

Collecting and Analyzing Youth Performance Data

Resources for a Basic Approach to Collecting
Data About Youth Performance

March 2016

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The transition from school to adult life is a most important event for young people. It requires planning and forethought, in particular for youth with disabilities. Essential to the planning is valid and accurate, transition assessment data providing a profile of the youth's preferences, interests, needs and skills (PINS) as a future employee and adult.

Families and youth in transition from school to adult life may work with numerous educators and adult serving agency professionals. Starting with the school, each agency has its own required procedures, vocabulary and forms of assessment for documenting a youth's skills, preferences and ability to perform a variety of academic, occupational, social, independence and other skills.

Agency (including schools) assessment procedures include those used for eligibility decisions. These formal approaches to assessment are required and necessary to bring resources and supports to youth.

Yet eligibility based assessment falls short of providing the kind of data about the individual youth that is useful to educators and staff providing direct instructional services, supports, programs and activities to youth. Data and information at the direct service level is most useful when it describes:

- **how** a youth is performing at a 'beginning' point in time (Baseline data)
- **the circumstances**, environment, types of supports that optimize a youth's performance and independence
- **the plans for** tracking progress and the effectiveness of supports, interventions, programs, etc. (Ongoing Implementation Data)

Data Collection is a vast and complex area. The data collection resources in this booklet focus on a basic set of tools for gathering data using observational skills. It includes a variety of approaches for quantifying observation and examples of data collection templates.

A basic approach to collecting and analyzing youth performance data provides a common vocabulary for discussing what a youth can do and what supports he or she needs. Using the same basic set of data collection approaches across agencies benefits educators and agency representatives in determining transition services for a youth.

Once the team determines plans for data collection, those entrusted with implementing specific services (teachers, aides, job coaches, provider agencies, etc.) will have clear direction and guidance for communicating progress, problems or set-backs to the team.

Youth performance data, gathered by observing the youth, has many advantages:

- 'observing' youth is routine for educators and other direct service providers; doing so systematically and recording it in some way transforms the observation to data
- some youth, especially those with complex disabilities may be at a disadvantage in completing more standard paper/pencil or online tools. A performance or action that is observed allows the youth to 'show what they know'
- Test scores may not provide professionals across agencies the same 'picture' of a youth's skills. Performance data does. For example, 'Jeff can stay on task 10 minutes' provides everyone with the same point of reference for discussing Jeff's on-task behavior.
- Youth can learn to monitor their own performance, empowering them to take charge of learning and progress and increasing independence.

These resources are intended to 'get people started' in collecting and analyzing data about a youth's performance. This type of data is most powerful in affording a well rounded profile of a youth when combined with other formal and informal methods of assessment.

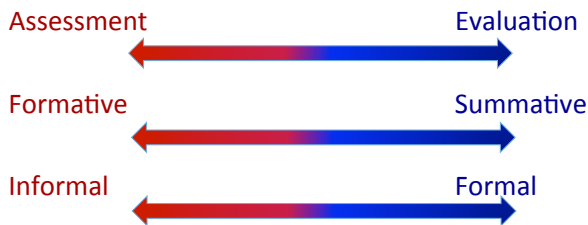
This booklet contains:

- **Data Has Many Dimensions.** Background information about data and data collection
- **Observing Youth Performance for Data Collection.** Guidelines and examples of processes for using observation as the basis of individual youth performance data collection.
- **Data Collection Strategies and Tools.** Presents a variety of types of measures of youth performance.
- **A case study** to illustrate the use of a variety of approaches to collecting and analyzing data
- **Samples** of data collection templates

These resources are offered to promote valid informal tools for collecting and analyzing data to be included in Transition Assessment.

Data Has Many Dimensions

Dimensions of Data



Formative and Summative Data

Formative	Summative
<ul style="list-style-type: none"> Assessment <i>for</i> Performance 	<ul style="list-style-type: none"> Assessment <i>of</i> Performance
<ul style="list-style-type: none"> Assesses 'how did he/she do' 	<ul style="list-style-type: none"> Assesses 'how the service etc. did'
<ul style="list-style-type: none"> Provides feedback that allows for just-in-time adjustments to enhance progress or effectiveness 	<ul style="list-style-type: none"> Provides yes-no data – did the service etc. result in what was intended
<ul style="list-style-type: none"> Provides data to determine rate of progress toward long term outcomes 	<ul style="list-style-type: none"> Summarizes performance or progress after a service etc. is concluded
<ul style="list-style-type: none"> Sensitive to small increments of growth 	<ul style="list-style-type: none"> Point in time 'snapshot' of performance
<ul style="list-style-type: none"> Provides immediate feedback 	<ul style="list-style-type: none"> Benchmarks progress over a period of time

The graphic to the left shows three Dimensions of Data that are relevant to talking about youth performance. Each set of terms, further defined below, provide common vocabulary for a multi-agency team to decide which type or types of data are needed to fulfill a specific purpose. Often a combination of types of data are needed to answer questions about youth performance.

- We often use the terms '**Assessment**' and '**Evaluation**' interchangeably. However, they do refer to types of data collection that are distinctly different in several ways.
- In general **Assessment** approaches use less formal measures for determining performance levels and **Evaluation** is a more formal process for measuring youth progress:
- Assessment processes are ongoing and use frequent checks for progress
- Evaluation uses a predetermined end point (such as at the end of a semester, or after completing a training program) to test for performance compared to a benchmark of quality or level of skill, such as a grade level reading score.
- When data is needed about how an individual performs or has improved (compared to their own previous performance or skill), Assessment is the approach to use
- When the data is to be used to make decisions such as eligibility for services or programs, the more formal Evaluation is the approach to use

The slide above discusses measures of Formative and Summative assessment. When both types of data are included, they comprise a well rounded set of descriptive data as the basis for transition planning. **Formative assessment** provides data to help 'form' or shape plans for improving a youth's performance. **Formative assessment** is a combination of formal and informal assessments that gives feedback to the teacher, job coach or other direct service provider to recognize where youth are struggling and address problems in a timely manner. Formative assessment provides data that addresses 'is it working?' or 'is it not working?' in regards to any intervention, program, service or support that have been put into action. That way, immediate adjustments can be made to the instructional approach, level or type of support, practice trials, etc. It typically involves qualitative or descriptive feedback (rather than scores) that focus on the details of how a youth is performing. Formative assessment provides immediate feedback and guidance about next steps to close the gap between the youth's current skill and the desired level of skill.

Summative assessment is an assessment of a youth's progress. **Summative assessment** is used to assess the impact of a class, program, etc., usually at the end point, providing a 'snapshot' of skill level. Summative assessment provides 'yes' 'no' type data, such as 'did the youth achieve the benchmarks the service intended to provide?' It is most often yields a score or grade.

Paul Black, an assessment expert, puts it "When the cook tastes the soup, that's **formative assessment**. When the customer tastes the soup, that's **summative assessment**." Both are critical to building a rich profile about a youth's PINS (Preferences, Interests, Needs and Skills/Strengths) of valid data upon which to determine services and supports.

Informal and Formal Tools, Strategies and Methods

Informal	Formal
• Free, low cost, may be created by user	• Generally published; requires purchase
• Can be created or adapted for unique purposes	• Instructions and format for administration are standardized
• Results may be criterion referenced	• Scores are normed
• Results can be a score, narrative, range	• Results represented by a score or scale
• Can be administered by a variety of people, including the youth	• Must be administered by a qualified professional
• Useful to make adjustments, gather baseline data, discover 'soft' skills, document performance	• Documents mastery
• Provides the most individualized data	• Compares performance to peers
	• Ranks an individual's performance against an accepted standard
• Most effective when same measure is used more than once over time and by multiple raters	• Useful for decision making regarding placements and competitive programs

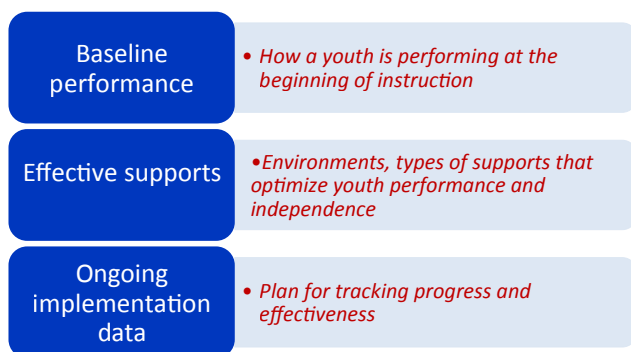
Informal and formal tools, strategies and methods are valuable in developing a youth's profile for purposes of transition planning. A good place to start is by gathering together from the youth's records (also known as a 'records review') previously completed formal assessments. These might include school records such as Evaluation Team Reports (ETR), results from State and District required academic tests, or other diagnostic tests or assessments done by therapists. If the youth is currently receiving services from any other agencies (Mental Health, County Bd of DD, etc.) find out if any evaluations or assessments have been conducted by them.

Previously completed formal and informal assessment provides the team a place to start in learning about the youth's PINS as they 'stack up' against the knowledge, skills, and level of independence needed to thrive as an adult. Transition assessment can then be designed that identifies any gaps in youth skills, and backwards planning can be used to determine transition services to close gaps.

There are many, many tools available for free and commercially to use within transition assessment. And some of these will likely be useful within a youth's ongoing transition assessment process. No single source or type of data can lead the team to make well-informed decisions about transition services and youth progress. However, getting data about what a youth can actually do, performance data, is critical, especially for youth with more complex disabilities who are unlikely to be able to effectively show what they know and can do on ready-made assessments.

Observing Youth Performance for Collecting and Analyzing Data

Observing Youth Performance for Collecting and Analyzing Data



Individual youth performance data is gathered by observing the youth actually doing a task or function for the purposes of identifying whether or not the youth is performing as anticipated or required. Observations become data when they are 'quantified' or written down in some way, such as using a data sheet or narrative description.

Performance data can be relied upon as accurate and valid for making decisions when it includes baseline data, a description of the setting and a plan for collecting ongoing implementation data.

An observation should focus on only one specific behavior or one aspect of a task at a time. In the context of youth performance data, the term 'behavior' refers to the action that is being performed. It does not only refer to unwanted or inappropriate 'behavior', although behavior in that sense is also observable and could be the subject of an observation.

Whether using a data chart, scatter plot or narrative, its important to identify the specifics of the observation so that the information and results can be summarized and shared with others. Suggested details to include:

- Date, time of day
- A specific, measurable description of the behavior being observed
- Amount of time the youth is observed
- Description of the setting/environment
- Name of observer

Observing Youth Performance for Collecting and Analyzing Data (cont)

Baseline data describe the 'starting point' for a youth's skills/level of performance at a particular point in time. It could be gathered before, during and/or after instruction, or intervention or when a support is put in place.

Baseline data provides the team with vital information to use as a point of comparison as the youth makes progress and improves over time. Baseline allows the team to quantify the improvement and progress when paired with ongoing implementation data. Baseline gathered during or after instruction also provides the team with immediate feedback about the effectiveness of the instructional plan, interventions and/or supports so that any changes can be made in a timely and responsive manner.

Without baseline data, any data collected lacks a way to gauge whether or not progress has been made or if an intervention or support resulted in improvement. The 'measuring stick' for baseline data is the performance the team expects or requires of the youth after new learning, supports, interventions, instruction, services, etc. are in place. Baseline data defines any gap between the current level of the youth's skills and level of skill the youth will need to perform as expected or required at school, home, in the community or at work. The size of the gap provides input to the team for setting goals for improved performance that are ambitious while still being realistic for the youth to achieve. Baseline, and accompanying implementation data afford the team objective facts to use in making decisions about next steps.

Rule of Thumb for Baseline Data

- At least 3 measures
- By 3 different raters
- Collected in settings appropriate for the skill or behavior
- Judged to be typical of the youth
- Generally over a 2 week period



Baseline data is easy to gather. And has so many important uses. The 'rule of thumb' for gathering baseline data is:

- Observe the youth at least three different times
- Observations are done by 3 different people
- Collected in authentic settings where the youth will be expected to perform the task or learning
- Gathered during a time when the circumstances or situation is considered typical for the youth (youth is not sick, situation is not unusual, etc.)
- Generally gathered within a fairly short period of time, such as two weeks

Guidelines for Collecting Ongoing Implementation Data

- Use a strategy and tool consistent with the those used to collect baseline data
 - Allows comparison of 🍏 to 🍏
- Collect frequent data (once a week) especially at first
 - Prevents wasting ⌚ or 🧑 if its not working
 - Allows timely adjustments when necessary
- Collect data enough different times to be considered valid (about 7-10)
- Share data with team to make decisions about next steps

Once a baseline of a youth's performance is in place, the team is ready to begin gathering ongoing implementation data. Ongoing implementation data allows the team to compare the youth's current performance with the baseline level. It documents whether or not the youth is making progress and if the supports, instruction, program, activity, service, etc. are effective. The implementation data provides a 'gauge' for the team to tell how well the instructional plan is working. This formative data is used to make adjustments when progress is not being made as expected.

There are some guidelines for collecting ongoing implementation data. The method for collecting the data should match that used for collecting baseline data about the same behavior or skill. That way, the team can easily compare current performance with the baseline level of the same skill.

When a new behavior or performance skill is added, it is good practice to collect data at least once a week, to be sure all is going as planned. The data will uncover any problem spots so that timely adjustments can be made.

It is critical that there is a plan for the staff collecting data to share it with the team. The communication may need to take place during a meeting, if there is much to discuss or problems arise. Or more routine communication can occur by phone, text, email, etc.

Data Collection Strategies and Tools

There are many, many strategies and tools for collecting baseline and ongoing implementation data. Event Recording and Narrative Recording are two primary strategies for collecting observational data about youth performance.

Event Recording of a variety of types is useful and easy to use. Use event recording when:

- The behavior or performance has a clear beginning and end, so that it can be observed as ‘starting’ and ‘stopping’
- The behavior or performance does not happen at such a high rate or so quickly that it is difficult to observe when it ‘starts’ and ‘stops.’
- Event recording can be used for both baseline and ongoing implementation data.

Narrative Recording is a way of taking notes about what occurs in real time during an observation. A narrative recording for ongoing implementation data should focus on just one behavior or performance, while also making notes about what else is occurring in the setting – others the youth interacts with, movements, actions, etc. Narrative recording is most useful as data when the observer ‘sticks with the facts’ of what is observed, rather than adding in personal ideas or opinions about why something occurred. Narrative recording is best used to supplement other ongoing implementation data. It is not as useful for establishing baseline levels.

Event recording

Frequency	• “how often”
Duration	• “how long”
Latency	• “how soon”
Intensity	• “how severe”
Accuracy	• “how correct”
Level of Independence	• “how self-sufficient”

Event Recording can be used to capture various aspects of a youth’s performance or behavior. When used to gather baseline data, ongoing implementation data should also be gathered using the same aspect of the youth’s performance or behavior. For example, if accuracy baseline data was gathered, ongoing implementation data should also be based on accuracy.

Six aspects of behavior or performance that can be gathered using Event Recording are described in the graphic to the left

How do you decide what type of data to collect and how it can be most effectively collected? It is helpful to have in mind how the data will be used and what question about the youth’s performance the data should answer.

What follows are examples of Event and Narrative Recordings for a case study youth named Shawna. The examples illustrate various ways to use data sheets, scatter plots and narratives to record an observation. In practice, it would be unlikely that all of these approaches would be used with a single youth. The team would decide on ways to record the observation that make the most sense for the youth, behavior or performance to be observed, and the situation in which it occurs.

A Case Study to Illustrate the use of Data Collection Strategies and Tools - Shawna

Shawna recently got a job at Health Care company. Her job is located downtown in a medium size city. She is able to ride the bus to and from her job, Monday – Friday, 9 am – 5 pm. Her office is located on the 4th floor of a 12 story building. The company she works for has about 200 employees and has offices on the 3rd – 7th floor of the building. Her job duties include data entry and medical coding. Occasionally she is also asked to do other clerical tasks, such as filing, copying and taking supplies to offices in other parts of the building. The works tasks are a good match with Shawna’s PINS, making good use of her skills and interests in computers and numbers. She likes working and being around other people, but lacks some appropriate social skills. Once engaged in work tasks, she sticks with it. However, there have been some issues getting her from the bus to her work station on time. Wide open spaces, such as the lobby in her building cause her a great deal of anxiety, to the point of having her melt down. Melt downs for Shawna can be ‘mild’ (where she just does nothing), to ‘severe’ (where she hurts herself and possibly others). Shawna is getting good reviews about the work she does but is frequently late which could hurt her ongoing employment and opportunities for advancement.

The following illustrates several different ways Shawna’s team could collect data about problem areas.

Baseline Data - Frequency

Shawna’s team decided to begin by observing how often (Frequency) Shawna was getting to her office on time now as baseline data. As the chart below shows, they followed the ‘rules of thumb’ for baseline data collection by observing her 3 different times, 3 different raters over a period of a couple weeks.

Frequency Data Recording Sheet

Youth Shawna Behavior/Skill being observed (be specific) How often does Shawna get to her work station on the fourth floor office on time?

Date	Tallies	Total	Setting	Amount of Time Observed	Observer
4/7/15		0	Arrive at work	15 min	Tony
4/12/15		0	Arrive at work	20 min	Linda
4/20/15		0	Arrive at work	12 min	Seth

Analyzing this data was pretty simple for the team – baseline is ‘0’, meaning that Shawna did not get to her work station on time any of the three days she was observed. In talking with her boss, they found out that during that entire time period (4/7 – 4/20) she was late a total of 6 times.

Shawna’s team felt they needed more information about what was happening that was causing her to be late so often. As they worked to identify that problem, they also felt she would benefit from some supports to help her with situations that were challenging for her, such as how her anxiety went up in the large open space of the lobby. They also wondered if Shawna’s social nature got her involved in talking with other people in the lobby and if she lost track of time, causing her to be late. The team decided that a narrative recording would give them a snapshot of what seemed to be interfering with Shawna getting through the lobby and to her work station on time.

After just two observations a few days apart, Shawna’s team reviewed what was learned. The Day 1 Observation revealed that Shawna was late getting to her work station because she was talking to people she recognized in the lobby area about cats. Bo clarified that Shawna did all the talking. The people she was talking to did not ignore her, but just smiled or nodded or said ‘uh huh’ so that they were not real conversations. The team, including Shawna, agreed that the Day 2 Observation showed her anxiety at its worst. It is unusual, and completely unexpected, that so many people would be in the lobby of her building that day. As Doug suspected, there was a group of about 30 people who were assembling in the lobby for a tour of a business on the 12th floor. While it won’t be routine for Shawna to encounter that many people in the lobby, it will happen from time to time. Even though Shawna was able to calm her anxiety (she thanked Doug for being nice to her) and get to work on time, the team agreed that Shawna needed some coping skills. The lobby of her building is not the only place in her life that she is likely to ever encounter large open spaces and crowds.

Narrative Recording Example

Youth	Behavior/Skill to Observe	
Shawna	Shawna will arrive at her work station on the 4 th floor within 5 minutes of entering the building. She now takes as much as 20 minutes to do so, causing her to be late. She wanders around the lobby, looking for anyone she can talk to about her special interest of cats. She frequently engages with the guy who runs the coffee cart at his busiest time. Her anxiety is increased in large open, noisy spaces and she can ‘melt down’, causing her to ‘freeze’ in place or act out in ways where she could hurt herself or others.	
Date	Observer	Observations:
12/2	Bo	Shawna got off the bus in front of the building at 8:53 am. Her work day begins at 9:00 am. She immediately entered the building, said ‘hello’ to me and went right to the coffee cart. Javier (coffee cart guy) had 5 customers in line. He nodded in Shawna’s direction. She went to the side of the cart to tell Javier a story about calico cats always being female. He continued to serve and speak to his customers. Shawna kept talking to him about cats. At 9:05 Shawna headed to the elevator. She pressed the ‘Up’ button, but then walked over to a girl watering plants in the lobby. She started talking to her about calico cats. She missed two up elevators. At 9:12 she got on an elevator. She pressed the button for the 3 rd floor. She got off the elevator and looked around for someone to talk to. No one was around. She got the next up elevator, got off on the 4 th floor and arrived at her work station at 9:17. There were only a few people in the lobby this day and no signs of anxiety were observed.
12/5	Doug	Shawna got off the bus at 8:45 am. She entered the building. The lobby was very busy, with about 40 people getting coffee, talking to each other and looking at various digital message boards. It appeared that people were gathering in a meeting place for some kind of event or tour (not connected to Shawna’s company). Shawna nodded at me and then froze in place as she looked around at all the people in the lobby. She looked for Javier, who had a crowd of people in line for coffee. She backed up against the wall just inside the front door and sat down on the floor. Others had to walk around her as they entered the building. I got her to move away from the door, for her safety and that of others. As I guided her toward the elevator she began to cry, then to call herself ‘stupid’. I suggested she take a deep breath to calm down, but she appeared not to hear me. I rode up on the elevator with her. Once she was in the quiet elevator, she stopped crying, wiped her tears away with a tissue. After getting off on the fourth floor, she went into her office on her own at 8:57 am.

With Shawna’s input the team explored various apps for her smart phone that could assist her in keeping on track to get to her work station on time. Right now a job coach provides 1:1 assistance using verbal prompts to keep her moving through the lobby toward the elevator and up to her job station. The team needs to fade this level of assistance. The team learned about an app they could customize with visual prompts for each step involved in Shawna getting from the bus to her work station on time. Over a two-week instructional period, the job coach prompted Shawna to use the visual prompts on her phone for arrival at work. The job coach systematically provided fewer prompts each day until Shawna was relying only on the app, even though he was still physically present. The team decided it was time to gather some baseline data about Shawna’s ability to use the app on her own, with a different job coach only observing from afar.

Frequency Data Recording Sheet

Youth Shawna Behavior/Skill being observed (be specific) How often does Shawna get to her work station on the fourth floor office on time independently using visual and auditory supports on her smart phone and her 5 point scale?

Date	Tallies	Total	Setting	Amount of Time Observed	Observer
5/8 - 10/15	/	1	Arrive at work	15 min @	Linda
5/15 - 17/15	//	2	Arrive at work	10, 15, 20 min	Max
5/20 - 23/15	/	1	Arrive at work	15, 15, 10 min	Doug

The team decided that they would need to observe Shawna multiple times to establish baseline, since circumstances in the lobby could vary each day, presenting a any number of different challenges and distractors for Shawna. After observing her 10 days, the team was disappointed to find that Shawna only got to work independently and on time 4 of the 10 days (40%). Since there was no real improvement, the team met with the job coaches to dig deeper into what was preventing Shawna from achieving success. The problem seemed to be that while Shawna did use her phone app, it didn’t keep her from chatting with Javier at the coffee cart and others about her special interest in cats. There was one minor meltdown (frozen in place) during the observation period when a high school class was in the building lobby for a tour of another business. The job coach did some personal intervention to physically guide Shawna through the lobby. The team decided to research some additional supports that could be loaded onto Shawna’s smart phone.

Shawna’s primary job coach mentioned that when he was providing 1:1 support, a combination of verbal and visual supports seemed to work best. A review Shawna’s PINS confirmed that she did consistently show strengths in learning when there was a combination of visual and auditory supports. They turned on the auditory feature in the visual navigation prompts and had Shawna use her ear buds. Shawna had some success with a 5-point scale that her teacher used with her, so they added that as well. Shawna keeps the index card size scale in a pocket in her purse, but until now the team was not asking her to use it. After teaching her to use the new supports and several practice trials, the team again collected baseline data.

Frequency Data Recording Sheet

Youth Shawna Behavior/Skill being observed (be specific) How often does Shawna get to her work station on the fourth floor office on time independently using visual and auditory supports on her smart phone and her 5 point scale?

Date	Tallies	Total	Setting	Amount of Time Observed	Observer
6/10 - 14/15	///	5/5	Arrive at work	10, 12, 15 min	Zoey
6/22 - 24/15	///	2/3	Arrive at work	20, 10, 10 min	Chris
6/27 - 28/15	///	2/2	Arrive at work	10, 15, 10 min	Jethro

The new supports seem to be working! During the observation periods, Shawna got to her workstation on time 90% (9 out of 10 trials). Her boss reported that she was not late any of the days when she was not observed. The one day of observation that she was late to work, the bus was running late and while she still arrived before 9 am, it was about 5 minutes later than usual and Shawna was stressed by the change in routine, leaving her 'frozen' in place. The job coach did prompt her to use her 5-point scale, she was able to get her emotions under control and ended up to be only a few minutes late to work.

The added auditory component and ear buds seems to work for Shawna to screen out distractions in the lobby and keep her entirely focused on her phone – behavior much like that seen by many other young people arriving at work. Javier (from the coffee cart) has asked about Shawna and why she never talks to him anymore. He was concerned he had done something wrong or offended her in some way. He truly enjoyed hearing her cat stories, but couldn't always spend time with her when he was busy. Shawna always enjoys talking to anyone who will listen to her talk about cats. Hearing this anecdote and Shawna's input, the team wishes for Shawna to have this social interaction, but within limits that do not interfere with Javier's business and doesn't make Shawna late for work. They will consider how to do this in the near future.

The team put in place a plan for collecting ongoing implementation data. One of the job coaches will spend time with Shawna to practice with her situations in which she needs to use her 5-point scale and to use it on her own. He plans to use video modeling, using himself and Shawna, so she can watch and participate in a number of situations that can raise her anxiety, like an unexpected crowd in the lobby of her building, and have her reach for the 5-point scale on her own. Shawna used this strategy in school and is aware of a what she describes as 'her hair tingling' when her anxiety first starts to rise. When Shawna reaches for the 5-point scale at the first sign of anxiety, it proves to be the most effective point for this intervention. In one of the videos, the job coach spiked his hair to exaggerate his anxiety as he encountered a crowd on the street when he exited the bus. Shawna found this very amusing, so he took a picture of her with spikey hair to update her 5-point scale card.

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6/22 - 24/15	///	2/3	Arrive at work	20, 10, 10 min	Chris
6/27 - 28/15	///	2/2	Arrive at work	10, 15, 10 min	Jethro
7/1 - 3	///	3/3	From bus to office	10 min @	Bo
7/6 - 8	///	3/3	From bus to office	10 min @	Bo
7/12 - 15	///	3/4	From bus to office	10, 15, 10, 15 min	Bo
7/19 - 21	///	3/3	From bus to office	10 min @	Barry
7/26 - 28	///	3/3	From bus to office	15, 10, 10 min	Barry
8/4 - 7	///	4/4		10 min @	Bo

After a month, the team convened to review ongoing implementation data and was very pleased that Shawna is now arriving at her work station 95% of the time. They will continue to have a job coach collect this frequency data about twice a month. The job coaches have a very positive relationship with Shawna’s boss – he has seen them as problem solvers who will respond when there are issues. He has agreed to communicate with a point person should Shawna be late to work. Shawna now is independently using her phone app and 5-point scale. And on days when her bus is on time and Javier is not busy she sets the alarm on her phone for 5 minutes of cat talk with him.

Following are some examples of other types of event recordings that Shawna’s team may also have found useful. Note that a different aspect of Shawna’s performance required a different approach to collecting and analyzing data. The ‘Behavior/Skill being observed’ statement is critical to accurately communicating about the data to be gathered. In practice, there may be a number of different people who gather the same data. Explicitly describing what behavior, action or performance allows different people to be consistent in collecting data that is accurate and useful in determining next steps for the youth.

All the data charts used in these examples are available as Word tables at the Employment First website, www.ohioemploymentfirst.org. On the left side of the home page, click the ‘Transition Planning’ button and scroll down to find ‘Collecting and Analyzing Youth Performance Data.’ These blank data charts can be easily changed to meet your specific purposes by changing a column heading, adding columns, deleting columns, etc.’

Duration Recording Chart

Use a data chart to measure “duration” when the aspect of the youth’s performance you want to learn about is ‘how long’ it takes for an action, performance or behavior to occur or how long a behavior, action or performance lasts.

Changing the ‘Behavior/Skill being observed’ required the team to modify the columns on the frequency data chart to make note of additional information, as shown in Shawna’s example below.

In this data chart, the team collected data about how long it took Shawna to get to her work station. She needs to be at her work station and ready to work by 9 am. Her bus usually arrives 8 – 10 minutes before 9. Even if Shawna had to wait on an elevator, it takes no more than 5 minutes to get from the bus stop right outside her building to her office on the 4th floor. The observer ‘started’ the observation when Shawna exited the bus (the Start Time column) and ended the observation when Shawna was at her work station and ready to work (the End Time column).

The data above the solid black line is used as baseline data (3 observations, by 3 different raters within about 2 weeks). To establish baseline performance, find the ‘average’ time it took Shawna by adding together the 3 entries in the ‘total time required’ column (16 + 18 + 19 minutes). Then find the average by dividing the total time required by the number of data entries, in this case, 3 (53 minutes ÷ 3 = 17.33). It’s OK to round the total up or down. In this case, the team will work with 16 minutes as the baseline.

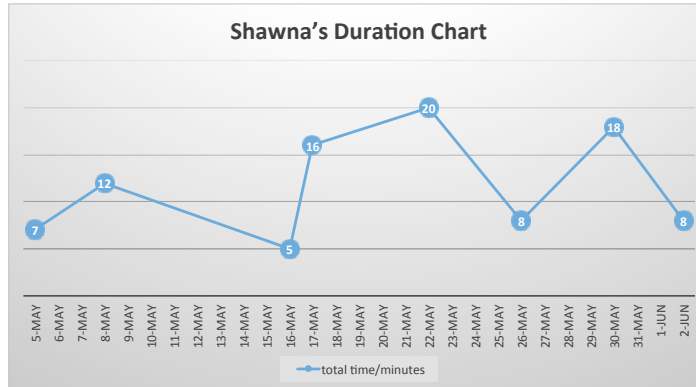
So that the ongoing progress data matches with the type of baseline data collected, the team used the same Duration Chart to monitor Shawna’s ongoing progress, once they introduced the app on her smart phone that provided visual/ auditory prompts to move her through the lobby. As you can see, the amount of time to get to her work station varied but she was only really ‘late’ once in the seven observations. Others in her office area typically get into the office by 9 and begin working by about 5 after, so her behavior fits what is expected and accepted in her office.

Duration Data Recording Sheet					
Youth <u>Shawna</u>		Behavior/Skill being observed (be specific) <u>Using Mobile Tech, how Long</u>			
<u>does it take Shawna to navigate to her 4th floor office independently?</u>					
#					
Date	Start Time	End Time	Total Time Required	Setting	Observer
4/7	8:54	9:10	16 minutes	After she enters the front door until she is at her work station, using an app with visual cues on her personal cell phone.	Barry
4/10	8:47	9:06	18 minutes		Max
4/12	8:52	9:12	19 minutes		Doug
5/5	8:55	9:02	7 minutes	Same as above; added the use of app on her phone with visual/auditory cues, ear buds	Bill
5/8	8:48	9:05	12 minutes		Jethro
5/16	9:03 (bus late)	9:07	5 minutes		Jethro
5/17	8:52	9:03	16 minutes		Jethro
5/22	8:47	9:08	20 minutes	She removed ear buds	Chris
5/26	8:53	9:00	8 minutes		Chris
5/30	8:46	9:04	18 minutes		Jethro
6/2	8:53	9:00	8 minutes		Bill

Duration Chart Visual Display

This is the same data from the data chart on the previous page shown in a visual display. This chart was created in PowerPoint, using an excel spreadsheet. A visual representation like this may help a team to look for patterns and trends across time.

How long does it take Shawna to get to her office?



Latency Recording Chart

Latency recording addresses the question of 'how soon' an action, performance or behavior occurs when it is expected. As you can see, the team again modified the data chart to include column headings and space for collecting the data needed to answer the question 'how soon?'

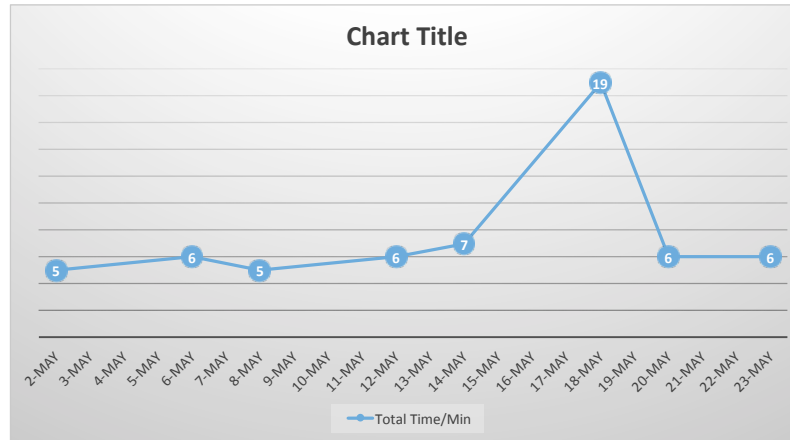
Latency Data Recording Sheet

Youth Shawna Behavior/Skill being observed (be specific How soon after arriving at her office does Shawna begin doing her work?)

Date	Start Time	End Time	Total Time Required	Observations/Notes	Observer
4/7	9:00	9:18	18 minutes	Spent time in break room talking to co-workers about cats. Went to restroom, went to work station, logged on, began work	Barry
4/10	9:05	9:20	15 minutes	In break room talking about cats to co-workers, went to receptionist's desk to talk about cats, came to work station, logged in, began work	Tessa
4/12	9:00	9:12	12 minutes	Went to break room to put her lunch in the fridge. Interrupted other co-workers conversations to talk about cats	Raul
Baseline Data Above					
5/2	8:57	9:02	5 minutes	Taught Shawna to use prompts for a social story script on her phone and a timer to limit conversation with co-workers. Co-workers participated in prompting Shawna to use her phone.	Barry
5/6	8:56	9:02	6 minutes	Shawna needed several prompts from co-workers to use her phone. Co-workers are very supportive of Shawna and want her to succeed	Barry
5/8	8:57	9:02	5 minutes	Shawna now getting through lobby consistently, fewer co-worker prompts today. Starts work about same time as others near her desk.	Barry
5/12	8:57	9:03	6 minutes	Her boss is satisfied with her starting work when she does. He would like for Shawna to have some time to talk with others about cats or expand her topics so she can have social interaction with co-workers	Tessa
5/14	8:56	9:03	7 minutes	Shawna is working on conversational skills. She is getting to office as soon as she can after getting off bus.	Tessa
5.18	8:56	9:15	19 minutes	Shawna ignored script. Need to review and change prompts. Suggest adding prompts for other conversational topics such as weather.	Barry
5/20	8:56	9:02	6 minutes	Changed up prompts, added topic prompts of weather, baseball (her favorite sport)	Barry
5/23	8:56	9:02	6 minutes	Will need to keep on eye on when script loses its effect and make changes	Barry

Latency Recording Visual Display

How soon after arriving at her office does Shawna begin doing her work?



Intensity Recording Chart

Intensity recording tracks the degree to which something occurs. Most often, some type of scale is needed to accompany Intensity Recording. Wanting to gather data about the intensity of Shawna's behavior required the team to add some areas to the data sheet.

Intensity Data Recording Sheet

Youth Shawna Behavior/Skill being observed (be specific) Using an app on her personal cell phone that provides visual and auditory prompts, what is Shawna's anxiety level when navigating to the fourth floor?

Intensity Scale or Description of Levels:
 Shawna gets frustrated if things don't go as expected. Her anxiety escalates as her frustration grows. She consistently acts out, in relation to the level of her anxiety (1 = low, 5 = high) as follows: (Record a '0' when no anxiety is exhibited)
 1 - refuses to try, seems frozen in place
 2 - wanders around, calling herself 'stupid' and shaking her head 'no'
 3 - sits down on the floor, rocks back and forth, ignores others who try to help
 4 - all #3 behaviors plus begins crying
 5 - all #4 behaviors plus self-injurious behavior (biting, scratching, pinching, hitting head on wall/floor or with fists)

Date	Observation Time (Start – End)	Intensity Rating	Other Factors Affecting Rating	Observer
4/8	8:53 – 8:56	2	Using app but not ear buds, yet to enter the building, did something happen on the bus? At home?	Tony
4/8	8:56 – 8:58	2	Enters building, a coworker held the door open for her, guided her toward elevator	Tony
4/8	8:58 – 9:00	0	Puts in ear buds as she gets on the elevator, watches coworker and exits when she does, goes into office	Tony
4/10	8:51 – 8:55	1	Gets off bus, but moves only a few steps, phone not in her hand, no earbuds	Jethro
4/10	8:55 – 8:58	4	Does enter building on her own, sits on floor in lobby Does not interact with any other people	Jethro
4/10	8:58 – 9:02	0	Prompted her to use app on phone and ear buds. She headed to elevator, got to 4 th floor without further prompting	Jethro
4/11	8:53 – 9:00	0	Prompted her to use app on phone and ear buds as she exited bus. Only needed this initial prompt	Tony
4/12	8:53 – 9:00	0	Prompted her to use app/ear buds when she got off the bus, did rest on her own	Jethro

Accuracy Recording Chart

An Accuracy data chart tracks how correctly an action, behavior or performance takes place, compared to a standard or set of directions. In this example, Shawna's team included notes from the observation that assisted the team in figuring out the problem areas and putting in place appropriate supports.

Accuracy Data Recording Sheet				
Youth <u>Shawna</u>		Behavior/Skill being observed (be specific) <u>When given clerical tasks to complete, how accurately does Shawna follow directions?</u>		
Date	Task	Accuracy (Y/N)	Observation/Notes	Observer
8/12	Told to make 15 copies of monthly report, 2 sided copies, stapled	N	Copied the report 1 sided, some copies were on colored paper someone else left in copier	Raul
8/15	Asked to pull invoices dated Jan - Jun 2013 from 25 customer files and scan into computer	N	Included some files for 2014, did not keep them in date order, mixed some customer files with each other, took much longer to do scanning	Raul
8/24	Asked to take some memos to a colleague on the 6 th floor for signature	Y	No problems	Raul
Baseline Above				
9/10	Told to make 15 copies of monthly report, 2 sided copies, stapled	Y	Added some visuals to verbal directions, via app on her smart phone	Barry
9/15	Scanning old invoices	Y	Someone else pulled the files needed and had them in order	Raul
9/22	Sorting mail for delivery to different floors of the building, using a directory of names and office numbers	Y	Very efficient in this task, visual component was built in	Barry
9/24	Removing staples and paper clips from files, then shredding documents	N	She did not like the noise from the paper shredder and walked away from the task after doing just a few documents	Barry
9/28	Asked to shelve a new shipment of office supplies in copy room	Y	She excels at organizing and shelving. Had some difficulty with items that were new and did not already have a shelf location. But she handled it well by asking a co-worker for help.	Barry
10/4	Asked to take some memos to another office on 4 th floor for signature	N	While she was not given a time limit to complete the errand, she was gone almost 30 minutes	Raul
10/15	Asked to pull invoices dated July – Dec 2013 from 25 customer files and scan into computer	Y	Visual prompts helped her stay accurate with each step of this process. Went well	Raul

Level of Independence



A Scatter Plot can be used to check on how a youth is reliant on or free from supports. In this Scatter Plot, the team was looking for when during the work day Shawna was most independent of 1:1 supports, relying instead for support from the technology she learned to use. The team can use this chart to discuss other supports/technology that can provide Shawna the support she needs during the times of day where she is continuing to rely on 1:1 supports.

Scatter Plot

Youth Shawna Observer Zoey

Dates 6/10 through 6/14 Target Behavior: Shawna moves through her work day independent of 1:1 supports, using visual and auditory prompts on her cell phone for arrival, certain clerical tasks and departure and her ear buds when in the lobby and other large, open, noisy areas.

Time	Activity	Dates									
		6/10	6/11	6/12	6/13	6/14					
8:53 am	Arrival in building	■	■	■	■	■					
8:54 am	Arrival in building	■	■	■	■	■					
8:55 am	At coffee cart										
8:56 am	At coffee cart										
8:57 am	Moves to elevator										
8:58 am	Gets on elevator										
8:59 am	Get off elevator										
9:00 am	Work day starts	■	■	■	■	■					
10:15 am	Break	■	■	■	■	■					
10:30 am	Break ends										
10:31 am	Back to work	■	■	■	■	■					
12:00 pm	Lunch	■	■	■	■	■					
1:00 pm	Lunch ends										
1:01 pm	Back to work	■	■	■	■	■					
2:30 pm	Break	■	■	■	■	■					
2:45 pm	Break ends										
2:46 pm	Back to work	■	■	■	■	■					
5:00 pm	Work day ends	■	■	■	■	■					
5:01 pm	Gets on elevator	■	■	■	■	■					
5:03 pm	Goes through lobby		■	■	■	■					
5:05 pm	Gets on bus			■	■	■					

 Behavior did occur
 Behavior did not occur

Collecting and Analyzing Youth Performance Data - Summary

This document and the resources in it are intended to help multi-agency teams embed some basic data collection practices into the assessment and planning done with transition age youth.

Word versions of the data charts used can be found at www.ohioemploymentfirst.org. These data charts are Word tables that can be modified by adding or deleting columns, changing column width, adding or deleting rows to suit the situation at hand.

Shawna's case study is designed to illustrate the various approaches that could be used to gather and analyze youth performance data. In practice, it would be unusual that so many different approaches would be used with the same youth. However, as the examples show, each different approach provided useful and meaningful data for figuring out how to support Shawna to be successful and having 'hard' data for the team to review as evidence of her progress and of the effectiveness of the supports she was provided.

These basic tools for collecting and analyzing youth performance data provide a 'common language' for a team to use in talking about youth performance. Additionally, instituting the practice of starting with baseline data provides valid, meaningful data for monitoring youth progress and the effectiveness of supports/services.

Professionals across agencies, including direct services providers, have a common base of information for understanding what youth can do and what youth need to have in place to be successful.