Indian Journal of Career and Livelihood Planning
Journal of the Indian Association for Career and Livelihood Planning (IACLP)
ISSN 2319 –2313
Volume 14, Issue 1, December 2025

Vocational Education for Tribal School Students: Insights from H.D. Kote in Southern India

Malathi H.D*
Co-Founder Avinya AcademIEQ Initiatives (AAI), Mysuru

Ramkumar N
Lead for Teacher Professiona l Education, Prayoga Institute of Education Research, Bengaluru

Abstract

This study examines how vocational education influences the career maturity, transition experiences, and socioeconomic mobility of first-generation tribal students in Heggadadevanakote (or H.D. Kote) in the southern Indian state of Karnataka. Despite India's National Education Policy (NEP) 2020, limited research documents vocational models tailored to tribal contexts such as found in the rural communities of H. D. Kote. To fill this gap, this study aimed to (a) identify the challenges tribal learners face during transitions to urban vocational institutions, and (b) analyse the implementation and impact of the Introduction to Basic Technology (IBT) programme at the Viveka Tribal Centre for Learning (VTCL). Findings from the two are used to examine implications for scalable vocational models for India's rural and tribal schools.

A qualitative case study methodology was adopted to examine complex phenomena within real-life cultural and institutional settings. Data were collected from school records (2013–2023), placement documents in vocational training institutions, classroom observations, informal interviews, and four purposively selected case study samples representing different tribal communities and genders. The analysis was guided by three conceptual frameworks: Transition Theory by Schlossberg (1981) to understand learner adjustment; Super's Career Development Theory (1990) to assess career maturity; and Sen's Capability Approach (1999) to interpret how vocational education expands learners' life opportunities.

Findings show that vocational education significantly enhances readiness for career decision-making, improves persistence in technical programmes, and strengthens upward mobility. Components of the IBT program—hands-on pedagogy, community linkages, and mentoring structures—arguably supported smoother transitions into urban institutions. The study provides descriptive evidence about a culturally-grounded, vocational education model for tribal youth and highlights implications for policy, scalable practice, and future research.

Keywords: vocational education, tribal students, career maturity, capability approach, socioeconomic mobility,

*Correspondence concerning this article may be addressed to Malathi H D, email: maladivakar72@gmail.com

Introduction

The National Education Policy (NEP) 2020 identifies vocational education as essential for India's human-resource development, and stresses early skill exposure, school-level integration, and employability pathways for disadvantaged groups, including students belonging to Scheduled Tribes. Scheduled Tribes (ST) in India, hold a special status. Along with scheduled castes (SC), the SC and ST community Scheduled Tribes (STs) in India are constitutionally recognized communities identified on the basis of historical marginalization, geographic isolation, distinctive cultural practices, and sustained disadvantage in education, healthcare, and employment. In response, the Indian State has instituted a comprehensive affirmative action framework. This framework includes reservation quotas in school and higher education admissions, public-sector employment, scholarships, residential schooling, and targeted welfare and skill-development programmes (Ministry of Tribal Affairs [MoTA], n.d.). It mandates local opportunity mapping skills-gap identification, and structured progression routes from school to higher education. The National Committee for the Integration of Vocational Education (NCIVE) guides innovation, standard-setting, and knowledge-sharing. Higher education institutions are encouraged to adopt apprenticeship models, create incubation centers, and partner with industry to enhance livelihood opportunities. Building on this broad policy vision, it becomes important to understand how vocational education operates for tribal students.

Vocational education for tribal students should ideally integrate indigenous knowledge systems, modern technical skills, and livelihood-linked learning across Grades 6–10. Preadolescent tribal learners—often strong in kinesthetic and visual learning and deeply connected with natural environments—benefit significantly from experiential, hands-on learning. Such learning enhances comprehension, motivation, and long-term employability, offering pathways toward socioeconomic mobility and career maturity for first-generation learners. To situate this unique profile of strengths and needs further, it is useful to view these practices against the wider landscape of vocational education models in India.

Several models, programmes and initiatives currently contribute to India's vocational education landscape. Examples include school-based vocational courses under both Central and State Boards of school education, Industrial Training Institutes (ITIs), polytechnics and diploma-granting institutions, courses under initiatives like Skill India and NSDC programs, and industry-linked apprenticeship models. Complementing these are: Tribal-focused Models such as the skill programmes of the Eklavya Model Residential Schools (EMRS), Ashram School vocational units, Community-based craft and forest-based skill training programmes, and habitat-linked livelihood initiatives integrating indigenous knowledge with modern competencies. Despite this range of initiatives, a significant gap persists in the availability of culturally grounded, well-documented models suited to tribal communities.

India has limited documented, evaluated, or scalable vocational education models specifically tailored to tribal contexts. In Karnataka, the evidence base is particularly sparse. Most studies do not examine culturally grounded pedagogies, community-based implementation, or long-term outcomes. This gap restricts targeted policy design, investment prioritization, and effective replication across districts and states. The present study contributes to filling this gap by analyzing a decade-long vocational education model implemented at the Viveka Tribal Centre for Learning (VTCL), in Heggadadevanakote (or H.D. Kote) in the southern state of Karnataka, India.

Context of the Study

Profile of the Study Region and VTCL

The Swami Vivekananda Youth Movement (SVYM), established in 1984, works toward health, education, leadership, and equity for marginalized communities. Rooted in Swami Vivekananda's humanistic vision, SVYM's education initiatives emphasize culturally relevant pedagogy, bilingual learning, experiential approaches, and coherence with NEP 2020. The Viveka Tribal Centre for Learning (VTCL), founded in 1988 with 28 students, is now a residential school serving over 500 tribal learners. Many students belong to the Jenu Kuruba, a Particularly Vulnerable Tribal Group (PVTG). Situated near the Bandipur Tiger Reserve (UNESCO-UNEVOC (2013))VTCL integrates open classrooms, agriculture, sports, arts, nutrition, and vocational pathways that enhance retention and post-secondary transitions. It maybe noted that this Tiger Reserve falls within the Nilgiri Biosphere Reserve and is recognised within UNESCO's Man and the Biosphere (MAB) programme for 'biodiversity conservation and sustainable development', with a specific focus on 'enhancing the relationship between people and their environments' (UNESCO).

Demographic Overview of H.D. Kote Taluk

The H.D. Kote Taluk (an administrative sub-division of the Mysuru District) has a large SC/ST population (52%); By comparison, neighbouring taluks such as Mysore(SC-13%/ST-7%), Hunsur(SC-19%/ST-16.5%), and Krishnarajanagara (SC-15%/ST-7%)have substantially lower proportions of SC/ST populations highlighting the exceptional demographic significance of H.D. Kote within the district (Census India, 2011). The H. D. Kote taluk includes Particularly Vulnerable Tribal Group PVTGs such as the Jenu Kuruba, alongside the Kadu Kuruba, Soliga, and Yarava communities. These tribal communities primarily inhabit forest-fringe haadis (small hamlets) across difficult terrain, which in turn restricts access to basic services. Literacy levels remain extremely low (30–40%), and livelihoods depends on subsistence farming, forest gathering and foraging, and seasonal labour linked to agriculture, cotton plucking, plantation work and forest related employment. Families often migrate for labour work to neighbour district such as Coorg or to other states, mainly Kerala. Children frequently participate in or accompany adults in these livelihood activities, which affects regular school attendance, continuity of learning, and increases the risk of early dropout. These interconnections between local livelihoods and schooling underscore the need for flexible, habitat-based, and culturally responsive educational approaches that can accommodate seasonal mobility, community rhythms, and the lived realities of tribal learners in H.D. Kote.

Socio-Educational Challenges in the Region

Children from tribal communities face several interlinked barriers such as:

- Low and limited preschool exposure
- Cultural mismatch between home environments and mainstream schooling.
- Linguistic discontinuity between home dialects (e.g., Jenukuruba & Kadukuruba) and the medium of school instruction in the state's language, Kannada, and additional languages at school (e.g., English or Hindi).
- Gaps in foundational numeracy, literacy and skills in the school language.
- Irregular attendance linked to livelihood patterns.

For PVTG communities, whose lives are deeply intertwined with forests and indigenous practices, schooling must integrate local ecological knowledge,

bilingual pedagogy, and socio-emotional support systems. VTCL's model represents one such context-responsive approach.

The IBT Programme at VTCL

The Introduction to Basic Technology (IBT) programme was launched at VTCL in 2011 to bridge the gap between state-board schooling and vocational pathways. Many first-generation tribal learners completed Grade 10 with little exposure to tools or technical concepts, restricting their post-secondary options. Grounded in experiential learning theories, pioneered by John Dewey's Experience and Education (1938) and formalised in David A. Kolb's Experiential Learning Theory (Experiential Learning: Experience as the Source of Learning and Development, 1984) experiential learning theories, IBT emphasises hands-on, tool-based, and community-linked learning aimed at developing technical skills, enhancing post-secondary readiness, strengthening confidence, connecting learning with local livelihoods, and preserving indigenous knowledge. Integrated with the Karnataka State Board curriculum for Grades 6–10, IBT is delivered through the Koushalya Kuteera skill centre. Modules cover carpentry, plumbing, electrical repair, tailoring, fabrication, agriculture, horticulture, and natural resource management. Students learn through demonstrations, guided practice, and project work, while artisans and tribal elders teach indigenous skills such as bamboo craft and natural farming. Between 2011 and 2024, the programme expanded significantly, supported by improved infrastructure, assessment rubrics, industry exposure visits, parental counselling, financial linkages, and partnerships with Nettur Technical Training Foundation (NTTF), Central Institute of Plastics Engineering & Technology (CIPET), and Government Tool Room and Training Centre (GTTC). Early cohorts recorded 21 job placements out of 34 graduates. Aims of the programme include providing enhanced technical competence, confidence, skills for teamwork, successful transitions to vocational diplomas and apprenticeships, employment in industries like TATA Motors and Titan. Programme innovations include local initiatives such as through school and community repair work. Within this context, this paper aims to answer the following question: How does vocational education contribute to the career maturity of first-generation tribal students, and what long-term impacts does it have on their socioeconomic mobility?

Specific objectives are as under:

1. To identify challenges during student transitions to urban vocational institutions.
2. To document the implementation and impact of VTCL's vocational education programme.
3. To recommend scalable vocational education models for rural and tribal schools.

Research Methodology

This study adopts a qualitative case study design to explore tribal students' experiences with vocational education and their transitions to external vocational institutions. The approach allows for interpretive understanding of cultural, institutional, and socioeconomic influences across a decade (2013–2023). This approach was selected because it offers depth, contextual richness, and the ability to understand complex phenomena from multiple perspectives. Scholars note that case studies are particularly suited for exploratory research where variables are not pre-defined, and lived experiences and socio-cultural factors must be interpreted holistically. This aligns with a focus on tribal students' lived realities, institutional support systems, and long-term vocational outcomes. As defined by Yin (2003) and Merriam (2009), case studies examine contemporary issues within real-life contexts

where boundaries are not clearly distinguishable. This approach enabled systematic analysis of transitions, challenges, and outcomes. A summary of the cases studies is provided in the Appendix 1.

In line with the research question, this section is next organized to address each specific objective describing the distinct but complementary data sources and analytical procedures.

Methods for Objective 1: Identifying Challenges During Transitions (Please refer to Table 1 in the Appendix 2)

The study focuses on Grade 10 graduates from VTCL over a 10-year period (2013–2023). The total population includes 442 students who passed Grade 10, of whom 66 students (15%) enrolled in vocational or technical education across institutions such as NTTF, GTTC and CIPET. Out of these, a total of 25 students successfully completed technical programmes, and 21 secured employment in companies such as Tata Motors, L&T, and Apsis Latitude. Out of five girls who completed the NTTF programmes (Tool & Die / Mechatronics), three went on to be employed in reputed companies such as Tata Motors and L&T. Out of 66 enrolled students, 28 (23 boys, 5 girls) were continuing vocational education at NTTF, GTTC, and other institutions. (See Tables in Appendices section).

Based on the available data and the author's extensive first-hand experience working with tribal students, teachers, and communities at VTCL, a structured checklist was prepared to collect information from key stakeholders. Data were gathered through informal interviews and case study documentation of students who had completed technical vocational courses.

From the 25 students who successfully completed their technical programmes, four case studies (16%) were conducted with students who were purposively selected. Tables 2 and 3 Appendix 2 provide a brief description. The selection was guided by pre-defined criteria to ensure representation, depth and relevance to the research questions. These criteria were:

- Completion of a technical vocational course and/or apprenticeship.
- Experience of significant academic or cultural challenges—particularly in Mechatronics, a course requiring advanced English and Mathematics.
- Inclusion of students from all groups: especially the PVTG and socio-economically backward tribal communities (Jenu Kuruba and Kadu Kuruba)
- Gender inclusion.
- Identification as role models within their communities.
- Continuation of working in diverse locations despite linguistic, cultural, academic, and financial barriers.
- Special focus on learners undertaking English medium courses.

These data sources enabled a detailed exploration of the academic, social, cultural, and emotional challenges faced during transitions to urban vocational institutions and directly addressed Objective 1.

Methods for Objective 2: Documenting VTCL's Vocational Programme

Data for this objective were drawn from VTCL's school records, curriculum documents, stakeholder interviews, and classroom and institutional observations. These sources captured programme design, pedagogical practices, mentoring structures, and transition-support mechanisms. This combination of administrative and experiential data provided insight into how the vocational education programme was implemented and how it shaped students' preparedness, confidence, and academic progression.

Methods for Objective 3: Recommending Scalable Vocational Models

Objective 3 drew on student trajectories, institutional practices, community involvement, and industry linkages. These were analyzed using longitudinal student records, informal discussions with instructors and parents, and a review of institutional reports and best practices. Together, these materials offered preliminary descriptive evidence of features in the IBT model that could inform scalable vocational education models for rural and tribal schools.

Findings and Discussion

Objective 1: Transition challenges (Pease refer to Table 4 in the Appendix 2)

Analysis of institutional records showed that 25 of the 66 enrolled students completed vocational programmes; among them, 21 secured employment, three remained unemployed, and one pursued higher education. Key challenges identified included language barriers, cultural shock, adjustment to urban environments, and coping with advanced technical coursework. Continuous mentoring emerged as crucial in reducing dropout risks and supporting emotional and academic adjustment.

These patterns directly relate to the career maturity of first-generation tribal learners. For such students, career maturity refers to their readiness to make realistic career choices based on self-awareness, exposure, and decision-making abilities—areas often limited by socio-economic disadvantage and restricted guidance. Super's (1990) definition emphasizes the developmental nature of career readiness, helping interpret why transitions are especially demanding for tribal youth.

The VTCL vocational education programme.

Our analysis suggests that VTCL provided a supportive environment through hands-on learning, collaborative stakeholder engagement, mentoring, remedial support, and structured placements. These mechanisms strengthened student confidence and improved transition outcomes.

The findings suggest that socioeconomic mobility for tribal youth is closely tied to such support structures. In addition, mobility depends on career maturity, transition experiences, capability development, and successful completion of vocational programmes in line with theoretical conceptual framework as proposed by Schlossberg's Transition Theory to understand learner adjustment; Super's Career Development Theory (1990) to assess career maturity; and Sen's Capability Approach (1999)). Limited exposure and low career maturity can hinder upward mobility and reinforce intergenerational disadvantage, highlighting the importance of VTCL's integrated approach.

A scalable vocational education model

Findings from the review highlighted the IBT model's scalability potential. The case studies emphasise the need for sustained support systems, refinement, and policy-level adoption to strengthen vocational education opportunities for rural and tribal learners.

Situating these findings within the broader literature shows that with the neoliberal framework, indigenous vocational education often struggles under outcome-oriented and competitive mainstream education policy environments that undervalue tribal knowledge. Effective models must therefore balance employability with recognition of cultural knowledge and community participation. Aligned with NEP 2020, VTCL's IBT model integrates early vocational exposure, hands-on learning, and community engagement, offering structured academic, emotional, and transition support that has the potential to strengthen career

maturity and enhance long-term socioeconomic mobility.

Question for Further Research

1. How can vocational education be further tailored to better suit the socio-cultural contexts of tribal students?
2. What further strategies can facilitate smoother transitions from rural schools to urban vocational institutions?
3. How can stakeholder engagement be optimized to support tribal students throughout their educational journey?

Conclusion

This study demonstrates that vocational education plays a critical role in enhancing the career maturity and socioeconomic mobility of first-generation tribal students. Drawing on Super's Career Development Theory, the findings indicate that structured vocational exposure, mentoring, and hands-on learning strengthen students' readiness for informed career decision-making. Interpreted through Schlossberg's Transition Theory, the IBT programme's sustained guidance and community-linked pedagogy supported smoother academic and social transitions into urban vocational institutions. From the perspective of Sen's Capability Approach, vocational education expanded learners' confidence, agency, and life choices despite linguistic, cultural, and institutional barriers. The VTCL IBT model illustrates how culturally grounded vocational programmes can counter the limitations of outcome-oriented and competitive mainstream education systems by valuing contextual knowledge and relational support. Overall, the study highlights vocational education as a viable and scalable pathway for empowering tribal youth and informing inclusive policy and practice in rural and tribal schooling contexts.

About the authors

Ms. Malathi H.D. is a senior educational consultant with 20+ years of experience across government systems, NGOs, private schools, and research institutions in India. Expertise in teacher education, experiential learning, qualitative research, curriculum design, leadership development, and NEP 2020–aligned implementation. Currently Senior Consultant at Prayoga Institute of Education Research and Co-Founder of Avinya AcademIEQ Initiatives.

Dr. N. Ramkumar is an educational researcher and teacher educator with 22 years' experience across schools, NGOs, and research institutions. His research interests are in the area of teacher professional development, curriculum design, qualitative research, and policy implementation, and currently leads Teacher Professional Excellence at Prayoga Institute of Educational Research, Bangalore, India.

Acknowledgements

The author gratefully acknowledges the support of the Swami Vivekananda Youth Movement (SVYM) and the Viveka Tribal Centre for Learning (VTCL), including its staff and students, for their sustained cooperation and engagement throughout this research. Special appreciation is extended to the Nettur Technical Training Foundation (NTTF), Bengaluru, for providing vocational training opportunities and institutional support. The author also sincerely thanks the parents and donors of VTCL students for their trust, encouragement, and continued support, which were instrumental in enabling the educational and vocational journeys documented in this study.

References

Aikman, S. (2012). *Intercultural education and literacy: An ethnographic study of indigenous knowledge and learning in the Peruvian Amazon*. Routledge.

Bennett, J. (2015). Vocational education for tribal youth in India: Challenges and opportunities. *Journal of Vocational Education & Training, 67*(4), 483–501. https://doi.org/10.1080/13636820.2015.1061030

Census India. (2011). *Population, religion, caste data as per Census 2011*. https://www.censusindia.co.in

Dewey, J. (1938*). Experience and education*. Macmillan.

Government of India. (2020). *National Education Policy 2020*. Ministry of Education. https://www.education.gov.in/nep2020

King, K., & Palmer, R. (2010). *Planning for technical and vocational skills development*. UNESCO.

Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice Hall.

Mehrotra, S. (2014). *Skills and jobs in India: The most recent evidence.* International Labour Organization.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.

Ministry of Tribal Affairs, Government of India. (n.d.). *ST welfare grant under Article 275(1)*. https://tribal.nic.in/STWelfareGrant.aspx

National Council of Educational Research and Training. (2019). *Curriculum frameworks and vocationalisation of school education*. NCERT.

National Council for Teacher Education. (2019). *Vocational education in tribal and rural India: A review of practices*. NCTE.

Pal, D., & Ghosh, A. (2018). Career development of tribal adolescents in India: Barriers and enablers. *Indian Journal of Psychology and Education, 8*(2), 45–56.

Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist, 9*(2), 2–18. https://doi.org/10.1177/001100008100900202

Sen, A. (1999). *Development as freedom*. Oxford University Press.

Super, D. E. (1990). *A life-span, life-space approach to career development*. In D. Brown & L. Brooks (Eds.), *Career choice and development* (2nd ed., pp. 197–261). Jossey-Bass.

Swami Vivekananda Youth Movement. (2018). *Impact evaluation of vocational education initiatives at VTCL*. SVYM. https://svym.org

UNESCO. (2015). *Rethinking education: Towards a global common good?* UNESCO Publishing.

UNESCO. (n.d.). *Nilgiri biosphere reserve*. United Nations Educational, Scientific and Cultural Organization.

UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. (2013). *World TVET database: India*. UNESCO-UNEVOC.

Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage Publications.

Appendix 1

Summary of Case Studies*

(*Student names are pseudonyms to protect identity)

Student 1

Chandan, a Kadukuruba first-generation learner from Brahmagirihaadi, studied Grades 1–10 at VTCL. Excelling in pre-vocational courses, he pursued Tool and Die Making at NTTF, Bengaluru, supported by donor funding. After apprenticeship and a short industrial job in Bengaluru, he returned home, worked as an instructor in an Industrial Training Institute (ITI), and later joined VTCL as a full-time Mechanical Instructor earning ₹2,25,000 annually, along with extra income through an additional welding business. Married and settled, Chandan aspires to pursue a graduate programme in Technology (B.Tech), and secure a government job.

Student 2

Raju, a Jenukuruba (PVTG) student from Maladahaadi, completed Grades 1–10 at VTCL. A bright learner strong in academics and vocational skills, he joined NTTF's Tool and Die Making course. Initially struggling with English, cultural differences, and urban adjustment, he improved through special coaching and graduated with first class. After working in Bengaluru, he returned during COVID and now works as a data operator at the SVYM hospital, also supporting mechanical tasks and earning ₹2,25,000 annually. Confident and fluent in English, he hopes to pursue a B.Tech when financially possible.

Student 3

Kethi, a Kadukuruba student from Basavanagirihaadi, studied at VTCL till Grade 10, excelling in academics and vocational training. Encouraged by her parents, she joined NTTF but initially struggled with English, cultural differences, and hostel adjustments, returning home for three months. With strong support from teachers, she rejoined and completed the course, securing a job at Tata Electronics, where she has worked for three years and now earns ₹25,000 as Technician-2. Confident and ambitious, she aims to become an Assistant Engineer and continue to support her family.

Student 4

Susheela, a Jenukuruba (PVTG) student, studied at VTCL till Grade 10 and later joined the Mechatronics course at NTTF, Electronics City in Bangalore. She struggled with technical subjects—especially Maths—and English, often returning home for long periods. With consistent counselling and support from school and college staff, she completed the course and initially worked in a Bengaluru factory. After losing her job during COVID, she later secured employment at L&T, Mysuru, as a Testing Operator earning ₹20,000 per month. She reports that she is satisfied with her vocational path and improved livelihood.

Appendix 2

Table 1 to 4

Table 1.
Students Enrolled vs. Completion of Courses (2013–2023)

Category	Number	Percentage / Notes
Total Grade 10 Pass-outs (2013–2023)	**442**	—
Students Enrolled in Vocational/Technical Courses	**66**	15% of total
Boys	**52**	72% of enrolled
Girls	**15**	23% of enrolled
Students Who Completed the Technical Programme	**25**	—
Boys	**20**	80% of completers
Girls	**5**	20% of completers
Completion by Community	**—**	—
Others	**16**	Majority of completers
Kadu Kuruba (KK)	**6**	—
Jenu Kuruba (JK – PVTG)	**3**	—
Employed Technical Graduates	**21**	Out of 25 completers

Table 2.
Employment Outcomes

Category	Number	Details / Notes
Total Students Who Completed Technical Vocational Education Courses	**25**	—
Students Currently Employed	**21**	Working in companies such as Tata Motors, L&T, Apsis Latitude

Table 3.
Community/Gender Distribution of 25 Technical Graduates

Category	Number	Notes
Others	16	Majority group
Jenu Kuruba (JK – PVTG)	3	2 boys, 1 girl
Kadu Kuruba (KK)	6	5 boys, 1 girl
Gender (JK – PVTG)	3	2 boys, 1 girl
Gender (KK)	6	5 boys, 1 girl

Table 4.
Status of Students After Completing the Course

Total	Agriculture	Technical Job	Forest watcher (Govt job)	Not working	Higher Education
25	8	12	1	3	1
%	32	48	4	12	4