
1	Primary only	34
2	Primary with Upper Primary	15
3	Primary with Upper Primary and Higher Secondary	1
4	Upper Primary Only	1
5	Primary with Upper Primary and Secondary	9
6	Upper Primary with Secondary	5
	Total	65

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Table1 shows that the total number of schools under EBRC Longleng block was 65 schools. Out of this, 34 were primary only, 15 were primary with upper primary, 1 was primary with upper primary and higher secondary, 1 was upper primary only, 9 were primary with upper primary and secondary and 5 upper primary with secondary.

Table 2: Total number of Classrooms under EBRC Longleng schools

Sl.No	Categories	No. of Categories	Percentage
1	Under Construction	7	1.41%
2	Need Major Repair	30	6.02%
3	Need Minor Repair	53	10.64%
4	constructed well	408	81.93%
	Total No. of Classrooms	498	100%

Table 2 indicates the total number of school classrooms under EBRC Longleng block were 498. Out of this, seven were under construction, 30 need major repair, 53 need minor repair and 408 classrooms were well constructed.

The total number of schools under EBRC Longleng Block was 65, and out of this, only 9 schools had computer with CAL Lab facilities and the rest 56 schools were without computer facilities.

The total number of teachers under EBRC Longleng Block was 630. Of this, 416 teachers were regular, 209 teachers were under contractual basis and only 5 teachers were under the category of part time.

The status of teachers with computer training is 63.40% male teachers, and only 36.60% female teachers. 64.70% male and 35.30% female teachers received training in CWSN (Children with Special Needs) under EBRC Longleng Block.

Elementary teachers under EBRC Longleng Block is 630, both in urban and rural schools, out of which 53.4% were male and 46.6% were female. The social category/caste of teachers employed under elementary schools EBRC Longleng Block reveals that the general category was 3.97%, SC category teachers were 0.77%, ST teachers were 93.17%, OBC category was 1.91%, and only 0.16% teachers were from other category.

The categories of teachers who were teaching in different classes reveals that 52.60% were teaching in primary level, 30.23% under upper primary level, 2.30% under primary and upper primary level, 11.10% under secondary level, 0.47% under higher secondary level, 2.60% under upper primary with secondary classes, 0.70% under pre-primary and primary level and none was teaching specifically under pre-primary level.

The detailed percentages about schools without proper facilities under EBRC Longleng Block indicates that the total number of schools is 65, and out of this, 1.50% schools were without proper functional toilet, 56.90% were without proper functional water facilities, 41.60% were without proper electricity facility and 0% were without adequate classrooms.

Responses from the Head Teachers

Status of Urban Head-teacher at the school: 100% of the Urban Head-teachers were male. 60% of Head-teachers with Matriculation, 20% with PU qualifications and 20% with B.A qualification. 40% of the head teachers were with D.El.Ed. (DIET) trained and 60% were found untrained. 60% of Head-teachers had 10-20 years of teaching experiences and 40% had 21-30 years teaching experience.

Status of Rural School Head-teacher: 100% of the Rural Head-teachers were male. 40% were with Matriculation, 40% with PU qualifications and 20% with B.A qualification. 40% of the head teachers were with D.El.Ed. (DIET) trained and 60% were found untrained. 90% of Head-teachers had 10-20 years of teaching experiences, while 10 % had 21-30 years teaching experience.

Status of both Urban and Rural schools infrastructure/building: All the schools were Hill Type/Pucca buildings.

Status of informal education under urban and rural schools: The school students were not satisfied with the given informal education. 20% schools conducted field trip, 0% of tour and 60% schools conducted other activities like sports, picnic, teacher's day, etc. No schools conducted excursion and tour activities.

Status of co-curricular activities of urban schools: 100% of schools conducted annual picnic, 100% of schools conducted annual sports, 100% observed Teacher's Day, 40% of conducted drawing competition and 100% conducted Children's Day. No schools conducted debate, quiz competition, cultural day activities.

Status of co-curricular activities of rural schools: 100% of schools conducted annual picnic, 100% of schools conducted annual sports, 100% observed of teacher's day, 60% conducted drawing competition and 100% conducted children's day and 60% conducted cultural day. No schools conducted debate, quiz competition activities.

Status of central scheme fund received at urban school: 100% of the students mentioned that the schools provide free textbook, 100% of them indicated that the school provided free uniform, 40% said that the school provided free stationeries and none of the students received of free rain coat. All the schools were providing mid- day meal scheme.

Status of central scheme fund received at rural school: 100% of the students mentioned that the schools provided free textbook, 100% of them indicated that the school provided free uniform. None of the students received free raincoat and free stationeries. All the schools were providing mid-day meal scheme.

Status of necessary facilities available at urban schools: 40% of the schools had computer facilities, none of the schools had playground, 60% of the schools had proper chairs, 100% had proper electricity, 100% had proper toilet but only 60% had separate toilets for boys and girls, 40% had safe drinking water facility, only 20% received teaching learning materials. None of the schools had library, canteen and sports materials in their school premises.

Status of necessary facilities available at rural schools: 20% of the schools had computer facilities, 40% of the schools had playground, 80% of them had proper chairs, 30% schools had proper electricity, 50% of the schools had proper toilet facilities and only 40% had separate toilets for boys and girls, 10% had safe drinking water facility, only 10% received teaching learning materials and 10% get sports materials regularly. None of the schools had library and canteen facilities in their school premises.

Status of Mid-day meal under both urban and rural schools: 100% of the schools under Longleng block both in urban and rural schools provide mid-day meal weekly and none of the schools are providing every day.

Proxy teachers in urban schools: 20% of the schools had the proxy teachers.

Proxy teachers in rural schools: 40% of the schools had the proxy teachers.

Responses from Teachers

Status of the teachers under urban schools: 60% were male teachers, 40% were female teachers. As per their educational qualifications, 40% were Matriculate, 40% were PU and 20% were B.A. 40% teachers were trained with D.El.Ed. (DIET), none of the teachers with B.Ed. degree. 60% teachers were untrained. 80% of teachers had 10-20 years of teaching experience and while 20% had 21-30 years teaching experience. While, 40 % of teachers were between 30-40 age group, 60 % of Teachers were 40 years and above.

Status of teachers under rural schools: 43.3% of the teachers were male and 56.7% were female teachers. As per their educational qualifications 13.3% were Matriculate, 40% were PU and 46.7% were B.A. 40% teachers were trained with D.El.Ed. (DIET), none of the teachers with B.Ed. degree. 60% teachers were untrained. 83.4% of teachers had 10-20 years of teaching experience and while 16.6% had 21-30 years teaching experience in terms of age, 60 % of teachers were between 30-40 age group and 40 % of Teachers were 40 years and above.

Class-test conducted by teachers: In urban area, 33.3% of the schools conducted the class test weekly, 13.3% monthly, 40% end of the lesson and 13.3% of the school on specific date. In rural area, 53.3% of the school conducted class test weekly, 20% monthly, 23.3% end of the lesson and 3.3% of the school on a specific date.

The area of student's interest: In urban area, none of the teachers stated that students were interested in homework, 26.6% teachers stated that the students were interested in play, 6.6% teachers stated that the students were interested in study, 60% in co-curricular and 6.6% in others like handicraft. In rural level, 6.6% of the teachers mentioned that students were interest in homework, 23.3% of the teachers stated that the students were interested in play and 86.6% in co-curricular activities and 3.3% in any other activities.

Orientation Program for teachers: All the teachers (100%) of the schools in both urban and rural areas had attended orientation programmes.

Responses from Elementary Students

Status of Elementary students: 46% were boys and 54% were girls from urban area. In rural area, 36% were boys and 64% were girls.

Responses from both urban and rural students: 100% of the students mentioned that the school provided free text book, 100% indicated that the school provided free uniform, 100% said that the school provided mid-day meal with more effectively in both urban and rural elementary schools, 100% of the urban students responded that the schools provided first aid but only 60% of the rural school students responded that the school provides first aid and in both urban and rural schools 40% students mentioned that the schools had separate toilets for boys and girls.

Responses from Parents

Status of the parents: 40% were male and 60% were female from both the areas.

Parents–Teachers meeting: In urban school, 20% of the parents stated that the school convened meeting with parents once in a year, 40% said twice in a year, 20% stated that school convened meeting weekly and only 20% commented that that the school never convened meeting. In rural schools 40% of the parents responded that the school convened meeting once in a year, 10% said weekly in a year, and another 50% of the parents said that the school never convened parents meeting.

Parents' awareness on Free and Compulsory Education up to 14 years: All the parents, both in urban and rural areas, were found to be informed and aware of such policy regarding free and compulsory education being implemented under primary to elementary education by the Government.

Parents visit to school: 13.3% of the parents visited the school monthly, 20% of the parents mentioned that they visited school alternatively (sometimes) and 66.7% of the parents never visited the school in urban. However, in rural areas, 23.3% of the parents visited the school monthly, 16.7% visited the school alternatively (sometimes) and 60% of the parents never visited the school.

Problems Being Faced by the Urban and Rural Schools under EBRC Longleng Block

Problems being faced by the urban and rural schools: 13.3% of the schools faced problems related to lack of cooperation from community, 33.3% of them lack of teachers training, 33.3% face lack of office staff, 46.6% faced problem with lack of fencing/surrounding walls, 46.6% faced insufficient fund, 46.6% faced problems of insufficient teachers, 93.3% faced problems with lack of sports materials, 80% lack of separate staff rooms, 73.3% faced problems with lack of computer facilities and 46.6% of them faced problem with in availability of proper electricity.

Problems faced by urban elementary schools

The specific problems faced by the rural schools were:

1. There are some TEC chairmen who were too authoritarian in dealing with the schools which created lack of cooperation between them.
2. In all the schools, the Head-teachers and teachers were mostly matriculate and with Class XII educational qualifications and 60% were untrained and without courses like D.El.Ed., and B.Ed training.
3. The elementary schools are facing more problems with the lack of sufficient office facilities like trunks, chairs, fans and almira. The existing facilities were only those that were issued during the inauguration of schools, thereafter, there was no good quality materials provided by the Government.
4. The schools were also facing problem with lack of fencing and retaining walls. Such problems prevailed in all the schools. Rather than permanent surrounding walls, fencing made of bricks, there were temporary fence made up of local timber and bamboo.
5. The Government does not respond to the grievances and proposals sent for fund from the schools, which affect progress and development of the school.
6. The elementary schools faced serious problems related to the lack of teachers in subjects like Maths, Science, English and Computer, etc.
7. And above all, the essential requirements in the schools were materials for games and sports, other co-curricular activities were not provided by the Government in the schools. As a result, the schools failed to organize and initiate those activity-oriented programs for students.

Problems faced by rural elementary schools

1. In rural areas, many schools were not properly looked after. There was

inadequate fund release and there was lack of cooperation by the VEC in the functioning of the schools.

2. The study revealed that the in-charge/Head-teachers were given opportunity based on seniority without looking at the background and the educational qualification and training obtained. 60% of rural Head-teachers were untrained.

3. They were also facing lack of office facilities like computer settings, electricity, almirah, chairs/tables and fans, etc. Furthermore, the chairs/tables, cupboards, etc., were getting worn out as they were made of wood 10 – 15 years ago.

4. Majority of the elementary schools had no proper maintenance of surrounding walls, fencing and entry gate, which was not safe or secure for the students and schools.

5. The schools were not satisfied with the allocation of funds by the Government.

6. The schools faced problem with lack of teachers in subjects like Science, Maths, English, Computer and Vocational teachers.

7. And 90% of the schools were not getting the sports materials to initiate and organise physical activities, games & sports in the schools for skill development of the students. The Government should take serious note of these issues for the effective functioning of the schools.

Changes made so far in government elementary school education

1. Participation of community: In the past, community participation was very rare in the field of education, but as the study shows, there has been more participation and involvement of community in school education for the progressive development.

2. Consistency of Mid-day Meal: Not only the government but even community with the help of some NGOs took up the responsibility for the improvement of the elementary school both in urban and rural areas. The school students were receiving mid-day meal consistently without delay and the community had also shown much concern for it.

3. Regular maintenance of attendance register in the office: The regularity of Head-teacher and teaching staff in their duties in the school had immensely improved since the implementation of Communitization on Elementary Education. The community had arranged some persons responsible for the programmes of school.

4. Awards and Records: Under EBRC Longleng Block some of the teachers in elementary schools were awarded by the District Administration for 'best conduct'. Students' participation also recorded many good positions in the competitions.

5. Increase in enrolment of girls in schools: Due to the parents' awareness of government policy on Free and Compulsory Education even the enrolment of girls students had increased. The enrollment of girls in the schools was 14.6% more than the boys.

6. Increase in trained teachers: More teachers were found to be attending training programmes organised by ERBC Block. More teachers were getting trained in D.El.Ed., and B.Ed. programmes.

Suggestions for improvement of elementary education in Longleng block EBRC

1. Teaching Learning Materials: For smooth functioning and development of the school education more relevant teaching learning materials should be provided on time.

2. Educational field trip or tours should be organised in the schools and students should be encouraged to learn about other cultural practices and environment to widen their mental horizon.

3. Laboratory facilities: It is important to have well-equipped laboratory particularly for science subjects. There is an urgent need to promote science education in Nagaland. It has become imperative to create interest in science education for the society to progress.

4. School Library: Schools should maintain libraries with good collection of textbooks and reference materials, related to the school subjects appropriate for children. Computer facilities should be made available.

5. Facilities for sports and games for both girls and boys should be provided adequately. It was very disheartening to note that in some schools, the girls were not getting opportunity to play any games while boys were involved in playing games and sports. Therefore, the facilities should be provided without any discrimination.

6. School Canteen: For adequate refreshments of students and staff, canteen with basic facilities and adequate food should be provided; clean drinking water supply should be made available in the schools.

7. Co-curricular activities: It has become more important to initiate and organise the co-curricular activities in the schools for the skill development of the students. Performing Arts and Fine Arts activities such as instrumental music facilities, drama, and debate may be organised in schools.

8. Adequate Computer facilities: The Government should provide adequate computer facilities in the school along with computer instructor.

9. Records maintenance: Proper record of each student should be maintained and follow up action/or remedial programmes should be organised for the slow learners.

10. Parents role: Parents should motivate their children to get interested in their studies. They can also make suitable arrangements to facilitate them in studies.

11. Time table for students: Parents should provide sufficient time for children to study especially in morning and evening. Furthermore, parents should monitor children in the use of their smart phones.

12. Skill development programmes: Schools should organize good skill development programmes for both teachers and students. Workshop and orientation programmes in teaching methodology should also be organised for the teachers in the schools for better teaching learning process. This has assumed more importance in the context of NEP 2020.

13. Competent leadership: Elementary schools in Longleng EBRC Block require competent leadership who will be able to serve the community with commitment, help strengthen and develop school education.

14. Encourage resource person from the community: The schools and TEC/VEC should encourage intellectuals, learned and educated person like Doctor, Engineer, Musician, Forestry and Agriculturist, etc., for community engagement programmes. They should be invited as guest resource persons for the program/occasion.

15. Adult Education Programmes: Andragogy may help rural uneducated folks in creating awareness on the importance of quality education and imparting knowledge for carrying out their roles and responsibilities towards school education effectively in this fast-changing world.

Conclusion

The word Phom is considered as the “Land of Cloud”. The Phom tribe is a major tribe of Nagaland. Longleng District was established in 2004, bifurcated from Tuensang District. The school system in the land of Phom community was first started with the system of dormitory or morung, where boys and girls were imparted knowledge as their first stage of education. The children were taught skills, folklores, norms and customs by the elder leaders who were already at the high level of stage in the morung. The real formal education was obtained from especially the neighbour district of Ao community. The first educational institution of Phom community was started at Tamlu area which is also an important town under Longleng district and later education spread to the other areas of the community.

The findings of the present study indicates that visible improvement has been made in many areas such as better student enrolment, retention rate and performance; better teachers and staff regularity and teachers’ performance; improved multiple

activities oriented programmes for students; orientation and training for the teachers; increased involvement of the community and parents; and better improvement and development of physical infrastructure. Sarva Shiksha Abhiyan of the Union Government, for universalization of elementary education, has achieved significant success and has demonstrated positive trends in several key indicators. As part of the effort to improve quality of education, regular in-service training programmes are organised for teachers in the District and academic support provided through BRC. There are two EBRCs under Longleng District- Longleng Block and Tamlu Block. These two blocks take control and perform functions over every elementary school education. The elementary schools in the Longleng EBRC Block have indicated more quality of education although not without problems remaining. Some of the issues and problems raised by the stakeholders were poverty and illiteracy of parents, insufficient financial assistance, inadequate supply of teaching learning materials, lack of computer setting, improper electricity connection, lack of proper cooperation from authority and lack of separate staff and head-teachers room.

Though the schools faced many different problems, it was largely believed that the government elementary schools increased in number and brought tremendous change and progress in the field of education for the people of Phom Community. Besides, due acknowledgement must be given to the communitisation process which is unique programme implemented by the Govt. of Nagaland. The Communitisation process is a mechanism which encourages the community to come to the school and facilitate the school to reach out to the community. There is strong collaboration between the community and the Government. This initiative of giving ownership to the community is fostering enormous community participation in several villages and towns and it is felt that this may be the best way to move forward towards universal and quality elementary education in the state. The Nagaland Government initiated this programme for the sustainable development.

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Positive Emotions, Relationships, Meaning, Engagement as Mediators between Accomplishment and Creativity among Indian Youth

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Abstract

Creativity has a lot of benefits when nourished. If it is suppressed, it becomes the reason why so many youths become miserable before their 30s and feel like they have gone nowhere in life. Interventions to improve Creativity have proven successful in cognitive aspects, but positive psychology aspects are still in their infancy. It is important to consider the positive psychology aspects in enhancing Creativity, or else, it might lead to "Negative Creativity".

The current study examines the positive psychology variables, i.e. Positive Emotions, Relationships, Meaning, and Engagement, as mediating variables between Accomplishment and Creativity. Four hundred and seven samples from the youth population from various states of India, i.e. Karnataka, Maharashtra, Kerala and Andhra Pradesh, completed a questionnaire package consisting of The Kaufman Domains of Creativity Scale (K-DOCS; Kaufman, 2012) and PERMA-Profiler (Butler and Kern, 2016). As an initial step, Pearson- Product moment Correlation was done to understand the relationship between the variables. The results disclosed positive and significant correlations between the study variables, thus allowing for further analysis. The obtained data were further analysed using Mediation Analysis. The results showed that the indirect path effect by which Accomplishment influences Creativity is via Positive Emotions, Relationships, Meaning, and Engagement. The study's implication is at the policy-making level. The government of India can use the developed model to make amendments in Education Policy. This model can be applied to the student's regular curriculum so that learning becomes easy, creative and pleasurable for them and contributes to the overall holistic development of the person in the longer run.

Keywords: *PERMA, creativity, Indian Youth.*

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1. Introduction

Creativity is defined as “thinking of novel and productive ways to conceptualize and do things; includes artistic achievement but is not limited to it” (Seligman, 2021; 29). The essential elements of Creativity are originality plus adaptiveness (Seligman, 2021; 110). The scientific study of Creativity is considered a significant part of the positive psychology movement (Simonton, 2002; Adams, 2012; Kaufman & Beghetto, 2014). Therefore, among many other reasons, Creativity is worth studying because it is an inherently interesting phenomenon and one of the life skills, which is also recommended by the Department of Mental Health, World Health Organization (1999). It is also the basis for historical, technological or cultural advances (Gabora, 1997; Simonton, 2000), enhances entrepreneurial or business performance (Amabile, 1988; Florida, 2002), promotes positive educational outcomes (Beghetto & Kaufman, 2010), and also it enhances mental health and wellbeing (Cropley, 1990; Forgeard & Elstein, 2014; Forgeard, Mecklenburg, Lacasse, & Jayawickreme, 2014; Kaufman & Sexton, 2006; Richards, 2007).

Richards (2019), a professor at Saybrook University, USA, a psychologist and psychiatrist, in her book “Everyday Creativity and the Healthy Mind: Dynamic New Paths for Self and Society”, writes,

“Everyday Creativity is...fundamental to our very survival. A creative style of living, coping with difficulties and weaving possibilities, can not only produce useful accomplishments for self and world but can offer the creator new resilience, perspective, aliveness at the moment, joy, and purpose in life.”

The Creative Life may not always be delightful but follow it because it can eventually lead to a profound and more meaningful sense of wellbeing. Creativity, which has a lot of benefits when nourished, if suppressed, it becomes the reason why so many youths become miserable before their 30s and feel like they have gone nowhere in life. Staff (2013) further says that today’s youth have no idea what they want to do because they hate whatever they do, and it is all because society is telling them what to do rather than allowing them to create their opinions and make their own decisions.

In a release by the Ministry of Youth Affairs and Sports (2003), The National Youth Policy of India (2003) defines the youth population as those aged 13-35 years. The United Nations defines “youth” as persons aged between 15 and 24. However, this definition is flexible (Youth, 2020). Youth is the most essential and dynamic

division of the population in any country. India is considered one of the world's youngest nations, with more than 62% of its working-age group (15–59 years) and more than 54% of its total population below 25 years of age. It was further opined that the average age of India's population by 2020 will be 29 years (Panda, 2018). In their article (*Youth and Creativity*, 2015), UNESCO mentions that Nations will see development when young entrepreneurs gain access to enhancing artistic and creative skills that can foster more dynamic creative sectors and strengthen the development of professional associations, networks and alliances for young cultural and creative professionals. The Vice President of India, addressing the students at the first Graduation Ceremony of PSG Institute of Technology and Applied Research at Coimbatore, (PIB, 2019) has called for tapping the creative potential of the country's youth to make India a leading knowledge and innovation hub. So, concluding the news releases of eminent Human Development Organisations and talks of India's prominent leaders and worldwide, it can be said that developing Creativity in Youth is very much needed for the betterment of the individual and the country.

Literature suggests various methods may foster creative thinking, like, concept mapping techniques such as mind mapping or brainstorming variations (Gordon, 1961). Forgeard and Eichner (2014) mention two types of creativity-based interventions: interventions in which Creativity is the main target (and is seen as an end in itself), and interventions in which Creativity is used as a tool to increase other aspects of psychological wellbeing. Interventions to improve Creativity have proven successful in cognitive aspects, but in positive psychology aspects, the researches are still in its infancy. It is important to consider the positive psychology aspects in enhancing Creativity, or else it might lead to what Cropley, 2012 calls "negative creativity". Almost all existing empirical and theoretical work on Creativity to this point, however, has focused on the positive outcomes from Creativity (James et al., 1999).

Creativity is seen as producing valuable products (concrete or abstract) in new ways. Discussions of Creativity tend to believe that it is always socially desirable. Though Creativity can produce damaging or unpleasant results to other individuals, groups, or society at large, a few individuals have mentioned the possible chances of "Negative Creativity"; and that side of Creativity has received relatively little theoretical attention or research. To rule out the negative side of Creativity, Positive psychology variables are required.

So, fostering positive psychology variables and Creativity is important so that the youth can become positively creative and avoid showing up Creativity, which is

destructive. With this intention, the researchers have chosen the PERMA model (Seligman, 2011), which is a widely recognized and influential model in positive psychology over other wellbeing models, that is, the Sustainable happiness model, which proposes that multiple factors account for wellbeing (Lyubomirsky et al., 2005), to enhance Creativity because the PERMA model is a recent model. This model gives us a complete framework for understanding wellbeing and a foundation for improving wellbeing. There are higher chances of improving Creativity with ease because it contains all positive variables like Positive Emotions, Engagement, Relationships, Meaning and Accomplishment.

Seligman (2011) has introduced the PERMA model of flourishing, which includes five domains related to psychological wellbeing: (1) Positive Emotions (P), (2) Engagement (E), (3) Relationships (R), (4) Meaning (M) and (5) Accomplishment (A). The wellbeing model has suggested providing a framework based on positive psychology principles. It can lead to increased health, life satisfaction, improved Creativity, and ultimately moral development and civic citizenship.

In this research paper, PERMA is defined as:

- P (Positive Emotion): What we feel: pleasure, rapture, ecstasy, warmth, comfort and likeness (Seligman, 2011).
- E (Engagement): Engagement is about Flow: being one with the music, time stopping and losing self-consciousness during an absorbing activity (Seligman, 2011).
- R (Relationships): Relationships refer to feeling loved, supported, and valued by others. Having positive relationships with others is an integral part of life, feeling good and going well (Seligman, 2011).
- M (Meaning): Meaning refers to having a sense of purpose in life, a direction where life is going, feeling that life is valuable and worth living, or connecting to something greater than ourselves, such as religious faith, a charity or a personally meaningful goal. Meaning provides a sense that life matters.
- A (Accomplishment): Accomplishment can be objective, marked by honours and awards received, but feelings of mastery and Accomplishment are also important. It involves working toward and reaching goals and completing tasks and everyday responsibilities (Butler & Kern, 2015).

The following researches examine the relationship between PERMA and Creativity. In her famous broaden-and-build theory, Fredrickson (2004) points out that an increase in positive emotions will lead to a broader thought-action. This ultimately leads to more creative, flexible, centralizing and open thinking and action

patterns. A study conducted by Gasper (2004: 223) with undergraduates found that sadness inhibits new ideas. This may be because when individuals are sad, they are warier at making mistakes and exercise more restraint. Conner (2016), a researcher at the University of Otago in New Zealand, and two American researchers analyzed various surveys from over 650 young adults who had filled out daily online diaries for 13 days. Among many other things, the questions asked how much time they spent in creative endeavours each day and about their wellbeing: their levels of positive emotion, negative emotion, and “flourishing”—an overall sense of meaning, engagement, purpose, and social connection in their lives. To understand what causes what, the researchers compared measures of Creativity on one day with the measures of wellbeing on the next day and vice versa. Results showed that people who engaged in more creative activities than usual reported increased positive emotion and flourishing the next day, while negative feelings didn’t change. According to Cohn et al. (2009), experiencing positive emotions is associated with more achievement, not simply because individuals are left feeling better, but also because a broadened mindset helps them develop positive emotions and achieve Flow.

According to Csikszentmihalyi (1996), Flow may increase Creativity in at least two ways: First, by increasing the hard work needed to gain the required knowledge to pursue an idea. Second, the state may facilitate creative thinking. Studies have found significant relationships between levels of Flow in music students and the quality of their group composition as measured by creativity ratings (MacDonald, 2006). A study also indicated the same in ensemble performance and improvisational jazz (Sawyer, 2007) and levels of Flow and engagement, enjoyment, and absorption in the creative writing process (Forgeard et al., 2009). Dietrich, who researched the concept of Flow and transient hypo frontality, explores the neurological profile of Creativity in his text “How Creativity Happens in the Brain”. He suggested that “Flow represents a third mode of creativity, alongside the deliberate and spontaneous modes of creative thinking” due to the certitude that Flow appears to involve processing in the implicit system (Dietrich, 2015). Emotional contagion theory explains that emotions can be transferred from one person to another, meaning if you carry positive emotions, you can transfer them to others.

In a research study done by Chang et al. (2020) the results say that when athletic class students constantly stay positive, their positive emotions get transferred to each other, which builds a positive relationship in the team. An article written by Northwestern Medicine Staff (2017) mentions that being in a loving relationship can give an individual a sense of wellbeing and purpose. It’s possible that having a sense of purpose can add years to your life. Kaufman (2018) mentions that *Creativity* can

enhance *life's meaning* in his article. In support of this article, Feeney & Collins (2014) in their research say, Supportive relationships help people find a sense of purpose and meaning in life. Wellington (2017) mentions that one absolute requirement for the flow state of mind is a clear sense of purpose. It would help if you felt an authentic connection to the meaning behind your work to devote yourself to fulfilling it at the moment. Kaufman (2016) says that Flow — the mental state of being completely present and fully immersed in a task — strongly contributes to Creativity. When an individual is in a Flow state, the creator and the universe become one, outside distractions subside from consciousness, and one's mind becomes fully open and attuned to the act of creating.

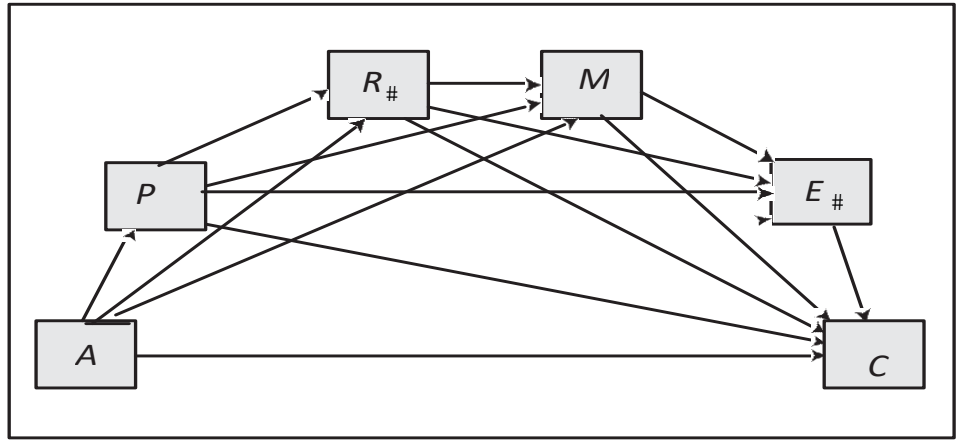
From the introduction and support of previous research, it can be concluded that Creativity, which is defined as “thinking of novel and productive ways to conceptualize and do things includes artistic achievement but is not limited to it” (Seligman, 2021: 29). The essential elements of Creativity are originality plus adaptiveness (Seligman, 2021: 110), which is a very important variable that needs to be studied in young adults. Researchers should explore new ways with PERMA variables to enhance Creativity in an individual, which contributes to the betterment of humankind. From the introduction, it can also be seen that, in previous research, this relationship between PERMA and Creativity has been well-established in different populations (Fredrickson, 2004; Seligman, 2011). The PERMA variables within themselves are highly correlated; complementing this point, research reported by Butler and Kern (2016) supported the five-factor structure of the PERMA model. Confirmatory factor analysis showed that the inter-correlated Five-Factor Model aptly fits the data and that the five factors were generally reliable. In a study done by Carvalho (2021), Confirmatory factor analysis revealed that the PERMA model of five inter-correlated factors is the best data fit.

However, from the literature, we can observe the possibility of “chains” of influence, but it remains unclear what path PERMA variables take to increase Creativity. This research is done to understand the chain of influence so that it fills the gap in the knowledge, as well as help the researchers to develop further the intervention based on the path discovered in the paper.

So, based on the review of literature, the researchers observed the probable path which PERMA variables take to increase Creativity among Indian Youth. After data mining, the researchers decided Accomplishment to be an independent variable and have come up with the below-mentioned path to understanding how PERMA variables take to increase Creativity.

Figure 1

The conceptualized model to assess direct and indirect relationships between Accomplishment, Positive Emotions, Relationships, Meaning, Engagement and Creativity.



2. Method

Objectives

The study's objectives are to: assess Positive Emotions, Engagement, Relationships, Meaning, Accomplishment and Creativity among Indian Youth; to find the correlation between variables of the study among Indian Youth; and find the path by which Accomplishment enhances Creativity among Indian Youth.

Hypotheses

H1: There is a significant correlation between study variables among Indian Youth.

H2: There is a significant indirect effect of Accomplishment on Creativity via Positive Emotions, Relationships, Meaning, and Engagement.

Research Design

The research design used here is the Correlational Design. The correlational design is used to understand the relationship between the variables. In correlational

research design, researchers use the statistical correlation test to measure the degree of association (or relationship) between two or more variables or sets of scores. The degree of correlation between two variables is classified in the correlation coefficient. This point is also supported by Creswell (2012: 338). This opinion also suggests that the researchers in this research do not attempt to control or manipulate the variables in the experiment; instead, they relate using the correlation statistics, two or more scores for each person.

Sampling

The researchers adopted the convenient sampling method. The researchers collected the sample from 407 participants from Karnataka, Maharashtra, Andhra Pradesh and Kerala states of India who belonged to 18- 35 age group.

Criteria

Inclusion criteria:

The National Youth Policy of India (2003) defines the youth population as those in the age group of 13-35 years. The World Health Organization (n.d.) defines 'Adolescents' as individuals in the 10-19 years age group and 'Youth' as the 15-24 year age group. At the same time, 'Young People' covers the age range 10-24 years. The United Nations defines Youth as 15 to 24 years of age (*Youth*, 2020). As there are various definitions, and there are no clear guidelines for determining what ages should be included in the designation of Youth, and there is a lack of consensus among international experts, in this research, Youth between the age group of 18- 35 is considered for the study.

Tools

This section comprises information regarding the tools used to assess Creativity and PERMA among Indian Youth.

The Kaufman Domains of Creativity Scale (K-DOCS) (Kaufman, 2012)

The researchers employed the above tool in the current study to measure participants' creativity in five broad domains: Everyday (11 items), Scholarly (11 items), Performance (10 items), Scientific (9 items), and Artistic (9 items). Sample items included:

- “Writing a poem” (Performance).
- “Writing a computer program” (Scientific).
- “Writing a letter to the editor” (Scholarly).
- “Teaching someone how to do something” (Everyday).
- “Appreciating a beautiful painting” (Artistic).

The participants were asked to compare themselves with other people about their age and life experiences. They then indicated the degree to which they think they are creative for each item on a 5-point Likert scale ranging from 1 (much less creative) to 5 (much more creative). The tool has adequate reliability and validity.

Reliability

Coefficient alpha reliabilities for the five scales for the total sample and each half-sample was done. All values are at least .80, indicating adequate internal consistency reliability for each of the five scales (Kaufman, 2012).

Validity

A factor analysis of 2,318 college student responses led to 50 items and five broad domains: Self/Everyday, Scholarly, Performance (encompassing writing and music), Mechanical/ Scientific, and Artistic. Correlations between the five creativity domains and the Big Five personality factors were consistent with past research, lending evidence of convergent validity (Kaufman, 2012). Coefficient alphas and coefficients of congruence were generally strong.

A study done by Awofala (2017) provided incremental validity to the multidimensional nature of the Kaufman Domains of Creativity Scale, thus reinforcing the five-factor model, namely Mechanical/Scientific, Scholarly, Performance (encompassing writing and music), Self/Every day, and Artistic.

PERMA-Profiler

The tool (Butler and Kern, 2016) was designed to assess multidimensional wellbeing and the five components of the PERMA model (Seligman, 2011). This measure was built as a 15-item survey with each item scored on a Likert-type scale from 0 to 10. Three items assess each PERMA construct, and composite scores are averaged across the three items per construct. The measure includes additional items assessing negative functioning (three items for negative affect, forming

the *Negative Emotion* subscale, and a single item for loneliness) and the perception of physical health (three items).

Reliability

The PERMA-Profiler has demonstrated acceptable internal reliability and good overall fit in studies including over 15,000 participants worldwide (Butler and Kern, 2016).

Coefficient alpha reliabilities for the five scales for the total sample was done, and the values are Positive Emotions .781, Engagement .479, Relationships .729, Meaning .835, and Achievement .720.

Validity

Ryan, 2019 reported that PERMA Profiler scores showed moderate and statistically significant convergent validity with scores on self-reported physical and mental health ($r = 0.46$ to 0.68). The strongest associations were seen between PERMA wellbeing scores with depression scores (DASS-21; $r = -0.645$, $p < 0.001$) and mental health scores (SF-12 MCS, $r = 0.633$, $p < 0.001$). On the other hand, Negligible correlations were observed between PERMA wellbeing scores with either of the objectively measured outcomes, physical activity ($r = -0.026$) and sleep ($r = -0.047$).

Procedure

Once the ethical committee approved the topic, the researcher met the participants; personally. The researcher explained the research objective to them and asked about their willingness to participate in the research.

The researcher collected phone numbers of the participants willing to participate in the study, and the researcher sent Google forms to those participants with appropriate instructions. Once the participants completed filling out the Google forms, the researcher thanked them for their participation, and then the researcher analysed the data.

Analysis of data

The data were first analysed using Pearson Correlation to test the hypothesis, which states a significant relationship between the variables. Once it was found out

that the relationship between the variables is significant, the Mediation analysis was done using SPSS PROCESS macro, Model 6, to test the hypothesis, which states a significant indirect effect of Accomplishment on Creativity.

3. Results

Table 1: The correlation coefficient among Positive Emotions, Engagement, Relationship, Meaning, Accomplishment and Creativity among Indian Youth

		P	E	R	M	A
E	Pearson Correlation	.222**	1			
	Sig. (2-tailed)	.000				
	N	407	407			
R	Pearson Correlation	.534**	.321**	1		
	Sig. (2-tailed)	.000	.000			
	N	407	407	407		
M	Pearson Correlation	.604**	.444**	.502**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	407	407	407	407	
A	Pearson Correlation	.495**	.446**	.389**	.719**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	407	407	407	407	407
Creativity	Pearson Correlation	.275**	.300**	.196**	.339**	.407**
	Sig. (2-tailed)	.000	.000	.000	.000	.000
	N	407	407	407	407	407

Note. P stands for Positive Emotions, E stands for Engagement, R stands for Relationships, M stands for Meaning and A stands for Accomplishment.

Table 1 shows a positive significant correlation between Positive Emotions, Engagement, Relationship, Meaning, Accomplishment and Creativity which is significant at 0.01 level. Although the correlation between the variables at 0.01 level it is found to be low.

The table indicates that, if Positive Emotions, Engagement, Relationships, Meaning and Accomplishment increases, Creativity increases and vice-versa. A research done by Wagner (2019) showed that in self-reports, all strengths including Creativity were positively related to all PERMA dimensions, and this previous study results, compliments the current study results.

Figure 2: Path model with standardised regression weights

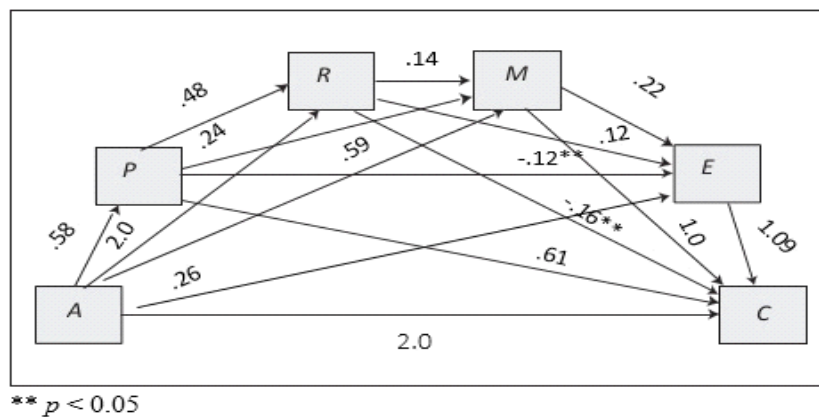


Figure 2 illustrates, the standardised regression coefficient between Accomplishment, Positive Emotions, Relationships, Meaning, Engagement and Creativity. The regression coefficient between Relationship, Engagement and Creativity was statistically significant. We tested the significance of this indirect effect using bootstrapping procedures.

Table 2 shows that the Engagement mediates the relationship between Accomplishment and Creativity. There is a significant effect of Accomplishment on Creativity via Positive Emotions and Engagement. There is a significant effect of Accomplishment on Creativity via Relationships and Engagement. There is a significant effect of Accomplishment on Creativity via Meaning and Engagement. There a significant indirect effect of Accomplishment on Creativity via Positive Emotions, Relationships and Engagement. There a significant indirect effect of Accomplishment on Creativity via Positive Emotions, Meaning and Engagement. There is a significant indirect effect of Accomplishment on Creativity via Relationships, Meaning and Engagement.

Table 2: Direct and indirect effect and 95% confidence intervals for the mediational model

Model Pathways	Estimated Effect	95% CI	
		Boot LLCI	Boot ULCI
Direct Effects			
Accomplishment → Creativity	1.9395	1.0593	2.8197
Indirect Effects			
A → P → C	.3518	-.0182	.7525
A → R → C	-.0324	-.1898	.0974
A → M → C	.0547	-.5447	.5805
A → E → C	.2759	.0845	.5153
A → P → R → C	-.0435	-.2203	.1256
A → P → M → C	.0132	-.1303	.1532
A → P → E → C	-.0812	-.1838	-.0090
A → R → M → C	.0027	-.0312	.0361
A → R → E → C	.0288	.0039	.0732
A → M → E → C	.1401	.0308	.3157
A → P → R → M → C	.0037	-.0403	.0425
A → P → R → E → C	.0387	.0081	.0817
A → P → M → E → C	.0337	.0068	.0787
A → R → M → E → C	.0070	.0008	.0212
A → P → R → M → E → C	.0094	.0016	.0243

Note. P stands for Positive Emotions, E stands for Engagement, R stands for Relationships,

M stands for Meaning, A stands for Accomplishment and C stands for Creativity.

The table 2 also indicates that the Positive Emotions doesn't mediate the relationship between Accomplishment and Creativity. Relationships doesn't mediate the relationship between Accomplishment and Creativity. Meaning, doesn't mediates the relationship between Accomplishment and Creativity. There is no significant indirect effect of Accomplishment on Creativity via Positive Emotions and Relationships. There is no significant indirect effect of Accomplishment on Creativity via Positive Emotions and Meaning. There is no significant effect of Accomplishment on Creativity via Relationships and Meaning. There is no significant indirect effect of Accomplishment on Creativity via Positive Emotions, Relationships and Meaning.

The table 2 also shows that there is a significant indirect effect of Accomplishment on Creativity via Positive Emotions, Relationships, Meaning, and Engagement, which confirms the path assumed by the researchers.

The study suggests that Positive Emotions, Relationships, Meaning, and Engagement are the variables, through which the Accomplishment takes to enhancement Creativity. This shows the mediating role played by PERMA to enhance Creativity.

4. Discussion

The current study results indicate that the indirect path effect by which Accomplishment influences creativity is via Positive emotions, relationships, Meaning and Engagement. This path can be explained with the support of following researches.

According to Cohn et al. (2009), experiencing positive emotions is associated with more achievement, not simply because individuals are left feeling better, but also because a broadened mindset helps them develop positive emotions and achieve Flow. Emotional contagion theory explains that emotions can be transferred from one person to another, meaning if you carry positive emotions, you can transfer them to others. In a study done by Chang et al., 2020, the results say that when athletic class students constantly stay positive, their positive emotions get transferred to each other, which builds a positive relationship in the team.

An article written by Northwestern Medicine Staff, (2017) mentions that being in a loving relationship can give an individual a sense of well-being and purpose. It's possible that having a sense of purpose can add years to your life. In support of this article, Feeney & Collins, 2014 in their research, says, Supportive relationships help people aid a sense of purpose and meaning in life. Wellington, 2017b mentions that one absolute requirement for the flow state of mind is a clear sense of purpose. It would help if you felt an authentic connection to the meaning behind your work to devote yourself to fulfilling it at the moment. Kaufman, 2016 says that Flow — the mental state of being completely present and fully immersed in a task — strongly contributes to creativity. When in Flow state, the creator and the universe become one, outside distractions subside from consciousness, and one's mind becomes fully open and attuned to the act of creating.

The results also support the literature which tells that, Engagement is that strong variable which predicts Creativity (MacDonald, 2006; Forgeard et al., 2009 & Sawyer, 2007).

5. Summary

The results showed that there is a significant direct effect of Accomplishment on Creativity. The indirect path effect by which Accomplishment influences creativity are via Positive Emotions, Relationships, Meaning, and Engagement.

Government of India can use the developed model to make amendments in Education Policy. This model can be applied in regular curriculum of the students, so that learning becomes easy, creative and pleasurable for them and also it contributes to the overall holistic development of the youth of India. So this model can be used in policy making, so that the learning can be made better, rather than mere exchange of information.

Conflict of interest

We have no known conflict of interest to disclosure.

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Covid-19 and Challenges to Indian State: Public Health Policy Perspective

• Pradip Kumar Parida¹

Abstract

This paper attempts to critically examine the challenges that the state administration faced during a pandemic to counter various issues involved in the domain of public policy implementation, particularly in health and social sector. As Covid-19 has affected the whole globe, it has created insurmountable challenges to the public administration of any state and also to public policy. Addressing the problems of people due to Covid-19 and the consequences of the impact of Covid-19 on the life and livelihood of general public were major challenges for any country. In that background, this paper tries to examine the issues from the public policy dimension, and how the administration of the country- national government, state government, district administration and, at the local level, the Panchayati Raj Institutions, responded to address the miseries of the people.

Keywords: *Covid-19, Government, Public Administration & Policy, Health Governance.*

Role of State in Pandemic Situation

Covid- 19 is a complete game changer across the globe, and the subsequent lockdown as well as unlocking processes, in different parts of the world. It has severely affected our day-to-day existence, life and livelihood, productivity, income, employment opportunities, in agriculture and industry, and subsequently, the polity and governance. It has really exposed the resilience, preparedness, responsiveness, and capacity of the government machinery, particularly bureaucracy, to tackle crisis management and engage people in development activities by implementing programmes. It underlines the need for proper planning to provide people with various options for livelihood opportunities at the local level with locally available

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resources, like the activities undertaken by MNREGA, etc. The role of local administration and institutions of governance is crucial in this context (Mathur, 2011: 10-11). This was particularly the case, in the areas where the number of corona-affected people was increasing and rehabilitation of the village returned laborers to their settlement, by providing them gainful employment opportunities and engaging them in various rural development programmes. That was the crying need of the hour. The important issues were the production and distribution of masks, identification of vulnerable communities, proper transportation, isolation of migrant workers, food and accommodation, medication, and subsequent rehabilitation by providing income generation activities (Planning Commission, 2021).

As Covid-19 has affected the whole globe, developing countries along with developed countries were equally affected. However, the administrative machinery in India at various levels has tried its best to address this problem, from prevention to isolation, quarantine, medication, cure, at individual and community levels. As a result, the death rate of Corona affected people across the globe was very disturbing. However, the percentage of people affected and death in India was comparatively less, in comparison to developed countries, like USA, France, Italy, UK, etc. (WHO, 2021). There were variations among various states in terms of the spread of Corona and death casualty. The state, district, and local administration played a significant role and contributed immensely to addressing the gravity of the situation. The facilities available at the existing public health institutions like government hospitals, PHC, CHC, and district headquarter hospitals were not adequate to address the severity of this pandemic. However, putting them together in the right place, linking them properly, keeping the affected people in proper places for quarantine, and providing them food, medicine and shelter became very important in this context, and were successfully administered by the respective district administrative machinery in many states.

Impact on Productivity: Agriculture and Industry

Mass migration and exodus of workers from the metro cities and Industrial townships to villages in the far-flung rural areas, in the aftermath of the declaration of complete lockdown, was unprecedented in the recent times. It will remain forever in our memory. It looked like a horrific scene from a Hollywood horror movie, where countries go to war and the whole civilization is wiped out due to war, and people are leaving their motherland or moving to another place (country) for their survival and existence, with an uncertain future. That has happened in the Covid-19 scenario. However, the fundamental difference was that here people were returning

to their respective villages and native places. But there was no certainty that they will get jobs or come back again to the places where they worked or lived for a long time. With bags and baggage overhead, old age parents, sick children, putting them on cycle, people were walking down, carrying the children on shoulders and dragging bags on the road and walking down thousands of kilometers, just to reach their desired destinations or villages. It reminds us of the movies depicting the stories of partition of countries followed by mass migration.

Closure of industries in the industrial township led to large amounts of unemployment and loss of livelihood and income for thousands of people. There were no alternatives for earning. How could they run their families for their day-to-day existence? Their survival was at stake. People were crying in panic. The government did not have adequate support for them. Where will they go? The private sector did not have sufficient resources to support them. Everybody was in the dark about what to do at such a critical juncture in the world. Trade and commerce were totally closed down, at least for a couple of months. There was no movement of vehicles and a lack of transportation facilities. That led to a situation where there was no movement of goods or factory products, even the consumable items of daily needs, vegetables, rations, etc. Though at certain places there were provisions for rations and other basic needs by government and non-governmental agencies/civil society organisations, those were not sufficient to cater to the needs of the whole population. Gradually, the market opened. But it had taken a long time.

When the people returned to their respective villages, many of them took to agriculture for their existence and livelihood. As a result of which, there was massive agricultural production, particularly in the fruits and vegetable sector, and also gradually expanded access to the local market. At least these items were sold to people and they had access to these edible items, which created some sort of stability in the sense people can now have something to eat and live. Interstate movements were restricted initially. Subsequently, it was opened with reasonable restrictions.

The movement of trains, buses, and trucks was limited. Over a period of two years, it was opened up completely. Though the restrictions imposed by the government on vehicles and peoples' movement were followed, in some places with a considerable amount of precaution and in many places without observance of any protocol. However, the restrictions imposed by the civil administration and the role of police to declare 'Containment Zones' and putting people in isolation or home restriction had a tremendous impact on the containment of Corona. It had a positive impact on people and society (*The Economic Times*, 2021).

The loss of National Income was primarily due to a lack of production in industry, and fewer activities in trade and commerce. The service and production sectors were completely closed down. It was indeed a great loss for the country in terms of national income, growth, and GDP. National income reduced to abysmal condition. The growth rate in GDP was extremely low and it has a negative trend. The new mantra at this juncture was 'work from home'. A large number of people attended office through online mode, particularly in white-collar jobs. The people working in the IT sector, banking, and other IT-related sectors were not largely affected due to innovative ways of doing the work, like 'online work' and 'work from home' systems. However, other sectors were negatively affected where physical presence is necessary for the work. Under these precarious conditions, the whole world and our country started to cope with 'neo-realism' or 'neo-normal', and 'continue to live and work with Corona viruses'.

Vulnerability of Education due to the Impact of Covid

Covid had severely affected the education system across the globe. Students/children were the worst affected by this phenomenon. Online education started, as schools, colleges and universities were closed down physically for approximately 2 years. Initially, there is no vaccine for children below 12 years. The problem was overcome late. School is the space where children meet their friends, and teachers on a day-to-day basis and engage with them in learning while playing, singing, jumping, and even fighting with friends and peer groups in a playful mood. That is the socialization process of a child in a primary school. However, once it was closed due to Covid-19 and online teaching-learning started, the children could not get the space that used to be previously at school, enjoying the mode of learning by playing, singing, and following others. He or she has just tried to mug up what has been taught to him/her by a teacher on the online mode. Hence, the whole pedagogy of learning and education system gets questioned. What is the end result here? What are the outcomes? Through this process, we have spoiled the education system and learning process of children. In many areas of our country, particularly in rural areas, far-flung from the district headquarter or cities, tribal and hilly areas, where network connectivity is a great problem, how could the children have been connected online? Many children from far-flung rural/hilly areas missed the opportunity of online learning. The same happened with the online examination system. The results were precarious. The evaluation system was not proper.

In the context of higher education in India, i.e. colleges, universities, vocational institutions, engineering, medical, pharmacy, agriculture, and para-medical colleges were affected severely. These courses are heavily dependent upon practical classes

and learning from experiments in the laboratory. What about those aspects of teaching-learning in the Corona period? Due to the lack of these facilities, the learning outcome of students could not become proper. How can a student of science, applied science, engineering, and medicine learn from books without practical knowledge, for roughly 2 years? Simply mugging up theoretical issues from the online mode of teaching is not adequate enough to cater to the academic needs of students. It won't suffice the purpose of education and its objectives. Education is not simply getting a degree at the end of the day. It's about the practical application of knowledge or theoretical inputs from books into solving our day-to-day life problems and its application to address societal developments.

Experience from Different States

Though the Government of India (GoI) at the central level, and many state governments in their respective state levels, responded proactively to address the problem by whatever means available, from health check-ups, quarantine, hospital admission, isolation, and social distancing, which resulted in less casualty in comparison to other developing and developed countries. What are the mechanisms followed by various states in India? Some states responded immediately and there were positive results, whereas some states were struggling to control it. The casualty is very less in some states, i.e. Kerala, whereas, the casualty was very large in some states, like Maharashtra. Why were there significant differences?

The case of West Bengal to handle Covid-19 is very important in this context. How did the state government respond to citizens in times of crisis? As a matter of fact, the cases were increasing like anything in West Bengal till June end of 2020. The situation became so complex that the state government did not allow the team sent by the central government for proper inspection so that proper identification could take place and appropriate rehabilitation policy and programmes could be implemented. Rather, the state considered it as an unnecessary interference in the jurisdiction of the authority of the state government by the Central government.

The situation worsened due to politicization, rather than addressing the genuine problem. This is due to political differences between the party in power in the state and at the Centre. The ideological feud running between them overshadowed the urgency and emergency of the situation. It led to a situation where people were sandwiched between two governments. The consequences were visible in addressing the crisis in the public health system there. The health governance system had collapsed to a large extent in the state.

Whereas Kerala was successful in addressing the pandemic from the very beginning, primarily due to its medical preparedness and robust public health system, and infrastructural facilities available at local levels. For example, even the PHC & CHC apart from District level hospitals were already prepared to gear up for the challenges encountered due to the sudden rise of Covid cases. Odisha has shown tremendous results due to handling the mass migration of laborers from outside the state, particularly from Gujarat and Maharashtra. There were buses and trains full of passengers from these states returning home, due to the sudden imposition of lockdown. The state, district, and local administrations looked into the matter in a holistic manner. Their isolation and creation of containment zone, staying there for 10 days with basic amenities, cooked meals for them, and other necessary things apart from medication, led to less mortality in Odisha in comparison to other states. The Odisha government went a step forward by declaring the Sarpanch or Mukhia of every Gram Panchayat (GP- the lowest level institution of PRIs), as the nodal officer and empowered them with Magistrate Power to control the law and order situation during the pandemic. This was unprecedented in the post-independent history of the state. The immediate implementation of MNREGA and some state government-sponsored schemes provided them with alternative livelihood generation at the local level in villages.

Maharashtra is a classic example where the death toll increased like anything, primarily in metros like Mumbai, Nagpur, Pune, etc. As there was the high density and lack of a large number of beds and hospitals and the affordability factors made people suffer due to Covid. Though government machinery was prepared to face any casualty, the end result was not positive, as many people died, particularly from poorer sections, as they could not afford to get oxygen cylinders, which were sold on the black market and could not afford private hospitals as the beds in government hospitals were already packed. The same situation was visible in Delhi, being the national capital with a population of more than one crore. The existing health infrastructure could not cope with the pressure, due to the sudden rise of Covid patients. Though the Delhi government tried its level best to address the pandemic situation, the number of patients outnumbered the beds and facilities available in the hospitals. That led to a situation, where there were large numbers of death tolls, in spite of a robust mechanism of the Delhi government to address the health needs of people living in the NCR region. Nonetheless, the demand outnumbered the supply, which triggered the severity of the critical situation (Sood, Kapur and Oomen, 2021).

The example of Uttar Pradesh compels us to find out reasons for not being able to handle the situation, primarily due to its large size and vast population, and lack of adherence to law and order. The people in this state, to a large extent, did not obey

the rules and standards mentioned by the central and state government. Without a mask, sanitizer, or containment zone, everything became unsystematic. The death toll increased like anything. The public administration in the state had tried to tackle it. However, the district administration and the panchayat administration, which are doing the work at the cutting-edge level, failed to foresee the problem and address them. This led to catastrophic results for the people affected by Corona virus. The bottom line was that the states who responded immediately with serious concern had shown positive results. The reverse was true for other states, which lacked seriousness. These are the case studies in the domain of 'Public Administration' and analysis of reasons for 'Policy Paralysis (Shriram, 2005: 21-30).

Role of PRIs and Local Institutions in States Handling Corona Issues

During the 1st and 2nd phases of Covid, each and everybody was concerned about recovering from Corona. At the local level, how the district administration with the presence of institutions like the Block office, line department of various government agencies, and the active participation of people through PRIs- the institutions of self-governance - could address this problem to the maximum extent possible? That is through identification of vulnerable sections of the society/migrant workers village, their Covid test, isolation, and quarantine process, offering them food as there were no job, their health issues, and how to keep them and their family updated about the latest development and make them understand that there is no stigma attached to it. In the post-Covid-19 scenario, how to settle them through jobs at the local level like MNREGA and other schemes? There is a need for policy analysis in this context to look into it from a development administration perspective. The local bureaucracy, starting from the state government to the District Headquarter to the Block level to Panchayat/village level- wherever they have done good work and responded proactively with humanitarian approach and sensitivity, empathy towards the people, in general, and affected people in particular, the results were tremendous (Sanghi, 2021). There was a substantial impact on the village population. This was clearly noticed in certain states. Though within a state, there were variations, where there was a strong presence of credible institutions of governance at the local level, the benefits to the poor and needy had really trickled down *NIHFW*).

The existence of democratically elected people's institutions, like PRIs, can play an important role by arranging the workforce who were sitting idle at home, searching for their livelihood- bread and butter, put them in gainful employment activities through MNREGA and other schemes, distribution of food to the needy jobless, poor, destitute, migrants, many of them were homeless, lack of purchasing

power, even to purchase their daily needs, how to address this genuine problem? It's a very important and primary task to identify them in addressing their problems, which are multi-pronged. As a matter of fact, the PRIs with the help of district administration could handle the situation at ground zero, more efficiently than any other institution (*Planning Commission, 2021*). Panchayats had shown that 'whenever there is willpower and funds, they can create wonders'. At the local level, they successfully handled the situation. It has a tremendous effect on the people- from health, survival, and livelihood aspects. However, there were contradictions visible in some parts of the country. The crying need of the hour was how to address the immediate needs of villagers, and migrant workers at the local level. There were success stories also (*ICMR, 2021*).

Critical Issues

Covid-19 has completely turned down the day-to-day life system, and livelihood opportunities, particularly those who were working in unorganised sectors of our country along with health issues and education of children. It was a great challenge to the whole administration in our country, starting from national to local. The challenges, particularly in the health sector were not at all easy to address. In a situation like this, where nobody knows what can be the probable solution to a particular problem, how could the administration have handled the emergency situation? What are the options available there? What are the problems encountered by common citizens in their day-to-day life in their respective spheres? In fact, nobody had any concrete idea or information regarding how to tackle Corona. Subsequently, the discovery of vaccines has given us relief.

Role of Media and Mass Communication Agencies

The spread of rumors by some sections of the media and disgruntled elements in our society and many mischief-mongers in our country created hurdles for the smooth flow of proper information. Considering the literacy rate, awareness levels, accessing media both print and electronic, and the motivation among people to overcome these obstacles in a collective manner, were really herculean tasks for everybody. The local media to a large extent has no credible sources of information. National media was somewhat divided on the basis of ideology and political affiliation. Some of them criticized the national government like anything by depicting the negative side of the pandemic. Failure of government, particularly in the health sector and health governance system, i.e. lack of availability of beds, medicine, testing facility, oxygen cylinder, subsequently it's black marketing, an increasing

number of the death toll and lack of proper amenities in the cremation grounds became daily affairs. However, some sections of the media also highlighted the significant steps taken by the respective governments at the Union and state levels respectively, apart from discussing the problems encountered by the common citizens of the country. They provided a rosy picture by depicting the success stories only and actions taken care of by the government.

However, the need of the hour was how to inform the common citizens of the country about the myths and realities of Covid. Its genesis, spreading mechanism, precaution to be taken, medication system and procedure to be followed in case of affected persons, etc. The tragedy was that the information was not available properly, to the common citizens (Das, 2021). The stigma attached to the Covid patients or death due to it and the critical problem of cremation of dead bodies were unprecedented. That became painful for everybody. In a pandemic situation, considering the urgency and the emergency of the situation, the administration must be prepared to provide some relief to common citizens, in terms of proper flow of information and awareness generation, which was lacking initially in case of Corona.

Conclusion

How to bring efficiency and effectiveness to the governance system? (In the context of the existing situation in our country, administering vaccines, providing proper information, creating adequate opportunities for livelihood generation, providing a robust and well-connected public health system, and training manpower to tackle emergency situations due to Corona, were indeed the herculean tasks not only for the administration but also for the whole population. It was a lifetime experience for all of us.

It was a new dimension in our public policy system, to engage the whole population to overcome the barriers created by Corona. How to do it? It's a matter of great concern for all of us - academicians, planners, policymakers, public health experts, public administrators, industry people, corporate sector, business institutions etc. Our country, along with the world, has overcome this situation and prepared us and ourselves to encounter any such situation in the future, not only in terms of medical emergency but also in terms of alternatives in livelihood generation, industrial production, and diversification of agricultural activities. This is apart from the creation of cottage and small-scale industries to cater to the needs of people at the local level in all fronts – be it health, education, employment, livelihood, etc. That is the crying need of the hour.

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Dimensions of Women Empowerment: Study on Women in Kudumbashree in Kerala

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Abstract

The Kudumashree Programme in Kerala is widely acknowledged as a model of poverty eradication and women empowerment. The idea of women empowerment follows a multi-dimensional approach as it encompasses economic, political, social, cultural, personal and family aspects. Since women are an integral part of every economy, women empowerment is of the utmost importance in order to achieve enduring and sustainable social growth. The objectives of the paper are to analyze the factors that motivate women to join Kudumbashree and to analyze the empowerment of women in Kudumbashree with respect to various dimensions of their life. The selected districts were Thiruvananthapuram, Kollam and Pathanamthitta. A total of 600 women from Kudumbashree units, 200 from each district, 100 from rural and 100 from urban forms the sample. A structured questionnaire was used to analyze the motivational factors and women empowerment. Univariate and Bivariate analysis have been used to interpret the data. Factor analysis is used to find the various dimensions of empowerment of women. While analyzing the factors for joining Kudumbashree in the present sample, it is seen that earning livelihood comes as the first priority followed by the provision of availing loans. The factor analysis identified the six domains of women empowerment which are self sustainability, personal empowerment, decision making, technological empowerment, financial empowerment, and frugality. In this study, the contribution of the personal empowerment factor to women empowerment is lesser compared to other factors. Capacity-building initiatives to improve skills will help increase the personal empowerment of women that will be easily achieved in an educated society like Kerala.

Keywords: *Kudumashree, women empowerment, decision making, self-sustainability, poverty eradication.*

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Introduction

Kudumbashree is a State Poverty Eradication Mission implemented by the Government of Kerala through local self-government institutions. The functions of the Kudumbashree are to focus upon (a) economic development and (b) social development (John, 2009; Vijayanand, 2009). Kudumbashree has adopted the strategy that any woman 18 years of age or above residing in Kerala state can become a member of the Kudumbashree unit (known as *Ayalkoottam* in Malayalam) irrespective of whether she belongs to Below Poverty Line (BPL) or not. This creates an opening for the above poverty line (APL) families to enter the community structures of Kudumbashree. Several government schemes and projects are linked with the Kudumbashree mission for ensuring the rights of economically and socially vulnerable women. It is a Self-Help Group in Kerala that disburses micro credits to women in order to make it easier for them to participate in entrepreneurial activities (Kudumbashree, 2013-14). The Kudumbashree programme in Kerala is widely acknowledged as a model of poverty eradication and women empowerment. The idea of women empowerment follows a multi-dimensional approach encompassing economic, political, social, cultural, personal and family aspects. Since women are an integral part of every economy, women's empowerment is of utmost importance to achieve enduring and sustainable social growth (Kabeer, 2009). Empowerment would catalyze women to be economically independent, self-reliant, and have positive esteem to enable them to face any difficult situation. The provision of microfinance is essential to achieve women's empowerment in Kerala. Kerala is the only state in India where women outnumber men in the population (1084 women for 1000 men, Census of India, 2011). The women in Kerala live six years longer than men. Kerala leads the other states of India in women's education, according to the 2011 Census (91.98%).

The study by Joseph et al. (2020) showed that the socio-economic empowerment of women has increased through the Kudumbashree. Selvi and Pushpa (2017) found that Kudumbashree was able to achieve the social and economic development of women. Kudumbashree had a direct influence over the living status, health, education and nutritional needs of the women (Jose J, 2015). But another study by Venugopalan K (2014) concluded that women empowerment was achieved by Kudumbashree only to a limited extent. Jose R et al. (2021) remarked that there is a positive sign of empowerment found in various domains of empowerment of the members of Kudumbashree. On these highlights, the present study analyses women's empowerment through Kudumbashree with respect to various dimensions of their life in three districts of Kerala, namely Thiruvananthapuram, Kollam and Pathanamthitta.

Objectives

The objectives of the paper are to analyse the factors that motivate women to join Kudumbashree and to analyse the empowerment of women in Kudumbashree with respect to various dimensions of their life.

Data and Methodology

The highest number of Neighbourhood groups (NHGs) are found in Thiruvananthapuram District, followed by Kollam District, and the lowest number of NHGs are found in Pathanamthitta District. So data were collected from these three districts with equal representation of women from rural and urban areas. A total of 600 women from Kudumbashree units, 200 from each district, 100 from rural and 100 from urban, form the sample. A structured questionnaire was used to elicit information regarding motivational factors and women empowerment. Univariate and Bivariate analyses have been used to interpret the data. Factor analysis was used to find the various dimensions of empowerment of women.

Factor analysis

Factor analysis is an explorative analytical tool. Factor analysis reduces the information in a model by reducing the dimensions of the observations. Factor analysis has several different rotation methods.

Eigenvalue

The Eigenvalue is used to decide how many factors shall be required in the analysis. If the Eigenvalue drops below one, it means that the factor explains less variance than adding a variable would do (all variables are standardised to have mean=0 and variance=1). The factors whose Eigenvalues are greater than or equal to one are retained in the analysis.

Factor loading

Factor loadings represent how much a factor explains a variable in factor analysis. Loadings can range from -1 to +1. Loadings close to -1 and +1 indicate that the factor strongly affects the variable. Loadings close to zero indicate that the factor has a weak effect on the variable.

In the factor analysis, the following variables were taken to describe women empowerment.

1. Have any savings
2. Decision on the education of children
3. Decision on the marriage of children/dependents
4. Decision on medical treatment
5. Decision of acquisition maintenance of assets
6. Purchase of household items
7. Improved skills and awareness
8. Ability to resist exploitation
9. Ability to interact effectively
10. Improved status of living
11. Courage to visit any bank or office attained
12. Know how to rotate and manage money
13. Capacity to make most profitable use of income and credit
14. Know how to operate a computer
15. Know how to operate a mobile phone
16. Know technological developments in agriculture and industry

Analysis

Profile of the sample

The description of the characteristics of the population under study in terms of factors which determine the composition of the population is vital in a sample-based study. Age-wise break up of women shows that great majority of women belongs to the category of more than 35 years of age and only 11.3 per cent of women are young (less than 35 years of age). Of the total women, 44.5 per cent is in 50+ age group. The proportion of respondents who are in the age group 50 above, is slightly higher in Thiruvananthapuram (51.5%) followed by Kollam (46.0%) but in the case of women below 35 years of age, the highest proportion is in Pathanamthitta (14.5%) in comparison with Thiruvananthapuram (10.5%) and Kollam (9.0%). Education plays an important role in women empowerment as it influences the attitude of the women and their standard of living. The educational level of women shows that more than fifty per cent (53.7%) are having school education 5-10 years followed by more than 10 years of school education (18.3%). Among women, 12.0 per cent have got graduation and while comparing the districts it is seen that graduated females are slightly higher in Thiruvananthapuram (14.0%) in comparison with Kollam (12.0%)

and Pathanamthitta (10.0%). According to place of residence, it is seen that an equal participation of women from rural as well as urban areas is present in the sample (Table 1).

Table 1 Profile of the sample

Age	Thiruvananthapuram (%)	Kollam (%)	Pathanamthitta (%)	Total (%)
Less than 35	21 (10.5)	18 (9.0)	29 (14.5)	68 (11.3)
36-50	76 (38.0)	90 (45.0)	99 (49.5)	265 (44.2)
50 above	103 (51.5)	92 (46.0)	72 (36.0)	267 (44.5)
Education				
Illiterate /upto 5	33 (16.5)	35 (17.5)	28 (14.0)	96 (16.0)
5yrs-10yrs	98 (49.0)	102 (51.0)	122 (61.0)	322 (53.7)
11- 12yrs	41 (20.5)	39 (19.5)	30 (15.0)	110 (18.3)
Above 12 yrs	28 (14.0)	24 (12.0)	20 (10.0)	72 (12.0)
Place of residence				
Urban	100 (50.0)	100 (50.0)	100 (50.0)	300 (50.0)
Rural	100 (50.0)	100 (50.0)	100 (50.0)	300 (50.0)
Type of ration card				
APL	84 (42.0)	72 (36.0)	75 (37.5)	231 (38.5)
BPL	116 (58.0)	128 (64.0)	125 (62.5)	369 (61.5)
Marital status				
Married	145 (72.5)	161 (80.5)	158 (79.0)	464 (77.3)
Unmarried/Separated	19 (9.5)	10 (5.0)	11 (5.5)	40 (6.7)
Widows	36 (18.0)	29 (14.5)	31 (15.5)	96 (16.0)
Social group				
General	103 (51.5)	72 (36.0)	81 (40.5)	256 (42.7)
OBC	69 (34.5)	102 (51.0)	72 (36.0)	243 (40.5)
SC	28 (14.0)	26 (13.0)	47 (23.5)	101 (16.8)
Position in Kudumbashree unit				
President/secretary	29 (14.5)	26 (13.0)	29 (14.5)	84 (14.0)
Volunteer	35 (17.5)	27 (13.5)	36 (18.0)	98 (16.3)
Members	136 (68.0)	147 (73.5)	135 (67.5)	418 (69.7)
Years of experience				
1-5 years	64 (32.0)	63 (31.5)	48 (24.0)	175 (29.1)
6-10 years	27 (13.5)	60 (30.0)	37 (18.5)	124 (20.7)
>10 years	109 (54.5)	77 (38.5)	115 (57.5)	301 (50.2)

The government of India uses the Below Poverty Line as a criterion for identifying individuals and households in need of government help and relief and it basically reveals the household status in terms of income. About 62 per cent of women possess the BPL ration cards and it is clear that in all the three districts majority of the respondents possess the BPL ration cards. The proportion of women who have BPL cards is higher in Kollam district compared to that of Thiruvananthapuram and Pathanamthitta. About 43 per cent of the population under study is in the general category followed by Other Backward Caste (40.5%). SC category forms 16.8 per cent. In Thiruvananthapuram and Pathanamthitta, general category forms the highest (51.5% and 40.5% respectively). In the case of OBC, 51 per cent from Kollam

shows the highest followed by 36.0 per cent from Pathanamthitta. A higher proportion of SC women is in Pathanamthitta (23.5%) when compared to Thiruvananthapuram (14.0%) and Kollam (13.0%). Majority (77.3%) women are married. Widows are also higher in number (16%) while 6.7 per cent are unmarried/separated. More than 70 per cent of the members from the three districts are married. Widows and unmarried or Separated women are higher in Thiruvananthapuram District (18.0% and 9.5% respectively).

According to the position in Kudumbashree units, it is seen that majority of the respondents (69.7%) are members, 14.0 per cent are Presidents/Secretaries and 16.3% are volunteers. Community health volunteer look after various health related aspects of the group members. Collection and Consolidation of accounts is the duty of income generation volunteer. Infrastructural development of the group is done with the help of infrastructural volunteer. District wise comparison shows that the percentage of president/secretary is almost equally distributed in all the three districts. The percentage of members is higher in Kollam (73.5%) in comparison with Thiruvananthapuram (68.0%) and Pathanamthitta (67.5%) whereas percentage of 'volunteers' is less in Kollam (13.5%). Years of experience in Kudumbashree has importance in raising their income and power to participate in the development process of their livelihood. Considering the fact that Kudumbashree is a team of women, years of their experience with Kudumbashree is a sure indication of their achievement. More than half of the members from Thiruvananthapuram and Pathanamthitta district have more than 10 years of experience in Kudumbashree.

Motivational factors for joining Kudumbashree

Kudumbashree is considered to be a model for state-guided initiatives for women for the enhancement of the livelihoods of poor families but its present-day significance goes well beyond this. The mission of Kudumbashree to eradicate poverty through women empowerment has indeed touched many phases of lives of women through its integrated, far-reaching approach. The development of the women community through the activities of Kudumbashree in various fields and their improved standard of living forced other women to join the scheme. While analyzing the factors for joining Kudumbashree in the present sample, it is seen that earning livelihood comes (39.3%) as the first priority followed by provision of availing loans (32.7%). This is because Kudumbashree is giving loan without any collateral security. Some members (9.2%) joined due to the influence of some officials. It shows that the guidance of the officials persuaded the women to join Kudumbashree. About 3 per cent of the women joined Kudumbashree after seeing the benefits attained by their neighbors.

The district wise comparison shows that earning for a livelihood is 48.5 per cent in Kollam, which is the highest, followed by 39.5 per cent in Pathanamthitta and 30.0 per cent in Thiruvananthapuram. Availing loans comes a major factor in Pathanamthitta (40.5%) and in Kollam (36.0%) and it shows almost equal proportions of women in each age group. The proportion of women below 35 is the highest for the factor of earning livelihood (44.0%) when considering the other age groups. Lower education seems to be a casual factor for women for joining Kudumbashree for earning their livelihood as it is seen that only 25 per cent opted that. About 36 per cent of women from APL families opines that earning livelihood is the main reason for their entry to Kudumbashree while it is 41.5 per cent of women from BPL families (Table 2).

Table 2 Motivational factors for joining Kudumbashree

Variables	Factors for joining Kudumbashree					Total (%)
	To earn a livelihood (%)	Influence of neighbours (%)	Motivation from officials (%)	Availing loan (%)	For Social development (%)	
District						
Thiruvananthapuram	60(30.0)	18(9.0)	24(12.0)	43(21.5)	55(27.5)	200(100)
Kollam	97(48.5)	0(0)	31(15.5)	72(36.0)	0(0)	200(100)
Pathanamthitta	79(39.5)	1(0.5)	0(0)	81(40.5)	39(19.5)	200(100)
Age						
<35	30(44.1)	0(0)	8(11.7)	22(32.4)	8(11.8)	68(100)
36-50	102(38.5)	8(3.0)	21(7.9)	86(32.5)	48(18.1)	265(100)
>50	104(39.0)	11(4.1)	26(9.7)	88(33.0)	38(14.2)	267(100)
Education						
Illiterate/upto 5	24(25.0)	3(3.1)	13(13.6)	32(33.3)	24(25.0)	96(100)
5-10 years	133(41.3)	9(2.8)	19(5.9)	116(36.0)	45(14.0)	322(100)
11-12 years	49(44.5)	4(3.6)	11(10.0)	28(25.5)	18(16.4)	110(100)
>12 years	30(41.7)	3(4.2)	12(16.7)	20(27.7)	7(9.7)	72(100)
Social group						
General	101(39.4)	17(6.6)	36(14.1)	65(25.4)	37(14.5)	256(100)
OBC	116(47.8)	2(0.8)	12(4.9)	81(33.3)	32(13.2)	243(100)
SC	19(18.8)	0(0)	7(6.9)	50(49.5)	25(24.8)	101(100)
Type of ration card						
APL	83(35.9)	6(2.6)	24(10.4)	84(36.4)	34(14.7)	231(100)
BPL	153(41.5)	13(3.5)	31(8.4)	112(30.4)	60(16.2)	369(100)
Place of residence						
Urban	106(35.4)	1(0.3)	31(10.3)	104(34.7)	58(19.3)	300(100)
Rural	130(43.3)	18(6.0)	24(8.0)	92(30.7)	36(12.0)	300(100)
Total	236(39.3)	19(3.2)	55(9.2)	196(32.7)	94(15.6)	600(100)

Availing loans is higher among women from APL families (36.4 %) in comparison with BPL families (30.4%). It is seen that more members from rural households joined Kudumbashree 'to earn a livelihood' (43.3%), while more members from

urban households (34.7%) joined for the purpose of availing loans. Very few members from urban households (0.3%) joined Kudumbashree due to the ‘influence of neighbors’, similarly few members from rural households (8.0%) joined due to ‘motivation from officials’.

Various dimensions of Women empowerment using factor analysis

Table 3 Eigen Values by Components

The Eigen values and percentage of variance about women empowerment are given in Table 3

Total variance explained			
Component	Initial Eigen values	% of variance	Cumulative %
1	4.26	26.625	26.625
2	2.739	17.12	43.745
3	2.0	12.498	56.243
4	1.511	9.446	65.689
5	1.145	7.155	72.844
6	1.016	6.347	79.191

Table 3 explains Eigen values by components. It is clear that 6 factors showed the initial Eigen values greater than 1. All the 6 factors after extraction cumulatively account for 79 percent of the total variance scores of women empowerment. The first factor accounts for 26.625 percent (Eigen value 4.26) of the total variance of women’s empowerment. The second factor explains 17.12 percent (Eigen value 2.739), the third factor accounts for 12.498 percent (Eigenvalue 2), the fourth factor accounts for 9.446 percent (Eigen value 1.511) and the fifth factor shows 7.155 percent (Eigen value 1.145), the sixth factor accounts for 6.347 percent (Eigen value 1.016).

Rotated factor coefficients of perception about women empowerment are given in Table 4. Based on the Eigen values six factors retain in this analysis. These six factors represent about 79 percent total variation on the response variable. The variables with high loading on a factor will provide the meaning and interpretation of the factor. The variables Improved skills and awareness, Ability to resist exploitation, Ability to interact effectively, Improved status of living, Courage to visit any bank or office attained have higher loading with factor 1. Hence this factor is named as “Self Sustainability Factor”.

The variables, Know how to rotate and manage money, Capacity to make most profitable use-of income and credit, Know how to use a mobile phone have higher loading with factor 2. Hence this factor is named as “Personal Empowerment Factor”. The variables, Decision on education of children, Decision on marriage of children dependents, Decision on medical treatment have higher loading with factor 3. Hence this factor is named as “Decision Making Factor”.

The variables, Know how to operate a computer, Know technological developments in agriculture and industry have higher loading with factor 4. Hence this factor is named as “Technological Empowerment Factor”. The variables Purchase of house hold items, Decision on acquisition maintenance of assets have higher loading with factor 5. Hence this factor is named as “Financial Empowerment Factor”. The variable have any savings have higher loading with factor. 6. Hence, this factor is named as “Frugality Factor”.

Table 4 Rotated Component Matrix

Women empowerment variables	1	2	3	4	5	6
Have any savings	0.034	0.05	0.007	-0.047	0.019	<u>0.935</u>
Decision of education of children	0.076	0.096	<u>0.76</u>	-0.079	0.057	-0.119
Decision of marriage of children	0	-0.048	<u>0.837</u>	0.162	0.235	0.079
Decision of medical treatment	-0.009	0	<u>0.854</u>	0.039	0.227	0.061
Decision of acquisition maintenance of assets	0.047	-0.016	0.234	-0.026	<u>0.898</u>	0.004
Purchase of household items	0.019	0.095	0.243	0.066	<u>0.883</u>	0.026
Improved skills and awareness	<u>0.697</u>	0.083	0.037	0.416	-0.049	0.23
Ability to resist exploitation	<u>0.755</u>	0.157	-0.042	-0.084	0.132	0.308
Ability to interact effectively	<u>0.907</u>	0.034	0.145	0.189	-0.036	-0.102
Improved status of living	<u>0.912</u>	0.018	0.107	0.208	-0.071	-0.13
Courage to visit any bank or office attained	<u>0.806</u>	0.133	-0.113	-0.077	0.11	-0.038
Know-how to rotate and manage money	0.136	<u>0.86</u>	-0.029	0.175	0.055	0.131
Capacity to make most profitable use-of income and credit	0.166	<u>0.82</u>	-0.012	0.337	-0.005	0.133
Know how to operate a computer	0.072	0.09	0.054	<u>0.837</u>	-0.049	-0.061
Know how to use a mobile phone	0.029	<u>0.857</u>	0.101	-0.128	0.032	-0.149
Know technological developments in agriculture and industry	0.179	0.139	0.022	<u>0.853</u>	0.106	-0.009

Table 5 -Distribution of women by their status in various dimensions of empowerment

Dimensions	Low	Medium	High
Factor 1 (Self Sustainability)	23.2	13.5	63.3
Factor 2 (Personal Empowerment)	30.5	24.5	45.0
Factor 3 (Decision Making)	11.0	11.5	77.5
Factor 4 (Technological Empowerment)	19.3	16.2	64.5
Factor 5 (Financial Empowerment)	9.7	17.7	72.7
Factor 6 (Frugality)	18.5	0.0	81.5

Table 5 gives the distribution of women with respect to 6 dimensions of empowerment. The six factors are named according to their nature of variables involved. The six domains identified are Self Sustainability Factor, Personal Empowerment Factor, Decision Making Factor, Technological Empowerment Factor, Financial Empowerment Factor, and Frugality Factor.

In the first factor of self sustainability, which comprises five questions obtained from the factor analysis, about 63 percent have high empowerment, about 14 percent of women have medium empowerment, and 23 percent have low self sustainability. In the second factor 31 percent women are in low empowerment, 25 percent women have medium empowerment and 45 percent have high empowerment. In the third domain of factor, 78 percent women have high decision-making power. From the fourth factor it is clear that, about 65 percent have high technological empowerment. In the financial empowerment domain, about 73 percent are at highly empowered. Among the six factors, percentages of respondents with low values are the highest for the factor 2 which is personal empowerment factor and it is followed by self sustainability.

Discussion and Conclusion

Kudumbashree, launched by the Government of Kerala in 1998 to eradicate poverty in rural and urban areas of Kerala through community development schemes, is now considered as one of the most significant women-empowering projects in India. Kudumbashree has enhanced leadership and entrepreneurship and the capacity of women to work and earn together. The status of women in family and society has thus substantially improved. The study has provided insight into the motivational factors for joining the Kudumbashree units and the women empowerment acquired after joining the Kudumbashree. The most important factor for joining Kudumbashree

was to earn a livelihood, followed by provisions to avail loans. The study results concur with Boniface, P. J et al. (2012) that the Kudumbashree mission, through its host of income-generating activities and programmes, empowered poor women economically and socially.

Empowerment cannot be studied in a single notation. In this study, the principal axis factoring method was used to analyse women empowerment and to identify the major domains that determine women empowerment. The present study suggested six domains of empowerment such as self-sustainability, personal empowerment, decision making, technological empowerment, financial empowerment and frugality. With the 16 variables describing women empowerment, it is visualized that women can be transformed into an empowered society in economic, social, and self-sustainability aspects after joining Kudumbashree. The finding of this study that the Kudumbashree scheme helps in the economic empowerment of women has significant implications. The economic empowerment of women leads to plenty of positive impacts on the social and economic aspects of society as a whole (Cholappallil D, 2021, John A, 2017). The activities of Kudumbashree enable women to indulge in decision-making, earn better from limited resources, and enhance self-sustainability (Praveen, K. V 2015). Raising the personal empowerment of women is an essential ingredient for realizing the full potential of women empowerment. But in this study, the contribution of the personal empowerment factor to women empowerment is lesser compared to other factors.

Like many other studies, this research has empirically found that the Kudumbashree programme has helped to empower women in Kerala. The personal empowerment factor is not so impactful on women empowerment in Kerala. Therefore, capacity-building initiatives to improve skills contribute to the personal empowerment of women that can be easily achieved in an educated society like Kerala.

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Community Engagement in Higher Education in National Education Policy 2020: A Study in Delhi NCR

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Abstract

Education is the most important key in order to head towards socio-economic development. It also enables people to understand their rights, duties and to live better standard of life. The Department of Adult Continuing Education and Extension (DACEE), University of Delhi conducted one research in Anna Nagar Community, ITO Delhi as a “Pilot Study” under their “University-Community Interface”. The study was conducted during May this year, to analyze the status of foundational literacy and numeracy, financial literacy and digital literacy. The awareness among the people of Anna Nagar Community about Health, Hygiene and Menstruation was also studied. The survey took place with the help of one schedule by the students of DACEE with 34 respondents. 5 communities are selected for the University-Community Interface study in the Centenary Year of University of Delhi in order to fulfill the Social Responsibility of Higher Education Institutions as per the National Education Policy 2020.

Keywords: *JJ Colonies, financial literacy, digital literacy, skill mapping, health and hygiene, National Educational Policy 2020.*

Introduction

As per the guidelines of national curriculum framework of UGC January 2022, community engagement is considered as the social responsibly of higher educational institutions (HEIs) in India. In the community, people require need based education and skill for their overall development (UGC, 2022). The National Education Policy 2020 has underlined that HEIs should engage themselves in community service and social work as their third dimension of extension (MHRD, 2020: 36; 38). It implied that both would stand to gain mutually by their inter-connection in community work

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and extension. It also implied that without fulfilling mutual benefits, community engagement does not serve the purpose of social responsibility of HEIs. The HEIs must link their learning with community service. The HEIs can also link research with the local knowledge and channelize knowledge in a productive way. The people of the JJ Colonies can be part of University-Community Interface as community volunteers. The objectives lie on extending the uses of technology and equipment with skills and competencies that are critical to shaping individual aspirations and creating awareness on various aspects of critical skills among people of JJ colonies.

The time has come when India needs to move towards complete literacy and not merely the basic literacy but also the financial and digital literacy. Today these along with the skills are important to lead a decent life. For reaching the goal, we need to design the need-based programmes for different sections of the community. We all need a shelf of core life skills like planning, focus, self-control, awareness and flexibility. These skills support the development of foundational skills such as literacy, numeracy, and digital skills and can also be utilized in several areas, such as gender equality in education, environmental education, peace education or education for development, livelihood and income generation, and for positive health promotion among others. The people are facing the challenges for basic literacy, financial literacy, digital literacy, etc. In this, HEIs can play a very important role to make them aware about these necessities of life to get a sustainable life. In this context, training will help them to realize their fullest potential.

Under the auspices of “**University-Community Interface**”, a pilot survey was conducted at Anna Nagar Community, ITO Delhi. Using this research schedule, the main study will be conducted at rest of the four communities: Shri Ram Community, Nand Lal Community, Outram Lines Community and Valmiki Basti in Delhi. The variations and the similarities will be checked among these communities and suited need-based programme will be designed after the need assessment through the research.

Objectives

The objectives of the study are:

- To find out the literacy status.
- To know the financial awareness among people.
- To know the status of digital literacy.
- To identify the interest of people in terms of skill.

- To do the skill mapping in the community.
- To understand the concept of health and hygiene among the people.
- To identify hygiene problem related to menstruation and awareness about that among them.
- To identify and train community volunteer to promote university community interface in DU Centenary year.

Understanding the above objectives of Communities interface, it is important to tune the learners of communities with basic critical skills and relevant competencies to enable them to take logical decision and understand the basic critical skills needed beyond the subject competencies to carry out their successful academic and non-academic life.

Delimitations: This is the pilot study based on a small number of respondents and it may not be representative for the whole Delhi NCR, but the data represent Anna Nagar Community, ITO. Also, the main study will be conducted in other four identified communities of Delhi to check if the result varies.

Literature Review

Scholars who have studied about the role of the university maintain that it can play an important role in addressing the problems faced by the society. Challenges such as poverty, Illiteracy, lack of awareness etc. in order to achieve the social advancement. Kotecha (2010).

W. James Jacob and others, in their book, have defined the different levels of community engagement in HEIs at international, regional, national, provincial/state and local level. The authors have defined the different activities that can take place between HEIs and communities at different level. Research projects are one of the initiatives that can be used for community engagement in HEIs, while others are collaboration initiatives, co-sponsored meetings, sports events, etc. The digital media, libraries and e-content can prove to be key levers in providing the communities the information about various things. The communities can help providing human resources to the HEIs and, the HEIs, in return, can provide them training, so that they would be more employable. Higher education traditionally has three functions: one is teaching and training; second is, research and innovation; and the last one is community development or extension services. (Goddard 2007; Duke 2008). The students can play an important role in community service activities at all levels.

W. Singh, in his study, has revealed the importance of community-university joint engagement in India and how it can provide the sustainable solutions to different challenges. The author has done the documentation of such practices in India between the communities and HEIs. The author has done the study on impact assessment of Community-University Interface. The result shows that Community-University Engagement doesn't have only two stakeholders, viz., community and university but, it also affects a number of sub-stakeholders like students, as they can get an experiential learning; teachers can take out socially relevant research as part of the curriculum; and the communities get the empowerment and sustainable livelihood.

In their book, Agarwal T. has written on Afghan refugees in the HE system in Delhi, in which they took 17 Afghan refugee students in HEIs in Delhi. The study sees not the "Community engagement" but the community experience in the HEIs in Delhi. The experience of Afghan refugees varied on various factors such as previous schooling experiences, cultural and language differences, financial provisions, etc.

Research Methodology

The descriptive survey approach is used for the analysis. It is an approach of descriptive research that stands for the kind of study which uses both qualitative and quantitative data to gather the information. Both the selection of the communities and collection of data was done through the convenience sampling.

A schedule consisting of 35 questions was developed for the purpose of University-Community Interface under University social responsibility for Centenary Year of University of Delhi. The pilot study was conducted with the help of Scholars of DACEE at Anna Nagar Community, ITO of Delhi in May this year, 2022. The schedule was developed to figure out the status of Foundational Literacy and Numeracy, Digital Literacy, Financial Literacy, health and hygiene, and lastly, the skill mapping was done. Anna Nagar Community of ITO Delhi was selected for the pilot study. Both qualitative and quantitative aspects have been taken into consideration while preparing the schedule.

This is a pilot study, and the main study will be conducted in rest of the four communities, viz., Shri Ram Community, Nand Lal Community, Outram Lines Community and Valmiki Basti in Delhi. The variations and the similarities will be checked among these communities and suitable need-based programme will be designed after the need assessment through the research.

Data Analysis and Discussion

The data demographics can be bifurcated based on gender, religion, category, age group, marital status and residential stay in Delhi. The questions were divided in six themes: 1st, demographic and socio-economic information, 2nd Questions for basic literacy status, 3rd, digital literacy status, 4th, financial literacy status, 5th, health and sanitation and last the skill mapping.

1. The Demographics and Socio-Economic Details; With respect to gender, 38% respondents are males and rest are females. No one has reported among transgender or any other gender category. The study tries to focus on the diversity of the communities; for that, it has taken into account the different variables such as the age group, their religion, and their social category, etc. The respondents were mainly in the 15-25 years age group, representing 53%, whereas 26% belonged to 25-40 years, 18% respondents were from 40-55 years age group. The percentage of the respondents in the more than 55 years category was negligible.

The religious orientation of the respondents reveals that 73% are Hindus, 21% are Muslims and 6% are from other religious beliefs. India is a very diverse country and to study any community it is very important to understand the background of the population of the study. Category is yet another important factor for that. The social categories who participated in the pilot survey shows that 38% are unreserved, 12% is OBC, 35% SC, 6% ST and 9% other categories, 53% respondents belonged to the 15-25 years age group. 50% respondents were unmarried and 44% respondents were married, whereas 3% respondents were widowed. One point to notice here is that no respondent was a divorcee. The reason behind this can be that divorces are seen as social stigma among middle class communities.

In respect of the employment status, it turned out that only 3% of the respondents were engaged in Government jobs. Maximum people were self-employed, mostly, they run their shops. The second major category was the people working in Private Limited Company; rest were engaged in some other small work. The males are mostly engaged in economic activities and females are mostly either housewives or doing something staying at home only. The females work as self-employed as the shop owner, they take care of shop whole day, or they give home tuition. Even after having higher educational level, very few females go out to earn.

Native Place: This question was asked to understand the pattern of their native place and know the state to which the majority of people belong. Maximum people

in Anna Nagar Community live there since birth. According to the respondents, it is the second generation living in Delhi, their parents came to Delhi and the major purpose for coming here is employment, with education, coming as the second major reason. The majority of the people belong to the neighboring state of Uttar Pradesh. Earlier, the community was mainly South Indian people but, with time, people from other states also came and stayed here. 41% of the respondents said the primary purpose for coming in Delhi was the employment. 17% respondents accepted education as one of the primary reasons for coming here. 15% respondents, who were females, reported marriage as the reason for shifting to Delhi.

If any Organization working in the community: Respondents asked if any organization or NGO is working in their community. The intention was to check their awareness level. 65% respondents responded they were aware about it, while 12% were not aware of any organization. 20% respondents said that there is no organization working for them but that too was wrong, as more than one organization is working for the betterment of the community. One Asha Clinic which provides free health facility, few students also come to teach them on Sundays and one more NGO works in the field of Education and Health.

Problems faced by the community: Maximum NGOs work in the area of Education and Health among Anna Nagar Community. But when the question asked on what problem according to them their community faces, the respondents listed drinking water issues and sanitation issues. Toilet facility is the major issues faced by the people of Anna Nagar Community. As informed by one respondent it is not allowed to have the personal toilet in that community. There is a need to foresee these issues as well. One respondent expresses his community's need of having security cameras on streets because many robberies take place in their area. The educational institutions are quite far, and their quality is not as good.

2. The Foundational Literacy and Numeracy Status: The people in Anna Nagar Community were not only literate but also fairly educated also. The educational level was high among females as compared to males. The literacy level among the people of Anna Nagar community was quite high, although it is still not 100%, but the new generation is literate. Only those who are old or in their mid-age, lack the foundational literacy skills. Efforts should be made in the field of lifelong learning/ education for all. 85% of the respondents did their schooling from government school. They belong to low and middle-income group, and it is hard for them to afford the schooling from private schools. In such areas, the accessibility to government education institutions should be good. Not only the accessibility but the quality of education delivered should also be of good quality.

3. Digital Literacy Status: As mere literacy is not enough for human development, the University-Community Interface has taken the digital literacy as one component of study. Especially after the COVID situation when the schools and offices were closed and all the work was being done online, the digital literacy has become more important. It was seen that only one member in a family had smart phone, the children as well as their parents did not know how to use mobile for educational purpose, i.e., taking online classes, making assignments and submitting online etc.

Having smart phone and using social media: 24 respondents have smart phone. Five people do not have one, and another five respondents reported using the smart phone of another member of the family. 59% of respondents use social media account like, Facebook, WhatsApp, Instagram, etc. This shows that they not only own the smart phone but also know how to operate it. 41% respondents don't use any social media account, although 70% own the smart but they don't know its full use.

Laptop/Computer: Only 6 respondents reported having laptop/computer. 27 do not seem to have a computer. One reported having one at home. In many jobs and courses, it is important to have a laptop. In the time of Corona, many people who were engaged in private or non-permanent jobs, lost their jobs. While applying for the other jobs (work from home), having no laptop proved to be a big roadblock for them.

4. Financial Literacy Statuses: Being financially literate is yet another kind of literacy which is important for leading a satisfactory life. People from low literacy backgrounds are not aware of different things related to financial awareness which make them more prone to get duped. It also stops them to get the full benefit of different government schemes. For all these purposes, financial literacy is very important.

Having a Bank Account and who operates: 79% respondents have bank account and 65% out of them know how to operate their bank account, whereas 25% respondents' account is managed by the males of the family. We can interpret that the bank account is either run by the respondents only or their father/husband/son operates their account. No account is operated by the females of the house.

Benefits from Government schemes in Bank Account: As mentioned earlier, lack of financial literacy deprives people from getting the full benefit of government schemes. Because people are not aware of the schemes, and they do

not register their bank account for those schemes, so that they can get the financial support from the government into their bank account.

To the question “Are you getting benefit from government scheme/policies directly in your bank account?”, only 26% respondents accepted that they are getting the government schemes benefits in their bank account. Many of them were those who got the money during lockdown. 65% respondents denied getting any benefit in their bank account, whereas 9% were not sure if they are getting any government scheme benefit in their bank account or not.

Basic use of Bank Account: 68% of respondents know how to credit money or withdraw money from the bank account. And 29% respondents did not know how use the bank account. Whereas 3% respondents were those who needed someone’s help in depositing the money in bank account. The negative tendency was seen towards online banking, 74% respondents do not use online banking and only 26% use the online banking.

5. Health and Sanitation: This is really an important factor to take care in slum areas. It is one of the major concerns in JJ colonies of Delhi. So, this issue was covered in this study in Anna Nagar community. Here, the people face many problems related sanitation. The survey revealed that many of them do not have the personal toilet and they use the public toilet, which leads to many diseases.

The one case of toilet at home turned out that because their father was really ill and he was unable to use the public toilet, but the construction was in process only when he died. They are not allowed to have personal toilet in Anna Nagar Community, 6% respondents even use the open space as toilet, when sometimes the lines are big and they are getting late, they avoid the public toilet and use open space. The toilet is one of the main issues faced by the people of Anna Nagar Community.

Free Health Benefit: Here one important thing to note is that no Mohalla Clinic is active in Anna Nagar Community. One NGO, Asha Clinic, works for them, so 56% respondents agreed that they are getting the free health benefits from Asha Clinic, while 44% said they are not getting any free health benefit.

Awareness about Menstruation: When we are talking of health and sanitation, we cannot skip the topic of menstruation. It is an important issue faced by women, especially in the lower middle-class families where the awareness is not really good, and the steps should be taken in this direction.

What are the Reasons for not using the sanitary pads? The survey revealed that 73% respondents use sanitary pads. 21% don't use the sanitary pads, 6% respondents, who were males, did not know if the females of their home use sanitary pads or not. The 21% respondents who do not use sanitary pads gave the reasons for not using it, its high cost. Lack of awareness and shyness are main reasons for not using the sanitary pads. The proportion is 15% and 14% respectively.

6. In respect of the **skills already proficient**, mostly females know beautician and tailoring skills, whereas the males know very less in these skills. A few of them know computer and similarly, a few know the driving skill as they are working as personal drivers.

Of the **skills they are interested in learning**, that could be useful for future planning, the study found 11 males are interested in learning computers, whereas just 2-3 expressed interest in learning cutting and tailoring, electrician, handicrafts and plumbing. In the case of females, the difference is very striking: 9 were interested in learning Beauty and Wellness, 10 in computer and 6 in cutting and tailoring. In hospitality, electrician and handicrafts, its only one each with interest in learning these skills.

Maximum number of males are interested in learning the computer and IT related skills, few of them are interested in learning the cutting and tailoring skills as well. 11 males said they would want to learn the computer skills. They have options to choose more than one skill. On the other hand, females were interested in learning the computer skills along with beautician and tailoring skills.

Community Volunteer: Finally, the purpose was to motivate the people of community to become the community volunteer for running the Programmes of University-Community Interface smoothly. 74% of respondents were interested in becoming the community volunteer. We can consider them and allot them some work in order to meet the objectives effectively.

Major Findings and Suggestions

The major patterns and findings which came into sight were as follows:

(i) Toilet issue: The toilet issue can be considered as one of the major problems faced by the people of Anna Nagar Community. As stated by one of the respondents, only houses situated at the front line of the community are allowed to have their personal toilet, as a result of which maximum people there use the public toilet.

(ii) Drinking Water Issue: The Anna Nagar Community faces the water crises at a critical level, especially the drinking water issues. Sometimes, they wait for the whole day for the water and the quality of the water is also not good. This leads to several water borne diseases.

(iii) Higher Education Level among Females: It was found in the Pilot study that the educational level was higher among the females in comparison males, the reason can be that males have this family responsibility to earn as they belong to the middle-class background, also they are more prone to get into the bad habits of alcoholism.

(iv) Sanitation issues: It is not only the toilet issue, but also the sanitation issue is very common issue faced by the people of Anna Nagar Community. The community is situated alongside the drainage, it causes the smell and other sanitation related issues. Also, because majority of the people use public toilet and both the quality and the quantity of toilets in the area are bad, few people use the open space for this purpose. Which eventually raises the serious concern of sanitation.

(v) Security Issues: The robbery is becoming common day by day, people from the community complained that it is not safe to park their vehicles outside as they either got stolen or gets damaged. It would be quite helpful if there will be CCTV camera in the community. The crime rates will go down and they will feel more secure.

(vi) Unavailability of Good Educational Institution Nearby: The children of the community feel hard to keep their studies going as the educational institutes or the schools are quite far from the community; they have to travel a lot for that, so quit their education because of that. The boys are mainly uninterested in the studies of other skill development, so the value education is needed in the community. The girls, on the other hand, have the responsibilities of taking care of household work and as mentioned earlier, the community faces the drinking water issue, and it leads to the dropout rates also. One specific study can be done to see the impact of bad quality of water over Girl's Education.

(vii) Unskilled men: The males of the community are mainly engaged in the random private work and they lack skills, whereas maximum females opt the skills of cutting and tailoring, cooking, beautician, *Mehndi* etc. We can easily appreciate that employable skill training programs should be organised in the community.

(viii) Awareness about Sanitary Pads: The study revealed that females were quite educated in comparison of the male population, it was reflected in the awareness about sanitary pads as well. Females were not only aware of it but also using sanitary pads. Although male member of the family doesn't interfere much in the topic, so they did not know if the females of their family use sanitary pads or not.

(ix) High Cost and Shyness are the main reasons for not using the sanitary pads: The reason that few females were not using the sanitary pads were majorly the high cost and shyness. The health and hygiene programmes specially for women should be conducted and they should be provided with free or at least easily buyable.

(x) Financial Literacy: The people were using the bank account on their own and we hardly find few people whose father/brother/husband was operating their bank account. To our surprise, we find not even a single person whose mother/sister/wife was operating their bank account even after having higher education level. It indicates two things first is that both the males and females are financially literate and financial literacy is something part of their daily life. Second thing is, even after being educated, the females don't really use it in proper way. Still the male member goes out earn, although few females have opened shop in their home but they don't go out to earn.

(xi) Digital Literacy: In comparison to financial literacy, the people need more support on digital literacy. Maximum people have smart phones but not all of them have a social media account. It shows they are not that good in operating the smart phone for educational purpose. Training sessions for that can be conducted.

(xii) Fully Settled Community: After the study we found out that the people are living here in Anna Nagar Community since their birth or even before that. This community is not recently developed, but it is a fully settled community.

Major Suggestions

- (i) Short term training sessions for the use of mobile for educational purpose.
- (ii) Initiate the skilling programme for both men and women.
- (iii) Conduct Value Education sessions to motivate the people of community for being the better vision of themselves.
- (iv) Awareness campaign on Health and Sanitation for women and Alcohol reduction for men.
- (v) Select the community volunteer and design a procedure for university-community interface.

Conclusion

In India, the population is increasing drastically but, not everyone has the access to basic amenities. Here, education becomes even more important. Specifically talking about Delhi, it is the capital of India and people from all over the country come here for various reasons such as employment, education, marriage, etc. But, as not everyone gets there where they thought of going, they end up in JJ Colonies of Delhi. According to the Delhi shelter Board, there are 375 JJ clusters in Delhi at present. And most of the people living in these communities don't have the access to essential needs such as safe drinking water, toilet and education.

Even though the people of the Anna Nagar Community are living here since at least one generation, the basic needs mentioned above are still the topic of concern. The career opportunities or the career exposure is the need of the people of Anna Nagar, especially the male population as they are mostly engaged in random private work as driver, cleaner, labor etc. The average educational qualification is up to 5th and 10th among males, whereas it is 12th and graduation among females. Two ladies were even post-graduate from the University of Delhi. The university will be working on the need assessment on five identified communities of Delhi under its Centenary Year. The result shows that many people were interested in becoming the Community Volunteer. The community volunteer will help the university in planning and executing any programme which will be run by DACEE. The result also shows that the females majorly have their own shops, there is big scope of entrepreneurship programs in this community.

Scope for Future Studies

- How does the availability and quality of drinking water affect the Girl's Education in Anna Nagar Community, ITO Delhi?
- What entrepreneurship programmes can be organised for the people of Anna Nagar Community ITO Delhi?

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State Resource Centre, Tamil Nadu (1977-2002): A Quarter Century of Progress

• R. Rajan¹

Igniting Momentum with NGOs for Adult Education: The First Decade

The State Resource Centre, Chennai was established in 1977, consisting of 6 staff, with Dr. Malcolm S. Adiseshiah and Sr. Catherine Mclevey as its founding President and Secretary respectively. One of the first tasks on hand was creating a favorable environment so that National Adult Education Programme could be launched. This made the first year a dynamic one with many programmes.

The second year saw the Centre (i.e. SRC) training 400 field level functionaries. There were 2 primers, one general and the other a client specific were brought out, along with a training manual for animators. Apart from other programmes, Annual Conference was held for the first time.

By the third year, the SRC had gathered momentum with many NGO's joining hands in the implementation of Adult Education Programmes. Workshops, seminars and conferences were organised to argue the required resource support. Various primers, 6 supplementary materials and other relevant printed materials including an evaluation pack were brought out.

The year 1980-81 saw the introduction of general primers, motivation numeracy games, 19 supplementary readers, 3 manuals and 4 evaluation materials. Staff members participated in the training programmes, seminars and workshops organised by the other institutions as well. A research initiative on learners' attitude towards literacy was conducted. On the 1st of October 1981, CBAE programme was launched in 5 villages of Ellapuram Block in Chengalpet District, thus, heralding the Cadre Based Adult Education (CBAE) Programme.

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For year 1981-82, 60 training programmes supported by the SRC (Centre, for short). Centre in 1981- 82, 7 were planned and organised. Kalankarai villakkam, a Non-formal Education primer was published along with 12 post-literacy materials.

During 1982-83, the Special Cell for Women SC/ST began to function in the Centre, with the aim of creating awareness among this special group. We participated in 76 training programmes, 8 workshops and 9 seminars.

On language and arithmetic skills, two primers were released along with 3 supplementary readers, a post-literacy serial on “Do it yourself”, two knowledge building books, a manual for animators and a book on simulation games in Adult Education.

MOE Commends SRC’s Leadership Support in Adult Education

The report of the Fourth All India Conference of State Resource Centres convened in 1982 summarises the progress of this State Resource Centre in the following words (Ministry of Education, 1982).

“The State Resource Centre, Tamil Nadu has done valuable work in the field of training, creation of environment and involvement of students in Adult Education programme. A recent impetus to its creditability is that it has been recognised as a Research Institution by the University of Madras. This has enabled it to sharpen its research orientation and perspective to many of its activities. It has also made significant efforts in the field of training of workers of “Population Education”.

Enhancing Its Reach in Coloration with NGOs

During the next year, 1983-84, 1903 field functionaries were trained through 51 training programmes.

The Department of Material Production organised a workshop on Curriculum Development for 3 stages of Adult Education. 2 supplementary readers under the serial of Leaders with a primer for women, were designed along with 2 other supplementary readers and a collection of songs on awareness. “Designing of Tools Evaluation of the Present Adult Education Programme” was the perspective of the workshop conducted this year.

The initiatives undertaken during 1984-85, included 68 training programmes, 7 seminars, 7 workshops/conferences, 18 consultancy meetings, 3 evaluation visits,

and 9 meetings and 1 leadership and social service camps were organised. 'Namum Karpom' was the title of a primer for Pondicherry Union Territory. "Nae Padika" was an innovative primer exclusively prepared for Tribals in a writer's workshop, besides 4 other supplementary materials.

In 1985-86, the SRC Staff were brought under a time scale of pay in line with the Government of India Pay Scales. An evaluation of the State Resource was conducted by Mr. Guhan of the Madras Institute of Development Studies. 12 programmes including 7 training, 2 regional seminars and 3 writers' workshops, were organised during 1985-86.

Independently and in collaboration with other agencies, 65 training programmes were organized, benefiting 3115 field functionaries. The SRC also participated in 21 other programmes, organised by various other agencies.

The primer "Namum Karpom" was revised and another primer for women in 3 parts was prepared. 3 supplementary readers, 1 post-literacy manual, 2 training manuals and 7 publications on Population Education were released.

The Mass Programme of Functional Literacy was launched in May 1986. In 1986-87 a total of 852 programme officers were trained under MPFL. An exhaustive literacy kit was prepared and distributed throughout the State. 27 training programmes, 3 Regional Conferences, Annual Conference, 1 seminar and 2 meetings had coverage of 1254 beneficiaries. The Centre also participated in 76 other training programmes, 12 seminars, conferences and meetings. Integrating population concepts, a primer for women alongwith 8 supplementary readers and 6 story cards for neo literates were published.

An exclusive Department for Population Education, integrating the concept of Population Education in Adult Education Programme was created in 1987-88. Apart from training programmes, "Ezhuthukkal Arivom", a primer with a workbook and guide was prepared apart from 4 alphabet cards and a set of numeracy card. Personnel from SRC participated in 13 training programmes for the N.S.S. Programme Officers and in 19 volunteers training programmes under MPFL. This, along with 9 training programme for field functionaries and 20 animators training programmes were the major events during this year (SRC, 1988)

Techno-Pedagogic Spearhead of NLM in Tamil Nadu

In 1988-89, the National Literacy Mission (N.L.M) was launched in a big way

by His Excellency the Governor of Tamil Nadu at a function in Madurai. SRC personnel participated in 8 training programmes, benefiting 425 N.S.S. Programme Officers, under MPFL and 15 other Programmes. Besides, the SRC organised 23 training programmes, 7 seminars, conferences/workshops. Along with 9 Post-Literacy materials, a manual and a set of knowledge building books, and a separate primer for tribal in Kalrayan Hills were released. During the year, a total of 1,03,482 literacy kits were distributed.

The International Literacy year saw the Centre's activities registering a massive increase, to create a conducive atmosphere to celebrate the I.L.Y. in fitting manner. A massive function was organised on the 12th of January 1990 in Madras. His Excellency the Governor inaugurated the I.L.Y. It was in this year, that the Ex-servicemen Adult Education Programme was initiated.

Orientation training for the personnel from the District Resource Units, Master Trainers Training programmes under Ex-servicemen Adult Education Programme, Prerak trainings were some of the important programmes organised this year. It included 7 training sessions for NSS Programme Officers organized under MPFL. In all, the SRC sponsored 82 training programmes. 'Kai Vilakku' a primer with a workbook, guide, a set of books for stage I of Non-Formal Education a Tamil alphabet chart, a book on arithmetic and 3 Post-Literacy materials were published.

The year 1990-91 had many fruitful events. Under the direction of the Govt. of India, 'Pudiya Pathai' 3-part primer with the in-built formative and summative evaluation incorporating the concept of IPCL was prepared for the MPFL. More than 1500 master trainers were trained under the Mass Programme of Functional Literacy. Many public sectors like Ordnance Factory, Madras Rubber Factory, BHEL, Avadi Heavy vehicles Factory, Quality Assurance Establishment, COAST Guard joined us in exercise of eradicating illiteracy in their respective areas (SRC, 1990-91).

The UNESCO Regional Office in Bangkok sponsored a workshop for the production of neo-literate materials for women. The State Resource Centre, Madras was selected as a co-sponsor of this programme and given the responsibility of translating the neo literate materials brought out in the workshop in Tamil.

The first batch of districts 'commencing the TLC as well as voluntary agencies have availed the services of the State Resource Centre for training, materials preparation and evaluation. A 3-part primer Arivoli Deepam was prepared under the guidance of the State Level Committee for the TLC Districts and Voluntary agencies.

The SRC which has been housed in rental buildings since 1977 has managed to move to a building of its own. Thanks to the financial help from the Govt. of India and the Govt. of Tamil Nadu. The building is rightly named appropriately as Adiseshiah Bhavan in remembrance of the support of Dr. Malcolm S. Adiseshiah to SRC and the literacy moments in India.

During the year 1991-92, Sivagangai and Pudukottai Districts entered into Total Literacy Campaign. Right from sensitizing the Campaign approach among the Districts Collectors and the officials to designing the appropriate Project Plan, the State Resource Centre collaborated with the respective districts and the Government of Tamil Nadu.

During this year, the primer “Arivoli Deepam” in three parts prepared by us and approved by the Expert Committee on IPCL materials was put to use in all the TLC Districts. To involve Voluntary Agencies in Total Literacy Campaign, two workshops were organised, one at Kodaikanal and the other at Madras, in collaboration with the Directorate of Non-Formal Adult Education. State Level Master Trainers were selected and training programmes were organised, one at Kanyakumari, and the other at Triuchirappalli.

Annamalai University implemented the rapid literacy campaign in 4 blocks in Cuddalore District. The SRC took the initiative in organising the training of volunteers and supplied 94,989 literacy kits in this programme. The Cadre Based Experimental Programme was initiated in Sholingar, Vellore District in coordination with REED, Voluntary Agency.

In 1992-93, the State Literacy Mission Authority Council was formed and had its first meeting on 18.12.1992 at the Secretariat, fort. St. George, Madras. The Director, SRC was invited to participate in this meeting. During this year, a special Leadership Programme for women was organised by the SRC in collaboration with District Arivoli Iyakkam, Kanyakumari District. As an outcome designed a Kalajatha Training Programme and organised for all the Voluntary Agencies involved in the Total Literacy Campaign. Santhome Communications Centre and Chozha Creations availed the services of SRC in their video productions for the Directorate of Adult Education, New Delhi (SRC, 1993).

Heading Providing Trainings and TLMs for Arivoli Iyakkam in TN

In 1993-94, the General Body of State Resource Centre was reconstituted along

with the new office bearers electing Shri C. G. Rangabashyam, I.A.S (Retd.) as the Chairman. The coverage of Total Literacy Campaign (Arivoli Iyakkam in Tamil Nadu) in districts increased from 8 in the year 1992-93 to 17 in 1993-94.

Similarly, Voluntary agencies in three districts Kancheepuram, Triuchirappalli and the Chennai were given opportunity to organize Total Literacy Campaign in their areas. The increased coverage in Total Literacy and Post-Literacy Campaign had brought with it higher responsibilities and work load for SRC. Another important programme during this year was 'Educated Volunteer's Scheme' launched by Government of Tamil Nadu.

The resource support was provided by SRC for organising training programmes and support of teaching/learning materials. On the advice of the Government of India, the SRC organised two Media cum Writers Workshops to orient the writers to develop neo literate materials. A number of popular writers in Tamil participated and acquired the specialized skill of writing CE books for neo-literates.

In 1994-95, the Government of India requested the SRC, Chennai to prepare a report of the progress made in achieving the Total Literacy in Tamil Nadu. This experience sharing report, compiled by the SRC, Chennai was released on the International Literacy Day at New Delhi.

Peers' Mouthpiece in Literacy: Bringing out News and Views Bulletin

Similarly, the idea of bringing out an information bulletin with a view to coordinate the activities of all the SRCs in the country was conceived by the Directorate of Adult Education, New Delhi and State. The SRC, Chennai was entrusted with this task. Readily agreeing to such a novel bi-monthly newsletter, all the SRCs promptly sent their activity reports for the first issue.

The Bulletin titled "News and Views", a newsletter of the SRCs in India was designed in a record time with the information, articles and felicitations sent by officials from the Ministry of Human Resource Development, Government of India, New Delhi. During this year, A Mission Statement for the State Resource Centre, Chennai was evolved by organising a workshop on 14-11-1994.

Liaison Point for National and UN Agencies Extension Initiatives in Related Areas

The year 1995-96 marked the beginning of an era for resource diversification.

The State Resource Centre ventured into publicity and motivational programmes for the CDD/WATSAN project of UNICEF, Chennai at Erode District. Encouraged by the success of the programme, UNICEF invited the SRC to plan for a publicity and motivation programme for their other projects – POWER in Salem PLP and CDD / WATSAN in Chennai slums etc. Similarly, VHAI, Chennai funded for a statewide motivational programme for AIDS Project; by this time, all the districts joined the Total Literacy Campaign. Non-Formal Education materials for the Stage I & II were revised according to MLL norms developed by NCERT, New Delhi.

In the year 1996-97, SRC focused on sensitizing the literacy beneficiaries on Panchayat Raj. A manual for orienting the trainees on Panchayat Raj system was developed and with this a number of training programmes were organised at the State level. Two other innovative programmes during this year, viz., Involvement of Industries in literacy promotion in collaboration with CII; and Integrating Development Programmes with Literacy targeting Health & Women Development. During this year, National level workshop on Integration of Population Education with Adult Literacy was held at Kodaikanal on May 27-28, 1996. This workshop was organised by the SRC in collaboration with the Directorate of Adult Education, New Delhi.

Continuing Education Programme: SRC, Chennai Serves as Support Backbone

In 1997-98, the Continuing Education Programme was initiated at the state level. Preparing them for CEP, the SRC developed a set of training package on continuing education with a number of training manuals and resource materials with media software support.

The following training manuals were developed during this year.

1. Trainer's training manual on Continuing Education Programme.
2. Training Manual for Nodel Preraks/Preraks of Continuing Education Programme.
3. Training Manual on Self-Help Group.
4. Training Manual on Participatory Rural Appraisal.
5. Training Manual on Youth Development.
6. Training Manual on Gender Issue.
7. Training Manual on Concurrent evaluation for Post- literacy programme.

Dr. Alan Roger, Director of Education and Development, London visited SRC and discussed about the production of Post-Literacy/CE books for the neo literates developed by the SRC (SRC, 1998).

By the end of year 1998-99, except four districts which were in the last leg of the Total Literacy Campaign, all the other 25 districts had implemented the Post-Literacy Programmes. Of them, 9 districts embarked on the Continuing Education Programme.

The activities throughout the year were concentrated on training the functionaries of Continuing Education; viz the DAEOs, DRU Personnel, District Project Co-ordinators, Block level Coordinators and Nodal Preraks/Preraks. During the year, the Directorate of Non-Formal Adult Education invited the SRC to act as a member in the state level screening committee for selecting Continuing Education Books.

Similarly, the SRC complied, at the request of Saksharatha Samithi of Bangalore, in the preparation of basic literacy materials Part I, II & III for the Urban Tamils Population of Bangalore City.

As a special programme, the SRC organised two experimental programmes on Continuing Education: one in Pondicherry and the other at Pottalpudur, Tirunelveli District, Tamil Nadu. The programmes at Pondicherry aimed at formation and organising Self Help Groups. The programme at Pottalpudur aimed at experimenting various inputs focusing on the four components of Continuing Education Programme.

In the year 1999-2000, the SRC focused on preparation of training materials on the target specific programmes, viz.,

- (1) Equivalency Programmes,
- (2) Income Generating Programmes,
- (3) Individual Interest Promotion Programmes,
- (4) Quality of Life Improvement Programmes

The SRC made an innovative attempt in the preparation of CE books by simplifying the stories written by popular writers like Sundara Ramasamy, Sivasankari, Jayakandan and Raj Narayanan.

Similarly, a short stories competition was organised in collaboration with Dinamani Kathir (Leading Tamil Weekly) and selected stories were published as CE Books. Two Neo-literate materials on Tribals–Kurumbargal and Irulargal were also brought out during this year.

To publicise the concept of continuing education through Mass Media, the SRC prepared 40 slogans / 23 Jingles and songs in a workshop inviting experts/writers and free lancers.

This was compiled in a book form and then sent to all AIR stations in Tamil Nadu and Pondicherry. Another innovative effort made during this year was a poster competition conducted on the eve of International Literacy Day. In Collaboration with Dhinamalar, leading Tamil daily Newspaper, the poster competition was organised.

In 2000-2001, the SRC developed two skill development vocational primers: one on Mushroom farming and the other on Poultry for the benefit of neo literates in post-literacy and Continuing Education Programme.

These primers were meant to motivate them to learn vocational skills and, at the same time, improve their literacy skills. Similarly, with a view to popularising the rural folk arts, especially stories in the oral format, the SRC decided to collect such stories and bring out a set of neo- literate materials.

In this regard, the writers selected for the assignment visited the continuing education districts for collection of popular stories from neo literates. Based on the collection, CE books four categories were brought out during this year.

A study on the researches and evaluations conducted in the field of adult education in Tamil Nadu from 1988 to 2000 was conducted during this year.

A detailed report was also brought out. Another study on 'Mutram' magazine was carried out, sponsored by UNICEF.

The main objective of the magazine was its relevance, appeals to the women in low income group (SHGs) and its impact on their lives. During this year, the SRC has been nominated as the Nodal agency to operationalise the Task Force for Adolescent Programmes in Tamil Nadu. The main objective was to evolve strategies to address adolescent issues and involving NGOs to address them.

In 2001-2002, the SRC had undertaken few innovative attempts in the field of preparation of materials. 'New Life' – Primer for the visually handicapped was developed and printed in Braille letters along with Tamil letters engraved.

This special primer will be useful for visually handicapped adults and those who are partially blind. Two different skills-based primers 'Agriculture' – A primer for the farm labourers and 'House' – A primer for the construction workers were also developed.

For the urban neo literates, CE books on Rainwater Harvesting, Recycling of waste and welfare schemes of Chennai Corporation were developed. In training, the SRC identified State Level Master Trainers among the CE districts and conducted training in three batches. In all, 75 Master Trainers for 18 districts benefited through this programme. They will train the grass roots level functionaries of CE in their respective districts.

Sensitization programmes for village panchayat were organised in Vellore and Dindigul districts during this year. Training manuals on four components of CE were also brought out during this year by the SRC on:

- Equivalency Programme
- Income Generating Programme
- Quality of Life Improvement Programme
- Individual Interest Promotional Programme

In conclusion, started in a humble way, the State Resource Centre has grown to its present status. Thanks to our founder Chairman Dr. Malcolm S. Adiseshiah and his successors, Dr. R. Jayagopal, Shri. C.G. Rangabashyam and Dr. K. Govindaraju, the Members of SRC / TNBCE, the past Directors and staff as well as all the Academic / Administrative staff without whose support and dedicated services, the success would not have been possible.

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Framework for Professionalization of Special Needs Education: An Indian Perspective

• Devaraj Balappagari¹

Abstract

In India, the professionalization of special needs education has undergone various models of schooling and training strategies of teachers to understand and address special educational needs. It is rooted in the initiatives of missionary organizations, and full-fledged Government intervention began in the 1970s. The framework has been characterized by provisions of special and integrated/inclusive education, supply of assistive aids and appliances, and training of educators. The majority of the framework has been formulated based on the framework advocated by international laws and comprehensive recommendations of committees on disability affairs from time to time. Disability laws/policies and mainstream national education policies have been paying considerable attention to education for PWDs. Rehabilitation council of India act (1992) is the first legislation in Indian disability history to formulate training policies for the professionalization of special needs education and regulate special educators. However, the mandate of the disability framework contradicts the mandate of the mainstream educational laws/policies regarding professionalization of special needs education. Based on this backdrop, this paper aims to understand how the framework for special needs education, has been designed, its gaps and its consequences. The author would use the method of policy analysis to critically examine the policy documents.

Keywords: *professionalization of special needs education, disability framework, education for PWDs.*

1. Introduction

Right to compulsory education (RTE) is a milestone in Indian history. Besides RTE, various laws and policies have been designed to provide suitable education to

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persons with disabilities (PWDs) from time to time, including the Rehabilitation Council of India (RCI) Act 1992, Persons with Disabilities and Equal Opportunities (PWD) Act 1995, National Policy for PWDs (2005), and Rights of Persons with Disabilities (RPWD) Act 2016. This legal/policy framework is considered the basis for special needs education, and its mandate includes special, integrated, and inclusive education; the supply of assistive aids; and training of teachers to understand and address the special educational needs of students with disabilities.

In India, Special educators are considered rehabilitation professionals, and the RCI act is the regulatory body that frames training policies for professionals who desire to become teachers to teach SWDs. Currently, there is a dearth of special educators who are recognized and registered under the RCI act. According to the affidavit submitted by the Ministry of Education to the supreme court of India, there are only 28,535 special educators and about 4.33 lakh general teachers, who were given some training to teach about 22.5 lakh students with special education needs. At present, only 1,20,781 special educators are registered with RCI. The affidavit did not provide data on the specialization of special educators in each disability. If available, more inferences could be drawn. Hence, by considering the existing disability framework, this paper aims to address how the framework for special needs education has been formulated, and how effectively it addresses the needs of special educators in India. Additionally, this paper intends to identify the gaps in the framework and explore the consequences of the gaps.

2. Methodology

This paper will use the method of policy analysis to understand how the framework for special needs education has been designed and to identify major gaps in the policy. Legal and policy documents from 1992 to 2020 will be reviewed and analyzed. The RCI act of 1992 was the first legislation regarding the training of professionals for special needs education. Since then, various schemes, action plans, and mainstream laws for PWDs have been designed. Hence, the context for this paper is the enactment of the RCI act which will help us understand policy shifts in the framework for special needs education.

3. Review of Literature

3.1 Special, integrated, and inclusive education

The professionalization of special needs education has been characterized by various models of schooling for individuals with special needs, the supply of assistive

aids and appliances to meet their educational needs; and training of teachers and other stakeholders to better understand and address special educational needs at different levels. The major models include special education, integrated and inclusive education, and home-based schooling for individuals with severe disabilities. The term “special education needs” is not another term used exclusively for the needs of individuals with disabilities. Rather, it refers to the needs that are currently unmet in mainstream education (Kothari, 2012). The oldest and still dominant model of education for SWDs is special education (Kothari, 2012; Kundu, 2000; Singal, 2009; Sorrells et al., 2004; Tomlinson, 2012, 2017). While it had been dismissed in favour of integrated education, ‘integration’ refers to the admission of a student into a non-special or mainstream school without necessarily adjusting the curriculum to their different abilities (Kothari, 2012). On the other hand, ‘inclusive education’ refers to the kind of educational environment that is necessary to make inclusion in mainstream schools possible for children who have traditionally been excluded.

Special needs education in India is rooted in the charity model (Obiakor et al., n.d.; Singal, 2006; Tiwari et al., 2015). In the 1880s, Christian missionaries began setting up institutions for special needs education i.e., schools for the blind, schools for the hearing impaired, schools for the mentally handicapped, etc. The first school for the blind was founded by Miss Annie Sharp in Amritsar in 1887. Thereafter, several other schools were started in various states (Antony, 2013; Das & Shah, 2014; Shahab & Begum, 2018; Sharma & Deppeler, 2005; Thirumurthy & Jayaraman, 2007). By 1944, there were about 32 special schools managed and owned and managed by the British Indian government, missionary organizations, societies, and provincial governments. The number of special educational institutes rose to 150 by 1979.

In India, until the 1970s, education for SWDs was mainly provided through the special education model, with most special schools being supported and run by charity organizations and voluntary bodies. However, during 1970s, the State started playing a pivotal role in formulating policies and schemes related to special needs education. Both before and after Independence, several committees were constituted to comprehensively study the conditions of PWDs and recommend appropriate measures to provide suitable education. For example, committee on blindness (1942) and Bahurul Islam committee (1987) recommended integrated education for mild and moderate disabilities, the establishment of residential schools for physically and mentally handicapped, certain relaxations for hearing impaired students, incorporation of disability-related issues in teacher training courses, etc. Particularly, the committee on blindness emphasized the setting up of residential schools with competent staff

and other facilities. It prioritized special schools for totally blind students, with separate schools for boys and girls.

During the 1970s, the Government of India started promoting integrated education for individuals with special needs. NEP (1968) and NPE (1986/92) both advocated for an integrated model of education. In 1974, the Government launched Integrated Education of Disabled Children (IEDC) programme to promote the integration of students with mild to moderate disabilities into regular schools and to retain SWDS in the regular school system. Under this programme, financial aid was provided to the children to cover the cost of books, school uniforms, transportation, and other special equipment and aids. However, the success rate of the programme was very limited in the first phase due to the non-availability of trained and experienced teachers, the lack of orientation among regular school staff about the problems of SWDs and their educational needs, the non-availability of equipment and educational materials and the lack of coordination among various departments in the implementation process (Rane, 1983).

In 1987, the Ministry of Human Resource Development (MHRD), UNICEF, and the National Council of Educational Research and Training (NCERT) jointly designed the Project for Integrated Education for the Disabled to strengthen the IEDC plan. PIED adopted a “Composite Area Approach” that consisted of all regular schools within a specified area. These schools had to share resources such as specialized equipment, instructional materials, and special education teachers among the blocks. A multi-level approach had been adopted for teacher training. Those who completed the final stage of the training could act as resource teachers to teach SWDs. The modified programme showed some positive implications due to well-planned and better management skills, encouraging many states to implement the scheme. Both teachers and students developed a positive attitude towards SWDs to some extent.

Approximately 13000 students have been admitted to regular schools and about 9000 teachers have received some kind of training as part of the programme. Although the initiative has yielded optimistic results, it has encountered several challenges such as poverty, negative attitude of non-disabled individuals towards PWDs, lack of an appropriate mechanism for dissemination and public education, insufficient resources, difficulty in providing required training to stakeholders, coordination issues between different ministries, lack of teacher training, etc. (Ahmad, 2015; Cooc & Kiru, 2018; Obiakor et al., n.d.; Sharma & Deppeler, 2005; Singal, 2006).

The IEDC programme was revised in 1992 to address some of the challenges it

faceted. Under the revised scheme, schools providing integrated education to PWDs received 100% assistance, and various non-government organizations were also fully funded to implement the programme.

The programme was implemented in 26 States and Union Territories, serving more than 53,000 students enrolled in 14,905 schools (Sharma & Deppeler, 2005). Notably, Kerala showed a high success rate, with the programme being implemented in about 4,487 schools, benefitting around 12,961 children.

The concept of inclusive education was introduced to India through the Salamanca statement and Framework for Action on Special Needs Education (1994) and the United Nation Convention on Rights of Persons with Disabilities (UNCRPD) 2006. India has been one of the key participants in both of these political commitments. The objective of the Salamanca statement was education for all. It advocated for fundamental shifts in the policy framework to promote the approach of inclusive education. The statement has influenced Indian policies to promote inclusive education, and various provisions have been included in RTE act and Sarva Siksha Abhiyan programme (2000).

Despite systematic efforts, there is still a huge number of children with disabilities who are not attending any educational institution. According to the State of the Education Report for India: Children with Disabilities (2019), about 75 percent of the children aged five and about 30-40 percent of children between the ages of 5-19 do not attend any type of schooling. There is a wide gap between boys and girls with disabilities who attend school, and the dropout rate at each successive level of education is very high. Additionally, the lowest number of children attending formal education are those with learning disabilities, intellectual disabilities and mental illness, and multiple disabilities (Agarwal, 2020; Das & Shah, 2014; and UNESCO, 2019).

A large number of SWDs are out of the formal education system due to various challenges like in accessible schools, institutes, buildings, toilets, libraries etc. In addition, there is a lack of awareness among parents of SWDs, lack of trained teachers, delay in the recruitment of trained staff, lack of a proper support system for students with high-supportive needs. Furthermore there is a lack of positive attitude of teachers and non-disabled individuals towards SWDs. Another important challenge is that most of the special/inclusive schools are located in urban settings, while 69% of PWDs live in rural areas (Narayan & Patnaik, 2020; Taneja-Johansson, et al., 2021).

3.2. Assistive aids and appliances

The supply of assistive aids and appliances is crucial in ensuring equal and full participation of SWDs in the education system (Singal, 2006). These aids and appliances can be classified into three categories. i.e., (1) devices for daily living such as prostheses and orthoses, tricycles, wheelchair, surgical footwear and other devices; (2) educational aids including Braille equipment, Dictaphone, CD player/tape recorder, computers, and other low vision aids; and (3) special mobility aids like canes for the blind, hearing aids, educational kits, communication aids, assistive & alerting devices, and devices suitable for the persons with mental disabilities.

The Scheme of Assistance to Disabled Persons for Purchase/Fitting of Aids/Appliances (ADIP Scheme) is a centrally sponsored scheme under the department of PWDs. It grants financial support to purchase assistive aids and appliances for social and psychological rehabilitation, as well as to enhance educational and economic potential (Ministry of Social Justice and Empowerment, 2022). However, according to Amba (2017), the distribution of these aids and appliances is very limited and does not reach PWDs living in rural areas (Antony, 2013; Singal, 2006; Taneja-Johansson et al., 2021). In addition, the imposition of GST on raw-material used in the production of assistive devices has made them less affordable. The Ministry of financial affairs, Govt. of India, brought most assistive devices under 5 percent and 12 percent GST categories.

3.3 Professional development of teachers

Persons with disabilities are not a homogeneous community. Each person with a disability has her/his own unique needs in terms of education and training. Individualized plans and teaching strategies are required to understand and address the educational needs of each disability (Das & Shah, 2014; Kundu, 2000; UNESCO, 2019). The lack of awareness on diversity of educational needs of students with disabilities and the absence of practice-based evidence are the major challenges that affect the adaptation of pedagogy. For instance, teaching stem subjects to SWDs requires additional attention and investment of time, depending on the type of disability. Special needs teachers can understand the special educational needs of the students, but they lack subject knowledge. On the other hand, general teachers are equipped with subject knowledge, but lack an understanding of special needs (UNESCO, 2019: 74).

Special educators should possess additional competencies in addition to knowledge of subject content, pedagogy, and methodology such as knowledge of

assistive devices, braille/sign language or format and mode of augmentative communication, and methods and strategies to understand and address the special educational needs of disabilities. In addition, Special educators should be competent enough to deal with various settings of schooling i.e., special, inclusive and homebased education.

The disability framework has been trying to address the training of professionals to meet the demand in the field of special education. The National education policy (1986/92) proposed the reorientation of teacher training to address the difficulties of SWDs, particularly among those dealing with primary education. The NEP (2020) recognizes the urgent need for special educators at various levels of schooling. The policy states that secondary specializations can be developed among subject teachers and generalist teachers during or after pre-service training preparation. However, the disability framework emphasizes the development of primary specializations in teacher training courses.

The co-teaching model and itinerant inclusion teacher model are predominant models employed to teach SWDs in integrated/inclusive settings. However, various studies noted that these models did not give satisfactory results due to a lack of supportive system and resources. In the Itinerant inclusion teacher model, teachers travel from school to school offering remedial teaching, but they get very limited time to spend in each school. General educators expressed difficulties with this model stating that it disturbs the daily teaching pattern. (Tiwari et al., 2015).

The State of education report for India (UNESCO 2019) states that at present, 9 million teachers are employed across the country, ranging from elementary level to higher secondary level. However, there are significant variations in the type of schools and student-teacher ratios across the country. In a recent verdict, the supreme court observed that there are only 28,535 special teachers for 22.5 lakh students with disabilities, indicating a dearth of special educators in the country. It also directed the GOI to notify the norms for student-teacher ratio of special/inclusive education and start the appointment process on an urgent basis. The top court accepted the petitioners' recommendation to adopt pupil-teacher ratios of 8:1 for children with cerebral palsy; 5:1 for children with intellectual disability, ASD and specific learning disabilities; and 2:1 for deaf and blind students; as well as a combination of two or more of the seven disabilities.

Teachers face certain structural and methodological challenges when teaching SWDs. The studies such as Pavan John Antony and others (2013), Ashwini Tiwari and others (2015), and Ajay Das (2013) found that many teachers fail to understand

the concept of inclusion and doubt their abilities to manage the special educational needs of SWDs. Several other studies including those by (Ashwini Tiwari, Ajay Das and others (2015) also noted that large class sizes, gaps between general education and special education, lack of sufficient resources, lack of rewards, etc., are major challenges expressed by teachers in teaching SWDs in general schools. Negative attitude of educators towards SWDs, a cynical understanding of the concept of disability, lack of focus on SWDs in the class, etc., remain major challenges that hinder academic performance of SWDs. Most general school teachers don't encourage these students to participate in class discussions (Das et al., 2013; Ghosh, 2016; Singal, 2006; Taneja-Johansson et al., 2021; Tiwari et al., 2015).

Mapping Indian policies

Provisions for training professionals to teach SWDs are embedded in national education policies and mainstream disability laws/policies. However, the RTE act had no mention of SWDs in the original act, and they were only included in the socially and economically disadvantaged category in the 2012 amendment. The RTE mandates that general teachers teach SWDs in neighbourhood schools and home-based schools. On the other hand, according to the RCI mandate, special educators should teach SWDs in special, inclusive, or home-based schooling. Before understanding the major gaps in the framework, it is important to consider some of the major provisions of disability laws/policies.

The RCI act is the first legislation in India's disability history. Enacted in 1992, it emphasizes formulating or taking appropriate measures towards rehabilitation and education for people with disabilities. It was amended in 2000 to regulate and monitor the training of rehabilitation professionals, promote research in rehabilitation and special education, and maintain a register of information that consists of information about rehabilitation professionals. These registered rehabilitation professionals can practice anywhere in the country, hold office in the governmental or non-governmental sector, authenticate any document pertaining to PWDs and provide witness in the court of law on disability issues.

Secondly, PWD act is the first comprehensive legal framework on disability to ensure full participation and equal opportunities. It mandates the provision of integrated education to mild and moderate disabilities and special education to severely disabled students along with vocational training. It also focuses on undertaking research on special education, assistive devices, and building barrier-free environment. However, this legislation has been replaced with the RPWD act in 2016.

Thirdly, the national policy for PWDs (2006) has been framed in accordance with the PWD act of 1995. This policy recognizes persons with disabilities as valuable human resources for the country and adopts special provisions to develop special schemes/programmes on education and rehabilitation. According to this policy, rehabilitation facilities are classified into three categories such as physical rehabilitation, educational rehabilitation, and economic rehabilitation. Physical rehabilitation services include early intervention, providing assistive mobility devices and other counselling services. Physical rehabilitation services are integral parts of medical, educational, and social rehabilitation programmes.

The National policy for PWDs has adopted a set of action plans and strategies to achieve the mandate of the PWD act (1995) regarding education and manpower development, i.e., training of teachers and other rehabilitation professionals to meet the requirements of pre-schooling for SWDs, special/inclusive education, home-based education through Training modules for teachers for inclusive education, diploma, degree and high-level programmes in special education, and training of caregivers for home-based education; building barrier-free and accessible institutes/campuses; and other measures.

Fourthly, the enactment of RPWD act is a key step towards protecting the rights of persons with disabilities. The provisions in this act fit well within a rights-based approach. The mandate of this act includes education, social security, employment, equal and full participation, building an inclusive society, equal access, and a barrier-free environment for persons with disabilities. Section 16-18 of the act advocate provisions and measures for education, training teachers and other professionals, and research in the field, i.e., inclusive education until the age of 18 years, reasonable accommodation, and accessible methods of communication. This includes periodic survey to identify PWDs, establishing adequate teacher education institutes and resource centres to support educational institutions at all levels of schooling, providing training and employment for teachers, including those with disabilities who are qualified in sign language, Braille, and teaching children with intellectual disability. Additionally, the act provides necessary training to professionals and staff to support inclusive education and provides teaching learning material and other assistive aids.

The evaluation of policy documents reveals various gaps in the rulebook itself and implementation level. The composition of the council is itself very problematic as RCI has no representation from NCFTE, and vice versa. RCI act doesn't set any regulations for the employment patterns of special educators and rehabilitation

professionals. Both mainly focus on pre-service training but are completely silent on in-service training strategies. Particularly, RCI doesn't even mention it. Another major issue is that there are no clear norms for the registration of special educators working in government sectors. Hence, it can be stated that the legal and policy framework on training professionals for special needs education has failed to address various ground realities.

There are several ambiguities across the provisions of the acts. For instance, the implementation and monitoring of special education rest with the ministry of social justice and empowerment, department of PWDs, whereas the implementation of integrated/inclusive education, RTE and others lies with the ministry of education. RTE act mandates provision of free and compulsory education to all until the age of 14 years. On the other hand, the RPWD act states that free and compulsory education should be provided to all benchmark disabilities until the age of 18 years.

The RCI-recognized courses provide necessary training to deal with the special educational needs of disabilities based on the type of disability. In the recent past, as part of the SSA programme, NCFTE has gone to the extent of providing modular training to general educators on teaching SWDs. Without having professional capabilities in braille/sign language, alternative modes of communication, and identifying the educational difficulties in the classroom, general teachers are allowed to teach in an inclusive setting. This move is quite detrimental to the education of PWDs, and also employment patterns of RCI-recognized special educators.

The mandate of RCI act and NEP (2020) have contradictory provisions for training teachers to understand and address special educational needs. The NEP 2020 states that secondary specializations can be developed among subject teachers and generalist teachers during or after pre-service training preparation for professional development of special educators. However, the RCI mandates the development of these specializations as primary specializations to address the various needs of each disability with courses at various levels recognized from diploma to research level. The educational needs of students with disabilities differ from one disability to other. Thus, in terms of developing areas of specialization for educators to deal with various requirements of education for PWDs, NEP 2020 contradicts the RCI mandate. NEP 2020 does not mention early childhood education for SWDs.

The lack of harmonization between RTE act and RPWD act in the legal and policy framework for professionalization of special needs education is another important concern. RPWD act (2016) mandates all educational institutes should provide reasonable accommodation according to the individual requirements to ensure

full inclusion. However, the act does not prescribe clear norms and standards to provide reasonable accommodation, individualized support, and full inclusion. The RPWD act indicates inclusive education and access to free education until the age of 18 years. But RTE act does not define the term inclusion and mandated access to free education until the age of 14 years only. Therefore, it indicates that a lack of political will is the major impediment to the effective formulation and implementation of legal/policy framework and to strengthening professionalization of special needs education.

5. Discussion

It is important to reiterate that RTE act (2009) is a constitutional amendment, while all disability laws are ordinary laws. Hence, it is the general understanding that any statute or policy after the enactment of RTE act should meet its mandate. However, none of the disability laws have a constitutional mandate.

The policy framework for professionalization of special needs education is designed both in accordance with recommendations of committee reports and the guidelines/framework set by international treaties and proclamations. For example, RCI act has been formulated based on the Behrul Islam committee report (1987). The PWD act (1995) has been designed in accordance with the Proclamation on the Full Participation and Equality of People with Disabilities in the Asian and Pacific Region 1992. And, the recent RPWD act has been formulated to ratify the UN convention on the rights of persons with disabilities (2006).

There are several structural and functional issues in formulating the framework for disability-related issues. Often, the GOI does not conduct proper consultations among major stakeholders, including special educators and rehabilitation professionals who deal with primary and secondary education, parents/guardians of PWDs, and disability rights organizations. Also, whenever GOI shares any draft for feedback/comments from the public, it is not sensitive to make such draft available in accessible modes or formats for the blind and hearing impaired. Additionally, when any bill is tabled in the parliament, there is hardly any discussion on disability related issues due to a lack of representation from the PWDs and a lack of interest and expertise among the members. Another important impediment in the process of effective policy formulation is the lack of transparent data on PWDs. Although counting has been done in the census and other surveys in India, some types of disabilities are left out from the mainstream data due to a lack of understanding among officers about disability aligned concepts and a lack of clear norms for the usage of terms to address various disabilities.

6. Conclusion

This paper aimed to address the development of the framework for special needs education in India. The mandate of the framework includes special/inclusive education, the supply of aids and appliances and training of teachers. RCI act is the first legal framework pertaining to the training of professionals to understand and address special educational needs of SWDs. It came into force before NCFTE. Since then, laws, policies and action plans have been designed from time to time to strengthen special needs education. RPWD act mandate of providing free education until the age of 18 years to PWDs enhanced the RTE mandate of free and compulsory education until the age of 14 years. However, there are multiple ambiguities among the mandates of various laws and policies, leading to a lack of convergence among implementing agencies.

Despite having a legal/policy framework for professionalization of special needs education, many SWDs are out of the formal education system. Education for PWDs has been encountering major traditional problems, like lack of trained personnel, lack of resources and infrastructure, lack of willingness of teachers to include SWDs in mainstream education, architectural barriers, deficient understanding of disability, etc, revealing that the major problem lies with implementation aspects.

Towards the end, this paper noted that the framework for special needs education has been formulated based on the recommendations of committees and international law, such as the UNCRPD and other proclamations that pertain to the rights of PWDs.

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Engaging Children during Covid-19 for Functional Literacy of Adult Learners: A Case Study

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Abstract

During the Covid-19 pandemic Aparna Trust took the initiative to provide online tuitions to their students. An interesting intervention was made to take them on virtual travel to different states of India as part of their Social Studies. Three groups of children from classes 6 to 8 were involved in the project “Bharat ki Sair”. During one session, the Chairperson motivated them to teach their non-literate mothers at home. Eighteen children volunteered and were trained to use literacy primers developed by the Lady Irwin College through a project “Padai Ka Maza”.

The mothers requested the NGO to provide them with an opportunity to come to the centre and learn. A motivated staff member was designated to teach them. Initially, they came for two days a week but decided to come thrice a week. As most of the 18 women had never been to school and were at different levels of literacy, the centre utilized a hybrid mode of learning and used WhatsApp to facilitate learning in small groups. To make learning more accessible and engaging for the women, primer lessons of part 1 were converted into video lessons. On International Literacy Day, 8th September 2022, women learners came to the college with their children and shared their experiences. They also interacted with the learners of another NGO and college students through interactive fun activities.

Keywords: *Life skills, literacy, COVID-19, students, motivators, women’s empowerment.*

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Sustainable Development Goal (SDG) 4.6 relates to ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. The principles, strategies, and actions for this target are underpinned by the contemporary understanding of literacy as a continuum of proficiency levels in a given context. It goes beyond the understanding of a simple dichotomy of 'literate' versus 'illiterate'. Therefore, actions for the target aim at ensuring that by 2030, all young people and adults across the world should have achieved relevant and recognized proficiency levels in functional literacy and numeracy skills that are equivalent to levels achieved upon the successful completion of basic education. The National Education Policy (NEP) 2020 accords the highest priority to achieving Foundational Literacy and Numeracy (FLN). In line with the New Education Policy 2020, 'Adult Education' is now called 'Education For All' (Department of Education, Government of India, 2020; UNESCO, n.d.).

Life skills are the group of psychosocial competencies that help a person lead a healthy and happy life (WHO, 2003). These skills are usually clubbed into three major categories: a) Thinking skills (critical thinking, creative thinking, problem-solving, decision making), b) Personal skills (self-awareness, self-management of stress, anger, emotions, and time), c) Social/Interpersonal skills (communication skills, empathy, cooperation). Building life skills through functional literacy is the desired outcome of any programme for the empowerment of women. Development sans literacy is unsustainable (Seth, 1997; UNFPA, 2000).

Building the life skills of adolescents is an investment for the future. Confident, well-informed, and responsible young people can engage in constructive community action (Seth, 2007; Seth and Khanna, 2011). This is the story that emerged during COVID-19 when children motivated their non-literate mothers to learn. The women enhanced their life skills by persuading the NGO where their children took tuition, to allow them spaces to learn. The outcome – a group of highly motivated mothers, proud of their family support and ready to march forward.

Beginning of a new journey

Arpana Trust is an NGO that operates in Molarbund, Delhi. The organization provides tuition support to around 1000 students in the mornings (boys) and evenings (girls). During the COVID-19 period (2021), the NGO conducted online classes and provided smartphones to needy students with the condition that the families would make the mobiles available to the students for online classes.

To break the monotony of the kids of classes 6th to 8th, they were offered the opportunity to take virtual trips to different parts of the country. In consultation with the teachers and management, it was decided that each class would have a one-hour session on Wednesdays, during which the children would explore one state per month. At the end of each state covered, the students participated in a quiz and enjoyed it a lot. With guidance, the teachers became comfortable conducting the sessions. Additionally, the chairperson, manager, and a senior teacher also participated to make the sessions interactive.

During one of the travel sessions attended by chairperson Mrs. Sushma Agarwal, she suggested to the children “These days you are at home and your mothers are also home. Most of your mothers are illiterate. Why don’t you teach them?”. This was taken as an opportunity to make an emotional appeal to the students, and 18 out of nearly 100 children (in three groups) volunteered. This marked the beginning of a dream project – “*Padai Ka Maza*” (Fun of Learning), which Mrs. Agarwal wholeheartedly supported. She explained “once in six months when we have PTM (Parent Teacher Meeting), we talk to parents. Fathers rarely attend, and the mothers tell us that they do not know if their child is studying, even holding the book upside down. When asked about homework, he shows notebook, but we don’t know when and what was done....”. She believed that the literacy project would benefit the children as well.

Online training was organized for the student volunteers in July 2021. The purpose of the training was to prepare them to teach someone in the family basic literacy skills. They were made familiar with the method of teaching adult learners using the literacy primer “*Padhe aur Jaane*” developed by the Lady Irwin College (Delhi University), Department of Development Communication and Extension. Qualities of a good teacher were emphasized hoping that in the process of teaching someone, they would enhance their own life skills as well. They were also taught the method of assessing the level of literacy before starting to teach.

Coming to the centre

In August 2021, the women requested the NGO to allow them to go to the centre for offline learning as they found it difficult to learn effectively from their children and they wanted to learn in a group. The NGO chairperson granted permission as the centre was closed and the staff in charge of fieldwork agreed to teach them at the centre. Thus began a new and exciting journey. We maintained contact with the children and the women through WhatsApp and it became a family project with some husbands encouraging their wives as well.

Initially, the women were coming to the centre twice a week – with a focus on reading and writing. However, after a few months, they expressed the need to learn numeracy as well and started coming three times with Tuesdays being dedicated solely to numeracy. There is an in-built evaluation for them to know their progress after every four lessons. An assessment at the time of joining the class is also done.

Activities at the centre included fun activities like making words from alphabets and *matras* written on 2.5 centimetres square paper chits which were placed in envelopes. Each learner added more alphabets to their envelopes as they increased their vocabulary. In WhatsApp videos, each learner proudly showed the words they learnt. They also sang songs written on charts and displayed on boards with those who could read pointing to the words being sung. The bonding with them strengthened with every online interaction.

Celebrating Women’s Day

Amidst COVID-19 protocols, the women celebrated Women’s Day on 8th March 2022. By now, they had formed a cohesive group and had decided to wear pink saris. Some guests also participated in the function – dancing, singing, games, and experience sharing. An interesting game was played called ‘*Mansik Swasthya Varnmala*’ (Mental Health Alphabets). A chart with associated emojis and words related to mental health was hung on the wall, with each alphabet representing a different word. With their eyes covered with a dupatta, the player had to touch an alphabet on the chart and then untie the dupatta to read the alphabet and words written in the block. They were also required to say a few words related to the word, for e.g., ‘M’ for ‘*Madad*’ (help); ‘G’ for ‘*Gumsum*’ (withdrawn); ‘Kh’ for ‘*Khushi*’ (happiness). If they were unable to recognize the alphabet and read the word by themselves, they were helped by others. However, each person could say something meaningful associated with the words.

Locked again at home

In January 2022, the COVID-19 situation in Delhi had become serious again and as a precaution, groups were discouraged to meet physically. The women were not allowed to come to the centre. However, the desire to learn remained high among them and they wanted to continue learning. Since a good rapport had been formed with the women, it was decided that they could form small groups and meet once a week on WhatsApp. Four groups were formed and each group met for one hour. During this time, each learner was given individual attention for about fifteen minutes. Additionally, there was interaction not only with the women but also with

their family members, mainly children and some husbands as well. Follow-up interaction enabled them to sustain their motivation to continue the learning and teaching process. Women took turns to talk and show their progress. Nevertheless, the method was found to be quite effective in communicating with them. This was a temporary phase, and soon the centre was open to children and women.

Recognition of school children as Volunteer-Teachers

During COVID-19, children were not able to give time to their mothers but were encouraging them to go to the centre and learn. They also took pride in their mothers' learning. Interactions on WhatsApp calls at a personal level during the lockdown provided an opportunity to interact with the children. However, the need to meet them was realized, and an interesting session was organized at the centre, where children played *antakshri* with their mothers. Women wrote the letter of the word of the song with the help of their children when needed. Experiences were also shared.

To give recognition to the students for their hard work, it was decided to meet with the principals of the schools (boys and girls) where children were studying. Two mothers and Saraswati's daughter Anjali volunteered to go with the NGO worker to the local schools. While permission was not granted to enter the boys' school without the permission of the Directorate of Education, the team was allowed inside the girls' school, where, unfortunately, the principal was not available. However, the Counsellor was very encouraging and promised to fix a meeting with the school Principal.

Training Volunteers from other NGOs

Encouraged by the success of the PKM (Padai Ka Maza) project of Arpana Trust, Lady Irwin College organized a training programme for volunteer teachers of Vaish Welfare Trust, a Delhi-based NGO, and Aseem Library in the college on 27th July 2022. This event provided an opportunity for the postgraduate students of the department to engage in experiential learning, plan and conduct training, and learn about the department's important initiatives in the area of adult education and women's empowerment.

International Literacy Day

On September 8th, 2022, Lady Irwin College organized a literacy day event that was attended by sixteen women and sixteen children. Eleven women learners from

Vaish Welfare Trust, who used the same teaching methodology, also participated in the function. They were very excited to come to the college and some had never travelled by the Delhi Metro before. Despite facing challenges, Santosh, who was six months pregnant with haemoglobin level as low as 6 and got a blood transfusion a day before the event, the participants were determined to attend. Although Santosh was discouraged from joining the group, she showed up at the metro station and joined the group.

It was an opportunity for the college students to plan and conduct interactive group activities. In addition to a puppet show and some floor games, the learners, volunteer teachers, and their children also shared their experiences. Certificates for participation in the *Padai Ka Maza* project were given by the chief guest Ms. Kalpana Kaushik, Director Indian Adult Education Association, and the Director of the college Prof. Anupa Siddhu. Learners were motivated to work hard and pass the literacy exam to earn the Certificate of completion.

The thirst for knowledge and learning among women has increased, and they have expressed a desire to learn tailoring and other skills for income generation. Ms. Kaushik informed them about the opportunities available for continuing their learning through NIOS (National Institute of Open Schooling).

Methodology of teaching

While teaching at the Lady Irwin College, we felt the need to develop our own literacy primer after reviewing existing literacy primers developed by various State Resource Centres (SRCs) and NGOs. Fortunately, we were working with students and had the opportunity to use their creativity for developing a primer through an Extension project that was part of their curriculum in the 1980s. The primer used an Eclectic approach which is a combination of Synthetic or Alphabetic (phonic) and Analytic methods. We revised the primer based on feedback from learners and volunteer teachers.

The literacy primer "*Padhe Aur Jaane*" is in three parts. Part 1, consisting of 12 lessons, enables a learner to read the stories of Part 2. These stories are based on case studies of women and focus on selected themes for discussion. Part 3, which covers Numeracy, was taken from the State Resource Centre (SRC) of Bhopal. It was published with the support of Vaish Welfare Trust. Part 1 of the Primer was converted into a Talking Book using the Multimedia Print Reader (MPR) technology. The MPR technology is a giant leap in educational technology allowing people to hear the text while reading along.

During COVID-19, smartphones were used to make video recordings of each lesson of Part 1 of the primer, which was used as a communication tool. Sharing the recorded video lessons with learners, and receiving feedback was useful for making changes. The videos were given to Lady Irwin College, Department of Development Communication and Extension, to not only fill gaps but also add value to the resource materials generated. The videos were also shared with literacy experts and field workers. The materials are accessible on a link to the Department of DCE on YouTube ([https:// youtube.com/playlist?list=PL2Aqs3s5Ljba3B4uIokdDzmtbC7jyVHWv](https://youtube.com/playlist?list=PL2Aqs3s5Ljba3B4uIokdDzmtbC7jyVHWv)).

Assessment of Learners

The literacy primer Part 1 has guidelines for the facilitators, which are reinforced during the training programme. It also includes a literacy assessment test to determine the learners' literacy level at the time of joining. All the literacy primers approved by the National Literacy Mission have built-in evaluation after every four lessons. This helps the learner to review their own progress and the organization monitor their progress.

To assess the progress of the learners and their level of confidence, it was decided to take 11 '*Panchantantra*' stories to the centre in bold print with visuals. Recognizing that they were not confident in reading full stories, they were encouraged to volunteer for reading the stories demonstrating how to read the story title and the text written in bold print. They were assured that even though they would not be able to read difficult words that they had not learned, they would surely be able to read some sentences with comprehension. Help was offered if needed. The purpose of this exercise was to find out how many would feel confident enough to try reading unknown texts in the presence of others, enhancing their life skills by giving them confidence, which is an important goal of adult education.

With encouragement, all the books were taken up by the women for trial. They were given some time to go through the books. Some were overjoyed as they had never held a storybook before. However, Saraswati returned the book quickly after realizing that it was a task beyond her competency. Nevertheless, each learner came up one by one and sat on a chair facing the audience. They were able to read and show the title of the book, and some could read a few lines from the first page with help. Most of them who had finished Part 1 were able to read with comprehension and were applauded by others. One learner who had come for the first time had studied till class 4 many years back and wanted to revive her skills. She read with ease but without comprehension.

Women were advised to take the books home and read them with the help of their children, who were supporting their efforts. It was decided to meet after a month with the children and discuss the stories they had read, what they enjoyed, and what they learned. Thus, the need for a library was felt. Nadira Chaturvedi was approached, and she sent more books for women with bold prints, and thus Aseem Library for women was started. She agreed to help in monitoring the progress of adult readers and provide them with need-based reading materials.

In preparation for celebrating International Literacy Day and going to Lady Irwin College on 8th September 2022, the women were motivated to take Basic Literacy Examination for getting certificates. A total of 19 women appeared for the examination. It was the first time they had taken a test and were very nervous but excited. While most of them successfully attempted the reading test, half of them scored poorly on the written test. None of them passed the numeracy test because they had not learned multiplication and division. Initially, the focus of “*Padai Ka Maza*” was on enabling them to enjoy reading within the limited constraints of their time. However, a few months after they began their classes, they expressed their interest in learning numeracy. Now, encouraged and motivated by children, they are requesting sessions five days a week and have become regular attendees.

Key Learnings

- Adult learners need the support of their family members. Children can be motivated and trained to become facilitators, enriching their own life skills while spending quality time with their mothers and other non-literate members of the community.
- It is crucial to train student volunteers and make them feel valued for getting involved in a noble mission. Teachers can play an important role in encouraging and recognizing students to become volunteer teachers for adult education.
- The learning process for adult learners becomes enjoyable and meaningful only if they can comprehend and relate it to their lives. There are plenty of edutainment materials available for teaching-learning. Selecting appropriate materials and using them effectively is an important aspect of volunteer training and management as well.
- The use of technology can improve learning outcomes and make the process enjoyable and interactive. It also helps monitor progress on the ground.
- Partnership between academic institutions and NGOs can be very fruitful for optimizing the use of available resources, strengthening programmes on the ground, and providing experiential learning to the students.

- Libraries are an essential component of adult education programmes. Reading materials that are relevant and appropriate for their learning levels with plenty of pictures, motivates the learners and facilitates rapid learning. Stories of women, produced independently by the women, and for the women, can be an outcome of the project.
- Children and college students can make a significant contribution to developing communication materials for promoting literacy and life skills.
- A non-threatening environment needs to be created for subjecting adult learners to the assessment process.
- Basic literacy should be the foundation for skill training for income generation.
- Women prefer to learn in groups, motivating each other. They can form support groups and actively participate in community development programmes.

Literacy, Library, and Life skills (3Ls) are integrated aspects of a meaningful programme for adults based on the principles of Enjoyment, Engagement and Empowerment (3Es) of all stakeholders involved in the teaching-learning process.

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Modern Usage of Technology in Science Teaching

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Abstract

This article examines the modern usage of technology in science education, exploring its significant impact on teaching and learning. Technology has become increasingly important in education, particularly in science education. With the introduction of technology in education, the roles of teaching and learning have evolved. As a result, the future trend in educational methodology and strategy is geared towards integrating technology into the classroom. In higher learning institutions, technology can be used as a strategic instructional medium to facilitate teaching and learning in science. The use of technology-based learning in education has the potential to improve education, empower people, and strengthen governance. Presently, technology-based learning includes smart boards, QR codes processed with Android phones, Hi-Tech labs, Tablets, E-books, Streaming videos, and Digital libraries. The Department of Education, Tamil Nadu has been providing smart classrooms and Hi-Tech laboratories for High schools and Higher Secondary schools to foster students' concept, knowledge, interest, and involvement in learning science. This article emphasizes the significance of modern usage of technology in science teaching and how it is helpful in the promotion of science teaching in the present scenario.

Keywords: *modern technology, science teaching.*

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Introduction

The use of technology in science education has become increasingly common in recent years. This includes tools such as:

1. Interactive simulations and virtual experiments that allow students to manipulate variables and observe the effects (Liou and Chang, 2018).
2. Online learning platforms such as MOOCs provide students with access to a wealth of resources and educational materials.
3. Augmented and virtual reality (AR/VR) applications, which provide immersive experiences for students to explore scientific concepts and phenomena (Wuet al., 2013).
4. Data analysis and visualization software that allow students to analyze and interpret scientific data (Vavra, Janjic, Loerke, Phillips, Norris & Macnab, 2011).
5. Robotics and coding programs that introduce students to the basics of programming and engineering (Benitti, 2012).

Overall, technology has provided new and innovative ways for students to engage with scientific concepts and has made science education more accessible and interactive.

Interactive simulations are computer programs that allow students to manipulate variables and observe the effects in real time. They provide an engaging and dynamic way for students to explore scientific concepts and experiment with different scenarios (Christensen, De Aquino & Degrande, 2011). Some examples of interactive simulations in science education include:

1. Physics simulations that allow students to explore the laws of motion and energy.
2. Biology simulations that demonstrate biological processes and systems, such as cellular respiration and circulation.
3. Chemistry simulations that allow students to visualize and experiment with chemical reactions and processes.
4. Climate and weather simulations that enable students to explore patterns and trends in weather data.

Interactive simulations can be utilized in both traditional classroom settings and online learning environments. These simulations can facilitate a deeper understanding

of complex scientific concepts by allowing students to explore and experiment in a controlled, virtual environment.

Virtual experiments are computer simulations that mimic real-life scientific experiments. They allow students to conduct experiments in a safe and controlled environment and provide an alternative to traditional hands-on experiments in cases where access to equipment or hazardous materials may be limited. Studies have clearly documented the value of technological capabilities for enhancing the presentation of complex or abstract content, such as computer visualization techniques (Lewis, Stern, & Linn, 1993). Some examples of virtual experiments in science education include:

1. Virtual dissection simulations in biology provide students with the opportunity to explore the anatomy of different organisms without the need for physical specimens.
2. Virtual physics labs that allow students to perform experiments on motion, force, and energy without the need for physical apparatus.
3. Virtual chemistry labs that provide students with the ability to conduct chemical reactions and observe the results, without the need for access to potentially dangerous chemicals.
4. Virtual astronomy simulations that allow students to explore the stars, planets, and galaxies without access to telescopes.

Virtual experiments can be used to complement or supplement traditional hands-on experiments and can provide students with a deeper understanding of scientific concepts by allowing them to explore and experiment in a virtual environment.

Online learning platforms are websites or applications that provide students with access to educational materials and resources. They can be used for both formal and informal education, and can provide students with a flexible and convenient way to learn. Some examples of online learning platforms in science education include:

1. Massive Open Online Courses (MOOCs) that offer free or low-cost courses on a wide range of scientific subjects taught by experts in the field.
2. Learning management systems (LMS) that are used by schools and universities to provide students the access to course materials, assignments, and assessments (Nadire & Muhammed Sharif, 2014).
3. Online tutoring platforms that connect students with tutors for personalized support and guidance.

4. Science-focused websites and apps that provide students with access to videos, animations, interactive simulations, and other educational resources.

As mentioned above, online learning platforms provide convenient and accessible ways for students to learn that complement traditional classroom-based instruction. They also help in breaking down barriers to education by providing students with access to resources and educational materials regardless of their location or socio-economic status.

Massive Open Online Courses (MOOCs) are online courses that are open to anyone, anywhere in the world. They are usually offered by universities and educational institutions to provide students with high-quality educational resources and materials. Some of the features of MOOCs include:

1. Open enrollment: Anyone can enroll in a MOOC, regardless of their location, educational background, or experience.
2. Access to educational materials: MOOCs typically include videos, readings, assessments, and other educational resources.
3. Interactivity: Many MOOCs include interactive features such as discussion forums, quizzes, and peer assessments.
4. Certificate of completion: Some MOOCs offer a certificate of completion for students who successfully complete the course.

MOOCs provide students with high-quality education at a low or no cost and help break down barriers to education by making educational resources and materials available to anyone with an internet connection. They can be particularly useful for students who are interested in science education, as many MOOCs offer courses on a wide range of scientific subjects, taught by experts in the field (Ortega-Sánchez, & Gómez-Trigueros, 2019).

Learning Management Systems (LMS) are software platforms that are used by schools, colleges, and universities to manage and deliver educational content to students. Some of the key features of an LMS include:

1. Course management: An LMS provides a centralized location for teachers to upload course materials, assignments, and assessments, making it easy for students to access these materials.
2. Assessment tools: An LMS includes tools for teachers to create and administer assessments such as quizzes, exams, and projects.

3. Communication and collaboration: An LMS provides a platform for students and teachers to communicate and collaborate through features such as discussion forums, messaging, and video conferencing.
4. Analytics and reporting: An LMS provides data and analytics to help teachers track student progress and assess their performance.

LMSs are widely used in education, as they provide a convenient and efficient way for schools, colleges, and universities to manage and deliver educational content to students (Nurakun Kyzy, Ismailova & Dündar, 2018). They can also help to improve student engagement and outcomes by providing students with access to educational resources and materials, and by facilitating communication and collaboration between students and teachers.

Online tutoring platforms are websites or applications that provide students with access to tutors who can offer personalized support and guidance. They can be used for a wide range of subjects, including science, and can provide students with a flexible and convenient way to receive help with their coursework. Some of the key features of online tutoring platforms include:

1. Access to tutors: Online tutoring platforms provide students with access to a pool of tutors who can offer support and guidance.
2. Scheduling: Online tutoring platforms typically provide students with the ability to schedule sessions with a tutor at a time that is convenient for them.
3. Live support: Online tutoring sessions typically take place in real time, allowing students to receive immediate feedback and guidance from their tutor.
4. Personalization: Online tutoring platforms can match students with tutors who specialize in the subject they need help with, ensuring that they receive tailored and relevant support.

Online tutoring platforms can provide students with a flexible and convenient way to receive support and guidance with their coursework (Dolenc et.al, 2015). They can also help to improve student engagement and outcomes by providing students with personalized and tailored support, and by allowing them to receive help at a time that is convenient for them.

Science-focused websites and apps are digital resources that provide students with access to educational materials and resources that are specifically focused on science (Castek & Beach, 2013). Some examples of science-focused websites and apps include:

1. Science encyclopaedia: Websites that provide students with access to a wealth of information and resources on a wide range of scientific subjects, including articles, videos, and images.
2. Interactive simulations: Apps and websites that provide students with interactive simulations and visualizations of scientific concepts and processes, allowing them to explore and experiment in a virtual environment.
3. Science games and quizzes: Websites and apps that provide students with engaging and educational games and quizzes that help reinforce scientific knowledge and skills.
4. Science videos: Websites and apps that provide students with access to a wide range of science videos, including animations, lectures, and documentaries.

Science-focused websites and apps can provide students with a more accessible and engaging way to learn about science and can supplement or complement traditional classroom-based instruction. They can also help to break down barriers to education by providing students with access to educational resources and materials regardless of their location or socio-economic status.

Augmented Reality (AR) and Virtual Reality (VR) are technology-based educational tools that can be used to enhance science education. AR and VR provide students with immersive and interactive experiences that can help to bring scientific concepts and processes to life (Nielsen, Brandt & Swensen, 2016). VR is a growing era and its significance to science education is gaining momentum day by day (Durukan, Artun & Temur, 2020). Some of the ways that AR and VR can be used in science education include:

1. Interactive simulations: VR can be used to create immersive simulations of scientific concepts and processes, allowing students to explore and experiment in a virtual environment.
2. Visualization of scientific data: AR and VR can be used to visualize scientific data in a more engaging and interactive way, making it easier for students to understand and retain the information.

Field trips: VR can be used to create virtual field trips, allowing students to explore and learn about scientific subjects in a virtual environment, without the need for physical travel.

3. Experiments: AR and VR can be used to create interactive and engaging simulations of scientific experiments, allowing students to conduct virtual experiments in a safe and controlled environment.

AR and VR have the potential to revolutionize science education by offering a more immersive and engaging learning experience for students. These technologies can help eliminate educational disparities and ensure that anyone with access to an AR or VR headset can benefit from the learning opportunities offered by these tools.

Data analysis and visualization software are tools used to collect, process, and visualize data. These tools are commonly used in science and research to help students better understand scientific concepts and theories. Some of the key features of data analysis and visualization software include:

1. **Data collection:** Data analysis and visualization software can be used to collect data from a variety of sources, including surveys, experiments, and simulations.
2. **Data processing:** The software can be used to process data, performing tasks such as data cleaning, transformation, and aggregation.
3. **Data visualization:** The software can be used to create a variety of visualizations, such as charts, graphs, and maps, which can be used to help students understand and interpret data.
4. **Data analysis:** The software can be used to perform a variety of data analysis techniques, including statistical analysis, machine learning, and data mining.

Data analysis and visualization software can help students to understand complex scientific concepts and theories by allowing them to work with real data and see the results of their analysis in a visual format (Olsson, Mozelius & Collin, 2015). They can also enhance student engagement and improve learning outcomes by providing students with hands-on experience with real data and by making it easier for them to see the results of their analysis.

Robotics and coding programs are educational tools that are designed to teach students the principles of robotics and computer programming. These programs can be used in science education to help students understand key concepts in science, technology, engineering, and mathematics (STEM) (Altin & Pedaste, 2013). Some of the ways that robotics and coding programs can be used in science education include:

1. **Robotics simulations:** Robotics simulations can be used to create virtual robots and environments, allowing students to experiment and learn about robotics concepts in a safe and controlled environment.

2. Robotics projects: Robotics projects can be used to give students hands-on experience with building and programming real robots, helping them to develop their STEM skills and knowledge.
3. Coding simulations: Coding simulations can be used to teach students the basics of computer programming, providing them with a visual and interactive way to learn and practice coding skills.
4. Robotics competitions: Robotics competitions can be used to encourage student engagement and provide them with an opportunity to apply their skills and knowledge in a real-world context.

Robotics and coding programs can provide students with a fun and engaging way to learn about STEM subjects and develop important skills, such as problem-solving, critical thinking, and collaboration. They can also help break down barriers to education by making STEM education accessible to students who might not have access to the materials and resources needed to participate in traditional STEM programs.

Smart boards are interactive whiteboards that are commonly used in schools for educational purposes. They consist of a large display screen, a computer, and a projector, and use touch-sensitive technology to allow users to interact with the display using a stylus or their finger (Aktas & Aydin, 2016).

Smart boards can be used in a variety of ways to enhance science education, such as:

1. Interactive lessons: Smart boards can be used to create interactive lessons that help students understand scientific concepts and theories. For example, teachers can use smart boards to create animations, simulations, and interactive diagrams that help students visualize complex concepts.
2. Collaborative learning: Smart boards can be used to facilitate group work and collaborative learning, allowing students to work together on projects, presentations, and assignments.
3. Real-time feedback: Smart boards can be used to provide real-time feedback on student work, allowing teachers to identify areas of strength and weakness and provide immediate support.
4. Access to multimedia resources: Smart boards can be used to access a variety of multimedia resources, including videos, images, and online resources, helping to make science education more engaging and interactive.

The use of smart boards in science education has the potential to improve student

engagement, outcomes, and overall satisfaction with science education by providing students with interactive and engaging learning experiences. They also help democratize education by making educational resources and materials more widely available and by providing students with real-time feedback and support. **QR codes (Quick Response codes)** are two-dimensional barcodes that can be scanned using a smartphone or tablet with a camera (Karahana, et al.,2017). In education, QR codes can be used in a variety of ways to enhance science teaching and learning.

Some of the ways that QR codes can be used in science education with an Android phone include:

1. Access to multimedia resources: QR codes can be used to provide students with instant access to multimedia resources, such as videos, images, and online articles, helping to make science education more engaging and interactive.
2. Interactive assessments: QR codes can be used to create interactive assessments that allow students to test their knowledge and understanding of scientific concepts and theories. For example, teachers can create quizzes that students can take using their Android phones with instant feedback provided via the QR code scan.
3. Virtual field trips: QR codes can be used to provide students with virtual field trips, allowing them to explore scientific concepts and theories in real-world settings. For example, teachers can create QR code scavenger hunts that students can complete using their Android phones.
4. Enhancing lab experiences: QR codes can be used to enhance lab experiences, allowing students to access information and resources related to the experiment they are performing. For example, teachers can provide students with QR codes that link to videos, images, and online articles that provide additional context and background information.

QR codes offer an engaging approach to science education by using technology that students are familiar with. They provide a fun and interactive way for students to learn and make educational resources available to a wider audience. QR codes can provide students with a fun and interactive way to learn about science, and they can help to break down barriers to education by making educational resources and materials available to a wider audience. By leveraging the technology that students are already familiar with and use regularly, QR codes can make science education more accessible and engaging.

A hi-tech lab in school education refers to a laboratory equipped with advanced

technology and resources designed to support hands-on learning and experimentation in science, technology, engineering, and mathematics (STEM) subjects.

Here are some of the features and benefits of a hi-tech lab in school education:

1. **Advanced equipment:** Hi-tech labs are equipped with advanced equipment, such as high-tech microscopes, 3D printers, and computer-controlled experiments, allowing students to perform hands-on experiments and explore scientific concepts in more depth.
2. **Immersive learning experiences:** Hi-tech labs provide students with immersive learning experiences, allowing them to visualize and interact with scientific concepts in a hands-on way.
3. **Increased student engagement:** Hi-tech labs can help to increase student engagement, motivation, and achievement in STEM subjects by providing students with hands-on, interactive learning experiences.
4. **Career preparation:** Hi-tech labs provide students with hands-on experience using cutting-edge technology and resources, helping to prepare them for careers in STEM fields.
5. **Collaborative learning:** Hi-tech labs can be used to facilitate group work and collaborative learning, allowing students to work together on projects, presentations, and assignments.

A **hi-tech lab** can provide students with the tools and resources they need to learn about science, technology, engineering, and mathematics in a hands-on, interactive way. (Strauss& Kinzie, 1991) advocates to offer students the opportunity to engage in hands-on learning and advanced technology, resulting in a positive impact on student learning outcomes and their readiness for careers in STEM fields.

Tablets in school education refer to the use of tablet computers as educational tools in the classroom. (Habler, Major and Hennessy, 2016) highlights the importance of the usage of Tablets which provide students with a portable and convenient way to access educational resources, software, and learning management systems.

Here are some of the benefits of using tablets in school education:

1. **Portability:** Tablets are portable and easy to use, allowing students to access educational resources and materials from anywhere, at any time.
2. **Interactive learning:** Tablets provide students with interactive learning experiences, allowing them to engage with educational resources, such as multimedia presentations and simulations, in a hands-on way.

3. Digital learning: Tablets provide students with access to digital learning materials, including e-books, videos, and educational apps, allowing them to learn about science, technology, engineering, and mathematics (STEM) subjects in an engaging and interactive way.
4. Improved student outcomes: Research has shown that the use of tablets in education can lead to improved student outcomes, including increased student engagement, motivation, and achievement.
5. Collaborative learning: Tablets can be used to facilitate group work and collaborative learning, allowing students to work together on projects, presentations, and assignments.

Tablets provide students with a convenient and portable way to access educational resources and materials, allowing them to learn about science, technology, engineering, and mathematics in an engaging and interactive way.

E-books in school education refer to the use of digital books as educational resources in the classroom. E-books are digital versions of traditional printed books that can be read on tablet computers, laptops, or e-readers (Lai, 2015).

Here are some of the benefits of using e-books in school education:

1. Convenient access: E-books can be easily accessed and downloaded from anywhere and at any time, providing students with convenient and immediate access to educational resources.
2. Digital learning: E-books provide students with access to digital learning materials, allowing them to learn about science, technology, engineering, and mathematics (STEM) subjects in an engaging and interactive way.
3. Interactive learning experiences: E-books can be interactive, allowing students to engage with learning materials in a hands-on way, such as highlighting text, taking notes, and using interactive features.
4. Improved student outcomes: Research has shown that the use of e-books in education can lead to improved student outcomes, including increased student engagement, motivation, and achievement.
5. Cost-effective: E-books can be less expensive than traditional printed books, providing schools and students with cost-effective access to educational resources.

E-books offer students a portable and convenient means to access educational resources and materials, enabling them to learn about science, technology, engineering, mathematics, etc. in an engaging and interactive way.

Streaming video in school education refers to the use of video content delivered via the internet as educational resources in the classroom. Streaming video platforms such as YouTube, Vimeo, and educational platforms like Khan Academy and Coursera provide students with access to a wide range of educational videos including lectures, tutorials, and interactive simulations.

Here are some of the benefits of using streaming video in school education:

1. **Access to multimedia learning resources:** Streaming video provides students with access to a wide range of multimedia learning resources, including video lectures, tutorials, and interactive simulations.
2. **Improved student engagement:** Research has shown that the use of video in education can lead to improved student engagement, motivation, and achievement.
3. **Personalized learning experience:** Streaming video can be accessed from anywhere, at any time, allowing students to learn and review materials at their own pace.
4. **Increased understanding:** Streaming videos can provide students with a visual representation of complex scientific concepts, helping to improve understanding and retention.
5. **Cost-effective:** Streaming video is a cost-effective alternative to traditional in-person lectures and tutorials, as it eliminates the need for physical classrooms or expensive equipment.

A digital library in school education refers to an online collection of educational resources and materials, including books, journals, articles, and multimedia content, that can be accessed and used by students and teachers.

Here are some of the benefits of using a digital library in school education:

1. **Access to a wide range of educational resources:** Digital libraries provide students and teachers with access to a wide range of educational resources, including books, articles, and multimedia content, allowing them to find and use the resources they need to support their learning.
2. **Improved student outcomes:** Research has shown that the use of digital libraries in education can lead to improved student outcomes, including increased student engagement, motivation, and achievement.
3. **Convenient and accessible:** Digital libraries can be accessed from anywhere and at any time, providing students and teachers with convenient and immediate access to educational resources.

4. **Cost-effective:** Digital libraries can be cost-effective alternatives to traditional physical libraries, providing schools and students with access to educational resources without the need for physical books and journals.
5. **Environmentally friendly:** Digital libraries can help reduce the need for paper-based educational resources, helping to conserve natural resources and reduce waste.

A digital library provides students and teachers with a convenient way to access educational resources and materials, allowing them to find and use the resources they need to support their learning (Chowdhury, Landoni & Gibb, 2006). By leveraging the latest technology, digital libraries can help to improve student outcomes and provide students and teachers with the tools and resources they need to succeed.

The Department of Education of the Government of Tamil Nadu has played a significant role in promoting modern science teaching methods in the state. Here are some of the contributions made by the department in this regard:

1. **Adoption of technology-enhanced learning:** The department has promoted the use of technology in education, including the use of digital learning tools, such as learning management systems, online tutoring platforms, and educational apps to support student learning.
2. **Implementation of e-learning programs:** The department has implemented various e-learning programs such as online courses and digital libraries to provide students with access to educational resources and materials.
3. **Support for teacher professional development:** The department has provided support for teacher professional development, including training and capacity-building programs to help teachers improve their skills and knowledge in using technology in the classroom.
4. **Encouragement of hands-on experiential learning:** The department has encouraged hands-on experiential learning, including the use of laboratory activities and field trips to help students engage with science concepts in a practical and meaningful way.
5. **Promotion of STEM education:** The department has also promoted STEM (Science, Technology, Engineering, and Mathematics) education, including the use of robotics and coding programs to help students develop skills in these important areas.

The Department of Education of the Government of Tamil Nadu has made significant contributions to modern science teaching methods in the state, promoting

the use of technology and hands-on experiential learning to support student learning and engagement. The department's initiatives and programs aim to prepare students for the challenges of the 21st century by equipping them with the necessary skills and knowledge for success.

Multimedia in science education refers to the use of various digital media such as videos, images, animations, simulations, and interactive activities to enhance the learning of scientific concepts. It provides a visual and engaging experience that can help students better understand complex scientific phenomena, retain information, and increase motivation and interest in science (Scanlon, Hodgson & Taylor, 1996). Additionally, multimedia can provide opportunities for students to engage in inquiry-based learning and explore scientific concepts through hands-on activities. In short, multimedia can be an effective tool for improving science education by making it more engaging, interactive and accessible to students of all learning styles.

Premlatha, et al. (2015) explored the various models/components of e-learning. (Scanlon, et.al 1996) highlighted his experience in the design of media-based learning in science and discussed the implications of the experience for the design and development of multimedia teaching materials. (Kotiash, et al., 2022) stressed the importance of the usage of Multimedia technologies in learning science. (Kuchai, et al., 2022) analyzes the role of multimedia education in the formation of the information society. (Green, et al., 2022) describes a new open-access digital resource for teaching and learning life science. (Rolfe, et al., 2011) made a systematic review to evaluate the effectiveness of multimedia resources in tertiary-level life science education. Although it did not improve short-term learning gains in this scenario, multimedia improved learning gains in 10 of the 16 sub-group comparisons made across all the studies.

Despite the prospects of digital education (Singhal, 2017) felt that students are accustomed to face-to-face classroom learning and hence, some of them couldn't adjust themselves to the new academic environment while staying at home. There are pros of classroom teaching that digital or online education will find hard to replace, such as collaborative learning, enhancement of critical thinking skills, improvement of social skills, building organisational skills, keeping students stimulated, and development of important personality and career-building skills.

Reasons for using multimedia in science teaching:

1. **Engagement:** Multimedia can make science lessons more interactive and engaging for students, which can lead to increased motivation and interest in the subject.

2. **Improved Understanding:** Visual aids such as images, animations, and simulations can enhance students' understanding of complex scientific concepts and relationships.
3. **Accessibility:** Multimedia can provide equal access to information for students with different learning styles, promoting inclusivity and levelling the playing field for all students.
4. **Active Learning:** Multimedia can provide opportunities for students to engage in inquiry-based learning, where they can explore scientific concepts in a hands-on manner.
5. **Retention:** Studies have shown that multimedia can improve students' ability to recall information and retain what they have learned over time.
6. **Relevance:** Multimedia can help to connect science concepts to real-life situations and make them more relevant to students, which can increase their understanding and interest in the subject.

Technology has been widely adopted in science teaching to enhance students' learning experiences and achieve educational goals. Some of the ways technology is used in science education include:

1. **Digital Learning Tools:** Technology provides access to digital learning tools such as simulations, animations, virtual labs, and interactive activities that can help students to visualize complex scientific concepts and engage in inquiry-based learning.
2. **Online Resources:** The internet provides students with access to a vast array of science-related resources, including articles, videos, and educational games, which can help to supplement classroom instruction and promote self-directed learning.
3. **Data Analysis:** Technology can help students to collect, analyze and visualize data, providing them with hands-on experience in the scientific process and fostering critical thinking and problem-solving skills in them.
4. **Collaboration:** Technology can facilitate collaboration among students, allowing them to work together on projects, share information, and engage in group discussions, even if they are not in the same physical location.
5. **Personalized Learning:** Technology can provide teachers with the ability to personalize learning experiences for individual students, tailoring instruction to meet their unique needs and learning styles.

In conclusion, technology has the potential to transform science education by providing students with interactive and engaging learning experiences, facilitating

collaboration and personalized learning, and improving access to educational resources.

Conclusion

The article concludes that while new technologies are transforming teaching and learning in science education, it is important to strike a balance between technology-based and face-to-face instruction. The advent of educational Technology is bringing digital revolutions into the classrooms, making teaching and learning more interesting and effective. Visual aids have replaced traditional chalk-and-talk methods, and new technologies like smart classes, VR, AR, QR codes, online tutoring platforms, LMS, and MOOCs have led to a paradigm shift in science education. The old method of chalk and talk is being done away with the introduction of visual aids. Education through new technology like the smart class, VR, AR, QR, Online tutoring platforms, LMS, MOOC's had brought a paradigm shift in the teaching learning process in Science education.

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Reddy M.C. Reddeppa (Ed.) (2022). *Dr. G.N. Reddi: The Doyen of Rural Reconstruction*. Serials Publications (P) Ltd., New Delhi-2, pp. xxxix+248

• V. Jagadeeswara Rao¹

• M. C. Reddeppa Reddy²

The book entailed ‘Dr. G.N. Reddi: The Doyen of Rural Reconstruction’, has been compiled and edited by Prof. M.C. Reddeppa Reddy, Former Director, Dept., of Adult & Continuing Education, S.V. University, Tirupati. It carries a large number of messages from VIPs including Dr. P. Ramachandra Reddy, Hon’ble Minister of Panchayat Raj and Rural Development, Govt., of Andhra Pradesh.

The book has seven sections. In Section- I, the articles, both English and Telugu, are arranged in 149 pages. There are about 30 articles in English (pages 1-80) and 17 articles in Telugu (pages 81-150) written by eminent personalities from different walks of life, with varied experiences with Dr. G. N. Reddi. The authors share their memories, anecdotes, achievements and visionary thinking of Dr. G. N. Reddi and narrate their association and services in the sector of rural reconstruction. These articles present him mostly as a fore-runner of the movement of rural reconstruction in India and abroad. The authors also describe Dr. Reddi’s inner life – the ideas, beliefs, thoughts, convictions and vision, and the contents of book are exhaustive. The articles also describe Dr. Reddi’s vast experiences, his treasure of knowledge, and his dedication and commitment towards the development of poor are quite notable and noble. The articles also noted that Dr. Reddi lived in the hearts of lakhs of people with his selfless services and social work. In essence, the book reflects his multi-talented personality, the tireless sharing and caring attitude and, above all, his utter devotion towards rural reconstruction.

Section - II of the book provides six lyrics (poetry) contributed by both academics and social activists (pp.151-162). The lyrics include ‘Johar, Johar Goturi Narayana Reddi’ by D.Gurrappa Naidu followed by ‘Aatma Bhandhuvuku Atmeya Nivali’ by

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A. Vasundhara, 'Pedala Palita Pennidhi Dr.G.N. Reddi Gariki Guru Dhakshina Swaramalika' by T. Subbanna, 'Prajabandhu Peddayana G.N. Reddi' by K.C. Govindarajulu, PPEDS, Kuppam and 'Veedkolu Edhe O'nesthama' by T.Venkataiah. These reflect the nature and characteristics of Dr.G.N. Reddi, the role played by him and his contributions to the society.

Section - III 'Organisations founded and their accomplishments' contains 11 articles, written or extracted from different sources. These relate to various non-governmental organizations, viz., Indian Rural Reconstruction Movement (IRRM), Grama Seva Samithi (GRASS), which are initiated/launched by Dr. G. N. Reddi and are included in pages 177-214. These articles reveal Dr. Reddi's efforts to serve the different sections of marginalized and downtrodden people from time to time in Kuppam area of Chittoor district.

Section –IV contains about 43 short messages (in English and Telugu), collected from local leaders, activists, and beneficiaries. Some are drawn from the writings of book and are arranged sparingly in the form of Screens/Shorts throughout the book. These screens depict Dr. Reddi's holistic approach to empower the people, his personality, his dedicated social service and developmental principles, four-fold strategy, offering of fellowships to the educated youth to develop interest and positive attitude towards social service and creation of political awareness among the public.

The book also contains a series of Boxes/Frames, arranged sparingly across the pages, which provide information about the adoption of certain definitions (Peasant, Rural reconstruction), advocacy of human reconstruction model, Four-fold strategy, credo/dictum of rural reconstruction and dissemination of information through inspirational quotes, messages, similes, appeals etc.

Further, the book contains a 'Photo Section' that includes the exclusive photos relating to Dr. G.N. Reddi, such as his association with people, family members, awards, contributions, achievements, etc.

The book also contains 12 Appendices dealing with biodata of G.N. Reddi, Citations, Photocopies of published documents and reports, Abstracts, Book reviews of 'Fundamentals of Rural Reconstruction', which was published in 2018 and other valuable information about Dr. G.N. Reddi and his credentials.

In essence, every article/page of the book provides very precious information about Dr. G.N. Reddi and commemorates his services and accomplishments in the

sector of rural reconstruction. Overall, the editor of the book Prof. M.C. Reddeppa Reddy has taken meticulous care in collecting, compiling and editing the book. In short, this book - 'Dr. G.N. Reddi: The Doyen of Rural Reconstruction', is much useful for the people working in the field of rural development/reconstruction, students studying social and developmental issues, and the youth who are interested in bringing changes in the outlook of rural areas.

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Sork, Thomas J. (2016). The Place of Ethics and the Ethics of Place in Adult and Lifelong Education. *Indian Journal of Adult Education*, 77(3), 5-18.

Chapter in a Book

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The Indian Adult Education Association founded in 1939, aims at improving the quality of life through education, which it visualizes as a continuous and lifelong process. It directs its efforts towards accelerating adult education as a process, a programme, and a movement.

The Association co-ordinates activities of various agencies – governmental and voluntary, national and international – engaged in similar pursuits. It organizes conferences and seminars, and undertakes surveys and research projects. It endeavours to update and sharpen the awareness of its members by bringing to them expert views and experiences in adult education from all over the world. In pursuit of the policy, the Association has instituted the Nehru Literacy Award and Tagore Literacy Award for outstanding contribution to the promotion of Adult Education and Women's Literacy in the country, respectively. It has also instituted Dr. Zakir Husain Memorial Lecture, which is delivered every year by an educationist of eminence.

The Association has brought out many publications on themes related to adult education, including Hindi editions of several UNESCO publications. It brings out the Indian Journal of Adult Education, Proudh Shiksha and IAEA Newsletter.

The Association acts as the Indian arm of the International Council for Adult Education, International Literacy Association and the Asian-South Pacific Association for Basic and Adult Education. Its membership is open to all individuals and institutions who believe in the aims and objectives of the Association.

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