



Decisions in *Motion*
IS³ Toolkit 6
Dropout Prevention

Decisions in Motion

IS³ Toolkit

Dropout Prevention

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Introduction

This toolkit is based on the six-step process that was created as part of the Iowa Safe and Supportive Schools (IS³) grant (Table 1), and applies these same six steps to focus on dropout prevention (RM Consulting and Iowa Department of Education, 2014). High school teams that have already worked through existing IS³ toolkits (improving adult-student relationships, addressing discipline, addressing bullying, setting boundaries and expectations, and improving student-student relationships) can continue using the established six-step process to address dropout prevention efforts through this toolkit.¹ Although the previous toolkits used data from the Iowa Youth Survey to create an action plan, this guide will use available school data to create an action plan focused on supporting dropout prevention efforts.

Teams should only use this guide after they have worked through at least one of the other toolkits. This toolkit assumes that the facilitator and team members are familiar with the processes and content contained in the other toolkits. We do recognize that addressing topics in the other toolkits also may support dropout prevention; for that reason, each step contains a table that references pages from previous guides that connect to dropout prevention.

| Toolkits |
|--|
| <ul style="list-style-type: none"> • Toolkit 1: Improving Adult/Student Relationships • Toolkit 2: Addressing Discipline • Toolkit 3: Addressing Bullying • Toolkit 4: Setting Clear Boundaries and Expectations • Toolkit 5: Improving Student/Student Relationships • Toolkit 6: <u>Dropout Prevention</u> |

Table 1: Six-Step Process From IS³ Grant

| Steps | Requirements to Complete Each Step |
|--|---|
| Step 1: Determining our focus | <p>The plan provides a clear description of why a focus in this area is important to the school.</p> <p>The plan lists the members of the action team and identifies the facilitator.</p> <p>The data items (incident or survey data) are clearly identified and studied in the focus area.</p> |
| Step 2: Describing the “story” behind our data | <p>The plan provides a clear hypothesis of the “story behind our data” by proposing additional data to gather from students/staff, including why these data should be gathered, how to gather them, and a brief analysis.</p> <p>The results of these additional data include graphs, charts, or tables (titled and captioned) that represent the additional data.</p> <p>The plan describes the change that is needed and summarizes the change using a “from” _____ “to” _____ statement.</p> |

¹ These toolkits and other resources are available at <https://www.educateiowa.gov/dropout-prevention>.

| Steps | Requirements to Complete Each Step |
|--|---|
| Step 3: Selecting our strategy | <p>The plan clearly describes the strategy (or strategies) that will be used to address the change that is needed.</p> <p>The plan clearly explains how/why the selected strategy has the potential for achieving the change that is needed.</p> |
| Step 4: Detailing our actions | <p>The plan lists action steps in sufficient detail so that anyone reading the plan would understand what to do.</p> <p>The plan clearly describes when the action steps will occur and who is responsible for completing the steps.</p> <p>The plan clearly specifies the resources and corresponding costs needed to complete each action step.</p> |
| Step 5: Ensuring adults are doing what they need to do | <p>The plan clearly specifies evidence of success for consistency and quality of implementation.</p> <p>The plan clearly specifies methods for implementation data collection, including how, when, and who.</p> <p>The plan clearly describes how the implementation data gathered will be used to make adjustments to the action plan.</p> |
| Step 6: Knowing if we've made a difference | <p>The plan clearly specifies methods for monitoring the effect of the strategies on students.</p> <p>The plan clearly specifies methods for results data collection, including how, when, and who.</p> <p>The plan clearly describes how the results data gathered will be used to make adjustments to the action plan.</p> |

Student Identification

One common way of thinking about all of your students is to categorize them into one of the following categories: old and far, old and close, young and far, and young and close (Rennie-Hill, Villano, Feist, & Legters, 2014). In this framework, the “old” students are multiple years older than their peers while the “young” students are a similar age to their peers. Students are either “close” to graduating (on-target) or are “far” from graduating (at risk of not graduating). In the field of dropout prevention, many educators are using attendance, behavior, and course performance data to support the identification of “young” students who may be at risk of not graduating from high school.

In order to identify those students who are at risk of dropping out, you will need to define these categories more fully. Table 2² offers an example of how to do so, but it is likely that you will need to customize these categories to fit your specific situation and school.

² Adapted from Jobs for the Future’s table, found at <http://www2.ed.gov/programs/dropout/earlywarningindicators.pdf> (Jobs for the Future, 2014, p. 28).

Table 2: Sample Organization of Student Population

| Category | Age | Distance to Graduation |
|-----------------|---------------|---|
| Young and close | 17 or younger | Has enough credits to graduate within 1 year |
| Young and far | 17 or younger | Few credits; at least 2 years from graduation |
| Old and close | 18 or older | Has enough credits to graduate within 1 year |
| Old and far | 18 or older | Few credits; at least 2 years from graduation |

In an intentional effort to think about all students, this guide uses the four categories of students listed above. Each step of the IS³ toolkit includes supporting information that applies to dropout prevention efforts. The facilitated processes outlined in the IS³ toolkit remain the same unless otherwise noted below. Many of the examples and handouts in the other existing toolkits can be used to support dropout prevention, and therefore are not replicated here. Appendix A contains handouts that can be used with school teams as participants work through the guide.

Step 1: Determining Our Focus

Outcomes

- The plan provides a clear description of why a focus on this area is important to the school.
- The plan lists the team members and facilitator.
- Data items (incident or survey data) are clearly identified and studied in the focus area.

In order to ground your team in the conversations that follow, you can first take some time to make predictions about your data, as the data are the focus of this step. A few prediction questions that your team might want to answer include the following (also on Handout 1):

How many students do you think dropped out of last year’s graduating class (compared with the freshmen cohort)?

What percentage of your student population would you place in each of the following categories?

- Old and far
- Old and close
- Young and far
- Young and close

As you review your team membership, ensure that you have staff that might have information about the “old” students; this might mean including someone from outside of the school.

Tips for Developing a Plan

Dropout is a preventable student outcome. Before we can effectively prevent future dropout, it is important to be retrospective. Why has dropout occurred in the past? For the future, what are the best measures we can take to prevent future dropout? How can we develop a strong team to analytically investigate this?

Toolkit References

Form an Action Team

- Toolkit 1, pp. 6–8, 10.

Select a Facilitator

- Toolkit 1, pp. 11–13

Explain the Context

- Toolkit 1, pp. 6–8, 10

Select a Focus

- Toolkit 1, pp. 28–32

Handout Reference

Handout 1

- Big Picture: Predictions vs. Actual Data

First, understand which people would be best suited to work on and lead this plan, given their knowledge, strengths, and weaknesses. Create a list of team members and appoint a team leader.

Next, with the data that you’ve been given, look at your dropout rates. Take the time to look at your data, and then start to think about hypotheses.

- Are there other patterns you notice?
- How many credits do students have who have dropped out (the “close/far” discussed above)?
- What age are students who have dropped out (the “old/young” discussed above)?

Think out of the box! Are there other patterns that you may think exist, but you don’t have enough data to show them? Are there some students who may fall into one demographic, but for others it’s much less clear? Make note of all of these patterns. These will become your hypotheses and will be important as you move forward.

| Step 1: Additional Resources | |
|--|---|
| High School Early Warning Intervention Monitoring System Implementation Guide | <p>A guide for implementing an early warning system for high school students at risk of dropping out</p> <p>Therriault, S., O’Cummings, M., Heppen, J., Yerhot, L., & Scala, J. (2013). <i>High school early warning intervention monitoring system implementation guide</i>. Washington, DC: National High School Center, American Institutes for Research. Retrieved from http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSHImplementationguide2013.pdf</p> |
| Middle Grades Early Warning Intervention Monitoring System Implementation Guide | <p>A guide for implementing an early warning system for middle school students at risk of dropping out</p> <p>Therriault, S., O’Cummings, M., Heppen, J., Yerhot, L., Scala, J., & Perry, M. (2013). <i>Middle grades early warning intervention monitoring system implementation guide</i>. Washington, DC: National High School Center, American Institutes for Research. Retrieved from http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSMImplementationguide.pdf</p> |
| Institutionwide Project Planning Toolkit | <p>A guide for implementing facilitywide strategies that improve services for all students</p> <p>The National Evaluation and Technical Assistance Center for the Education of Children and Youth who are Neglected, Delinquent, or At-Risk. (2013). <i>Institutionwide project planning toolkit</i>. Retrieved from http://www.neglected-delinquent.org/resource/tool-institutionwide-project-planning-toolkit</p> |

Step 2: Describing the “Story” Behind Our Data

Outcomes

- The plan provides a clear hypothesis of the “story behind our data” by proposing additional data to gather from students/staff, including why these data should be gathered, how to gather them, and a brief analysis.
- The results of these additional data include graphs, charts, or tables (titled and captioned) that represent the additional data.
- The plan describes the change that is needed and summarizes the change using a “from” _____ “to” _____ statement.

In order to create an action plan that best supports your students, your team will need to review data that help you understand not only the symptoms of dropout, but also the causes. You’ve done some of this in the last step by identifying patterns you noticed for students who dropped out. You may have noted that many students who had low attendance ultimately dropped out. In this step, we’ll take those observations and form them into hypotheses. For instance, if a student dropped out of school due to low attendance, the low attendance is just a symptom of what was happening, but not necessarily the cause. Perhaps after digging down into the data further, your team learns that the student wasn’t able to attend school due to transportation-related issues (i.e., he or she moved and no longer had access to school transportation). Lack of transportation then becomes a hypothesis for (or a developed cause that may ultimately result in) dropout.

As was mentioned in the previous step, this step may require additional data than what might be readily on hand at the school. For students who are young and close (still enrolled in school), schools are frequently examining attendance, behavior, and course performance data to determine which students are at risk of not graduating.^{3,4}

Handouts 2–5 in Appendix A are organized to help your team through the process of reviewing your data, identifying the types of additional data to explore, and conducting a root-cause analysis.

Reviewing Your Data

As your team begins to review your data, the questions below may be helpful to guide the conversation. You may not need to think about all of them, but considering each at least briefly may help in understanding the data.

- How do your data compare with the predictions made in Step 1 (Handout 1)?
- What do the data say across levels (schools, groups of students, individual students)?
- What patterns begin to emerge within your data?

³ <http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSHSImplementationguide2013.pdf>.

⁴ <http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSMGIImplementationguide.pdf>

- Which groups of students most concern you (old and far, old and close, young and far, young and close)?
- Are there subgroups of students that concern you the most?
- What do you know about these students or groups of students?
- What initial theories or ideas might explain why they are at risk?
- What data are you currently collecting that can support dropout prevention?
- What additional information could you collect to better understand underlying causes of risk?

Toolkit References

Creating Student Surveys

- Toolkit 1, pp. 36–37

Using Survey Data

- Toolkit 1, pp. 38–39

Creating Charts/Graphs

- Toolkit 1, p. 29

Identifying Additional Data to Explore

As your team thinks about additional data that should be collected to provide further information about students, one way of organizing data is to think about short-, medium- and long-term data sources.

Short-term data might be collected on a daily, weekly, or monthly basis, and usually by a teacher. These data are formative in nature and tend to drive instructional decisions.

Medium-term data are collected three or four times a year and can provide information about whether a student is on track to meet established goals. Common medium-term data would be district benchmark assessments administered three or four times a year.

Long-term data are collected once or twice a year. These data are too infrequent to use for instructional programming decisions, but instead are considered summative data, often used to evaluate an intervention or program. Handout 4 contains a graphic organizer to help identify short-, medium-, and long-term data that could be used as your team works through this step of organizing and reviewing the types of data you might have by answering the following questions:

- Are there gaps in the data you have available?
- How will additional data be collected?
- What have you learned from these new data or evidence?
- What do you know/believe is the likely cause(s) of risk?
- What do student(s) need (define the problem to be solved)?

Root Cause Analysis

Now that you have identified patterns in the data and proposed additional data to discover, it's time to understand the "root of the issue," or the causes that explain dropout. There are many strategies that could be used in order to determine the underlining causes, including those listed in the IS³ guide. Another process that might be useful is to conduct a root cause analysis. This process will help you identify root causes of dropout. Handout 5 contains information that can be used to go through the root cause analysis process.

As your team plans meetings additional time will be needed to really work through this step. This step may require multiple meetings where the team first meets to review initial data and determines additional data that are necessary to review. The second meeting might include an overview of the additional data and then begin the root cause analysis process. Depending on the meeting time, the team might need a third meeting to work through the root cause analysis process.

Tips for Developing a Plan

In the previous step, you identified patterns in the data. In this step, we're going to think in a structured, organized way about those patterns. The patterns have done most of the work: now that we've recognized them, we're going to try to uncover why those patterns have emerged. This requires thinking about the steps in these students' lives that lead to these results. Take each pattern ("The students who dropped out are always late to class...", "The students who dropped out live the farthest from school...") and think about each one *individually*. Each pattern you notice may have a different cause; now, you need to think of these causes.

| Handout References | |
|--------------------|---------------------------------|
| Handout 2 | • Reviewing Big Picture Data |
| Handout 3 | • Digging Deeper Into Your Data |
| Handout 4 | • Identifying Additional Data |
| Handout 5 | • Determining the Root Cause |

For each pattern, think about the backwards steps required to get to that result. Think "why?" "WHY do students who drop out live farthest from school?" It may be because transportation is poor. "WHY is transportation poor?" You will then need to identify which data sources can answer this question. Repeat this process five times (asking "why?", answering "why," and identifying the data source five times); this will probably require some paper, a pen, and brainstorming. Writing down your thoughts can help direct them and keep everything straight. This is a great activity to do in a group: challenge each other to really consider what could be driving these patterns. You also can think about them individually. This process will help you get to the root cause of the issue.

Sometimes, thinking about the data like this will make you think of other data you need to collect. Maybe you aren't aware of how far students live from school—these are the types of

data you can ask administrators for to help you determine root causes. Keep a list of the data you need.

Results you can expect: You may find that there are different root causes for each pattern, and that's okay. It may be that students who live the farthest away have poor transportation OR they may come from a different household demographic than other students. List and keep note of all of the root causes—each root cause you develop will be important moving forward! You also should have a list of additional data sources that you need to confirm hypotheses you may have, but aren't sure if the data tell that same story.

| Step 2: Additional Resources | |
|--|--|
| <i>Five Steps for Structuring Data-Informed Conversations and Action in Education</i> | <p>A framework for using data to make decisions within schools</p> <p>Kekahio, W., & Baker, M. (2013). <i>Five steps for structuring data-informed conversations and action in education</i> (REL 2013–001). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Pacific. Retrieved from http://ies.ed.gov/ncee/edlabs/projects/project.asp?ProjectID=360</p> |
| <i>High School Early Warning Intervention Monitoring System Implementation Guide</i> | <p>A guide for implementing an early warning system for high school students at risk of dropping out. Pages 14–20, Step 3 (Reviewing Data) and Step 4 (Interpreting Data), discuss data usage in this context.</p> <p>Therriault, S., O’Cummings, M., Heppen, J., Yerhot, L., & Scala, J. (2013). <i>High school early warning intervention monitoring system implementation guide</i>. Washington, DC: National High School Center, American Institutes for Research. Retrieved from http://www.earlywarningsystems.org/wp-content/uploads/documents/EWSHSImplementationguide2013.pdf</p> |
| <i>Dropout Prevention in Tennessee: A Planning Guide for Prevention, Intervention, and Recovery</i> | <p>A tool to support development of an action plan and creation of a diverse task force focused on dropout prevention. Pages 6–11 contain discussion questions regarding the factors contributing to dropout at your school.</p> <p>Center for Dropout Prevention. (n.d.). <i>Dropout prevention in Tennessee: A planning guide for prevention, intervention, and recovery</i>. Nashville, TN: Tennessee Department of Education, Division of College & Career Readiness, Office of Safe & Supportive Schools.</p> |
| <i>Program Manager’s Assessment Toolkit: Measuring Student Academic Performance</i> | <p>A toolkit containing resources to help educators successfully use pre- and post-assessment data in supporting students</p> <p>The National Evaluation and Technical Assistance Center for the Education of Children and Youth who are Neglected, Delinquent, or At-Risk. (2012). <i>Program manager’s assessment toolkit: Measuring student academic performance</i>. Retrieved from http://www.neglected-delinquent.org/sites/default/files/resources/toolkits/tool_prepost_practitioners.pdf</p> |

Step 2: Additional Resources

***Building-Level Tools
to Support
Identification of
Needs Related to
Graduation and
Dropout***

A presentation that lists and describes a series of tools that can support the collection and use of student data to support dropout prevention

The National Dropout Prevention Center for Students with Disabilities (NDPC-SD). *Building-level tools to support identification of needs related to graduation and dropout*. Retrieved from http://www.ndpc-sd.org/documents/NDPC-SD_Data_Tools.pdf

Step 3: Selecting Our Strategy

Outcomes

- The plan clearly describes the strategy that will be used to address the change that is needed. The plan provides a clear description of why a focus on the selected area is important to our school.
- The plan clearly explains how/why the selected strategy has the potential for achieving the change that is needed.

How to Achieve the Outcomes

Once your team has identified the root causes in Step 2, you can now determine which strategies are best suited to match the needs of your students. As you select strategies to use, make sure the team is connecting back to data discussions conducted in the previous step. In addition to reviewing your own data, it is important to use strategies that have a research base to support the outcomes that you are hoping to replicate.

There are a number of resources advertised to support dropout prevention; choosing strategies that match the needs of your students is critical. Knowing where to access information about research on the various strategies can help you select appropriate strategies for your school.

| Toolkit References | |
|---|------------------------|
| How to Select a Strategy | • Toolkit 1, pp. 43–46 |
| Improving Adult-Student Relationships | • Toolkit 1, pp. 18–24 |
| Addressing Discipline | • Toolkit 2, pp. 18–30 |
| Addressing Bullying | • Toolkit 3, pp. 18–28 |
| Setting Expectations | • Toolkit 4, pp. 18–26 |
| Improving Student-Student Relationships | • Toolkit 5, pp. 18–26 |

Each of the existing five toolkits also contains a sample plan with strategies for dealing with specific challenges that students and educators face, many of which could be helpful in addressing dropout prevention (e.g., improving adult-student relationships or addressing bullying).

Contextual Fit

One possible lens to use when selecting a strategy is the idea of “contextual fit,” which is focused on matching an intervention to the needs and values of the community in which it is being implemented.

The Office of the Assistant Secretary for Planning and Evaluation (2014) developed a useful guide, *The Importance of Contextual Fit When Implementing Evidence-Based Interventions*, which outlines this strategy. The guide provides resources and examples that help determine whether or not a specific strategy is a good contextual fit for your community and identifies eight specific elements that comprise fit. Table 3 includes guiding questions based on these eight elements that can help you match a strategy to the needs of your school.

Table 3: Guiding Questions for Eight Elements

| Element | Guiding Question |
|--|--|
| <i>Need</i> | Does this strategy meet an identified need? |
| <i>Precision</i> | Are the individual steps of the intervention clear and well defined? |
| <i>An Evidence Base</i> | Has this strategy previously produced positive outcomes with this same population? |
| <i>Efficiency</i> | Will this strategy produce concrete outcomes within realistic financial and time constraints? |
| <i>Skills/Competencies</i> | How will those leading the implementation gain necessary training to be successful? |
| <i>Cultural Relevance</i> | Does this strategy fit the values of your action team and the school population with whom you are working? |
| <i>Resources</i> | Do you know where to find the resources necessary for successful implementation of this strategy? |
| <i>Administrative and Organizational Support</i> | Does this strategy fit the values of the administration? |

Some additional discussion questions that may support your conversation on selecting a strategy include determining which pathways to a high school diploma you have for students who are:

1. Older and far from completing graduation requirements
2. Older and close to completing graduation requirements
3. Young and far from completing graduation requirements
4. Young and close to completing graduation requirements

Resources

In order to help you find the strategies that will best fit your school, this section contains several different resources that identify and describe effective dropout prevention strategies (summarized in Table 4). You also will find further support for the process of choosing a strategy in the additional resources.

Table 4: Resources to Identify Effective Dropout Prevention Strategies

| | | |
|--|---|--|
| <i>What Works Clearinghouse</i> | What: Reports on dropout prevention strategies and programs | |
| | Topics: | <p>Which programs are effective at:</p> <ul style="list-style-type: none"> • Helping youth complete school • Keeping youth in school • Helping youth progress through school <p>Research compiled on strategies such as:</p> <ul style="list-style-type: none"> • Credit recovery • Reconnecting youth • Check & Connect |
| | Where to find it: http://ies.ed.gov/ncee/wwc/ | |
| <i>Institute of Education Sciences Dropout Prevention Practice Guide</i> | What: Publication identifying six recommended dropout prevention strategies | |
| | Strategies: | <ul style="list-style-type: none"> • Use a data system to identify students who have dropped out as well as students who are at risk of dropping out • Assign adults to students who were identified as being at risk of dropping out • Provide academic support and enrichment • Implement programs to improve classroom behavior and social skills • Personalize instruction • Provide rigorous and relevant instruction to better engage students |
| | Where to find it: http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dp_pg_090308.pdf | |
| <i>Collaborative for Academic, Social, and Emotional Learning (CASEL)</i> | What: A review of effective middle school and high school social and emotional learning programs focused on five competencies | |
| | Competencies: | <ul style="list-style-type: none"> • Self-awareness • Self-management • Social awareness • Relationship skills • Responsible decision making |
| | Where to find it: http://www.casel.org/ | |

| | | |
|--|--|---|
| National Dropout Prevention Center/Network (NDPC/N) | What: Resources focused on 15 identified strategies with consistent positive impacts on dropout prevention | |
| | Strategies: | <ul style="list-style-type: none"> • Systemic renewal • School-community collaboration • Safe learning environments • Family engagement • Early childhood education • Early literacy development • Mentoring/tutoring • Service learning • Alternative schooling • Afterschool opportunities • Professional development • Active learning • Educational technology • Individualized instruction • Career and technical education (CTE) |
| | Where to find it: http://www.dropoutprevention.org/effective-strategies | |
| The Doing What Works Library | What: A series of tools and materials focused on six recommended strategies | |
| | Strategies: | <ul style="list-style-type: none"> • Robust data systems • Adult advocates • Academic supports • Social/behavioral supports • Personalized learning environments • Rigorous and relevant instruction |
| | Where to find it: http://dwwlibrary.wested.org/library/dropout-prevention | |

One free federally funded resource, the [What Works Clearinghouse](#), conducts rigorous reviews of research on various education topics. The What Works Clearinghouse (WWC) has and continues to review research pertaining to dropout prevention strategies and programs, specifically focused on completing school, staying in school, and progressing in school. Sample reports include strategies such as [credit recovery programs](#), [reconnecting youth](#), and [Check & Connect](#).

After reviewing research pertaining to common dropout prevention programs, the [Institute of Education Sciences](#) (IES) released a publication that identified the following six recommended practices (Dynarski, Clark, Cobb, Finn, Rumberger, Smink, & Gill, 2008):

1. Use a data system to identify students who have dropped out as well as students who are at risk of dropping out.
2. Assign adults to students who were identified as being at risk of dropping out.
3. Provide academic support and enrichment.
4. Implement programs to improve classroom behavior and social skills.
5. Personalize instruction.

6. Provide rigorous and relevant instruction to better engage students.

[The Doing What Works Library](#) takes these six recommendations from IES and provides a series of tools and sample materials to help educators implement these strategies.

Similar to the WWC, the [Collaborative for Academic, Social, and Emotional Learning](#) (CASEL) has conducted research reviews for social and emotional learning programs. CASEL published a review of middle and high school social and emotional learning programs in June 2015.

The National Dropout Prevention Center/Network (NDPC/N) has identified 15 strategies that “have the most positive impact on the dropout rate” (National Dropout Prevention Center/Network, [2015](#)). These strategies are listed in the modified supplemental amount dropout prevention application in previous years (previously MAG-DOP). More information regarding each of these strategies is located on the NDPC/N website. For ease of reference, the 15 strategies are listed below:

- Systemic renewal
- School-community collaboration
- Safe learning environments
- Family engagement
- Early childhood education
- Early literacy development
- Mentoring/tutoring
- Service learning
- Alternative schooling
- Afterschool opportunities
- Professional development
- Active learning
- Educational technology
- Individualized instruction
- Career and technical education (CTE)

Tips for Developing a Plan

Congratulations! In the previous step, you just came up with root causes that underlie dropout. This step is comprised of two substeps: determine which of the root causes you can *do something about* and *figure out how to do it*. This step is especially satisfying because now you get to implement a change to help your students.

You've generated a list of root causes that underlie why your students are dropping out. Some of these root causes, unfortunately, are issues that you cannot do anything about, often called static variables. Common static variables include neighborhoods where students live and socioeconomic status. You should focus on the alterable variables that you can influence. By conferring with others, figure out which of these are issues that you, the administration, funding source, and school, can respond to. In other words, with your list of root causes, figure out which are causes you can do something about.

Second, create a strategy. Your strategy should be a *response* to the root cause. This may seem counterintuitive: How can you solve an issue by looking backwards? But if you create strategies that respond to issues that led to dropout in the past, you may solve these issues for high-risk students now and in the future. Brainstorm and develop appropriate strategies that respond to the causes of dropout. Some of these strategies will be more detailed than others. After generating a list, check and make sure the strategy satisfies these eight questions:

- Does this strategy meet the identified need?
- Are the individual steps of the intervention clear and well defined?
- Has this strategy previously produced positive outcomes with this same population?
- Will this strategy produce concrete outcomes within realistic financial and time constraints?
- How will those leading the implementation receive the necessary training to be successful?
- Does this strategy fit the values of your action team and the school population with whom you are working?
- Do you know where to find the resources necessary for successful implementation of this strategy?

| Handout References | |
|--------------------|---------------------------------|
| Handout 2 | • Reviewing Big Picture Data |
| Handout 3 | • Digging Deeper Into Your Data |
| Handout 4 | • Identifying Additional Data |
| Handout 5 | • Determining the Root Cause |

- Does this strategy fit the values of the administration?

Eliminate strategies that do not satisfy most of these needs. The remaining ones will be your strategies for combatting dropout.

| Step 3: Additional Resources | |
|---|---|
| <p style="text-align: center;"><i>Approaches to Dropout Prevention: Heeding Early Warning Signs with Appropriate Interventions</i></p> | <p>A guide to identifying the early warning signs of dropout and effectively implementing strategies to address it. Pages 4–12 discuss early indicators of dropout and interventions that can address each indicator.</p> <p>Kennelly, L., & Monrad, M. (2007). <i>Approaches to dropout prevention: Heeding early warning signs with appropriate interventions</i>. Washington, DC: National High School Center, American Institutes for Research. Retrieved from http://www.betterhighschools.org/docs/NHSC_ApproachestoDropoutPrevention.pdf</p> |
| <p style="text-align: center;"><i>The Importance of Contextual Fit When Determining Evidence-Based Interventions</i></p> | <p>A guide to determining whether or not a specific intervention will fit the needs, resources, and values of the target population</p> <p>Office of the Assistant Secretary for Planning and Evaluation. (2014). <i>The importance of contextual fit when determining evidence-based interventions</i>. Washington, DC: U.S. Department of Health and Human Services, Office of Human Services Policy. Retrieved from http://aspe.hhs.gov/hsp/14/IWW/ib_Contextual.pdf</p> |
| <p style="text-align: center;"><i>Dropout Prevention: A Practice Guide</i></p> | <p>A guide to help administrators at the district and school levels implement successful dropout prevention policies</p> <p>Dynarski, M., Clarke, L., Cobb, B., Finn, J., Rumberger, R., & Smink, J. (2008). <i>Dropout prevention: A practice guide</i>. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance. Retrieved from http://www.ies.ed.gov/ncee/wwc/pdf/practice_guides/dp_pg_090308.pdf#page=23</p> |
| <p style="text-align: center;"><i>15 Effective Strategies for Reducing the Dropout Rate</i></p> | <p>A series of 15 strategies that have been identified as having the greatest impact on preventing dropout and examples of the ways in which these strategies were implemented in Arizona</p> <p>National Dropout Prevention Center/Network. (n.d.). <i>15 effective strategies for reducing the dropout rate</i>. Clemson, SC: Author. Retrieved from http://www.azed.gov/wp-content/uploads/PDF/DropoutPreventionStrategies.pdf</p> |

Step 4: Detailing Our Actions

Outcomes

- The plan lists action steps in sufficient detail so that anyone reading the plan would understand what to do.
- The plan clearly describes when the action steps will occur and who is responsible for completing the steps.
- The plan clearly specifies the resources and corresponding costs needed to complete each action step.

Use the Step 4 resources available in other toolkits to guide the development of the action plan. For each task in your plan, consider the following questions:

1. When does this task need to be implemented?
2. Who is responsible for implementing it?
3. How much will it cost?
4. What kinds of resources and tools will be necessary to carry it out?

Toolkit References

Recording Action Plan Steps

- Toolkit 1, p. 49

Implementing Your Strategy

- Toolkit 1, pp. 50–51

Tips for Developing a Plan

You've just generated actionable, feasible strategies for how to intervene and prevent student dropout. Now, your goal is to put these strategies into action. The best way to do this is to list what each strategy requires by creating a guide. Delineate the steps clearly. If there are multiple people needed to carry out the strategy, the strategy guide should be clear to everyone who would need to rely on the guide, and should list each job clearly.

In addition, specify what each strategy requires. How much money will it cost? How many people will it need to be implemented, and when will these people be needed? Who is responsible for this strategy and who will oversee it when it is carried out?

You also gathered types of additional data you wanted to capture. Plan how to best gather those data.

Step 4: Additional Resource

Dropout Prevention in Tennessee: A Planning Guide for Prevention, Intervention, and Recovery

A tool to help create an action plan and diverse task force that focuses on dropout prevention. Appendix G contains worksheets for defining action items and their implementation.

Center for Dropout Prevention. (n.d.). *Dropout prevention in Tennessee: A planning guide for prevention, intervention, and recovery*. Nashville, TN: Tennessee Department of Education, Division of College & Career Readiness, Office of Safe & Supportive Schools.

Step 5: Ensuring That Adults Are Doing What They Need to Do

Outcomes

- The plan clearly specifies evidence of success for consistency and quality of implementation.
- The plan clearly specifies methods for implementation data collection, including how, when, and who.
- The plan clearly describes how the implementation data gathered will be used to make adjustments to the action plan.

Toolkit Reference

Monitoring Implementation

- Toolkit 1, pp. 55–57

You can use the Step 5 resources found in the other toolkits to help guide your determination of what data to collect. These data will work in conjunction with the student data you identify in Step 6 to help you monitor whether outcomes are changing and the overall success of your strategies. Furthermore, make sure that you are collecting data at regular intervals so that you will be able to successfully identify how your impact is changing over time.

You may want to ensure that the data you choose to collect (as well as the data from Step 6) answer questions focused on both the implementation itself, and also the following:

1. Are each of the steps laid out in the action plan actually occurring?
2. Are these steps being implemented as planned or are there discrepancies?
3. What is the impact of each individual strategy on student outcomes? Are some more successful than others? What do you think is contributing to the success of those specific interventions?
4. Are you seeing changes in all targeted students or only in certain groups? Why are your strategies working for those groups? What are the gaps that are preventing you from reaching other groups?

Tips for Developing a Plan

You've taken all of the steps needed to come up with an intervention to help prevent dropout. That was a lot of work, so now you need to make sure you're seeing the fruits of your labor. You should make sure that people are adhering to the strategy guides created in Step 4.

Also, test your strategies! Gather together and see if others are experiencing effective results and if the strategies you came up with are effective at keeping students in school. Talk about

your experiences with others: What’s been working? What’s not been working? Are you noticing things that can be tweaked to make the strategy more effective?

In addition, don’t forget about that supplementary data you wanted to gather! Now is the time to have been gathering them. Do you have the data? If not, why? If you do, what can you see about the data? If the data seem helpful, go back to Step 2 and come up with root causes and go forward from there.

| Step 5: Additional Resources | |
|---|--|
| <i>Parent Engagement Toolkit</i> | <p>A toolkit organized by transition points in a student’s education that focus on the role of parents, as well as educators and the community, in dropout prevention</p> <p>America’s Promise Alliance. (n.d.). <i>Parent engagement toolkit</i>. Washington, DC: Author. Nashville, TN: Author. Retrieved from http://www.americaspromise.org/parent-engagement-toolkit</p> |
| <i>The Family Engagement for High School Success Toolkit</i> | <p>A guide to engage families, schools, and the community in dropout prevention efforts</p> <p>Weiss, H., Lopez, E., Rosenberg, H., Brosi, E., & Lee, D. (n.d.). <i>The family engagement for high school success toolkit</i>. Cambridge, MA: Harvard Family Research Project. Retrieved from http://www.hfrp.org/family-involvement/publications-resources/the-family-engagement-for-high-school-success-toolkit-planning-and-implementing-an-initiative-to-support-the-pathway-to-graduation-for-at-risk-students</p> |

Step 6: Knowing We've Made a Difference

Outcomes

- The plan clearly specifies methods for monitoring the effect of the strategies on students.
- The plan clearly specifies methods for results data collection, including how, when, and who.
- The plan clearly describes how the results data gathered will be used to make adjustments to the action plan.

Part of monitoring the effect of the selected strategies on students is determining what evidence to use. The following list provides possible data points that could be used by the team:

- Percentage of students who graduate on time
- Percentage of students who graduate, but not with their cohort group
- Percentage of students who end up dropping out
- Number of students served in a dropout prevention program
- Percentage of attempted credits that are completed using credit recovery
- Percentage of graduates who recovered credits (through credit recovery) to graduate on time
- Percentage of students who increase their average daily attendance
- Percentage of students who are no longer chronically absent (miss 10% or more of instructional time)
- Percentage of students who decrease their number of office referrals per semester
- Percentage of students who will be able to stay on track in earning credits
- Percentage of students who will withdraw before completing the program
- Percentage of students who are promoted to the next grade level

Toolkit Reference

Monitoring Results

- Toolkit 1, pp. 61–63

Tips for Developing a Plan

Now, measure the effectiveness of your strategies. Pull out the data you had at the end of last year. To compare how effective your interventions have been, you'll need to gather the same

data from this year. Compare last year's data to this year's data. What do you notice? What has been successful? What has not been as effective?

What have *you* learned? What has *your team* learned?

| Step 6: Additional Resource | |
|--|--|
| STEPSS (State Toolkit for Examining Post-School Success) | A toolkit that supports the use of secondary transition data to improve services for students with disabilities |
| | <i>STEPSS (State Toolkit for Examining Post-School Success)</i> . Retrieved from http://www.ndpc-sd.org/documents/STEPSS.pdf |

Appendix A. Facilitated Handouts to Support Team Discussions

Directions: This series of handouts will help your team create an action plan to support dropout prevention efforts at your school.

Handout 1: Big Picture Data Predictions Versus Actual Data

Use the table to first predict how many students in your school fall into the different categories. After you have made predictions, use the data to identify the actual percentage or number of students for each indicator.

| Group of Students | Predict Percentage or Number of Students | Actual Percentage or Number of Students |
|-------------------|--|---|
| Old and Far | | |
| Old and Close | | |
| Young and Far | | |
| Young and Close | | |

Handout 2: Reviewing the Big Picture Data

Answer the guiding questions below as a team, reflecting on the table your team completed above. You might need to review your data again in order to answer some of these questions.

1. What did you learn, and how did your predictions compare with your actual data?
 - About your school?
 - Old and far
 - Old and close
 - Young and far
 - Young and close
 - About individual students?
2. Were there any surprises in the data?
3. Were there any findings that raised questions or were confusing?
4. What do your data suggest about tiered behavior and academic supports (Tier 1, Tier 2, and Tier 3 supports)?

Handout 3: Digging Deeper Into Your Data

1. What do your findings suggest about priority areas for your school?
What data are you using to justify this decision?
2. About which student or group of students are you most concerned?
3. What do you already know about this student or group of students?

Provide a description of your student or group of students. Consider the following characteristics and the questions in the textbox on the next page:

- Age
- Number of students
- Grade levels
- Language skills
- Special education status
- Demographic information
- Attendance rates
- Absenteeism rates
- Academic results
- Current involvement in interventions

You may want to consider the following questions:

- Did the student(s) fail English language arts, mathematics, or both? What might be the underlying cause(s) (e.g., preparation for content, low literacy skills, an unidentified or untreated learning disability) of the low performance?
- Is the student(s) failing any other courses? In which classes does the student(s) perform well?
- In which classes or types of classes is this student(s) enrolled (e.g., remedial reading or remedial mathematics courses)?
- Are there any academic, attendance, or behavior patterns?
- What other information do you need to understand the patterns and/or common underlying reasons (e.g., special education status, English language learner status, prior achievement) of students who are failing English language arts or mathematics?¹

Source: Therriault, O’Cummings, Heppen, Yerholt, &, Scala, 2013

4. Why do you *think* this student or these students are at risk? What are your *initial theories or ideas*?

Handout 4: Identify Additional Data

A. What data are you currently collecting that can supplement the dropout prevention data?

Use the Data Collection Plan to reflect on the types of data available in your school for the target area of concern. Organize these data by short-, medium-, and long-term data sources, based on the frequency with which you can use these data to inform instructional decisions. Complete the corresponding columns for each type of data identified.

| Department Data Collection Plan | | | | | |
|---------------------------------|------|--------------------|------------------------------------|--|--|
| Data Type | Data | Person Responsible | Schedule for Gathering Information | Schedule for Interpreting and Sharing Data | What Decisions (e.g., instruction) Are Made and Actions Taken? |
| Short-term data | | | | | |
| Medium-term data | | | | | |
| Long-term data | | | | | |
| Other | | | | | |

Adapted from page 161 of *Data Wise: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning* (Revised and Expanded Edition), edited by Kathryn Parker Boudett, Elizabeth A. City, and Richard J. Murnane, and published in 2013 by Harvard Education Press.

B. What additional information could you collect to better understand underlying causes of risk?

1. Are there gaps in data you have available? Did you include data on behavior, social-emotional, or other relevant focus areas?

2. If so, how will additional data be collected? Add these data to the Data Collection Plan in a different color.

3. Review your updated Data Collection Plan and answer the following questions about including too much information:
 - Are some data sources looking at the same thing?

 - Are some data sources likely to yield more or better information than others?

 - Should some data sources be collected and reviewed before others?

 - What are the most valuable or efficient sources we can use?

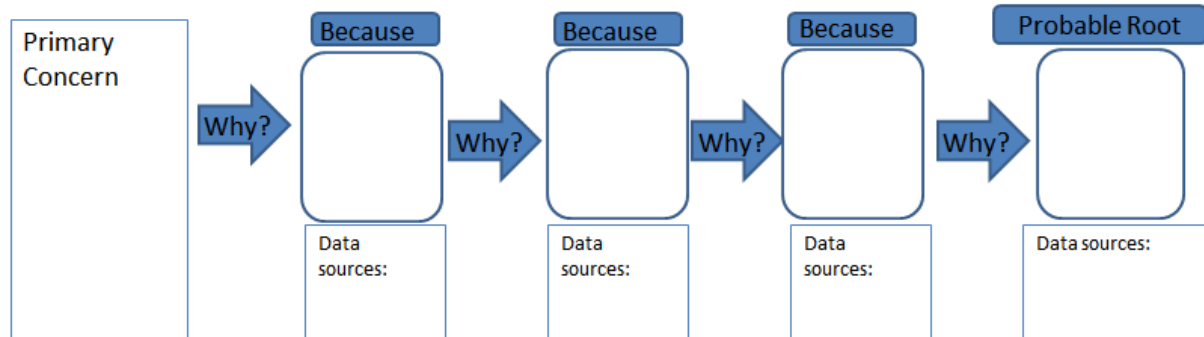
Handout 5: Use Evidence to Determine Root Cause

A. Brainstorming the Root Cause

Based on the additional data you have collected for your area of concern, what are some likely underlying cause(s) of risk indicated by the evidence you have collected thus far?

1. Brainstorm possible explanations or causes for your target concern.
2. Categorize similar causes together and circle those that are actionable by the school.

3. Use the “Because ... Why?” diagram below as a model and the following questions to ensure that you have determined the root. Use the available chart paper to begin to identify the root cause for your primary concern. Be sure to identify the related data sources you used to make the decision. It can frequently require cycling through “Because...Why?” five to seven times before getting at the root cause.



Note. This provides a model for getting to the probable root cause; it may be necessary to add more steps to the process. The diagram above includes a limited number due to space.

Adapted from *School Improvement Planning Basics: Root Cause Analysis*, published in 2012 by the Clark County School District. Retrieved from <http://www.ccsd.net/resources/aarsi-school-improvement/pdf/planning/school-improvement-planning-basics-root-cause-analysis.pdf>

Consider the following questions:

- *What is the evidence that this cause exists? Is it concrete? Is it measurable? Are there more than two data elements that provide evidence?*
- *What is the evidence that this cause could lead to the stated effect? Are we merely asserting causation? (Example: If a program is identified as the reason students are not achieving, is there evidence that it is not aligned to the tested and taught curriculum? Have students spent the majority of the allotted instructional time using this program?)*
- *What evidence is there that this cause actually contributed to the problem? Given that it exists and could lead to this problem, how do we know it was not actually something else?*
- *Is anything else needed, along with this cause, for the stated effect to occur? Is it self-sufficient? (Example: Are special education student schedules the only problem that prevents students from grade-level curriculum exposure, or is there another key factor, such as the level of experience of teachers to scaffold instruction to meet the needs of all learners?)*
- *Can anything else, besides this cause, lead to the stated effect? Are there alternative explanations that fit better? What other risks are there?²*

² Clark County School District. (2012). *School improvement planning basics: Root cause analysis*. Retrieved from <http://www.ccsd.net/resources/aarsi-school-improvement/pdf/planning/school-improvement-planning-basics-root-cause-analysis.pdf>

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