From School to Workforce: A Systematic Review on Enhancing Transition Outcomes for Students with Special Needs

Siti Noorhafiznas Husna Husni[1,*], Low Hui Min[1]

[1] School of Educational Studies, Universiti Sains Malaysia, 11700 Gelugor, Pulau Pinang, Malaysia

ARTICLE INFO	ABSTRACT
	The transition from school to postsecondary settings for students with special needs presents complex challenges, particularly regarding vocational training, family engagement, and supportive policy structures. This research addresses critical gaps impacting these students' employment readiness and community integration, drawing on a systematic literature review focused on three areas: Transition and Employment Readiness, Family and Community Support, and Educational and Policy Approaches. The PRISMA framework guided the selection and evaluation of studies from 2020 to 2024, identifying key barriers such as inadequate vocational skills, fragmented family support, and restrictive educational policies. Employing a mixed-methods analysis, the study emphasizes the importance of experiential vocational training, coordinated family and community networks, and policy-driven educational support tailored to individual needs. Findings suggest that early, inclusive, and collaborative transition planning fosters self-determination and improves long-term employment outcomes. The research concludes with recommendations for implementing integrated vocational programs, strengthening community partnerships and utilizing technology to enhance accessibility, ultimately promoting meaningful employment and independent living for students with special needs.

1. Introduction

For students with special needs, transitioning from school to postsecondary settings is a crucial time that includes difficulties with vocational training, family participation and policy assistance. Many students face deficiencies in occupational skills, a lack of community support and restricted access to resources that facilitate a smooth transition into the workforce or further education, even with concentrated efforts [1]. For example, studies show that many students with special needs do not receive enough training tailored to their needs, which makes it difficult for them to find fulfilling jobs after graduation [2]. Furthermore, family and community assistance are essential for transition planning, but there are frequently insufficiently coordinated frameworks to guarantee that these resources adequately meet the needs of each student [3].

---

* Corresponding author.
E-mail address: inazhusna22@gmail.com

Although family and community networks are crucial for bridging the gap between independent living and school programs, their full potential is limited by limits in collaborative approaches. According to studies, family participation in transition planning can have a big impact on kids' capacity for self-determination and goal-setting, two skills that are essential for their long-term success [4]. At the same time, community resources like social assistance and vocational training offer vital experiential learning opportunities, but their efficacy is limited since they are frequently not integrated with educational policies [5].

Furthermore, the unique requirements of students with special needs are frequently not adequately addressed by legislative frameworks in educational institutions. Higher education policy, for example, might neglect crucial services like specialized career support, which could have an effect on long-term employment prospects [6].

Moreover, a key gap in the literature is a lack of research into integrated transition planning models that include occupational training, family and community involvement, and educational policies in a unified framework. While numerous research addresses these topics separately, few investigate how these parts might be brought together in a collaborative, holistic manner. This systematic literature review (SLR) addresses these gaps by exploring three key themes: Transition and Employment Readiness, Family and Community Support in Transition, and Educational and Policy Approaches for Transition. The evaluation's goal is to integrate insights from various fields to provide useful recommendations for enhancing transition support, which will ultimately enable students with special needs to lead better lives.

2. Literature Review

The literature review about The Role of Vocational Training and Community Support in Transition Planning for Students with special needs, Holistic Transition Planning: Integrating Educational Interventions, Community Resources and Early Family Engagement and Barriers, Facilitators in Transition for Students with Special Needs and Educational and Policy Approaches for Transition for Special Needs.

2.1 The Role of Vocational Training and Community Support in Transition Planning for Students with Special Needs

The transition planning for students with special needs is a multifaceted process that significantly benefits from vocational training and community support. Effective transition planning is essential for ensuring that students with special needs can successfully navigate the shift from school to post-school life, which includes employment and further education. Recent studies emphasize the importance of vocational training as a critical component of this transition, highlighting that early and structured vocational education can lead to improved employment outcomes for these students [7].

Vocational training programs tailored for students with special needs not only enhance their employability skills but also provide them with the necessary support to adapt to the workforce. For instance, research indicates that vocational rehabilitation services are most effective when they are integrated with educational programs that focus on career preparation [8]. Additionally, the involvement of community support services plays a crucial role in facilitating these transitions. Community-based vocational instruction sites have been shown to provide an environment conducive to learning both technical and soft skills, which are vital for success in integrated employment settings [9].

Moreover, the role of family and community in transition planning cannot be overstated. Families are often the primary advocates for their children and their involvement in the transition process is linked to better outcomes for students with special needs [10]. Effective transition planning requires collaboration among various stakeholders, including educators, vocational rehabilitation counselors and community organizations, to create a cohesive support system that addresses the unique needs of each student [11].

In addition to vocational training and community support, the development of individualized transition plans that incorporate student preferences and strengths is essential. A strengths-based approach to transition planning has been shown to foster a positive mindset among students, which can mitigate the negative perceptions often associated with disability [12]. This approach not only empowers students but also encourages their active participation in the planning process, leading to more tailored and effective transition strategies [13].

In summary, the successful transition of students with special needs is contingent upon the integration of vocational training, community support, and active family involvement. By fostering collaboration among all stakeholders and focusing on individual strengths, transition planning can significantly enhance the post-school outcomes for students with special needs.

2.2 Holistic Transition Planning: Integrating Educational Interventions, Community Resources, and Early Family Engagement

Holistic transition planning for students with special needs is a critical process that integrates educational interventions, community resources, and early family engagement. This comprehensive approach is essential for ensuring that students are adequately prepared for the transition from school to adulthood, encompassing aspects such as employment, further education, and independent living.

One of the key components of holistic transition planning is the integration of educational interventions that focus on developing essential skills for life after school. Research indicates that early and structured educational programs can significantly enhance the readiness of students with special needs for post-secondary opportunities [10,14]. For instance, a study highlighted the importance of a holistic, interactionist approach that considers both personal and contextual factors in developing school readiness for children on the autism spectrum [10]. Such educational interventions not only equip students with necessary academic skills but also foster social and emotional competencies that are vital for successful transitions [15].

In addition to educational strategies, community resources play a pivotal role in students with special needs during their transition. Community-based programs can provide valuable vocational training and real-world experiences that are crucial for developing job readiness [14,16]. Moreover, collaboration between schools and community organizations can facilitate access to resources that support students' diverse needs, including mental health services and job placement assistance [17]. This collaborative approach ensures that students receive comprehensive support that addresses their unique challenges and promotes their overall well-being.

Family engagement is another critical element of holistic transition planning. Research shows that active involvement of families in the transition process leads to better outcomes for students with special needs [18,19]. Families can provide essential insights into their children's strengths and preferences, which can inform the development of individualized transition plans. Furthermore, fostering positive attitudes among family members towards students with special needs can enhance their participation in inclusive educational practices [18]. Early engagement of families in the

transition planning process not only empowers them but also helps build a supportive network around the student, which is vital for successful transitions.

In conclusion, holistic transition planning for students with special needs necessitates a multifaceted approach that integrates educational interventions, community resources and early family engagement. By addressing the diverse needs of students through collaboration among educators, community organizations and families, we can create a supportive environment that facilitates successful transitions into adulthood.

2.3 Barriers and Facilitators in Transition for Students with Special Needs

The transition process for students with special needs is often fraught with barriers that can impede their successful movement from school to post-school environments. A multi-factor analysis reveals several critical barriers, including a lack of vocational skills, limited family or community support, and restrictive policies that hinder effective transition planning.

One significant barrier identified in the literature is the lack of vocational skills among students with special needs. Research indicates that many students do not receive adequate vocational training during their secondary education, which is crucial for preparing them for employment opportunities [20,21]. For instance, a study highlighted that the absence of a unified vision for transition and insufficient teacher competencies contribute to the inadequacy of vocational training [21]. Furthermore, students with learning disabilities often lack access to college preparatory curriculum, which can enhance their chances of completing postsecondary education [22]. This gap in vocational preparation not only limits their employability but also affects their self-determination and agency in pursuing career goals [23].

Limited family and community support also poses a significant challenge in the transition process. Families play a crucial role in advocating for their children and supporting their transition planning. However, many parents express a desire for more involvement in the transition process, yet they often face barriers such as a lack of knowledge about available resources and transition services [1,23]. Additionally, cultural and linguistic differences can further complicate family engagement, as families from diverse backgrounds may feel disconnected from the transition planning process [24]. This lack of support can lead to feelings of isolation and frustration for both students and their families, ultimately impacting the students' transition outcomes.

Restrictive policies and practices within educational systems can also hinder effective transition planning. For example, changes in federal legislation have reduced the time educators are required to focus on transition planning, which can negatively affect the quality of transition services provided to students with special needs [25]. Moreover, the variability in state policies regarding transition planning can create inconsistencies in the support students receive, leading to disparities in post-school outcomes [20,26]. The lack of comprehensive legislation that guarantees the rights of students with special needs to receive adequate transition services further exacerbates these challenges [21,27].

In conclusion, the transition for students with special needs is influenced by a complex interplay of barriers, including insufficient vocational skills, limited family and community support and restrictive policies. Addressing these barriers requires a concerted effort from educators, policymakers and community organizations to create a more inclusive and supportive transition process that empowers students with special needs to achieve successful post-school outcomes.

2.4 Educational and Policy Approaches for Transition for Special Needs

The impact of current policies on transition outcomes for students with special needs is a critical area of analysis, as these policies shape the educational landscape and influence the resources available for effective transition planning. This examination will focus on how various educational policies, particularly those related to inclusive education, vocational training and individualized transition planning, affect the post-school outcomes for students with disabilities. In Malaysia, the framework governing this transition is shaped by various educational policies, including the Education Act 1996 and the National Special Education Policy of 2004. These policies emphasize inclusive education, promoting the integration of students with disabilities into mainstream schools. However, despite the legislative framework, the implementation of effective transition planning remains inconsistent across schools. Many educators lack the necessary training and resources to develop individualized education programs (IEPs) that cater to the unique needs of students with disabilities. This inconsistency can hinder the effectiveness of transition planning, ultimately affecting the outcomes for these students [28].

Inclusive education policies also play a pivotal role in shaping transition outcomes. The integration of students with disabilities into mainstream classrooms has been shown to foster social skills and peer relationships, which are essential for successful adult life [29]. However, the effectiveness of inclusive education is contingent upon adequate support for teachers and the provision of necessary resources. Policies that promote professional development for educators in inclusive practices can significantly enhance the educational experiences of students with special needs, thereby improving their transition outcomes [30]. Furthermore, the involvement of parents and community stakeholders in the transition process is vital, as it creates a supportive network that can facilitate smoother transitions [31].

Moreover, vocational training policies are essential for preparing students with disabilities for the workforce. Programs that provide real-world work experiences and internships have been linked to increased confidence and employability among students with special needs [32]. However, the lack of collaboration between schools, vocational rehabilitation counsellors, and employers often limits the effectiveness of these programs [31]. Policies that encourage partnerships between educational institutions and local businesses can enhance the availability of meaningful work experiences for students, thereby improving their post-school outcomes [33].

In conclusion, current policies significantly impact transition outcomes for students with special needs. The effectiveness of these policies hinges on their ability to promote early intervention, inclusive education, vocational training, and mental health support. By addressing these areas, policymakers can enhance the practical relevance of their initiatives and ultimately improve the post-school outcomes for students with special needs.

3. Methodology

The PRISMA Framework is used to conduct the Systematic Literature evaluation process, which entails a rigorous evaluation of three major phases stated in subsections 3.1 Identification, 3.2 Screening and 3.3 Eligibility. Following the data formulation, the PRISMA Framework-based review is described in 3.4 Data Abstraction and Analysis.

3.1 Identification

The process of conducting a systematic literature review (SLR) typically involves three crucial phases to ensure the comprehensive identification and selection of relevant studies. The first phase centres around gathering relevant research papers through a carefully designed search strategy. This begins with identifying key terms, phrases and synonyms associated with the research topic. These terms can be derived from various sources such as dictionaries, encyclopaedias and, importantly, previous studies within the field.

In this study, a thorough search was conducted using these identified phrases, which helped to expand the scope of the literature review. A total of 62 research papers were successfully gathered from the Web of Science (WoS) and Scopus databases, marking the completion of the first phase of the review. To facilitate the search process, specific search strings were created based on the identified terms and phrases. These search strings were used to query the WoS and Scopus databases, as shown in Table 1. This strategic approach ensured that the selection of studies was both systematic and comprehensive, capturing a broad spectrum of relevant research in the field.

Table 1
Search string

Database	Search string
Scopus	(TITLE-ABS-KEY ("students with special needs" OR "individuals with disabilities" OR "youth with disabilities" OR "young adults with disabilities" OR "students with special needs") AND TITLE-ABS-KEY ("employment barriers" OR "employment challenges" OR "work transition" OR "workplace accessibility" OR "employment transition" OR "vocational barriers" OR "employment outcomes") AND TITLE-ABS-KEY ("transition to work" OR "transition planning" OR "job training" OR "workforce integration" OR "employment readiness"))
WoS	((TS=(("students with special needs" OR "individuals with disabilities" OR "youth with disabilities" OR "young adults with disabilities" OR "students with special needs"))) AND TS=(("employment barriers" OR "employment challenges" OR "work transition" OR "workplace accessibility" OR "employment transition" OR "vocational barriers" OR "employment outcomes"))) AND TS=(("transition to work" OR "transition planning" OR "job training" OR "workforce integration" OR "employment readiness"))

3.2 Screening

The screening phase began with the removal of duplicate records from the databases, resulting in the elimination of three duplicated entries. The remaining articles were then subjected to a secondary screening to further refine the dataset based on tight inclusion and exclusion guidelines.

In keeping with the review's aim, articles were limited to original research studies published in English within the last five years (2020-2024). Non-journal literature categories, such as conference proceedings, book chapters, book series and review papers, were excluded, as were pieces that had not been finished (i.e., those marked "In Press"). This careful filtering approach resulted in the elimination of 44 articles, leaving only 14 research for eligibility assessment. The screening criteria used are presented in Table 2.

Table 2
The selection criterion of searching

Criterion	Inclusion	Exclusion
Language	English	Non-English
Timeline	2020-2024	< 2020
Literature type	Journal (Article)	Conference Proceedings, Book chapters, Book Series, Review
Publication Stage	Final	In Press

3.3 Eligibility

The remaining 15 studies were thoroughly examined in the third step, Eligibility, to ascertain their applicability to the review's core topic. To make sure they were in line with the particular research questions of this systematic review, titles, abstracts, and primary content sections were carefully examined. Two studies that were determined to be irrelevant to the intended topic area were eliminated as a result of this evaluation. As a result, 12 papers were ultimately chosen for qualitative analysis; these studies represent recent and noteworthy advances in our knowledge of transition hurdles for students with special needs.

3.4 Data Abstraction and Analysis

In this study, a variety of research methodologies, including mixed, qualitative and quantitative methods, were combined using an integrative analysis strategy. The primary objective was to identify relevant topics and subtopics on the Transition Program for children with exceptional needs. Eight publications had to be thoroughly examined in order to obtain pertinent information for the study's topics. Three main issues emerged from the authors' joint work: " Transition and Employment Readiness," " Family and Community Support in Transition," and " Educational and Policy Approaches for Transition." Together with associated themes and concepts, these themes were expanded upon. A comprehensive record was consistently kept throughout the data analysis process to record analyses, conclusions, queries and other important information. Experts in Special Education and Technical and Vocational Education and Training (TVET) reviewed the analysis to guarantee domain validity and confirmed that each sub-theme was relevant, acceptable and understandable. Professional opinions and comments were added to the analysis during the expert review process, which improved the study's validity and reliability. The steps required to implement the PRISMA Framework are shown in Figure 1.
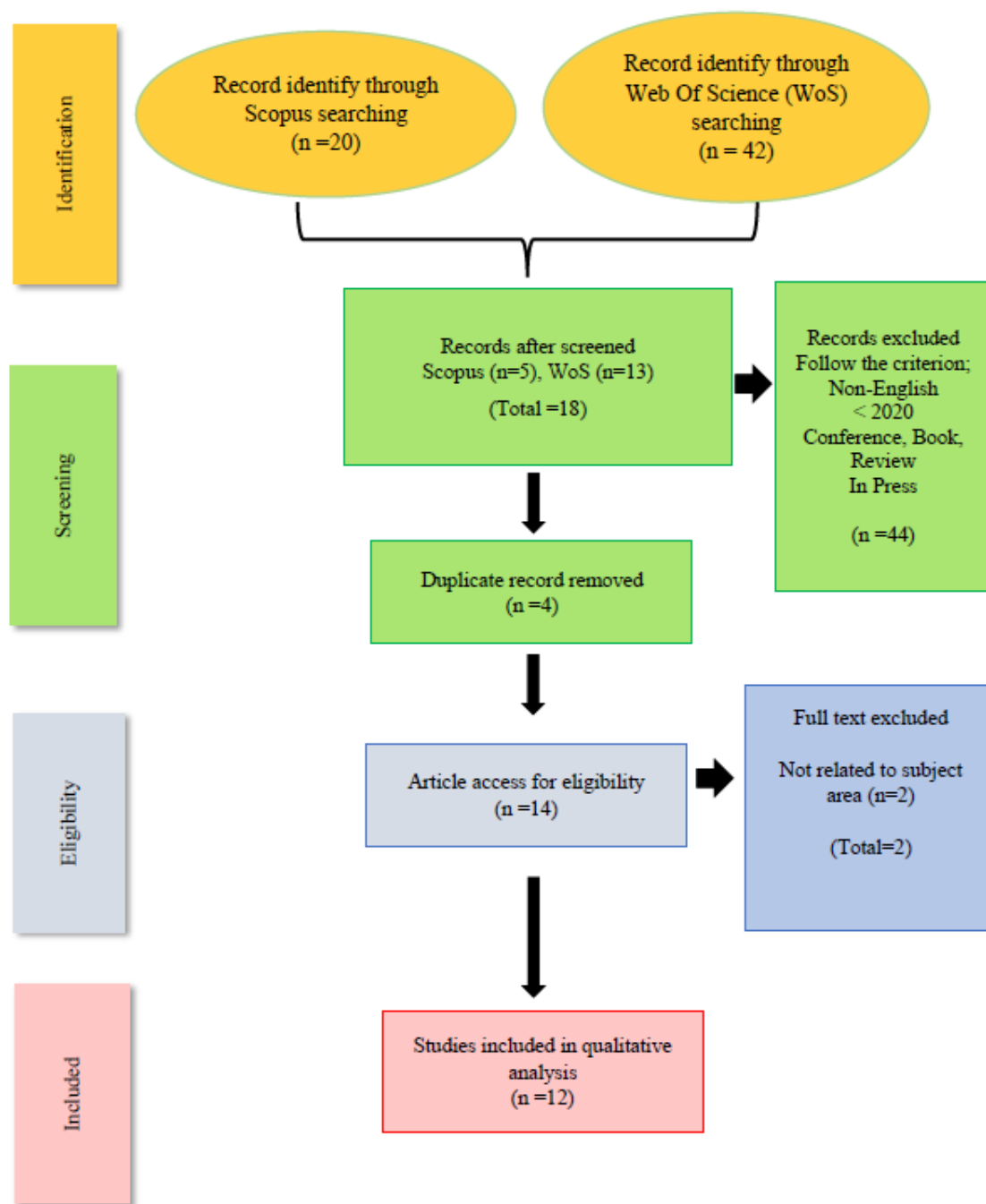
Fig. 1. Prisma framework adapted from Moher *et al.,* [34]

4. Research Findings and Discussions
4.1 Transition and Employment Readiness

The studies selected in the area of Transition and Employment Readiness for Students with special needs regularly highlight the challenges and complications that these persons encounter as they get ready to integrate into the workforce. The disparity between job-specific skill development and vocational training has been noted as a major concern throughout the studies. Because many students lack the practical skills that companies look for, this gap frequently results in limited work options after graduation [1,11,23]. As a result, authors stress the vital necessity for specialized support systems in educational systems that prioritize employability skills appropriate for a variety of career sectors in addition to academic competencies [35].

Additionally, the importance of vocational training in fostering employment readiness is often highlighted. Research on this issue indicates that experiential learning opportunities such as internships and work-study provide students with real-world experience that is not possible through standard classroom instruction [36,37]. It is believed that this experiential learning method is crucial for developing both job-specific abilities and more general, transferable skills like problem-solving and communication. According to research, integrating these chances into the curriculum will help students with special needs become more independent and self-assured during their transition by preparing them for the reality of the workforce [23].

Another recurring issue is the importance of institutional support and policy; writers talk about how structured, policy-driven transition programs might improve and standardize the assistance that students receive [2]. According to the research, policy changes that emphasize customized transition plans can better suit the particular goals and strengths of every student. This method promotes a customized framework that not only meets the various needs of students with special needs but also synchronizes learning objectives with the demands of the job market. The importance of governance in eliminating structural obstacles and establishing settings that enable students with special needs to succeed after graduation is highlighted by this policy-centric viewpoint [1].

Effective transition planning is also said to be based on early intervention and ongoing support. According to the research, transition talks and preparations should begin earlier in students' academic careers to enable a thorough and gradual skill-building process [37]. It is suggested that ongoing assistance that is customized to each student's changing needs can lessen transitional challenges and make the path to employment easier. This viewpoint acknowledges the changing nature of workforce entrance obstacles and the importance of continuous help in adjusting to these changes [35].

In conclusion, the research included in the Transition and Employment Readiness issue as a whole emphasizes the necessity of a comprehensive approach to transition preparation. These studies offer a road map for enhancing post-graduation outcomes for students with special needs by emphasizing early intervention, customized transition plans, policy-driven assistance and vocational training. Policymakers, educators and activists looking to improve employment possibilities and independence for people with disabilities in a meaningful and sustainable way will benefit greatly from the insights this research has produced. The article summary for theme 1 is displayed in Table 3.

Table 3

Theme 1: Transition and employment readiness

Authors	Title	Finding
Kim *et al.,* [38]	Postschool outcomes for Korean American young adults with intellectual/developmental disabilities and parental perceptions of transition planning	The study found that Korean American young adults with intellectual/developmental disabilities (IDD) experience significant challenges in post-school outcomes, with lower employment rates and college enrolment compared to peers from other backgrounds. Additionally, many parents expressed dissatisfaction with the transition planning provided, highlighting a need for improved support and information tailored to Korean American families during this crucial transition phase.
Mello *et al.,* [39]	Characteristics of Students with special needs Who Do and Do Not Receive Transition Services	The study highlights disparities in transition service access among students with special needs, revealing that those with mild intellectual disabilities are less likely to receive these services, which adversely affects their employment and education outcomes. It emphasizes self-determination as crucial for successful transitions and identifies barriers like limited educator training and lack of awareness.

Bouck *et al.,* [40]	Transition Planning Involvement and Students with Intellectual Disability: Findings from the NLTS 2012	The paper demonstrates that active participation in transition planning improves post-school outcomes for students with intellectual disabilities, boosting self-advocacy skills and satisfaction. However, many students still have limited involvement, hindering their ability to set meaningful goals.
Bakken [41]	Special Education Transition Services for Students with special needs: An Introduction	The paper underscores the essential role of transition services in preparing students with special needs for post-school life, improving outcomes in employment, education and independence. It highlights the need for collaboration among educators, families and community agencies, as well as enhanced training for special education staff.
Mahiko [42]	Voices of a Rural Community: How to Sustain and Improve Work Experiences for Youth with Disabilities	The viewpoints of community members who give rural children with disabilities employment experiences are examined in this paper. The results show that maintaining these experiences depends on good stakeholder communication, knowledgeable staff and favourable attitudes from the students.

4.2 Family and Community Support in Transition

The research topics selected under the theme of Family and Community Support in Transition emphasize the critical role that community networks and family involvement play in helping students with special needs get ready for adulthood. During this time of transition, family members frequently serve as the main advocates and offer both practical and emotional support, bridging the gap between the demands of independent living and school services [3]. The results repeatedly demonstrate that when families participate in transition planning, better results are achieved because students gain from the organized support and advocacy that families offer. According to research, students with special needs are more likely to acquire self-determination skills and set realistic, attainable objectives when families are actively involved in the transition process. These skills are critical for successful adult outcomes [4].

A key factor in the success of a transition is community support, which includes peer support groups, local organizations and social services. In addition to family assistance, communities offer a wider range of services, including recreational opportunities, career training and inclusive social events [5]. With the help of these community services, students with special needs can practice life skills in a variety of authentic environments, improving their social skills and general readiness for adulthood. According to research, a welcoming and cooperative community setting helps students feel more included in society and strengthens their sense of belonging, both of which are essential for social integration after graduation [3].

The studies also highlight the significance of a coordinated transition planning strategy, in which community organizations, educators and families collaborate to build a strong support system. According to Laghi *et al.,* [4], this kind of cooperation guarantees that the transformation process is ongoing and that new demands are addressed early on. In the discussion of the difficulties in creating frameworks for collaboration among providers, Chang *et al.,* [5] point out that better transition results can be achieved by closer ties between families and community services. Families and community members can contribute to the development of an atmosphere where students with special needs can get the assistance, they require by keeping lines of communication open and fighting for the resources they require.

In summary, the literature in the Family and Community Support in Transition theme shows that effective transitions require a supportive network that is involved and cooperative. Together, these studies indicate that in order to give pupils a solid foundation for social integration and self-sufficiency, family and community cooperation must be given top priority throughout transition

planning. Given the significant influence these networks have on the long-term results for people with disabilities, the findings support legislative and educational initiatives that prioritize family and community involvement. Table 4 shows the article summary for theme 2.

Table 4
Theme 2: Family and community support in transition

Authors	Title	Finding
Jones *et al.,* [43]	The Relationship Among Demographic Factors, Transition Services and Individual Development Account (IDA) Saving Participation Among Transition-Age Youth with Disabilities	The paper investigates how demographic factors and transition services affect participation in Individual Development Accounts (IDAs) for transition-age youth with disabilities. It finds that characteristics like age, race and income influence IDA participation, with those receiving transition services showing higher savings rates. Effective transition services are shown to boost financial literacy and saving habits, supporting financial independence. The authors recommend expanding access to these services and IDA programs to improve financial outcomes for this group.
Chang *et al.,* [44]	Providers' Perceptions of the Collaborative Challenges and Assistance Provided to Families in Pre-Employment Transition Services	The paper explores service providers' perspectives on challenges in delivering pre-employment transition services to families of youth with disabilities. Key barriers include communication gaps, differing priorities and limited resources. Despite these issues, providers are committed to supporting families, often using creative problem-solving. The study emphasizes the need for strong interagency relationships and improved communication strategies to enhance service delivery and improve employment outcomes for youth with disabilities.
Laghi *et al.,* [45]	Individual planning starts at school. Tools and practices promoting autonomy and supporting transition to work for adolescents with autism spectrum disorder.	The paper underscores the importance of individualized planning to support adolescents with autism spectrum disorder (ASD) in transitioning from school to work. Findings show that personalized tools and practices that foster autonomy and active participation enhance employment skills and outcomes. The authors advocate for collaboration among educators, families and community stakeholders to create supportive environments, ultimately improving job opportunities and quality of life for individuals with ASD.

4.3 Educational and Policy Approaches for Transition

Research highlights the necessity of educational initiatives and policy changes that correspond with the changing needs of transition for students with special needs within the theme of Educational and Policy Approaches for Transition. According to studies in this theme, well-planned school-based interventions can greatly improve preparedness by offering organized assistance that targets particular abilities required for success in postsecondary education. According to Talley *et al.,* [46], CAR is a cutting-edge program created to teach defensive driving techniques to students with impairments. It functions as a model for promoting independence as well as a useful life skill. These focused interventions highlight how specialized teaching methods can help pupils get ready for adulthood.

Additionally, web-based treatments are emphasized as effective transition support tools, particularly in situations when in-person resources are scarce. The impact of online interventions in preparing students with physical disabilities for transition-related issues was investigated by Lindsay *et al.,* [47]. The study demonstrates how easily available, web-based tools offer a flexible option, giving children in underserved or remote places tailored support. According to these results, technology-driven initiatives may play a key role in increasing the scope and adaptability of transition services, particularly for students who have limited mobility or limited access to conventional support services.

Another important area of focus within this issue is the function of school psychologists and counsellors. According to Ducharme *et al.,* [48], school psychologists can play an active role in transition planning by assisting students in becoming emotionally resilient and prepared for the workforce. According to the study, school-based mental health providers are in a prime position to help students deal with the psychological effects of transition, such worry and self-doubt, which frequently come with moving into the workforce or pursuing further education. This strategy demonstrates how important it is to incorporate mental health support into educational strategies in order to promote comprehensive transition preparation.

Another important field of research is higher education policy, specifically with relation to job outcomes for students with special needs. The impact of postsecondary institution policies on the employment of students with special needs after graduation is examined by Phillips *et al.,* [6]. According to their findings, these graduates have better employment outcomes at universities that actively adopt inclusive policies, such as focused career services and accommodations. According to this study, universities should review their policies to make sure they meet the demands of the labour market and offer the assistance required for long-term employment.

In conclusion, research under the theme of Educational and Policy Approaches for Transition shows how important it is for colleges and universities to have organized, policy-driven support networks. A comprehensive support system can be established by educational institutions through the use of technology, the integration of practical skill-based programs and the involvement of mental health specialists. The results demonstrate that a mix of specialized educational interventions and adaptive policies that support students with special needs in their academic and professional endeavours is necessary for effective transition planning. The article summary for theme 3 is displayed in Table 5.

Table 5

Theme 2: Educational and policy approaches for transition

Authors	Title	Finding
Talley *et al.,* [49]	Defensive Driving: CAR:POOL as a Model for Proactive Postsecondary Planning and Connection	The paper finds that students with special needs who receive transition services have significantly better post-school outcomes. Using a national survey of parents, the study identified disparities in service access, with students with mild intellectual disabilities often receiving fewer services. It also emphasized the importance of self-determination skills, as students more engaged in transition planning showed improved employment and education outcomes. Barriers such as limited educator awareness and insufficient training were noted, underscoring the need for enhanced support to improve transition planning for all students with special needs.
Lindsay *et al.,* [50]	A web-based intervention for youth with physical disabilities: Comparing the role of mentors in 12- And 4-week formats	The paper the effectiveness of 12-week and 4-week mentoring formats in a web-based employment readiness program for youth with physical disabilities. Both formats improved engagement and employment skills, but the longer 12-week program fostered deeper mentor-student relationships and more thorough skill development. The study emphasizes the value of peer mentorship, particularly from near-peers with disabilities, in offering social support and building a sense of belonging.
Ducharme *et al.,* [51]	The Role of School Psychologists in Employment-Focused Transition Services	The paper highlights the essential role of school psychologists in supporting employment-focused transition services for students with special needs. School psychologists contribute by conducting assessments, creating individualized plans and collaborating with educators, families and community agencies. However, challenges like limited vocational training and systemic barriers hinder their involvement.
Phillips *et al.,* [52]	Recent College Graduates with Disabilities: Higher Education Experiences and Transition to Employment	The paper explores the transition experiences of recent college graduates with disabilities, noting that while many report positive higher education experiences, they encounter significant employment challenges. Key barriers include limited employer awareness of accommodations, insufficient tailored career services and persistent negative stereotypes.

5. Conclusions

In conclusion, this systematic literature analysis shed light on the varied character of the transition process for children with special needs, emphasizing the crucial interplay between transition and career preparedness, family and community support and educational and policy approaches. The findings highlight that successful transitions are affected not just by individual preparedness but also by the broader support networks offered by families, communities and educational institutions. A comprehensive approach that includes targeted employment preparedness initiatives, strong family and community engagement and successful educational and policy frameworks is required to ensure smooth transitions into adulthood and the workforce. The evidence highlights the importance of family and community in creating a supportive environment, while educational and policy frameworks must develop to meet the changing needs of individuals. Furthermore, activities targeted at improving employment readiness should address both the skills needed in the labour market and the psychological support required for confidence and adaptability. However, this study has limitation. The review's scope was limited to current literature, thus emerging ideas and innovations in transition programs may have been missed. Furthermore, because individual experiences and socio-cultural circumstances of transition differ, certain conclusions may

not be generally relevant. In conclusion, while much progress has been achieved in strengthening transition plans, much more need to be done. Future study should focus on how these features might be more successfully integrated, particularly in populations with limited opportunities. In order to move forward, the focus should be to build a more inclusive and sustainable system that provides every people with the assistance and opportunities they require for success in the workplace and beyond.

Acknowledgement

References

[1] Kim, Kyeong-Hwa and Mary E. Morningstar. "Postschool outcomes for Korean American young adults with intellectual/developmental disabilities and parental perceptions of transition planning." *Social Behavior and Personality: an international journal* 48, no. 12 (2020): 1-13. https://doi.org/10.2224/sbp.9421

[2] Carlson, Sarah R., Vidya D. Munandar, Michael L. Wehmeyer and James R. Thompson. "Special education transition services for students with extensive support needs." In *Special education transition services for students with disabilities*, vol. 35, pp. 117-136. Emerald Publishing Limited, 2019. https://doi.org/10.1108/S0270-401320190000035015

[3] Jones, Weneaka D., Brian N. Phillips, Ellie Hartman, Malachy Bishop, Timothy N. Tansey and Catherine A. Anderson. "The relationship among demographic factors, transition services and individual development account (IDA) saving participation among transition-age youth with disabilities." *Rehabilitation Counseling Bulletin* 65, no. 1 (2021): 37-48. https://doi.org/10.1177/0034355220962215

[4] Laghi, Fiorenzo and Barbara Trimarco. "Individual planning starts at school. Tools and practices promoting autonomy and supporting transition to work for adolescents with autism spectrum disorder." *Annali dell'Istituto Superiore di Sanità* 56, no. 2 (2020): 222-229.

[5] Chang, Wen-hsuan, Dalun Zhang, Tahereh Boroughani, Cindy Gilson, Yingying Zhao and Carolina Davila. "Providers' Perceptions of the Collaborative Challenges and Assistance Provided to Families in Pre-Employment Transition Services." *Career Development and Transition for Exceptional Individuals* (2024): 21651434241279585. https://doi.org/10.1177/21651434241279585

[6] Phillips, Kimberly G., Kimara Nzamubona andrew J. Houtenville, John O'Neill and Elaine E. Katz. "Recent College Graduates with Disabilities: Higher Education Experiences and Transition to Employment." *Journal of Postsecondary Education and Disability* 35, no. 3 (2022): 213-228.

[7] Crane, Kelli, Meredith Gramlich, Richard G. Luecking, Paul B. Gold and Taylor Morris. "Staff capacity building and accountability in transition services." *Career Development and Transition for Exceptional Individuals* 44, no. 2 (2021): 89-96. https://doi.org/10.1177/2165143420986465

[8] Bhatt, V., R. Yadav and M. Khan. "An Empirical Study on the Impact of Integrating Vocational Education and Skill Development Programs on the Labor Market." *Research and Advances in Education* 3, no. 6 (2024): 15-25. https://doi.org/10.56397/RAE.2024.06.02

[9] Cordell, Alexandria T. "Creating a vocational training site for individuals with autism spectrum disorder." *Intervention in School and Clinic* 59, no. 4 (2024): 274-280. https://doi.org/10.1177/10534512231156882

[10] Johnson, David R., Martha L. Thurlow, Yi-Chen Wu, John M. LaVelle and Ernest C. Davenport. "IEP/transition planning participation among students with the most significant cognitive disabilities: Findings from NLTS 2012." *Career Development and Transition for Exceptional Individuals* 43, no. 4 (2020): 226-239. https://doi.org/10.1177/2165143420952050

[11] Taylor, Joshua P., Holly N. Whittenburg, Magen Rooney-Kron, Tonya Gokita, Stephanie J. Lau, Colleen A. Thoma and LaRon A. Scott. "Implementation of pre–employment transition services: A content analysis of Workforce Innovation and Opportunity Act state plans." *Career Development and Transition for Exceptional Individuals* 45, no. 2 (2022): 60-70. https://doi.org/10.1177/2165143421993027

[12] Yeager, Kristopher Hawk and Malarie E. Deardorff. "Strengths-based transition planning: A positive approach for students with learning disabilities." *Intervention in School and Clinic* 58, no. 1 (2022): 3-8. https://doi.org/10.1177/10534512211047594

[13] Fasching, Helga and Katharina Felbermayr. "Participative Cooperation During Educational Transition: Experiences of Young People With Disabilities in Austria." *Social Inclusion* 10, no. 2 (2022): 358-368. https://doi.org/10.17645/si.v10i2.5079

[14] Nguyen, Linda, Claire Dawe-McCord, Michael Frost, Musa Arafeh, Kyle Chambers, Dana Arafeh, Kinga Pozniak *et al.,* "A commentary on the healthcare transition policy landscape for youth with disabilities or chronic health conditions, the need for an inclusive and equitable approach and recommendations for change in Canada." *Frontiers in Rehabilitation Sciences* 4 (2023): 1305084. https://doi.org/10.3389/fresc.2023.1305084

[15] Stormont, Melissa and Wendy M. Reinke. "Introduction to the special series: The evidence for universal social emotional intervention effectiveness from randomized control trials for students with or at risk for disabilities." *Remedial and Special Education* 42, no. 1 (2021): 3-6. https://doi.org/10.1177/0741932520967651

[16] Cleverley, Kristin, Julia Davies, Brooke Allemang and Sarah Brennenstuhl. "Validation of the Transition Readiness Assessment Questionnaire (TRAQ) 5.0 for use among youth in mental health services." *Child: care, health and development* 49, no. 2 (2023): 248-257. https://doi.org/10.1111/cch.13035

[17] Wijlaars, Linda Petronella Martina Maria, Pia Hardelid, Astrid Guttmann and Ruth Gilbert. "Emergency admissions and long-term conditions during transition from paediatric to adult care: a cross-sectional study using Hospital Episode Statistics data." *BMJ open* 8, no. 6 (2018): e021015. https://doi.org/10.1136/bmjopen-2017-021015

[18] Zeng, Wen, Song Ju and Casey Hord. "Parental influences on student self-determination: Perspectives of college students with learning disabilities." *Learning Disability Quarterly* 46, no. 3 (2023): 180-190. https://doi.org/10.1177/07319487221107890

[19] Aini, Farida and Farida Kurniawati. "The Effectiveness of the SERASI Intervention Program in Improving Parents' Positive Attitudes towards Students with Disabilities." In *2nd International Conference on Intervention and Applied Psychology (ICIAP 2018)*, pp. 576-587. Atlantis Press, 2019. https://doi.org/10.2991/iciap-18.2019.49

[20] Brown, Dottie, Anthony J. Plotner and Kathleen J. Marshall. "Principal and assistant principal involvement in and barriers to supporting secondary transition for students with disabilities." *NASSP Bulletin* 107, no. 4 (2023): 313-332. https://doi.org/10.1177/01926365231216755

[21] Eltantawy, Mahmoud. "A Study of the Requirements Availability for the Successful Transition of Students with Intellectual Disability to the Post-School Stage from their Teachers' Perspective." *International Journal of Special Education* 38, no. 3 (2023): 139-151. https://doi.org/10.52291/ijse.2023.38.45

[22] Yu, Meifang, Jeanne A. Novak, Matthew Ryan Lavery, Brooks R. Vostal and Julia M. Matuga. "Predicting college completion among students with learning disabilities." *Career Development and Transition for Exceptional Individuals* 41, no. 4 (2018): 234-244. https://doi.org/10.1177/2165143417750093

[23] Mello, Maria P., Meghan M. Burke, Julie Lounds Taylor, Richard Urbano and Robert M. Hodapp. "Characteristics of students with disabilities who do and do not receive transition services." *The Journal of Special Education* 54, no. 4 (2021): 251-259. https://doi.org/10.1177/0022466920925437

[24] Frentzel, Elizabeth, Zoe Geyman, Jeremy Rasmussen, Chad Nye and Kathleen M. Murphy. "Pre-employment transition services for students with disabilities: A scoping review." *Journal of Vocational Rehabilitation* 54, no. 2 (2021): 103-116. https://doi.org/10.3233/JVR-201123

[25] Suk andrea L., James E. Martin, Amber E. McConnell and Tiffany L. Biles. "States decrease their required secondary transition planning age: Federal policy must change." *Journal of Disability Policy Studies* 31, no. 2 (2020): 112-118. https://doi.org/10.1177/1044207320915157

[26] Goodall, Gemma, Odd Morten Mjøen, Aud Elisabeth Witsø, Sissel Horghagen and Lisbeth Kvam. "Barriers and facilitators in the transition from higher education to employment for students with disabilities: A rapid systematic review." In *Frontiers in Education*, vol. 7, p. 882066. Frontiers Media SA, 2022. https://doi.org/10.3389/feduc.2022.882066

[27] Scheef andrew and Julia Mahfouz. "Supporting the post-school goals of youth with disabilities through use of a transition coordinator." *Research in Educational Administration and Leadership* 5, no. 1 (2020): 43-69. https://doi.org/10.30828/real/2020.1.2

[28] Che Ahmat, Nur Hidayah, Susan Wohlsdorf Arendt and Daniel Wayne Russell. "Examining work factors after Malaysia's minimum wage implementation." *International Journal of Contemporary Hospitality Management* 31, no. 12 (2019): 4462-4481. https://doi.org/10.1108/IJCHM-10-2018-0827

[29] van Kessel, Robin, Rok Hrzic, Sarah Cassidy, Carol Brayne, Simon Baron-Cohen, Katarzyna Czabanowska and Andres Roman-Urrestarazu. "Inclusive education in the European Union: A fuzzy-set qualitative comparative analysis of education policy for autism." *Social work in public health* 36, no. 2 (2021): 286-299. https://doi.org/10.1080/19371918.2021.1877590

[30] Plotner, Anthony J. and Monica L. Simonsen. "Examining federally funded secondary transition personnel preparation programs." *Career Development and Transition for Exceptional Individuals* 41, no. 1 (2018): 39-49. https://doi.org/10.1177/2165143417742138

[31] Plotner, Anthony J., Valerie L. Mazzotti, Chad A. Rose and Kinsey B. Carlson-Britting. "Factors associated with enhanced knowledge and use of secondary transition evidence-based practices." *Teacher Education and Special Education* 39, no. 1 (2016): 28-46. https://doi.org/10.1177/0888406415599430

[32] Alias, Aliza. "The issues in implementing transition program for special needs students." *Asian Social Science* 9, no. 16 (2013): 9. https://doi.org/10.5539/ass.v9n16p9

[33] Pesonen, Henri V., Mitzi Waltz, Marc Fabri, Minja Lahdelma and Elena V. Syurina. "Students and graduates with autism: perceptions of support when preparing for transition from university to work." *European Journal of Special Needs Education* 36, no. 4 (2021): 531-546. https://doi.org/10.1080/08856257.2020.1769982

[34] Moher, David, Alessandro Liberati, Jennifer Tetzlaff, Douglas G. Altman and T. PRISMA Group*. "Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement." *Annals of internal medicine* 151, no. 4 (2009): 264-269. https://doi.org/10.7326/0003-4819-151-4-200908180-00135

[35] Bouck, Emily C., Kayla Bartz and M. Patty Costello. "Transition Planning Involvement and Students with Intellectual Disability." *Education and Training in Autism and Developmental Disabilities* 56, no. 2 (2021): 173-189.

[36] Bakken, Jeffrey P. "Special education transition services for students with disabilities: An introduction." In *Special Education Transition Services for Students with Disabilities*, pp. 1-14. Emerald Publishing Limited, 2019. https://doi.org/10.1108/S0270-401320190000035003

[37] Mahiko, Joy. "Voices of a Rural Community: How to Sustain and Improve Work Experiences for Youth with Disabilities." *Rural Special Education Quarterly* 42, no. 2 (2023): 67-77. https://doi.org/10.1177/87568705231165341

[38] Kim, Kyeong-Hwa and Mary E. Morningstar. "Postschool outcomes for Korean American young adults with intellectual/developmental disabilities and parental perceptions of transition planning." *Social Behavior and Personality: an international journal* 48, no. 12 (2020): 1-13. https://doi.org/10.2224/sbp.9421

[39] Mello, Maria P., Meghan M. Burke, Julie Lounds Taylor, Richard Urbano and Robert M. Hodapp. "Characteristics of students with disabilities who do and do not receive transition services." *The Journal of Special Education* 54, no. 4 (2021): 251-259. https://doi.org/10.1177/0022466920925437

[40] Bouck, Emily C., Kayla Bartz and M. Patty Costello. "Transition Planning Involvement and Students with Intellectual Disability." *Education and Training in Autism and Developmental Disabilities* 56, no. 2 (2021): 173-189.

[41] Bakken, Jeffrey P. "Special education transition services for students with disabilities: An introduction." In *Special Education Transition Services for Students with Disabilities*, pp. 1-14. Emerald Publishing Limited, 2019. https://doi.org/10.1108/S0270-401320190000035003

[42] Mahiko, Joy. "Voices of a Rural Community: How to Sustain and Improve Work Experiences for Youth with Disabilities." *Rural Special Education Quarterly* 42, no. 2 (2023): 67-77. https://doi.org/10.1177/87568705231165341

[43] Jones, Weneaka D., Brian N. Phillips, Ellie Hartman, Malachy Bishop, Timothy N. Tansey and Catherine A. Anderson. "The relationship among demographic factors, transition services and individual development account (IDA) saving participation among transition-age youth with disabilities." *Rehabilitation Counseling Bulletin* 65, no. 1 (2021): 37-48. https://doi.org/10.1177/0034355220962215

[44] Chang, Wen-hsuan, Dalun Zhang, Tahereh Boroughani, Cindy Gilson, Yingying Zhao and Carolina Davila. "Providers' Perceptions of the Collaborative Challenges and Assistance Provided to Families in Pre-Employment Transition Services." *Career Development and Transition for Exceptional Individuals* (2024): 21651434241279585. https://doi.org/10.1177/21651434241279585

[45] Laghi, Fiorenzo and Barbara Trimarco. "Individual planning starts at school. Tools and practices promoting autonomy and supporting transition to work for adolescents with autism spectrum disorder." *Annali dell'Istituto Superiore di Sanità* 56, no. 2 (2020): 222-229.

[46] Talley, Jillian, Devadrita Talapatra, Gloria Miller and Peter Organisciak. "Defensive Driving: CAR: POOL as a Model for Proactive Postsecondary Planning and Connection." *Contemporary School Psychology* 28, no. 2 (2024): 120-134. https://doi.org/10.1007/s40688-022-00438-0

[47] Lindsay, Sally and Elaine Cagliostro. "A web-based intervention for Youth with Physical disabilities: comparing the role of mentors in 12-and 4-Week formats." *JMIR Pediatrics and Parenting* 3, no. 1 (2020): e15813. https://doi.org/10.2196/15813

[48] Ducharme, Dustin andrew T. Roach and Quynh Doan Wellons. "The role of school psychologists in employment-focused transition services." *Journal of Applied School Psychology* 36, no. 4 (2020): 376-400. https://doi.org/10.1080/15377903.2020.1749205

[49] Talley, Jillian, Devadrita Talapatra, Gloria Miller and Peter Organisciak. "Defensive Driving: CAR: POOL as a Model for Proactive Postsecondary Planning and Connection." *Contemporary School Psychology* 28, no. 2 (2024): 120-134. https://doi.org/10.1007/s40688-022-00438-0

[50] Lindsay, Sally and Elaine Cagliostro. "A web-based intervention for Youth with Physical disabilities: comparing the role of mentors in 12-and 4-Week formats." *JMIR Pediatrics and Parenting* 3, no. 1 (2020): e15813. https://doi.org/10.2196/15813

[51] Ducharme, Dustin andrew T. Roach and Quynh Doan Wellons. "The role of school psychologists in employment-focused transition services." *Journal of Applied School Psychology* 36, no. 4 (2020): 376-400. https://doi.org/10.1080/15377903.2020.1749205

[52] Phillips, Kimberly G., Kimara Nzamubona andrew J. Houtenville, John O'Neill and Elaine E. Katz. "Recent College Graduates with Disabilities: Higher Education Experiences and Transition to Employment." *Journal of Postsecondary Education and Disability* 35, no. 3 (2022): 213-228.