

1.1 A Tour of the iGraph™ Interface



Overview

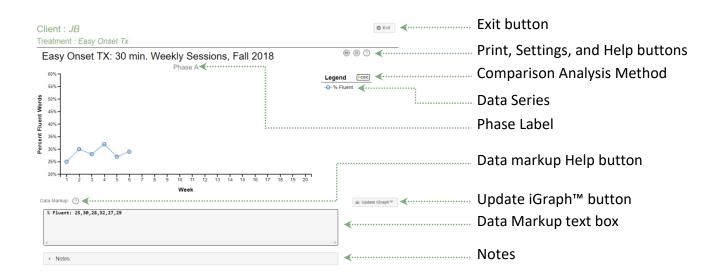
Now that you can create a client, enter client data, and do some basic graph customizations, you will next learn about several different tools for using and customizing your iGraph™.

NOTE: While Therapy-Science works well with most tablets and touchscreens, it is easiest to learn and explore the interface with a mouse pointer. We recommend that you utilize the discoverable visual cues and tooltips that are presented when the mouse pointer hovers and pauses over interactive $iGraph^{\mathsf{TM}}$ elements. Once you are familiar with the interface, you can utilize a touch screen with confidence and awareness of all the functions at your disposal.

The iGraph™ Interface

iGraph™ is designed to be easy and intuitive to use, with all the tools you need built right into the interface. We'll use the **Client** and **Treatment** from the last module (**1.0 Creating Your First iGraph™**) so go ahead and select JB, then explore the Easy Onset Tx treatment.

You should be presented with the graph as shown below. A few of the key iGraph™ interface elements have been labelled and we'll start at the top and go through each one. When you are done, you will have a good handle on how to interact with any iGraph™ you create.





The Exit Button

The Exit button returns you to the Clinician Dashboard. If you haven't already, you will be prompted to save your data. It is important that you use this button and not the page navigation buttons on your browser, as the latter will not prompt you to save your data.

Print, Settings, and Help buttons

These buttons are used to: Print the iGraph™, Open the Settings dialog for the iGraph™, and View the help dialog for the iGraph™ respectively.

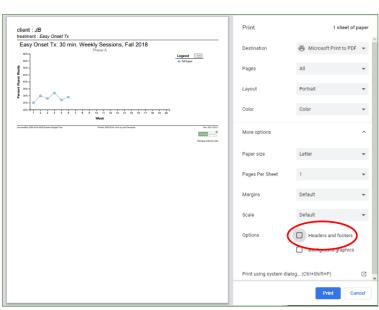
Printing the iGraph™

The Print button utilizes the printing function of your browser to print the iGraph™. Therapy-Science assembles the iGraph™ (as you see it), any results from the results panel, as well as any notes you may have added to the Notes section for printing (more on results and Notes later).

Therapy-Science also prints out some additional information following the Notes. The "Last Modified" date as well as the date and time of the print is shown so that printed documents can be used in a classroom environment for homework and timed activities.

Go ahead and try out the print button on your graph. You should get a print dialog like the one shown below.

NOTE: Your browser's print settings may add additional information in the header and footer of the page that is printed. You can usually toggle these settings on or off in the print dialog, so look for those options if you want to add or remove that header and footer information.



Pro Tip: Getting an image (.png) file of your iGraph™

Many people utilize Therapy-Science to analyze and present research data in publications, as part of a poster session at conferences, or within client progress reports. To help support those efforts, we made it easy to get an image file of your graph so that you can utilize it in (pretty much) any publishing program you may be using to make your publication or poster.





Simply press the control key (windows) or command key (mac) as you click the print button and the image will download to your default download directory.

iGraph™ Settings Dialog

There are numerous iGraph™ settings to help you customize the look and content that is displayed on your iGraph™. However, you don't have to master them all in order to effectively visualize and analyze your data. In many cases, the default settings will work fine, but feel free to explore the dialog and experiment with some of the options available to you. Other modules and **How-To** resources go into each of these options in more detail, but at this point in the stage of your iGraph™ introduction, you can focus on just the first three.

The **iGraph™ Settings** dialog is shown on the right.

Pad x-axis to: Allows you to set a minimum value for the x-axis. If your data count is less than this amount, the iGraph^{TM} will still show that many sessions. If your data exceeds that value, the axis will automatically increase to show all your data.

Color Theme: Changes the iGraph™ color palette to grayscale or a heightened color which can be helpful for some older projectors.

Show Grid: Superimposes a grid onto the iGraph™

NOTE: The settings shown next are covered in more advanced modules. You can skip to the **iGraph**^{TM} **Practice 1.1a** section below or review them here to get a feel for some of the more advanced options available.

iGraph™ Type: Allows you to specify a single or multi-panel graph (multiple graphs on the same page). See **How-To: Create a Multi-panel and Multiple Baseline iGraphs™** for more on this topic.

Comparison Analysis Method: Select from the available statistical analysis options for your data path comparisons (see **Chapter 7.2** of the book for more details on these methods).

iGraph™ Settings: Pad x-axis to 20 sessions (0 to 30) Color theme: default Show grid iGraph™ Type: Single panel Multi-panel Multiple baseline graph Comparison Analysis Method: Percent Non-Overlapping Data Percent Non-Overlap of All Pairs Conservative Dual Criteria Nonparametric Conservative Dual Criteria Tau-U Visual Presentation: Reflect graph Goals and Benchmark(s) Show goals Show benchmarks Label: Benchmark example: (1,2.2) (5,4.8) (10,6.0) * - a maximum of 3 benchmark lines can be shown OK Cancel

Visual Presentation: Some of the comparison analysis methods support a visual **Graph Reflection** which inverts the x- and y-axis to provide a visual that is reflected both vertically and









horizontally about the center of the iGraph™. By providing a new perspective of the data, you can challenge some of your natural biases when analyzing the data visually.

Show Goals: Click the checkbox to display goals directly on iGraph™. Unchecked, the goal will only display when the goal icon is clicked in the analysis panel.

Show Benchmarks: Benchmarks are used to display lines (or curves) on the iGraph™. They can be used to represent expected performance trajectories, custom error bounds, or some other visual line that you would like to use to illustrate an informative aspect of intervention program. You can read more about them in **How-To: Make Goals and Benchmarks**.

iGraph™ Practice 1.1.a

Go ahead and open the settings dialog on your graph. Adjust the **Pad x-axis to** a total of 12 sessions. Click OK and see how the x-axis adjusted to the new setting.

- 1. What happens when you adjust the **Pad x-axis to** a value of 5?
- 2. Set the **Pad x-axis** value back to 12.
- 3. Traditionally, single case graphs do not show gridlines, but some people like the detail that a grid adds to their ability to visually analyze the data. Show the grid lines on your graph. What do you think?
- 4. If you are printing on a black & white printer, you may want to change the **Color Theme** to grayscale. Try printing out your graph on a black & white printer using the default color theme and then with the grayscale color theme. Which looks better to you? Which one would you want to use in a publication or a report?
- 5. Go ahead and set the **Color Theme** back to the default.
- 6. Download an image of the iGraph™. Now you can place that into your favorite word processor and add titles and captions around it to meet your publishing requirements go ahead and give it a try.

Help Button

This help button launches the iGraph™ help dialog that covers how you can analyze the data in your iGraph™. We'll cover these steps later, so no need to click on the Help button right now (unless your curiosity gets the best of you).









iGraph™ Practice 1.1.b

1. Move your mouse so that it is over the data line (we call it a data path) on your graph. You will notice that the data path gets highlighted when your mouse is over part of the connecting lines. It will not highlight when the mouse pointer is over a data point.

Try clicking on the data path when it is highlighted. The **Analysis Results** panel will appear below the graph. The details of the analysis are covered in other learning modules and How-To articles (see the How-To Analyze **Data** series for details). Click the close button **(8)** in the upper right to close the panel.

2. Move your mouse over a data point and pause. A tooltip will appear showing you the value of the data point. Now try clicking on the data point (make sure you have closed the Analysis Results panel first).

You'll notice that this is a shortcut way for you to go directly to editing the data markup for that point. That point value is highlighted in the data markup and can then be edited.

This feature will be covered in more detail in later learning modules, but you should be aware of it in case you accidentally click a data point when you meant to click the data path. Click on some whitespace in the graph area to remove the focus from the Data Markup box.

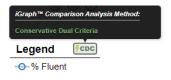
Working with the Legend

The legend identifies the important elements in the iGraph™ such as the data series, goals, and benchmarks by linking a visual characteristic of the data (e.g., color, symbol, pattern) with a meaningful label. It is interactive, so you can perform several functions by directly interacting with the legend.



Comparison Analysis Method

To the right of the word **Legend** is an icon that identifies the **Comparison** Analysis Method that is currently set for this graph. If you cannot remember the method associated with the icon, you can hover your mouse over the icon and pause, a tooltip will appear that shows you the name of the method. If you click on the icon, a dialog will open that allows you to





?

Analysis



change the method. See chapter **7.2 Analyzing Your Data Through Visual-Quantitative Means** for more information about the available methods.

Data Series

The data series listed under the legend is also interactive. If you hover over **%Fluent** label in the legend, then it will highlight. Pause on the label when highlighted and a tooltip will appear that tells you to "Click to toggle the series visibility". This is helpful for instances when you have more than one data series on your iGraph™ and you temporarily want to remove one (or more) of them so that you have a simpler visual to work with. Go ahead and toggle your data series off and then back on again.

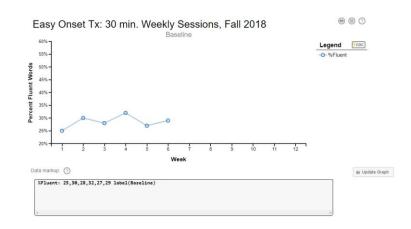
NOTE: If your mouse moves over a graphical element in an $iGraph^{\mathbb{M}}$ and that element gets highlighted, then that is an indication that that element is interactive – you can click on it to perform a function.

Phase Label

Your iGraph™ only has one treatment period (we call this a **phase**) and by default, it is labelled for you as **Phase A**. You can change the label by clicking it — which will bring up the **Edit Phase Label** dialog box.

Go ahead and click on the **Phase A** label and change it to **Baseline**.

Your iGraph™ should now look like this:



Notice how the phase label now reads **Baseline**? Is there something else that changed?

Let's take a closer look at the data markup:

%Fluent: 25,30,28,32,27,29 label(Baseline)

You'll notice that when you edited the phase label using the dialog, there was some additional markup added to your data. The labels for the phases are set in the data markup by using the keyword "label" followed by the text for the label you want for that phase enclosed in parenthesis.







NOTE: You can edit the phase labels directly using the data markup, but we do not recommend it until you become more familiar with the markup syntax.

WARNING: **Do** *not* add parentheses to your phase label. They will not be recognized and then you will have to remove them from the markup by directly editing the text. Instead, you can use brackets [and] or { and }.

Data Markup Help Button

Clicking on the help icon next to the data markup label below the graph brings up a dialog with instructions for using data markup to create an iGraph™. This help dialog covers most of the data markup details that you will use; however, you can find additional data markup details in some of the How-To's mentioned at the end of this module.

For now, just read through the help panel and become familiar with some of the markup syntax. In the next module of this series, we'll build on what you know and practice some of these markup basics.

Update iGraph™ Button

If you've made it to here, then you are plenty familiar with the Update iGraph™ button. You press this every time you have modified your data markup and want those changes to be reflected in the iGraph™ and saved.

Data Markup Box

This is where you enter the information about the data that you want to show in your iGraph™. As you read more **How-To** articles and gain practice using the iGraph™ interface, you will learn how to enter additional information that will help you when evaluating the data and making clinical decisions.

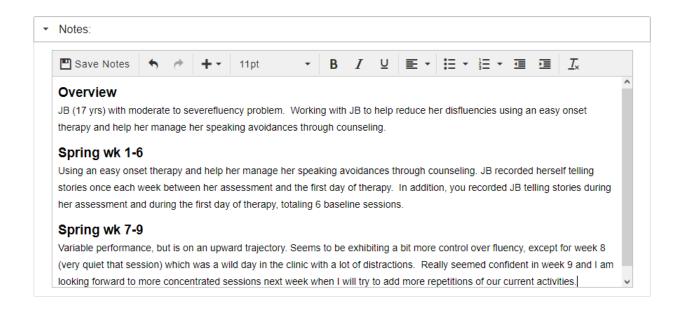






Notes

A drop-down note panel allows you to keep session notes with your iGraph™. The notes panel provides a basic set of formatting features. In addition, clicking on the + icon pops up additional features such as a line to separate entries and a set of IPA characters for speech sound descriptions.



Go ahead and explore the options of the notes panel and enter some text. Be sure to **Save Notes** before you leave the note page. An example of some notes for JB are shown above.

iGraph™ Practice 1.1.c

1. To get some practice using the skills you have learned so far, we'll create a client, add a treatment, then plot some data and customize the iGraph™.

For this exercise, we'll be working with a shy 6-year-old boy named FN who has a mild learning disability. He lacks confidence and is afraid to participate in any form of social interaction – which makes it difficult for him to participate in learning activities and seek academic help when he needs it.

His classmates are friendly, and he likes to play during recess when others go out of their way to bring him into the fold. The teacher feels that there is an opportunity to build some confidence in FN's ability to participate in social interactions by building off his desire to play with others during recess.





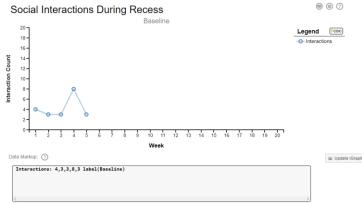


A classroom aid tracked FN during the first five weeks of the spring session and counted the number of social interactions that FN was involved in during recess. This will provide a baseline that the team can use to see if their interventions are effective. The data is shown below:

WEEK	SOCIAL INTERACTIONS
1	4
2	3
3	3
4	8
5	3

- There are 10 recess periods each week and the average student in FN's class had social
 interactions that ranged from 20 to 35 per week. You can use this information to help
 understand the appropriate scale of the measurements you could expect as you work
 with FN.
- 3. In your Therapy-Science dashboard, create a client and a treatment for FN. Add the data to the iGraph™ and customize the following iGraph™ elements:
 - a. title of the graph
 - b. y-axis label
 - c. y-axis range
 - d. x-axis label
- Add some notes to the iGraph™ notes section to help describe FN and the goal of the intervention and then print your graph and notes.

A sample of what your iGraph™ might look like is shown here. Depending upon what title, labels, and y-axis range you chose, your iGraph™ may differ.







Congratulations!

You have now explored the bulk of the iGraph™ interface and developed some core skills that will allow you to leverage all the amazing features of the iGraph™ data visualization and analysis functions.

The next module in this series will build off these skills and begin to utilize iGraph™ for practical analysis applications. Below are listed a series of How-To resources that you can use to further familiarize yourself with many of the features that were touched on in this module.

Relevant How-To Resources

Additional information on some of the technical steps covered in this tutorial are covered in the following How-To articles. You can find these in the **How-To Index** that is in the **Quick Links** section of the **Resources** page.

- How-To: Enter Data
- How-To: Customize the Graph Title, Axes, and Phase Labels
- How-To: Customize the Look of Your Graph