



KIHd System DRAFT USER'S MANUAL

**Developed by
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USER'S MANUAL

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PURPOSE OF THE USER'S MANUAL

This user's manual serves to provide a step-by-step guide to use the KIHd System to collect, and analyze data on students' behaviors in an educational setting.

Using simple 'how-to' steps with supporting diagrams and images, we aim to provide a simple 'click' approach to collect data on a regular basis.

The manual is useful to data collectors (includes teachers, staff, instructors, paraprofessionals, researchers, etc) in an educational setting.

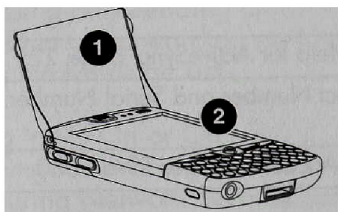
The user's manual is divided into three sections— General information, Administration of the KIHd System and Getting Started- Data Collection.

General information introduces the user to his/her PDA and its main external parts. Details of the PDA and its functioning process can be obtained from the manufacturer's user's manual. This is followed by a short description of the KIHd System—what it is about and how it works. Additional information of the KIHd System can be obtained from the website <http://kihdsystem.gmu.edu/stepstone/index.html> Click on 'Documents' to read the White paper on the KIHd System.

The second section of the manual deals with the administrative aspect of the KIHd System. It is divided into four sections—Administrative tool page, Parameter page, Task page and Graph page. Each sub-section is explained with relevant images and information. This is followed by how to use the administrative page.

Finally, the Getting Started- Data collection section walks the user through each step of the data collection process. Additionally, information on a stand-alone system, how to use it and synchronizing the PDA are provided.

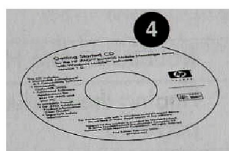
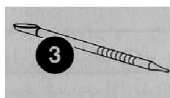
1.1 GENERAL INFORMATION: Knowing your PDA- Parts of a typical PDA



1 Removable flip cover

2 PDA

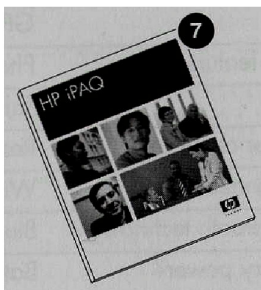
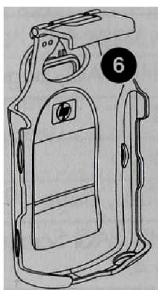
3 Stylus



4 Getting Started CD and special software

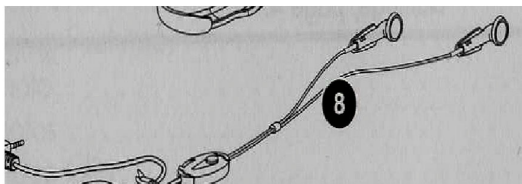
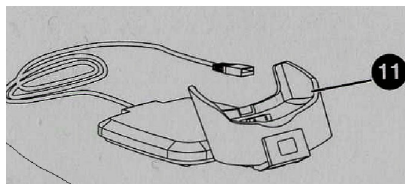
5 Standard lithium-ion removable/rechargeable battery

6 Belt holster



7 Product information

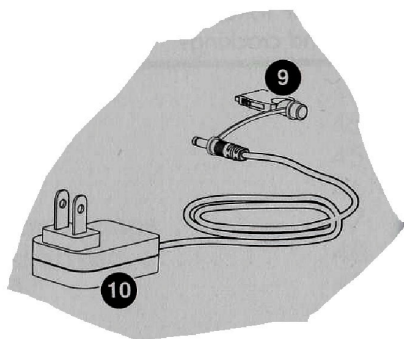
8 Wired earbud headphones



9 Charger adapter

10 AC adapter

11 USB desktop synchronization cradle



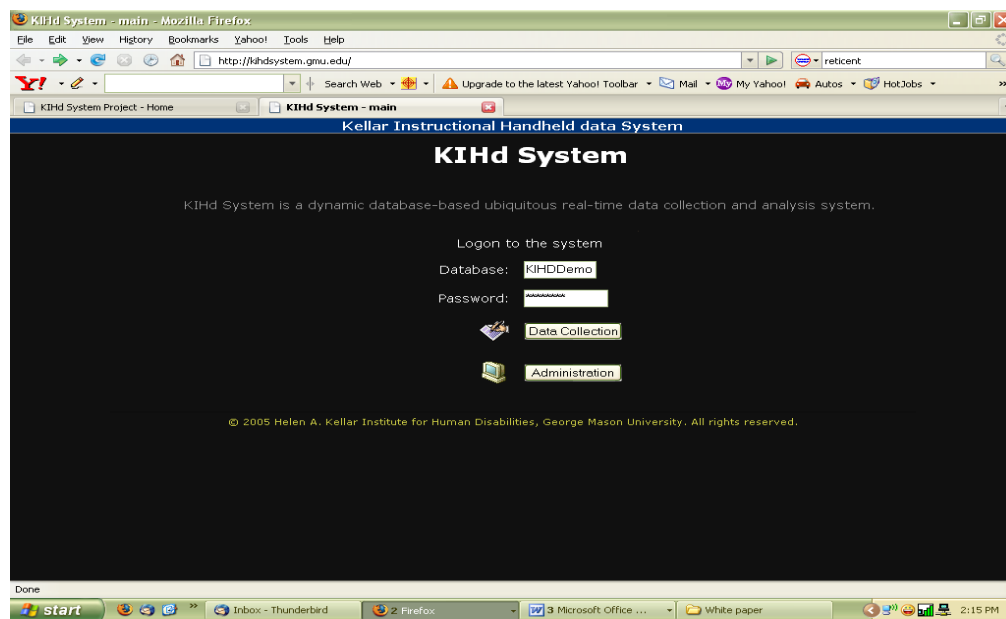
1.2 KIHd System

The KIHd System collects real time data using the data types of frequency, accuracy, duration, and fluency and instantly charts the data. In the education system, simultaneous use of the system promotes inter-rater reliability thus verifying a student's progress between teachers over a period of time.

The KIHd interactive graph provides evidence of consistent and reliable intervention data. The system's print graphs can be used for documentation of student's progress, promoting evidence-based practices and accountability. Parents can also use the system to enter information about their child's behavior at home so that teachers and therapists can have a more complete picture of the child.

Basically, the KIHd System consists of two platforms: a PDA and a PC. The PDA collects the data while the PC is used to define and analyze the data. The data that is stored on the internet makes analyses possible by using database software tools such as Microsoft Access on the PC. The data collectors have easy and reliable access to data in the form of graphs as soon as they have completed the data collection process.

The KIHd System has new main interfaces- the Data Collection and the Administration interfaces. Users of the KIHd system will be introduced and taught how to use both of them.



2.1 ADMINISTRATION OF THE KIHd SYSTEM: Administrative tool page

The administrative tool page provides an interface to the MS Access database on the server (online). From this page parents, teachers, and/or paraprofessionals (thereafter ‘teacher’) can select their database configuration, define task, add or edit child information, add a parameter, view the graphs and reports or begin to collect data. Although most data will be collected using the PDA, data collection can take place using the PC.

Example- If a teacher wants to add a new child for data collection, s/he would click on the “add a child” tab. Here, a child may have a secondary behavior that may need to be included. For instance, Bobby has a flapping behavior. This association allows the teacher to collect secondary data on how long Bobby flaps during a period of time, perhaps circle time or work time. By collecting information on secondary behaviors, the behavior can be analyzed, and new socially appropriate behaviors may be introduced.



2.2 Parameter page

If the teacher chooses to add a new item to the curriculum, the parameter tab is selected. This tab enables to either add or edit a teacher to the KIHd System.

The login password for each teacher protects information entered into the system. The parameter/s used to define each item consists of the following information: Domain name (physical, cognitive, etc.), Skill area (area of instruction), Skill objective/s (item to be taught), Instructions (stimulus to be used), Targets (what is the anticipated response of the child), Material (items needed to implement the instruction/lesson), and Mastery criteria (the percentage of correct responses needed for proficiency).

For instance, a teacher may want to teach a lesson on colors. The domain in this case is "cognitive" with the skill being "pre-academic colors." The skill object is to learn the color blue. The teacher's instructions may be verbal directive of "touch blue" with the "target" being the child touching a blue card kept on a table in front of him. The materials would be various color cards and the mastery criteria would be 90%. Once those parameters have been added, the teacher needs to define the specific task by going to the task page. This task can be done for multiple children and teachers.

2.3 Task page

The task page provides access to a simple interface to assist in the creation or editing of each learning component or a “task.” Here the information previously entered is narrowed down by providing a task name and associations, such as distractors (2 with red and yellow), prompt level (gestural or independent prompting-how will you help the child), and data type (frequency-the type of data you will collect for this task). The KIHd System can collect four types of data: frequency (number of correct responses), duration (time to complete), accuracy (number correct over the total number), and fluency (number of correct responses over a time frame).

The screenshot displays the 'Add New Task' interface within the Kellar Instructional Handheld data System. The interface is organized into several sections:

- Tasks already in system:** A dropdown menu showing a list of tasks, with an 'Edit' button below it.
- Task Name:** A text input field containing 'Blue2', marked as '*Required'.
- Domain:** A dropdown menu showing 'Cognitive', marked as '*Required'.
- Skill Area:** A dropdown menu showing 'Pre-academic colors', marked as '*Required'.
- Skill Objectives:** A dropdown menu showing 'Primary colors', marked as '*Required'.
- Distractors:** A dropdown menu showing '2'.
- Instructions:** A dropdown menu showing 'touch blue'.
- Targets:** A dropdown menu showing 'identifies color blue'.
- Material:** A dropdown menu showing 'Color cards'.
- Mastery Criteria:** A dropdown menu showing '80% accuracy over 2 session'.

Below these fields is the **Prompts** section, which includes a list of checkboxes for different prompt types:

- ☐ full physical
- ☐ verbal
- ☒ gestural
- ☐ modeling
- ☐ faded physical
- ☐ faded verbal
- ☒ independent
- ☐ positional

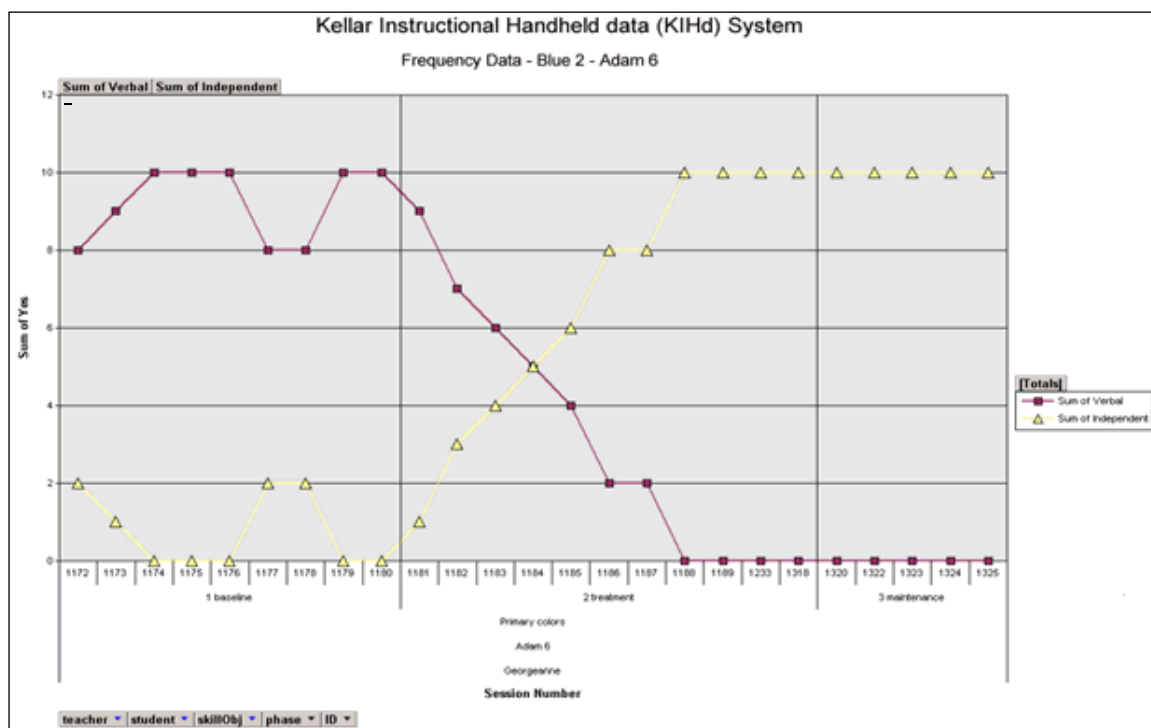
Underneath the prompts is the **Optional Prompts** section, which contains two empty text input fields.

The **Datatype** section features a dropdown menu set to 'Frequency'.

At the bottom of the form is an 'Add Task' button and a link labeled 'back to admin main page'.

2.4 Graph page

The graph page provides visual data on the data collected on a particular student/s performance at a given period of time. Graphs for an individual student or a group of students can be obtained. All data are displayed in three phases—baseline (B), treatment (T) and maintenance (M) phases of instruction. The data are presented in a traditional ABA type line graphs or in bar charts or pie charts.



2.5 How to use the administrative page

The administrative page is used to define targets, add student/s/parameters, view graphs and/or generate reports.

- Click the “Administration” tab

The **Administration** page will bring you to the page that defines targets/tasks, add a child, add parameters, view graphs and/or reports. **Help** may be selected to view the video and manual or you may press **Exit** to leave the system.

- To define targets, click “Define Targets” in the Administration page

On the **Add New Targets page**, select the target name and data to define your target from the drop down menu. In addition, prompts and data type can be selected from this page. **Prompts** are checked or novel prompts are typed under **Optional Prompts**. **Data type** is selected from the drop down menu with the choice of frequency, fluency, duration or accuracy.

After adding all the relevant information on target, click “**Add Target.**”

Current targets may be edited; their files can be made active or inactive.
To edit current target/s, click “**Edit**” button

- To add students, click “Add a Student” in the Administration page

On the **Add Student page**, subject/s and associated secondary behavior/s may be added. Secondary behaviors can be collected with the data type of frequency or duration.

After adding all the relevant information about the student, click “**Add Student**” button.

Current students may be edited; their files can be made active or inactive.
To edit current student/s, click “**Edit**” button

- To add parameters such as teachers, skill areas, programs and content areas, etc., click “Add Parameters” in Administration page
- View Graphs, Reports

The interactive **Graph** can be created by limiting the data from the drop-up menus of teachers, students, skill objective, or phase. In fact, one student can be viewed across many teachers or one teacher across many students.

- Reports can be generated to reflect various sessions and anecdotal information. Click on “Report.”

5/1/2006	Ms. Steele	Herberta	address	baseline	4	
5/1/2006	Ms. Steele	Herberta	address	treatment	1	
5/1/2006	Ms. Steele	Herberta	address	treatment	2	
5/1/2006	Ms. Steele	Herberta	address	treatment	3	
5/1/2006	Ms. Steele	Herberta	address	treatment	4	eye infection
4/30/2006	Teacher 1	Student 1	multiply by 5	baseline	1	

3.1 Getting Started- Collecting data on your PDA

1. Go to <http://kids01.gmu.edu>
2. Database: STEPSTONE (default)
3. Enter your Password

To collect Data

1. Click the “**Data Collection**” tab
2. Find your name, then click “**Login**”
3. Select **Student**
 - A. For a practice session, select “Student1”.
 - B. For real trial, select your student (name) who you are working on.
4. Select **Target**, then click **Continue**
5. Make sure you are in the right place.
 - A. If you see an error message on the PDA screen, click on the **Back** button in **Internet Explorer**.
 - B. Click **Continue**.
6. Choose Phase (example Baseline, Treatment, Maintenance, etc)
 - A. View Chart – In order to view the chart, first, initiate the session. In order to initiate the session, click **Start Session**, then click **Cancel**. Now, **View Chart**. Repeat **View Chart** after your session is completed.
 - B. Click “**Back to data collection**” if you have additional data collection session/s.
 - C. To start to collect data, click “**Start Session**”
 1. **Y** – Correct
 2. **N** – Incorrect

3. If you make a mistake while collecting data, simply click the **Back** button in **Internet Explorer**. This will take you back one step and you can re-start your data collection session.
 4. If you want to start the session all over again, click on the “**cancel**” button, followed by the “**Start Session**” again.
- D. Upon completion of data collection, click “**End Session**”
7. **View Chart** again to see what you have collected. Then click “**Back to data collection**” if you have additional data collection session/s.
 8. Make sure you log out of the KIHd system by clicking on **End data sample - Log Out -Exit**



Make sure you connect your PDA to the charger after you use it.

The screen shots of your PDA will look like these during the data collection process

LOG IN

STUDENT'S NAME

PARAMETERS

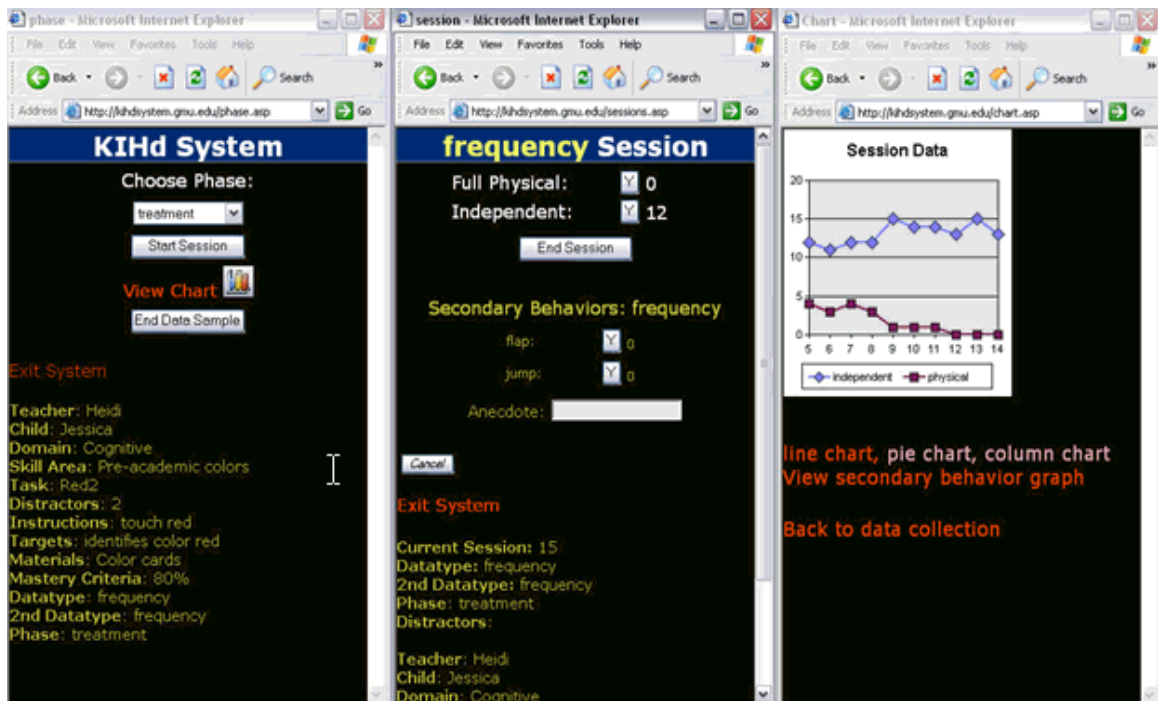
The screenshots show the KIHd System interface across three steps:

- LOG IN:** The 'Login' page displays a dropdown menu for 'Select your name:' with 'Heidi' selected, a 'Password:' field, and a 'Login' button. An 'Admin Home' link is visible at the bottom.
- STUDENT'S NAME:** The 'Home' page shows 'Child Name: Jessica' and 'Task: Red2' with a 'Continue' button. It also displays 'Exit System' and 'Current User: Heidi'.
- PARAMETERS:** The 'Instructions' page lists various parameters: Task: Red2, Domain: Cognitive, Skill Area: Pre-academic colors, Skill Obj: Primary colors, Distractors: 2, Instructions: touch red, Targets: identifies color red, Materials: Color cards, Mastery: 80%, Criteria: 80%, Datatype: frequency, and 2nd Datatype: frequency. It includes a 'Continue' button and an 'Exit System' link at the bottom.

START SESSION

IN SESSION

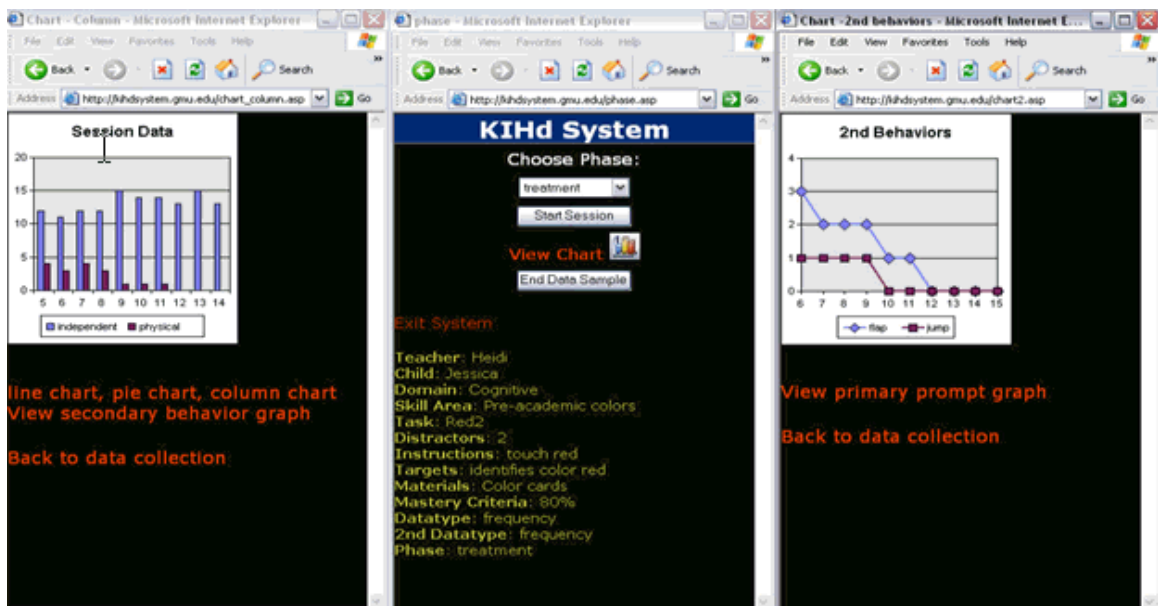
VIEW GRAPH



VIEW BAR GRAPH

?

SECONDARY BEHAVIOR



3.2 Using a stand alone system

A standalone KIHd system is used in case that the Internet connection is not available in a PDA to collect data. It is a very convenient tool because data can be collected anywhere, anytime, without an Internet connection. In order to have a standalone application in your PDA, a KIHd standalone application must be installed. Please check _____ for details.

The data collected using a standalone KIHd system is stored in a database in the PDA temporarily. In order to retrieve the data from the PDA to the PC, it is critical that the PDA is synchronized as soon as the data collection is completed. The data is transported into the database in the server located at George Mason University.

3.3 Synchronizing your PDA

It is recommended to synchronize the PDA once a day.

1. If the Internet is available to the PDA, you can sync it right from the PDA.
 - a) Load KIHd standalone system in PDA
 - b) Click **“Sync data”** at the bottom of the screen in PDA.
2. If the Internet is not available to the PDA, you will need to connect your PDA to the PC using the PDA “cradle”. Check that the PC is connected to the Internet.
 - a) Load the KIHd standalone system in your PDA
 - b) Place the PDA in its cradle
 - c) Connect the cradle to the PC (USB port), and make sure active sync is connected
 - d) Click **“Sync data”** at the bottom of the screen in PDA

