

# AAction Points

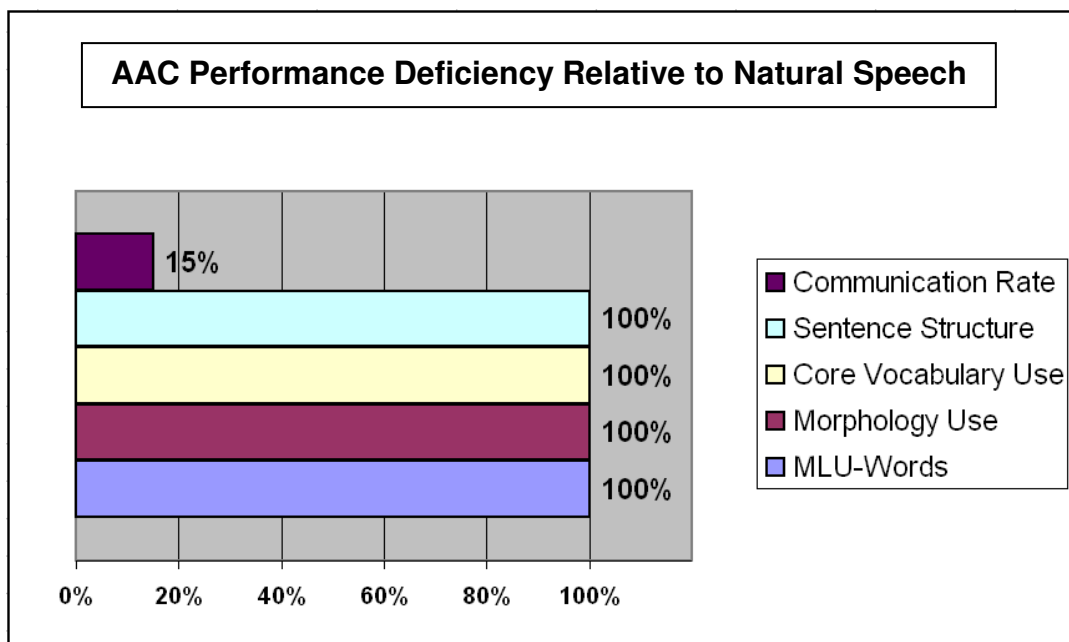
## Optimizing Communication Performance using AAC

### I. Summary Statement

Optimized communication performance is key to the best life experience for people who use AAC and is thus the goal of the AAC service delivery process.

### II. The AAC Performance Gap

Of nearly all parameters used to characterize communication, people who use AAC can presently achieve performance equal to that of natural speakers of otherwise comparable ability. These parameters include: sentence construction, MLU (Mean Length of Utterance) in words and morphemes, use of core vocabulary, use of social functions, etc. However, one measure stands above all the others as the flagrant and significant performance gap: **communication rate**. Therefore, communication rate is a primary focus of AAC service delivery.



### III. What are the factors that affect Communication Rate?

Both research and clinical case studies concur that the primary factors that impact communication rate are:

- 1) Use of language representation methods, and
- 2) Selection rate.



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## IV. Language Representation Methods

Three language representation methods (LRMs) are used in AAC systems:

- 1) **Single Meaning Pictures** (including visual scenes)
- 2) **Alphabet-based methods** (spelling, word prediction, words, etc.)
- 3) **Semantic compaction**

Each method has particular characteristics and offers different performance. Most people achieving high performance using AAC use a combination of methods. Most use one method for core vocabulary and a different method for extended vocabulary. To learn more about language representation methods, take the free Self-Study Program course at the AAC Institute web site. CEUs are offered without cost.

**[www.aac institute.org](http://www.aac institute.org)**

## V. Selection Rate

Selection rate directly influences communication rate. Selection rate is the rate at which the individual can make choices using the communication system. Selection rate can be measured in bits per second. Evidence-based practice includes measuring and optimizing selection rate. Tools for doing this are available: [www.aac institute.org](http://www.aac institute.org). Click on Products.

## VI. What AAC device features contribute to optimized AAC performance?

- 1) The most important feature in AAC devices is the support of language representation methods that result in high performance communication. (All devices do not support all methods.)
- 2) Language activity monitoring (LAM) supports the evidence-based practice process of achieving optimized communication through the automatic collection of language samples.

## VII. What other tools can contribute to monitoring AAC performance to optimize communication?

- 1) **U-LAM** (Universal Language Activity Monitor) software facilitates collection of language samples from any speech output AAC device.
- 2) **PeRT** (Performance Report Tool) software automates the generation of the AAC Performance Report, a set of 17 quantitative summary measures of communication performance. A Self-Study Program course on the AAC Performance Report is available.

Both U-LAM and PeRT are available from AAC Institute.

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