NTACT
National Technical Assistance Center on Transition

Data-Based Decision Making Annotated Bibliography

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What is "Data-Based Decision Making" in Transition Planning?

Data-based decision making refers to collecting, analyzing, and reporting data to drive school improvement (Dahlkemper, 2002). This can apply to any level of the school from individual students to the entire system. When applied to the field of secondary transition, it refers to using data to drive decisions to improve the in-school and post-school success of secondary students, as well as the systems that support those students.

Why is "Data-Based Decision Making" in Transition Planning Important?

The use of data to not only assess performance, but also to drive decisions has numerous benefits. Hamilton et al. (2009) identified a number of these advantages. For instance, data-based decision making allows educators to prioritize their time to target the areas most needed. It allows educators to identify strengths to be built upon and weaknesses to be addressed. Further, the effectiveness of interventions can be monitored, which allows for the refinement of interventions. This includes highly local interventions such as the type of feedback given to an individual student to extremely broad interventions such as a new district policy. Therefore, the use of data-based decision making in transition planning is important to ensure transition services provided to students are effective and efficient.

References

Dahlkemper, L. (2002). School board leadership: Using data for school improvement. *National School Board Association Research Policy Brief, 2*(1), 1-4.

Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides/.

What Does the Literature Say About Data-Based Decision Making in Transition Planning?

The following sections provide a reference and brief synopsis of articles published on the topic of data-based decision making. The articles are divided into three categories based on the focus of the article. The first category, systems level, includes articles that focus on data-based decision making for an educational system (e.g., school, district). The second category, student level, focuses on data-based decision making for students. The third category, NTACT, describes the resources that can be found on the NTACT website (http://transitionta.org/dataanalysis).

Systems Level

Carlson, D., Borman, G. D., & Robinson, M. (2011). A multistate district-level cluster randomized trial of the impact of data-driven reform on reading and mathematics achievement. *Educational Evaluation and Policy Analysis*, *33*, 378-398.

- In this study researchers examined the effects of a data-driven reform initiative at the district level.
- Districts were randomly assigned to treatment and control conditions. In the experimental districts consultants from the Johns Hopkins Center for Data-Driven Reform in Education (CDDRE) worked to (a) implement quarterly benchmark assessments for students, and (b) provide extensive training on how to interpret the resulting data and use that interpretation to drive educational reform.
- Results showed significant districtwide improvements in student mathematics achievement for the CDDRE districts when compared with the control districts, but failed to show similarly significant gains in student reading achievement.

Cooley, V. E., Shen, J., Miller, D. S., Winograd, P. N., Rainey, J. M., Yuan, W., & Ryan, L. (2006). Data-based decision-making: Three state-level educational leadership initiatives. *Educational HORIZONS*, *85*, 57-64.

- This article described three cases of statewide leadership initiatives to improve data-based decision making. This included Ohio, New Mexico, and Michigan, all of which were supported by grants that were a part of the Wallace Foundation's State Action for Education Leadership Project II.
- In Ohio the project used workshops, self-paced electronic modules, and graduate coursework at the Ohio State University to develop a range of data-based decision making skills. These skills included (a) using value-added information and other data analysis methods to improve student achievement, (b) disaggregating student data, (c) monitoring yearly progress of students using value-added data reporting, (d) prioritizing the greatest need, (e) creating a

network to share information, and (f) identifying practices to raise student achievement.

- New Mexico decided to target "accountability literacy," which referred to the ability to interpret and analyze accountability data, using that data to support educational efforts across settings, and to be able to use that data to effectively advocate for students.
- Michigan targeted data-based decision making at multiple levels of leadership to establish a coalition. These levels included the governor's office, the department of education, major professional organizations, and select universities that prepared the majority of Michigan's educational administrators.

Johnson, M., & Black, B. (2012). What's going on? Analysing visual data to understand context-based decision-making processes. *International Journal of Research & Method in Education*, *35*, 243-250.

- This study examined how team leaders/supervisors gave feedback to examiners of a high stakes educational assessment.
- Researchers observed and coded how examiners navigated the observable behaviors examiners exhibited during evaluation, as well as the examiners' comments made when they viewed their own performance via video recordings.
- Results showed a stable process that included three phases (i.e., Evaluation-Diagnosis-Feedback). First the team leaders would evaluate an examiner's markings. Next they would diagnose why they thought an examiner's mark was made. Last, they would provide feedback to the examiner.

Jolivette, K., McDaniel, S. C., Sprague, J., Swain-Bradway, J., & Ennis, R. P. (2012). Embedding the positive behavioral interventions and supports framework into the complex array of practices within alternative education setttings: A decision-making process. *Assessment for Effective Intervention.* Advance online publication. doi: 10.1177/1534508412454450

- Alternative education settings often use a range of curricula, interventions, and strategies. As such, there is no guarantee the many practices are compatible or implemented in an organized manner.
- This article described a decision-making process for how the positive behavioral interventions and supports (PBIS) framework can be adopted in alternative education settings.
- After describing the framework of PBIS, the authors described several steps to facilitate adoption in alternative education settings. These steps included (a) creating an initial list of practices, (b) analyzing the evidence supporting the practices, (c) keeping the evidence-based practices, (d) dividing the remaining practices into tiers of intervention, (e) writing formal procedures for each practice, (f) creating a progress monitoring plan for each tier, (g) developing a

"menu" of tiered support and the accompanying written procedures, and (h) scheduling reviews for the menu of procedures.

Walser, T. M. (2009). Systemic data-based decision making: A systems approach for using data in schools. *Articles on Best Practice, 6*, 28-32.

- Using the Toyota Motor Corporation as an example, this article described how data-based decision making can be used on a systems level to support school leaders and educators to promote student and school success.
- They began by arguing for the need to focus on *means*, defined as internal operations, as opposed to *ends* or results. In application this means creating standards for the tasks educators perform and focusing on measures of those standards to assess systemic performance, as opposed to simply measuring external data sources such as achievement data.
- The authors acknowledged the need to use external information such as student achievement scores in advance of interventions and for monitoring results over time.

Student Level Articles

Duffy, H. (2007). Meeting the needs of significantly struggling learners in high school: A look at approaches to tiered intervention. Retrieved from National High School Center website: http://www.betterhighschools.org/docs/NHSC_RTIBrief_08-02-07.pdf.

- This article described how to implement a multi-tiered system of support, specifically Response to Intervention (RTI), to support students at the secondary level.
- After describing the RTI model as it has been applied in elementary schools, the author described several implications for using RTI in secondary schools such as the need to monitor students who enter receiving supplemental services and the fact that some academic and behavioral issues may not manifest until high school.
- Next various issues for RTI at the high school level (e.g., the need for screening and progress monitoring tools, high school appropriate interventions) were reviewed.
- Finally, RTI research that was being conducted at the time of publication and listing relevant resources were provided.

Hamilton, L., Halverson, R., Jackson, S., Mandinach, E., Supovitz, J., & Wayman, J. (2009). *Using student achievement data to support instructional decision making* (NCEE 2009-4067). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from http://ies.ed.gov/ncee/wwc/publications/practiceguides/.

- This practice guide is intended to assist teachers and administrators in their use of achievement data to make appropriate instructional decisions. The authors focused on what they refer to as common assessments (i.e., state accountability tests, commercial assessments, end-of-course tests, interim district/school level tests).
- The guide provides a framework for how to use these data, suggesting (a) multiple data sources should be used, (b) encouraging collaborative discussion among teachers regarding how to use the data to support student achievement, and (c) instructing students to monitor their own data and use it for personal goal setting.

Kashima, Y., Schleich, B., & Spradlin, T. (2009). The core components of RTI: A closer look at evidence-based core curriculum, assessment and progress monitoring, and Data-Based Decision Making. Bloomington, IN: Center for Evaluation and Education Policy, Indiana University.

- This report looked at three of the six core components of response to intervention (RTI) as described by the Indiana Department of Education. These included evidence-based core curriculum, assessment and progress monitoring, and data-based decision making. The authors described each component, address common concerns, and discussed application of that component.
- Regarding data-based decision making, after the initial description the authors described a problem-solving process to guide data-based decision making and then provided an example of its application from an elementary school.

Positive Behavioral Interventions & Supports (2015, January) *Drill down tool evaluation brief* (Evaluation brief No. 19). Eugene, OR: Eliason, B. & Morris, K.

- This brief provided an overview of the School-Wide Information System (SWIS) Drill Down Tool. The tool assists in data-based decision making by filtering a school's office discipline referral (ODR) data, which is collected via the SWIS.
- The SWIS Drill Down tool offers the ability to filter core SWIS reports into 12 categories (i.e., referral type, student/staff demographics, data/time, location, problem behavior, perceived motivation, others involved, action taken, seclusion/restraint, notes, and custom fields).
- An overview of how to use the tool is provided.

NTACT Resources

Resources for Indicator B-13: Transition Planning and Service Compliance

- The National Secondary Transition Technical Assistance Center (NSTTAC) developed an Indicator Checklist to assist states in meeting the requirements of Indicator 13. This resource was developed in consultation with the OSEP in 2006 and updated it in 2009 and 2012. The checklist includes two forms.

    - Indicator Checklist Form A is designed to meet the minimum requirements for collecting and reporting data on Indicator 13 of the Part B State Performance Plan and Annual Performance Report. It allows a school, district, or state to review the data for each item simultaneously across all postsecondary goal areas.
    - Indicator Checklist Form B is a multiple column form that meets the requirements for collecting and reporting data on Indicator 13. It also allows a school, district, or state to more deeply analyze professional development and program change needs by providing data on each item for each postsecondary goal area.
- A sample of completed checklists and case studies are provided.
- These resources are available at: http://transitionta.org/dataanalysis; then click on **State Performance Plan (SPP)/Annual Performance Report (APR) Part B Indicator Data Collection, Analysis, and Use**.

Resources for Indicator B-14: Post-school Outcomes

The National Post-School Outcomes Center created a number of resources related to Indicator B-14. These resources are organized into two categories.

- The first category is *Resources for Collecting Indicator 14 Data*. This group contains a number of products on how to establish and ensure effective methods are in place for collecting and storing Indicator 14 data. Resources include, but are not limited to, a data collection protocol, strategies for contacting hard to reach youth, a response calculator, and a training guide for interviewers.
- The second category is *Resources for Analyzing and Using Indicator 14 Data*. This contains products to assist with displaying, analyzing, and making decisions based on the collected data. Resources include, but are not limited to, a data display template, guide to writing suggestions, how to embed data in the statewide longitudinal data system, and tips for engaging parents and families.
- These resources are available at: http://transitionta.org/dataanalysis; then click on **State Performance Plan (SPP)/Annual Performance Report (APR) Part B Indicator Data Collection, Analysis, and Use**.

Core Data Tools for Dropout Prevention

- The National Dropout Prevention Center for Students with Disabilities originally developed a set of Excel-based data tools to help districts and schools organize, examine, analyze, and share their data that impact graduation and dropout rates. The tools can support a school team's work carrying out a root cause analysis of the factors that impact school completion rates. They also can inform the development and evaluation of a local intervention plan.

- Tools include: (a) the Core Dropout Data Tool; (b) additional tools for middle and high school levels focused on academics, attendance, discipline, and graduation & dropout data; and (c) a discussion guide for use of the tools.
- These resources are available at: http://transitionta.org/dataanalysis; then click on **Data Analysis, and Tools**.

Evaluation Toolkit

The Evaluation Toolkit is a resource to assist educators and service providers to improve programs.

- The toolkit is designed to help determine what is important to your stakeholders, what needs to be measured to satisfy stakeholders, what is feasible to measure, how to measure these items, and how to report, disseminate, and use your evaluation findings.
- It provides specific examples for state and local teams who are developing goals and activities to improve transition education and services for students with disabilities.
- This resource is available at: http://transitionta.org/evaltoolthirdedition

Interdisciplinary Team Planning Tool

- The Interdisciplinary Team Planning Tool was designed to assist state and local interagency teams develop strategic plans to improve secondary transition education and services.
- It walks teams through a process of a needs assessment through the development of actionable goals including clearly delineated opportunities to measure progress.
- It is an online tool that includes the capacity to house data from other sources – including some of the data displays for Part B Indicator Data from NTACT, data from the VR State Plan, as well as other sources of data relevant to transition education and outcomes (e.g., the STEPSS tool, the QI-2, the Dropout Data Tools to inform the planning process).
- This resource is available at: http://transitionprogramtool.org/

QI-2

- The QI-2 is a self-assessment instrument designed to help determine the most critical needs within a transition program, across 7 transition domains. It was developed by, and is available through, the Transition Coalition.
- This resource is available at: http://transitioncoalition.org/qi-survey-introduction/

State Toolkit for Examining Post-School Success (STEPSS)

- STEPSS is a web-based data-based decision making tool designed to support state departments of education in disseminating and using data related to

secondary transition (SPP Part B Indicators 1, 2, 13, and 14) to improve in-school transition programs for youth with disabilities.

- Developed by the National Post-School Outcomes Center, the National Secondary Transition Technical Assistance Center, and the National Dropout Prevention Center for Students with Disabilities in 2013, it continues to be updated and maintained by NTACT.
- A guide for using STEPSS is also provided. (http://transitionta.org/sites/default/files/dataanalysis/STEPSS_Facilitator.pdf)

Vocational Rehabilitation Data

- Two resources are included under Vocational Rehabilitation Data.
- The first is a PowerPoint presentation on how to use VR data sources for program improvement. The presentation comes from the National Capacity Building Institute in 2015. (http://transitionta.org/sites/default/files/dataanalysis/Using%20VR%20Data.Fabian_Neubert.pdf)
- The second resource is ExploreVR. ExploreVR a web application accessing a range of VR and related data to assist in planning, evaluation, and decision-making. (http://www.explorevr.org/)

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