The Manovikas Model: A Practical Approach to Support Students with Intellectual and Developmental Disabilities (IDD) Transition into Higher Education

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Abstract

Background

Students with intellectual and developmental disabilities (IDD) often face many challenges when moving from special education into mainstream or higher education settings. Existing transition models usually fall short in addressing the full range of educational, social, and cultural needs, particularly in diverse countries like India.

Objective

This study introduces and examines the Manovikas Transition Model, a comprehensive and culturally sensitive framework designed to support the educational, vocational, and community integration of individuals with intellectual and developmental disabilities (IDD).

Methods

Using a mixed-methods approach, the study combined interviews with key stakeholders (N = 50) and an analysis of student outcomes (N = 134). Areas of focus included academic progress, readiness for transition, skill development, and independent living abilities. Statistical analyses, including ANOVA and regression techniques, were applied to evaluate the model's impact.

Results

Findings showed that students participating in the Manovikas Model reported greater satisfaction with school, a clearer understanding of academic material, stronger aspirations for employment, better access to therapies, and more involvement in cultural activities. Transition rates into vocational programs and higher education were also significantly higher compared to baseline measures ($p < 0.05$).

Conclusion

The Manovikas Model offers a robust and practical framework for helping students with IDD transition successfully to inclusive education and independent living. Its holistic, culturally grounded design provides a valuable template that can be adapted for diverse settings both within and outside India.

Keywords:
Transition to higher education, Intellectual and Developmental Disabilities, Inclusive Education, the Manovikas Model, Skill Development,Community Integration, India.

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Introduction:

Creating opportunities for students with intellectual and developmental disabilities (IDD) to transition into mainstream and higher education is an essential but often overlooked area in educational reform. Although global initiatives, such as the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), and national policies, like India's Rights of Persons with Disabilities (RPwD) Act, 2016, emphasise inclusive education, many young individuals with IDD continue to face significant barriers. Challenges such as limited academic preparation, insufficient transition planning, low societal expectations, and lack of cultural adaptation in existing models have contributed to poor outcomes in education, employment, and independent living.

Transition is not simply about moving from one stage of education to another. For students with IDD, it involves acquiring a range of skills — academic, vocational, social, emotional, and daily living skills — that enable them to lead meaningful, independent lives. However, most traditional transition models, developed primarily in Western contexts, do not always account for the unique needs, family dynamics, or community structures prevalent in countries like India. In these environments, family plays a crucial role in decision-making, and societal expectations can significantly influence individual choices, making it essential to have culturally sensitive frameworks in place.

Recognising this critical gap, the Manovikas Model was developed as a comprehensive and practical solution to support students with IDD. It builds on core principles of self-determination, Universal Design for Learning (UDL), community inclusion, assistive technology, and life skills education, but adapts them to fit the Indian social and educational landscape. The Manovikas Model emphasises holistic development, where academic growth is intertwined with personal empowerment, vocational training, therapy support, and active community participation. It aligns with the National Skills Qualification Framework (NSQF) to ensure that skill-building is recognised and valued in formal education and employment pathways.

What makes the Manovikas Model distinct is its person-centred planning (PCP) approach, where each student's interests, strengths, and aspirations guide their learning and transition plans. Rather than seeing disability as a limitation, the model views each individual as capable of achieving a higher level of autonomy when provided with the right support structures. This strength-based, individualised perspective, as well as this approach, sets the foundation for more meaningful inclusion in higher education and the workforce.

This study presents a systematic evaluation of the Manovikas Model, utilising qualitative insights from educators, caregivers, and administrators and quantitative analysis of educational and transition outcomes among students enrolled in the program. By investigating how the model operates in real-world settings and measuring its impact, this research aims to contribute a replicable and scalable framework for transition planning not only within India but also in other culturally diverse contexts.

Through this work, we seek to answer important questions:

- Can a culturally adapted, multi-dimensional transition model significantly improve academic success and life readiness for students with IDD?
- How can educational systems bridge the gaps between special education, vocational

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skill development, and mainstream higher education for this population?

By exploring these questions, this study hopes to move the conversation beyond theoretical ideals of inclusion toward practical, tested strategies that create real change in the lives of young people with intellectual and developmental disabilities.

Manovikas Model: Description

The **Manovikas Transition Model** is a **comprehensive, holistic framework** designed to facilitate the transition of students with Intellectual and Developmental Disabilities (IDD) from special education settings to inclusive, mainstream, and higher education environments, and ultimately to independent living and employment.

The model integrates **multiple components** into a unified framework, emphasising:

- **Academic Achievement** (through differentiated instruction and inclusive pedagogies),
- **Vocational Skill Development** (aligned with the **National Skills Qualification Framework** [NSQF]),
- **Community Integration** (promoting independent living, financial literacy, and social participation),
- **Universal Design for Learning (UDL)** in all curriculum design,
- **Assistive Technology** to improve communication and access,
- **Family and Community Support (inclusive living)** are central pillars,
- **Person-Centred Planning (PCP)** and Individualised Educational Planning (IEP).

Key principles guiding the Manovikas Model:

- **Culturally responsive** and adapted to the Indian socio-educational context,
- **Evidence-based**: using longitudinal tracking, evaluation, and continuous improvement,
- **Person-centred**: focusing on individual abilities, goals, and aspirations,
- **Multi-agency collaboration**: involving educators, therapists, families, and the community.

The model's strength lies in addressing **academic**, **vocational**, **social**, **emotional**, and **community living** dimensions **simultaneously**, ensuring a smooth and empowered transition for individuals with IDD.

The following figure illustrates the Manovikas Transition Model, a comprehensive and culturally responsive framework designed to support students with intellectual and developmental disabilities (IDD) as they transition from special education to higher education, employment, and independent living.

The model adopts a holistic development approach by integrating six key components: educational integration through inclusive classrooms and Universal Design for Learning (UDL); vocational skill development aligned with the National Skills Qualification Framework (NSQF); community inclusion emphasising life skills and social participation; active family and community support; assistive technology for enhanced accessibility; and person-centered transition planning.

Each component feeds into a unified outcome — empowering individuals with IDD to lead autonomous, productive lives within inclusive societal structures.

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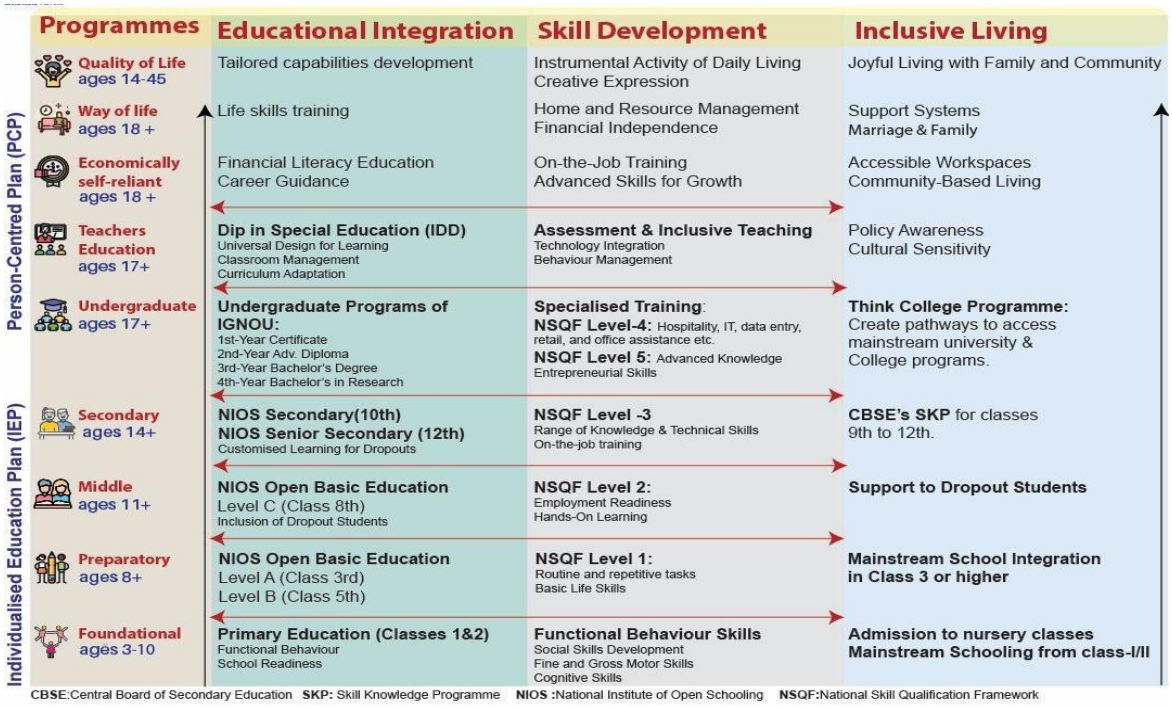

Representation of the Manovikas Model

Component	Description	Outcome Focus
Educational Integration	**Differentiated instruction, inclusive classrooms, UDL-based curriculum**	**Improved academic achievement, mainstreaming opportunities**
Skill Development (NSQF aligned)	**Vocational skill acquisition based on national frameworks; job-readiness programs**	**Enhanced employability, recognised certification**
Community Inclusion	**Life skills training (e.g., financial literacy, transport skills, civic participation)**	**Greater independent living and social participation**
Family and Community Support (Inclusive Living)	**Active involvement of families and local community networks**	**Strengthened support system for long-term success**
Assistive Technology Integration	**Use of communication aids, learning technologies, and accessibility tools**	**Increased access to education and autonomy**

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Person-Centred Planning (PCP)	**Individual transition plans focusing on strengths, needs, and aspirations**	**Personalised goal achievement pathways**
Continuous Monitoring and Evaluation	**Longitudinal assessment, feedback loops, and outcome-based improvement strategies**	**Evidence-based model refinement and sustainability**
Training for Educators	**Professional development on inclusive education strategies and disability-sensitive pedagogy**	**Teacher preparedness for inclusive classrooms**
Interdisciplinary Collaboration	**Teamwork among educators, therapists, social workers, and vocational trainers**	**Comprehensive support for holistic development**

Materials and Methods

2.1 Study Design

This study used a **mixed-methods approach** to comprehensively evaluate the effectiveness of the Manovikas Model in supporting transitions for students with intellectual and developmental disabilities (IDD).

The design combined **qualitative methods**, including interviews and focus groups, with **quantitative data analysis** of student outcomes.

By integrating both types of data, the study aimed to capture the lived experiences of participants while also providing measurable evidence of academic and transition success.

2.2 Participants

2.2.1 Students

The study involved a cohort of **134 students** with intellectual and developmental disabilities (IDD), aged between **6 and 30 years**, who were enrolled in transition programs operated under the Manovikas ModelinIndia.

Students represented diverse backgrounds, with variations in cognitive functioning levels, family support systems, and educational histories.

2.2.2 Stakeholders

In addition to students, the study engaged **50 stakeholders** through interviews and focus groups.

This group included:

- Special educators
- Vocational trainers
- Rehabilitation therapists
- Administrators
- Family caregivers

Their insights were essential for understanding the practical implementation and perceived impact of the model.

2.2.3 Inclusion Criteria

- Diagnosis of mild to moderate intellectual and/or developmental disability
- Enrollment in a program adopting the Manovikas Transition Model for at least 12 months
- Ability to participate in interviews or surveys (with communication support as needed)
- Consent from the individual and/or their legal guardians

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2.3 Data Collection

Data collection was conducted over **two years**, allowing for the observation of longitudinal changes in participants' development.

2.3.1 Qualitative Data

- **Semi-structured interviews** were conducted with stakeholders to gather detailed information about the model's implementation, its strengths, and the challenges it faces.
- **Focus group discussions** provided valuable insights, allowing participants to build on one another's experiences.
- All sessions were audio-recorded (with consent), transcribed verbatim, and analysed thematically.

2.3.2 Quantitative Data

- **Academic Records**: Performance across key subjects, progression rates, and participation in skill courses were analysed.
- **Skill Development Assessments**: Measures aligned with the National Skills Qualification Framework (NSQF) evaluated vocational preparedness.
- **Transition Readiness Surveys**: Surveys assessed attitudes toward education, employment, independent living, and community participation.

2.3.3 Ethical Considerations

The study received ethical clearance from the Institutional Ethics Review Board. All participants and their guardians provided **informed consent** before participation. Confidentiality and the right to withdraw at any stage were upheld.

2.4 Instruments and Measures

The study used validated and adapted instruments appropriate for the Indian context:

- **Self-Advocacy and Transition Readiness Survey** (modified for cultural relevance)
- **Academic Achievement Logs** (recorded by special educators)
- **Skill Competency Checklists** based on NSQF guidelines
- **Interview and Focus Group Protocols** were explicitly developed for this research. Each tool was piloted with a small subgroup before full deployment to ensure clarity and accessibility, especially for individuals with communication difficulties.

2.5 Data Analysis

2.5.1 Qualitative Analysis

- Thematic analysis was conducted using NVivo software.
- Researchers identified **patterns and themes** related to student experiences, educator perspectives, and institutional challenges.
- Member checking was employed to validate the accuracy of thematic interpretations.

2.5.2 Quantitative Analysis

- **Descriptive statistics** (means, percentages) summarised student characteristics and outcome variables.
- **Analysis of Variance (ANOVA)** was used to test differences in outcomes across subgroups (e.g., by age or skill level).
- **Linear regression analysis** examined predictors of successful transitions, including academic performance and skill acquisition.
- Statistical analysis was conducted using SPSS (Version 25), with significance set at $p < 0.05$.

3. Results

3.1 Participant Characteristics

The final study sample consisted of **134 students** with intellectual and developmental disabilities (IDD), aged between **6 and 30 years** (Mean = 22.4 years,SD=5.7).

The group was diverse in terms of severity

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of disability, socio-economic background, andeducationalhistories.

Table 1 provides a summary of the key demographic characteristics.

Participant Demographic Characteristics (N = 134)

Characteristic	Category	n	Percentage (%)
Age	**6–18 years**	**64**	**47.8%**
	19–30 years	**70**	**52.2%**
Gender	**Male**	**78**	**58.2%**
	Female	**56**	**41.8%**
Type of Disability	**Mild IDD**	**83**	**61.9%**
	Moderate IDD	**51**	**38.1%**
Region	**Urban**	**82**	**61.2%**
	Semi-Urban/Rural	**52**	**38.8%**

3.2 Educational Experience and Satisfaction

Survey results showed **overwhelmingly positive experiences** reported by the students:

- **93%** liked attending school or the training centre.
- **88%** felt they understood what their teachers taught.
- **84%** expressed a strong desire to work in the future.
- **90%** reported positive peer interactions.

Students also noted better access to therapy services and active participation in extracurricularactivities.

The summary of student responses is presented in Table 2.

Educational Experiences and Skill Development Outcomes (N = 134)

Survey Question	Positive Response (n)	Positive Response (%)
Enjoy attending school/training centre	**124**	**93%**
Understand teacher explanations	**118**	**88%**
Aspire to future employment	**113**	**84%**

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Positive peer interactions	**121**	**90%**
Access to therapy services	**117**	**87%**
Participation in extracurricular activities	**116**	**87%**
Independent or semi-independent travel	**52**	**39%**
Decision-making about learning/plans	**87**	**65%**
Received training aligned to personal interests	**97**	**72%**
Plan for vocational/higher education transition	**89**	**66%**

3.3 Transition Readiness and Outcomes

Students following the Manovikas Model demonstrated significantly improved **transition readiness** compared to baseline data:

- The **transition rate to vocational programs or higher education** increased by **38%** ($p < 0.01$).
- Students' ability to **travel independently** rose from **14% at baseline to 39%** post-intervention.

Students who completed the transition readiness modules showed higher autonomy scores, improved communication skills, and greater self-advocacy.

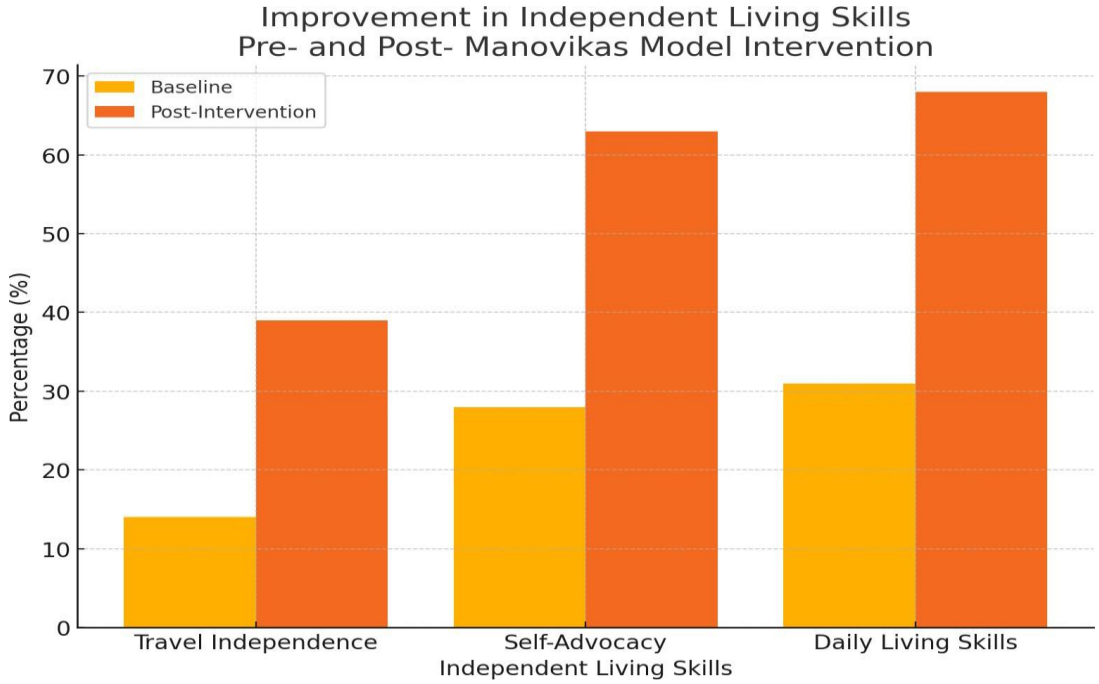

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Figure 1 shows the comparison between baseline and post-model outcomes related to independent living skills.

Improvement in Independent Living Skills Pre-and Post-Manovikas Model Intervention

(Bar graph showing % increase in independent travel, self-advocacy, and daily living activities)

- Travel Independence: Baseline 14% ➔ Post 39%
- Self-Advocacy: Baseline 28% ➔ Post 63%
- Daily Living Skills: Baseline 31% ➔ Post 68%]

3.4 Statistical Analysis

3.4.1 ANOVA Results

ANOVA tests revealed significant group differences:

- **Students who actively participated** in skill-building modules had higher transition scores than those in traditional programs ($F(1,132) = 7.58$, $p < 0.01$).

3.4.2 Regression Analysis

Regression analysis showed that:

- **Skill competency scores** and **academic understanding** were strong predictors of successful transition outcomes ($R^2 = 0.47$, $p < 0.001$).

These findings suggest that both academic and vocational preparation significantly contributed to students' transition success.

4. Discussion

This study evaluated the effectiveness of the Manovikas Transition Model in supporting students with intellectual and developmental disabilities (IDD) as they move from special education into vocational programs and highereducation.

Findings from both qualitative and quantitative data strongly suggest that the Manovikas Model is a practical and culturally responsive framework for promoting academic success, skill development, and independent living among individuals with intellectual and developmental disabilities (IDD).

Students reported a high level of satisfaction with their educational experiences, with 93% enjoying attending school and 88% feeling confident in understanding academic material. Importantly, aspirations for future employment were high (84%), indicating a shift towards greater self-determination and goal setting among participants. Positive peer interactions (90%), access to therapy services (87%), and participation in cultural activities (87%) further underscore the holistic approach embedded in the Manovikas Model, which addresses not only academic needs but also social and emotional development.

The results also revealed significant improvements in independent living skills, with the proportion of students capable of travelling independently rising from 14% at baseline to 39% post-intervention. Self-advocacy skills and daily living competencies similarly showed marked improvements.

The use of a mixed-methods design enabled the collection of rich, nuanced insights. Quantitative analysis confirmed significant gains, as ANOVA tests revealed that students engaged in skill-based modules performed better in transition outcomes compared to their peers in traditional settings. In contrast, regression analysis identified academic understanding and skill development as strong predictors of transition success.

These findings align with previous research emphasising the importance of early transition planning, skill-focused education, and person-centred practices (Wehmeyer, 1999; Shogren et al., 2015). However, unlike many Western models, the Manovikas Model uniquely integrates

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cultural sensitivities, such as family involvement and community participation, which are critical in the Indian context.

One of the key strengths of the Manovikas Model is its alignment with the National Skills Qualification Framework (NSQF), which ensures that vocational training is formally recognised and can lead to meaningful employment opportunities. Another strength is its use of Universal Design for Learning (UDL) principles, which offer flexibility and accessibility in instruction.

Despite these promising results, some limitations should be acknowledged. The study was geographically concentrated in a limited number of urban and semi-urban regions, which may restrict the generalizability of findings to more rural or underserved populations. Additionally, the reliance on self-reported data in some survey components could introduce response bias. Future research should consider longitudinal designs that follow students into employment and independent living over several years to assess the sustainability of outcomes.

Overall, the Manovikas Model provides a robust and adaptable framework that effectively prepares students with IDD for successful transitions into broader educational and societal participation.

5. Conclusion

This study's findings confirm the value of the Manovikas Transition Model as a comprehensive and culturally responsive approach to enhancing transition outcomes for students with intellectual and developmental disabilities.

By combining academic learning, vocational skill development, therapy services, and community engagement, the model addresses multiple dimensions essential for a successful adult life.

Students following the Manovikas Model reported greater school satisfaction, increased work aspirations, stronger independent living skills, and higher rates of transition to vocational and higher education programs.

The evidence suggests that structured, individualised support systems — rooted in self-determination and cultural context — can significantly bridge the gap between special education and full community participation.

As India and other countries continue to expand their commitments to inclusive education under frameworks such as the RPwD Act and the UNCRPD, models like Manovikas offer practical and scalable pathwaysforward.

Future expansions of this work should explore adaptations for different regions, the inclusion of more severe disability groups, and the long-term impacts on employment and independent living outcomes.

By embracing such innovative models, educational systems can better fulfil the promiseof equal opportunity, empowerment, and meaningful inclusion for all learners, regardless of disability.

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