



## Language Activity Monitoring (LAM)

### What is LAM?

Language Activity Monitoring or LAM is a term that represents the importance language-based intervention has in achieving successful results using augmentative and alternative communication (AAC). LAM has grown from a basic approach of collecting and using logfiles to measure communication performance to an evidence and value based intervention. Language is the foundation of effective communication and, therefore, monitoring gains in language competence or maintaining language performance is central to evaluating the effectiveness of AAC intervention.

### What is a LAM logfile?

A LAM logfile represents the use or events associated with a given AAC system; the selections made by the user. The logfile starts with a time stamp (24 hour clock) and then the event, e.g. word, message or control feature selected. For example:

01:20:10 "I"

01:20:20 "like"

01:20:22 "you"

A series of events makes up a language sample and can be transcribed and analyzed to measure communication performance. The time stamp is critical to accurately measure communication and selection rates for someone.

### Why use LAM?

LAM signifies that a language-based approach is being implemented as part of a clinical-educational program that desires to achieve an AAC speaker's maximum performance.

LAM data logging is a quick and easy way of gathering a language sample. In addition to saving time, logged data can provide accurate information on the time of communication activity, how a language event was selected, and the use of an AAC system during a given day or location.

AAC professionals find that LAM supports evidence-based practice and families find that LAM data answers questions about their expectations on AAC outcomes.

### How to Use LAM data logging?

The automated data logging feature of an AAC system or software running in a computer to collect and analyze a language sample can be saved and uploaded to view and analyze. LAM is a built-in feature of several AAC systems and increasingly is being added to AAC software applications under various labels such as data logging, usage, or history.

Depending on the AAC system/software, LAM data may be viewed on the AAC speaker's display or visually inspected after being uploaded and saved on a computer. The Performance Report Tool (PeRT) is a software analysis tool designed specifically to allow a logfile to be transcribed and analyzed. PeRT provides a 2-page report with 18 summary measures and several appendices to use to support treatment decisions and performance and outcome measurement.

ICAN™ Talk clinicians suggest these steps:

- ★ Upload the weekly logfile when clients arrive at clinic to view and help customize the therapy session.
- ★ Use the session logfile to create a transcript and analyze using PeRT to monitor performance during treatment.
- ★ Compare performance in therapy with communication activity across other daily activities, environments and partners.
- ★ Receive logfiles from clients who want their performance reviewed when they cannot come to the clinic.
- ★ Revise LAM intervention strategies to maximize gains based on all the evidence.

# RESOURCES

**History features of AAC activity** available on several apps are not the same thing as LAM data, intervention and reporting of use or performance. Software history features typically do not have a time stamp or information about how a word was selected or utterance generated.

## Read More about LAM and LAM Intervention

Hill, K. & Corsi, V. (2012). The role speech language pathologists in assistive technology assessments . In M. J. Scherer & S. Federici (Eds.) *Assistive technology assessment: A handbook for professionals in disability, rehabilitation and health professions* (pp. 301-336). London, UK: Taylor & Francis Group.

Hill, K. (2010). Advances in Augmentative and alternative communication as quality of life technology. *Physical Medicine and Rehabilitation Clinics of North America*, 21, 43-58.

Hill, K. (2009). Data collection and monitoring AAC intervention in the schools. *ASHA Perspectives on Augmentative and Alternative Communication* 18 58-64 June 2009. doi:10.1044/aac18.2.58

Hill, K. (2004). AAC evidence-based practice and language activity monitoring. *Topics in Language Disorders: Language and Augmented Communication*, 24, 18-30.

Hill, K., & Romich, B. (2001). A language activity monitor for supporting AAC evidence-based clinical practice. *Assistive Technology*, 13, 12-22.

**The AAC Institute Self-Study Program course on LAM and the AAC Performance Report Tool or other AAC courses.**

<http://www.aac institute.org/welcometoaacissp.html>

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## LAM Related Tools

★ KEYLAM: stands for Keyboard Language Activity Monitor and is a professional logging program for PC computers that records keyboard and mouse clicks. These input events can either come from a standard keyboard and mouse or from devices that emulate input hardware such as onscreen keyboards and external speech generating devices (SGD) that use a Windows operating system. KeyLAM works with all Windows releases - Windows XP or newer.

★ PeRT: facilitates the generation of the AAC Performance Report from AAC language samples automatically collected using the Language Activity Monitor (LAM) data format. With the AAC Performance Report, therapy can be far more effective and higher communication performance can be achieved. The AAC Performance Report supports AAC evidence-based practice.

★ LAM Developer's Information: AAC Institute assesses developers in adding the LAM feature to their communication applications. We have established universal guidelines to make data logging consistent across platforms and AAC systems. This is helpful to everyone.

★ Language Sampling Procedures for LAM: We have a manual that describes procedures for collecting the best representative samples from various users.

For more information on LAM related tools, please contact Katya Hill or Barry Romich at the AAC Institute.