

University of Massachusetts Boston

Think College Transition (TCT)

DID TCT IMPROVE THE JOB SKILLS, CAREER READINESS, AND SELF-DETERMINATION OF STUDENTS WITH INTELLECTUAL DISABILITIES OR AUTISM?

Project Overview

THE PROBLEM: What Challenge Did the Program Try to Address?

Only 11% of high school students with intellectual disabilities and autism (ID/A) go on to attend college, with the result that they have the poorest college and employment outcomes of all disability groups. Many of these students remain in high school and receive special education services until they are 21. During their last two to three years in high school, students with ID/A tend to participate in self-contained or segregated life-skills or vocational programs. This does little to support their successful transition into adult life, with the majority of these students leaving high school and entering sheltered employment and day habilitation. To address these circumstances, the Institute for Community Inclusion at the University of Massachusetts Boston received an i3 development grant¹ (2014–2018) to implement and evaluate Think College Transition: Developing an Evidenced-based Model of Inclusive Dual Enrollment Transition Services for Students with Intellectual Disabilities and Autism.²

THE PROJECT: What Strategies Did the Program Employ?

UMass Boston's Think College Transition (TCT) program provided an innovative approach to transition services for students with ID/A. It did so by having these students participate in a dual enrollment program where they participated in inclusive academic and social activities with same-aged peers on a college campus instead of continuing to only receive transition services in a high school environment. Students were fully included in all aspects of college life and received supports as needed. The TCT impact evaluation used a quasi-experimental design to compare three cohorts of students with ID/A participating in the program at three universities in Massachusetts with three cohorts of students with ID/A participating in typical transition services through their school districts.

¹ Development grants provide funding to support the development or testing of novel or substantially more effective practices that address widely shared education challenges. All i3 grantees are required to conduct rigorous evaluations of their projects. The quality of evidence required to demonstrate a project's effectiveness depends on a project's level of scale or grant type.

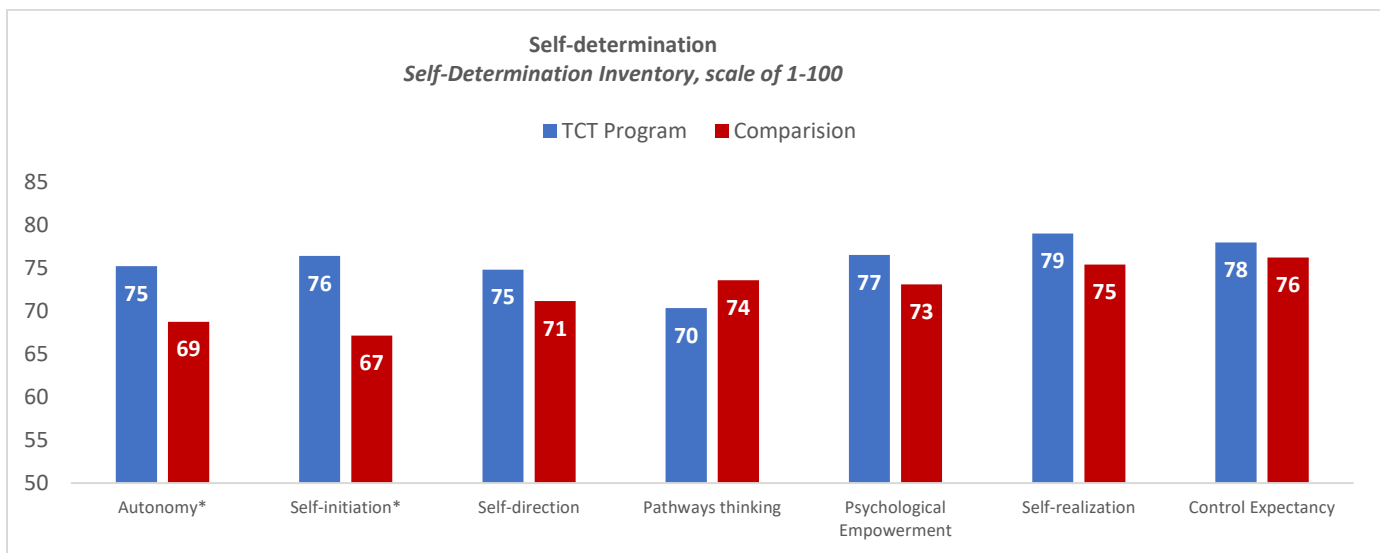
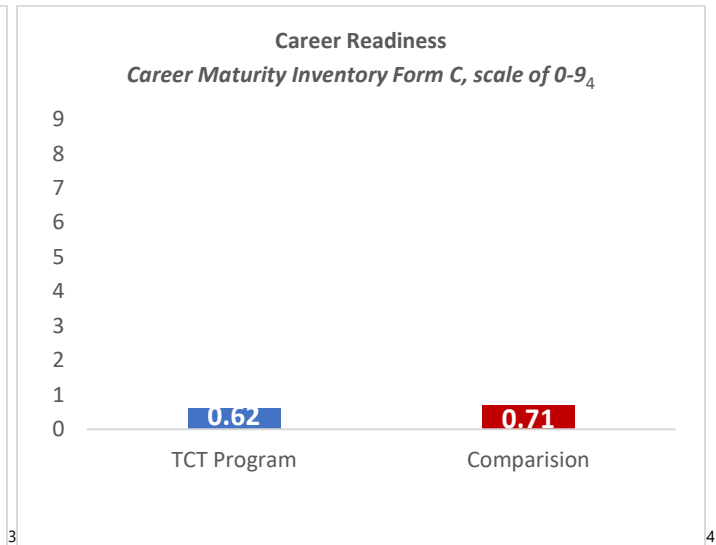
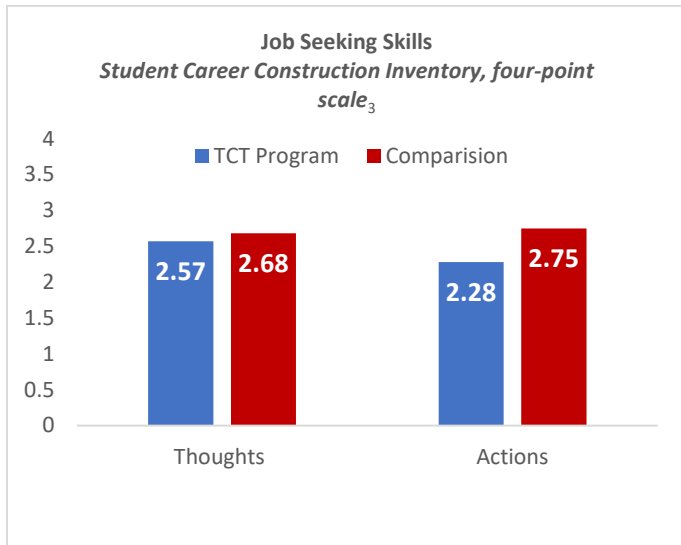
² University of Massachusetts Boston received an i3 development grant supported by the U.S. Department of Education's Investing in Innovation program through Grant Number U411C130149.

THE THINK COLLEGE TRANSITION MODEL

- **Staff Training.** Both high school and college staff involved in the program received training and technical assistance in the skills and knowledge needed to implement the model. Administered through a series of workshops, the training and assistance focused specifically on identifying, evaluating, and revising relevant policies; developing a work-based learning plan; selecting, training, and supervising a coordinator of peer mentoring; implementing person-centered planning by identifying student goals and outcomes; providing access to academic classes, supports, accommodations, and advising; and promoting and supporting college campus and community navigation and engagement.
- **Student Activities.** Activities for students included person-centered planning, enrollment in college courses aligned with their career interests, participation in employment opportunities, and assignment of peer mentors and/or instructional coaches. More specifically, students were expected to enroll in institutes of higher education for at least one year; participate in person-centered planning at least once per year; take part in regular check-ins about their goals two to three times per semester; have agreements in place regarding the type and frequency of support plans; enroll in and complete college courses of their choosing; take part in career services offerings; and participate in paid internships and/or obtain integrated competitive employment related to their career goal.
- **Collaborative Partnerships.** The program fostered collaborative partnerships between school districts, institutions of higher education, and local partners. In doing so, it promoted understanding of TCT and its anticipated outcomes, clarified who would be responsible for each TCT component, and advanced a common understanding of and commitment to TCT's goals.

Summary of Results

DID TCT IMPROVE THE JOB SKILLS, CAREER READINESS, AND SELF-DETERMINATION OF STUDENTS WITH INTELLECTUAL DISABILITIES OR AUTISM?



*Findings are statistically significant

³ Job-seeking skills was measured via a modified version of the Student Career Construction Inventory (SCCI). The SCCI contains 17 questions regarding specific job-seeking skills, such as using the Internet to search for jobs. Responses were measured on a four-point scale.

⁴ Career readiness was measured via a modified version of the Career Maturity Inventory Form C – Screening Form. The CMI-C Screening Form scale is unidimensional based on a factor analysis of the 10 items. The modified CMI-C contained nine items dichotomously measured. A student's career maturity was the sum total of the responses, ranging from 0 to 9. A higher score represents higher levels of career maturity.

Focusing on all three cohorts of students in the program, the main analysis indicated that TCT had statistically significant and substantively important positive effects in sub-domains of the self-determination inventory. However, the analysis also indicated that the program did not have a significant impact on students' job-seeking skills or career readiness.

- **JOB SEEKING SKILLS.** TCT did not have a statistically significant impact on participants' job-seeking skills. The effect sizes of the differences between the intervention and comparison groups were also not substantively important at less than 0.25 standard deviations.
- **SELF-DETERMINATION.** TCT had a positive and statistically significant impact on two sub-domains of self-determination – volitional action and self-initiation. In addition, the effect sizes for nine out of the 10 self-determination sub-domains were substantively important. Only the pathways thinking sub-domain was not substantively important, with an effect size of 0.23.
- **CAREER READINESS.** TCT did not have a statistically significant impact on participants' career readiness. Both groups scored very low – below 1 on a scale of 0-9.

SECONDARY FINDINGS

The evaluation also looked at a number of exploratory outcomes, examining whether just one or two years of participation in TCT led to higher growth over time in the key dependent variable measures relative to the comparison group.

- **JOB SEEKING SKILLS.** One year of participation in TCT did not lead to higher growth over time in levels of job-seeking skills compared to students who received typical transition services. Two years of TCT participation did not produce higher levels of these skills relative to students with one year of TCT participation.
- **CAREER READINESS.** One year of participation in TCT did not lead to higher growth over time in levels of career readiness compared to students who received business as usual services. Two years of TCT participation did not produce higher levels of career readiness relative to students with one year of TCT participation.

- **INTEGRATED PAID EMPLOYMENT.** Twelve of the 19 students who exited TCT during the evaluation agreed to take part in a phone interview six months later in order to inquire about their job status. Since these 12 students included 10 intervention group participants and two from the comparison group, the sample size was too small and disproportionate to conduct an analysis for this research question.
- **SELF-DETERMINATION.** Compared to students receiving typical transition services, one year of participation in TCT led to higher growth over time in the self-determination sub-domains of autonomy, self-initiation, psychological empowerment, and self-realization. TCT participants had significant growth compared to non-TCT participants from baseline to the end-of-the-year, though the effects for the psychological empowerment and self-realization sub-domains were not statistically significant.
- **COLLEGE SELF-EFFICACY.** Analyzed solely as an exploratory outcome, students with two years of participation in TCT did not have higher levels of college self-efficacy compared to those with one year of participation.

OTHER CONSIDERATIONS

The study reported on the degree of implementation of the core program components, as well as some limitations to the study that may have shaped the impact evaluation results.

- **IMPLEMENTATION: STAFF TRAINING.** The target goal for implementation of the technical assistance (TA) workshops each year was having at least 75% of sites have 75% of site participants attend 75% of the TA workshops. This target was not met in any of the three years of implementation. On the other hand, the workshops still had considerable breadth of attendance, as at least one staff member – and often two or more – consistently attended the workshops each year in 14 of the 21 intervention districts.
- **IMPLEMENTATION: COLLABORATIVE PARTNERSHIPS.** Implementation of the collaborative partnerships was tracked via formal signed documentation and regular meetings. The target goal of 50% of the sites having high implementation was met in each of the three implementation years.

- **IMPLEMENTATION: STUDENT ACTIVITIES.** The student activities were implemented with fidelity in each year of the program, with 100% of sites reaching high implementation in the second and third years.
- **LIMITATIONS.** One limitation to the study is the holistic nature of the intervention. Students with ID/A had opportunities to engage in academic classes, college social life, institutional supports, and employment alongside their peers. This approach made it difficult to determine which aspects of the intervention had the greatest impact, whether one aspect alone was sufficient, or if the holistic approach was necessary. In addition, the job skills and career readiness instruments were modified by the researchers and may not have captured the true impact of the intervention on these two outcomes. Other limitations included the small sample size and the fact that TCT and comparison students came from the same districts and were supported by the same staff members, so comparison students may have been exposed to aspects of the program.

Please see Appendices B and C for information about the evaluation's design and the quality of the evidence, respectively.

For More Information

Evaluation Reports

[Final Evaluation Report](#) (Education Development Center, December 2018)⁵

⁵ The information and data for this result summary was collected from the most recent report as of 01/30/2020: Education Development Center (2018). *Think College Transition: Developing an Evidenced-based Model of Inclusive Dual Enrollment Transition Services for Students with Intellectual Disabilities and Autism*. Retrieved from https://thinkcollege.net/sites/default/files/files/TCT_final_evaluation_report_2019.pdf

Appendix A: Students Served by the Project⁶

GRADE(S) ⁷													
PK	K	1	2	3	4	5	6	7	8	9	10	11	12

GENDER

RACE/ETHNICITY

COMMUNITY

Not Reported

Not Reported

Not Reported

HIGH-NEED STUDENTSⁱ

Free/Reduced-Price Lunch	English Learner	Students with Disabilities
N/A	N/A	N/A

⁶ These data reflect the entire student population served by the intervention, not just the evaluation sample used in the impact study.

⁷ To be eligible for the program, students had to be 18-22 years old, enrolled in transition services in participating school districts in Massachusetts, and have an intellectual disability or a dual diagnosis of autism and an intellectual disability. Students also could not have previously participated in a dual enrollment program.

Appendix B: Impact Evaluation Methodology⁸

RESEARCH DESIGN:

Design:	Quasi-Experimental Design
Approach:	<ul style="list-style-type: none"> The study used a quasi-experimental design to compare a set of students with ID/A participating in the TCT dual-enrollment program at Holyoke Community College, Westfield State University, and Bridgewater State University to a set of comparison students with ID/A who received business as usual transition services in their school districts. Analyzing three cohorts of students, the first two cohorts received either two years of TCT services or typical transition services, while the third cohort received either one year of TCT or business as usual services.
Study Length:	Three years

DATA COLLECTION AND ANALYSIS

Study Setting:	Twenty-one school districts in the pioneer valley and south shore regions of Massachusetts, along with three institutions of higher education
Final Sample Size:	<ul style="list-style-type: none"> <i>Intervention Group</i>: 53 students enrolled in TCT <i>Comparison Group</i>: 50 students not receiving TCT services
Intervention Group Characteristics:	<ul style="list-style-type: none"> Not reported
Comparison Group Characteristics:	<ul style="list-style-type: none"> Not reported
Data Sources:	<ul style="list-style-type: none"> Student inventories Student surveys Student interviews
Key Measures:	<ul style="list-style-type: none"> Job-seeking Skills (Student Career Construction Inventory, modified) Career Readiness (Career Maturity Inventory Form C – Screening Form) Self-determination (Self-Determination Inventory: Student Report) College Self-efficacy (College Self-Efficacy Inventory) Integrated Paid Employment (Interviews with students)

⁸ These data reflect only the evaluation sample in the impact study, not the entire population served.

Appendix C: Quality of the Evidence

WHAT WORKS CLEARINGHOUSE REVIEW⁹

STUDY	RATING
Not reviewed as of 01/30/2020	N/A

EVIDENCE FOR ESSA REVIEW¹⁰

STUDY	RATING
Not reviewed as of 01/30/2020	N/A

NATIONAL CENTER ON INTENSIVE INTERVENTIONS REVIEW¹¹

STUDY	RATING
Not reviewed as of 01/30/2020	N/A

⁹ <https://ies.ed.gov/ncee/wwc/FWW>

¹⁰ <https://www.evidencefoessa.org/>

¹¹ <https://intensiveintervention.org/>

Investing in Innovation (i3) Grantee Results Summary

Development, 2014-2018

The [*Investing in Innovation Fund \(i3\)*](#), established under section 14007 of the American Recovery and Reinvestment Act of 2009, is a Federal discretionary grant program at the U.S. Department of Education within the Office of Elementary and Secondary Education (OESE). i3 grants help schools and local education agencies work in partnership with the private sector and the philanthropic community to develop and expand innovative practices that improve student achievement or student growth, close achievement gaps, decrease dropout rates, increase high school graduation rates, and/or increase college enrollment and completion rates for high-need students.

This summary was prepared by the Education Innovation and Research (EIR) Program Dissemination Project. The project is conducted by the [*Manhattan Strategy Group*](#), in partnership with [*Westat*](#) and [*EdScale*](#), with funding from the U.S. Department of Education, [*Office of Elementary and Secondary Education*](#), under Contract No. ED-ESE-15-A-0012/0004. The evaluation results presented herein do not necessarily represent the positions or policies of the U.S. Department of Education, and no official endorsement by the U.S. Department of Education should be inferred.

ⁱ “High-need student” refers to a student at risk of academic failure or otherwise in need of special assistance and support, such as students who are living in poverty, attend high-minority schools, are far below grade level, who have left school before receiving a regular high school diploma, at risk of not graduating with a diploma on time, who are homeless, in foster care, have been incarcerated, have disabilities, or who are English learners. For more information see: [*Applications for New Awards; Investing in Innovation Fund-Development Grants, 81 FR 24070 \(April 25, 2016\)*](#).