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Designing Evidence-Based Career and Workforce Development Policies and Practices: Using a Translational Research Strategy to Increase Youth Access to Quality Services in India

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Abstract

To address India's workforce development challenges (e.g, high unemployment rates, need for workforce skills, and limited awareness of career pathway opportunities), this paper explores evidence-based career and workforce development strategies that align with the National Education Policy (NEP) 2020 goals to transform career development programs in India. A translational research approach is proposed as a strategy for mobilizing collective interest and engagement in adopting and implementing evidence-based career and workforce development programs and services. International evidence-based frameworks, including the Gatsby Benchmarks, OECD recommendations, and individualized career plans, are described as examples to consider. It is recommended that the Indian government consider allocating resources to establish regional coordinating councils consisting of a cross-sector of education agencies, NGOs and industry and business leaders. The council's activities include gathering regional labor market information, creating communication materials to create a shared understanding of current education and employment outcomes, and designing culturally and regionally responsive career and workforce development programs and services. It is also recommended that access to career and workforce development programs and services can be improved by gathering and providing professional development to career mentors that include classroom educators, employers, and families.

Keywords: skills gap, translational research, capacity building, benchmarking outcomes

Introduction

India has over 50 million unemployed individuals (Shastri et al., 2022). A range of contributing factors include the impact of technological advancements and automation leading to job displacement (Bonsay et al., 2021; Merola, 2020), high growth rate of the population, the lack of job opportunities, inefficiencies of the public sector (Sinha, 2022), low level of formal educational attainment, untapped potential in informal labor markets (Djidonou & Foster-McGregor, 2022), policy inefficiencies, and a lack of job-oriented education system (Singh et al., 2020). While the lack of access to formal education or vocational training leads many individuals to be unaware of their skills and competencies (Pilz et al., 2015), conversely, rapid population growth

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generates a surplus in the labor supply that exceeds the availability of jobs in the workforce (Sinha, 2022). Other challenges include upskilling India's dominant informal sector (Pilz et al., 2015), enacting policies without considering capacity and infrastructure considerations (Sundararasan, 2022), and mismatches between skills and competencies being taught in education and workforce skills needed in industry (Mehrotra et al., 2014). India's career and workforce development policies indicate a need for more attention to industry needs, more focus on training quality and expected outcomes, and stronger integration with formal education (Batra, 2009).

To address these challenges, Lysetty et al. (2022) encourage stronger investment in employability skills through developing skill development modules and training programs to meet India's current and emerging labor market opportunities. In designing career and workforce readiness programs and services, it is important to consider efforts that help educators, families, and students identify talent and skills and the alignment of these talents and skills with both the formal and informal job markets. Further, it is important to increase knowledge about the many ways in which students' skills transfer into a wide range of occupations so that families can assess a wider range of high-demand, high-wage opportunities before encouraging specific pathways for their children (Dani & Desai, 2018). In sum, important considerations for improving India's career and workforce development include efforts that develop capacity among educators, families, and students to focus on employability skills and exploration of occupational pathways that align with those skills (Batra, 2009; Chakrabarty, 2019; Chand et al., 2018; Mehrotra et al., 2014).

Using Translation Science to Encourage Adoption and Implementation of Effective Career and Workforce Development Policies and Practices

There is strong evidence confirming the positive impact of quality career and workforce development programs and services on academic and future employment outcomes (Gatsby Charitable Foundation, 2014; Mann et al., 2021; Solberg, 2019). Based on several longitudinal datasets collected from around the world, Mann et al., (2021) verify the increase in future wages for youth who participate in quality career development activities that are facilitated by caring and encouraging educators and employers. The challenge is identifying ways that enable education agencies and youth-serving organizations to adopt and build their capacity to effectively implement evidence-based programs and services. A relatively new branch of research, referred to as translational science, has emerged to address these challenges (Faupel-Badger, et al., 2022; Woolf, 2008). To support education agencies and youth-serving organizations to implement new innovative practices, the evidence base needs to be translated in such a manner as to encourage the adoption of the practices as well as investment in the professional development needed to effectively implement the practices (Faupel-Badger, et al., 2022; Woolf, 2008). Translational research prioritizes actively engaging practitioners and community members, aiming to "translate" and implement research findings in practice (Mitchell, 2016). Translational research strategies involve several key steps: 1) framing the need to invest in career and workforce development policies and practices in a way that generates collaboration and encourages engagement among stakeholders, 2) reviewing and analyzing findings from intervention studies to identify effective evidence-based practices, 3) translating these evidence-based practices into accessible and scalable resources like classroom lessons, practice briefs, and implementation policies, 4) offering professional development and user-centered design feedback from initial implementation efforts, and 5) conducting evaluative research to examine implementation outcomes and user experiences (Mendel et al., 2018; Olswang & Prelock, 2015; Woolf, 2008).

Framing the Need to Invest in Career and Workforce Development

To encourage interest in adopting evidence-based career and workforce development strategies, it is important to bring awareness about the need to invest in career and workforce development policies in ways that create a shared perspective among policymakers, educators, industry and business, and families. This can be accomplished by preparing communication materials regarding employment and wage-earning outcome data and including evidence on how these outcomes can be improved by investing in quality career and workforce development practices (e.g., Solberg, Park, et al., 2023). One important outcome indicator within the Indian context is the percentage of youth and young adults who are "not in education, employed or training" (NEET). Data from the Multiple Indicator Survey - NSS 78th Round Report (2020-21) indicates that the NEET rate is 32.9% overall with 15.4% of men and 51.7% of women between the ages of 15 to 29. Another important outcome indicator is the number of students who have access to career advisors. Presently, over 93% of Indian schools do not have dedicated career counsellors (Kohli, 2021). The latest estimate shows that India has the largest student population of 350 million students and needs at least 1.4 million career counsellors to maintain a globally acceptable student-to-school-counsellor ratio of 250-1 (Khandelwal, 2023). An example from the United States is the Coalition for Career Development Center's annual Condition of Career Readiness report which reports a range of education and workforce outcomes including graduation rates, postsecondary participation, employment rates, and future wage earnings (Solberg et al., 2024). This report offers summative outcome data with examples of effective career and workforce development efforts that will improve the economic outcomes of youth and adults. In addition to the NEET rate for each of the 50 states, the report includes secondary and postsecondary education outcomes and median hourly wages for adults and describes a range of efforts designed to improve youth transition to employment.

Translating Evidence Into Practice

To further encourage the adoption of new career and workforce development practices, it is also important to gather and translate evidence-based practice into culturally relevant consumable products that educators can incorporate into classroom and community settings and provide the professional development needed to effectively implement these practices. To translate NEP 2020 recommendations into actionable practice, it is important to consider how to make these practices both culturally relevant and responsive to regional workforce needs. One strategy is to establish regional coordinating councils consisting of a cross-sector of stakeholders from education, health and human services, non-government organizations, and industry and business leaders. In addition to identifying regional workforce development needs, coordinating councils should consider ways to increase access to quality career advising by mobilizing efforts to enlist and extend professional development to career mentors or coaches that include but are not limited to teachers, educators, employers, non-profit organizations, parents, families, and communities. An example includes the New North initiative in Wisconsin that mobilized industry and education sectors to create connected learning and internships that align with their regional high-demand opportunities (New North, 2023). To design effective implementation policies and practices, coordinating councils can consider adopting important evidence-based strategies such as those found in the Gatsby Career Benchmarks (Gatsby Charitable Foundation, 2014), recent OECD research on key mechanisms that improve youth transition to employment outcomes (Mann et al., 2021), and use of individualized career plans (Solberg, 2019).

Evidence-based Benchmarks for Designing Quality Career Development Policies and Practices

The Gatsby Charitable Foundation's 2014 report "Good Career Guidance" outlines eight evidence-based benchmarks to ensure quality career development and guidance in secondary schools. These benchmarks include: developing strategic leadership with a stable career strategy; using career and labor market information to understand options; identifying student needs; linking curriculum to careers; facilitating workplace exposure; providing first-hand work experiences; enabling encounters with higher/further education providers; and offering one-on-one career guidance (Gatsby Charitable Foundation, 2014). These benchmarks call for collaboration across systems and stakeholders to equip students with the experiences, knowledge, and support required to make informed career decisions.

These benchmarks align well with NEP 2020 priorities such as integrating vocational education, providing exposure to various career paths, and encouraging the development of soft skills. Borrowing from the UK benchmarks to update current Indian practices could provide a framework to achieve NEP goals for enhancing career readiness. For example, Benchmark 4 focuses on linkages between schools and local employers which connects with NEP 2020 aims to align education with skills needed for the 21st century economy through community involvement. Benchmark 1 encourages strategic career planning aligned to local market trends and is directly addressing NEP 2020's recommendation for forward-thinking and pragmatic career advising. Establishing regional coordinating councils would need to adapt and align the Gatsby benchmarks to NEP 2020 to ensure that the design of career and workforce development practices are culturally relevant and responsive to local Indian business and industry needs.

Preparing Youth for the Post-Pandemic Labor Market

The OECD's "Career Ready" report offers several evidence-based career and workforce development practices that regional coordinating councils can consider when striving to increase future employment and wage earnings, especially for youth from historically underrepresented groups and individuals with disabilities (Mann et al., 2020). Recommendations include: increasing exposure to the world of work; integrating career-related lessons across curricula; fostering mindset shifts towards focusing on skill-building as opposed to immediate employability; leveraging technology in program design; facilitating networks between schools, employers, higher education, and community partners; developing educator capacity for quality career education and advising; implementing career information campaigns; and tailoring approaches to meet the unique needs of youth from historically underrepresented backgrounds and individuals with disabilities.

Several priorities from the OECD report connect directly to NEP 2020 such as the need to ensure that vocational training aligns with regional workforce needs, adopting a skills-based curriculum, establishing community partnerships to increase access to work-based learning opportunities, and increasing equitable access to quality career and workforce development programs and services. For example, increasing access to diverse work exposure opportunities and networks between industry, schools, and higher education institutions aligns with NEP 2020 goals to encourage employers and educators to make coordinated efforts in enhancing experiential learning. Recommendations to increase access to quality career mentoring also resonate with NEP 2020 mandates for teacher training reforms and increasing access to career counselors in schools. Additionally, emphasizing career readiness for youth from historically underrepresented backgrounds and individuals with

disabilities intersects with NEP 2020's social justice and equity focus. The report stresses utilizing technology when strengthening career development policies and programs, enabling fact-based fine-tuning aligned to India's localized needs.

Implementing Individualized Career Plans

Implementing Individualized Career Plans (ICP) aligns seamlessly with NEP 2020's core principles. ICPs consist of a sequence of self-exploration, career expiration, and planning activities that are organized around a scope of grade-specific career readiness learning objectives (Boston Public Schools, 2023; Solberg, 2019). Ideally, commencing no later than middle school, ICP activities are facilitated by ICP Coaches/Mentors and enable youth and families to become proactive in navigating learning and workforce development opportunities aligned with their skills, strengths, specific goals, and future aspirations. In the Indian context, many stakeholders can be trained to become coaches and mentors to facilitate ICP with students. Training stakeholders is crucial because of the variations in geography, culture, language, and education systems across different regions of India. Utilizing professionals from the local community with field experience proves to be the most effective approach for delivering interventions to students in these diverse contexts. Quality ICP programs include activities emphasizing career exploration that is well-informed by regional labor market projections, and developing goal-setting skills for short-term academic, career, and personal objectives, and engagement in activities that foster career management and planning skills. Quality ICP programs also include activities focused on future academic planning that help students identify learning pathways that include high school and early college courses as well as a range of post-high school goals (e.g., training, certification, two-year, and four-year options). Quality ICP programs also encourage families to be an integral part of the ICP process and provide ideas for ways they can participate in exploration and planning (e.g., Pewaukee School District, 2023).

Enlisting Career Mentors and Coaches

India's NEP 2020 underscores the significance of expanding access to career advising. Assuming the costs of adding multiple certified school counselors throughout Indian schools are prohibitive, quality career and workforce development programs advocate for school educators and employers to "facilitate" exploration and planning activities by serving as caring and encouraging career mentors or coaches. OECD reports that young adults who recall meaningful career conversations with educators and employers in secondary school are more likely to be employed and earn higher wages (Mann et al., 2020). As a translational research strategy, the ICP curriculum should offer resources and access to career technology such that the activities can be implemented with little or no formal training (e.g., Jaques & Solberg, 2023). Given Indian family's active involvement in their children's career decision-making (The Economic Times, 2015), it is imperative that they also receive access to resources that enable them to become effective career mentors.

With access to professional development and career technology for prospective mentors, there are several exploration activities that educators, employers, and families can perform such as expanding awareness of future occupational pathways, establishing future life and occupational goals, and exploring the skills and training needed to pursue those goals. Research indicates that, on average, more than 90% of Indian students can identify seven career options (Chakrabarty, 2019). While some skills such as interpreting assessments may need support from certified career advisors (Dani & Desai, 2018), with curriculum and access to career technology, mentors can engage in meaningful career conversations (e.g., Colorado Department of Education, 2023) and facilitate activities that enable youth and their families to become aware

of how their talent and skills can transfer into a wide range of occupational pathways (e.g., Interstate Renewable Energy Council, 2023).

Conclusion

In conclusion, India faces critical workforce development challenges of high unemployment, skills gaps, and limited career awareness that require coordinated efforts on multiple fronts to address. Translating evidence-based practices into localized policies and programming could significantly advance India's aims under the National Education Policy 2020 to transform career guidance. The Gatsby Benchmarks, OECD recommendations, and individualized career plans offer practical evidence-based strategies for designing quality career and workforce development programs and services. It is recommended that establishing regional coordinating councils could provide leadership in adapting these strategies for their local Indian context. In sum, using translation science as a framework for communicating the urgency of investing in NEP 2020 career and workforce development recommendations and creating consumable curriculum and career technology that can be facilitated by career mentors offers a viable pathway for India to increase equitable access to quality programs and services while also aligning education and training to meet local workforce needs.

About the authors

V. Scott H. Solberg, Ph.D., is a Professor at the Boston University Wheelock College of Education and Human Development. Dr. Solberg is working internationally and nationally on the design, implementation, and evaluation of effective career development programs and services for especially high-need youth populations, including youth with disabilities. His recent book "Making School Relevant with Individualized Learning Plans: Helping Students Create Their Own Career and Life Goals" was published by Harvard Education Press. He is also the author of ScholarCentric, a resiliency program available from Graduation Alliance, co-editor of the "Handbook of Career and Workforce Development: Research, Practice and Policy" from Routledge, and co-editor of "Careers for Students with Special Educational Needs: Perspectives on Development and Transitions from the Asia-Pacific Region" from Springer.

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