

Extended Abstract from the 2010 ISAAC Biennial Conference, Barcelona, Spain.

Title: Learning with Lennart

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Lennart received his first Voice Output Communication Aid (an Eco with German Minspeak Programm Wortstrategie 84) at the age of 6.6 - one year prior to beginning school. He accesses the device using a Tracker head-mouse. Before acquiring the device, his spontaneous communication was limited to answering yes/no questions and the use of a 36-location communication chart which he accessed using a simple head-movement code.

In order to learn to use the device, he relied on exploratory play and especially on the modeling provided by his mother in their joint conversations. She had initially taught herself to communicate using the device in order to reduce the asymmetry typical of the language modeling of AAC users. She accompanied their discussions showing how the device might be used to extend or refine utterances. As is the case in the parental modeling in normal language development, she was careful to offer a model that was appropriate to his current language skills; i.e., slightly more than he had previously achieved. With an aim to establishing solid language skills, this modeling initially placed special emphasis on the manipulation of approximately 400 high-frequency "target" words. Only later, as Lennart's manipulation of these words improved, did the emphasis of instruction change towards establishing an extensive fringe vocabulary. Nevertheless, the aim remained to optimize his manipulation of language rather than simply to extend his vocabulary. As his mastery of the device improved, his mother's language modeling on the device was reduced and became increasingly purely vocal.

In the course of the months that are charted in this presentation Lennart moved from making single-word utterances (either as communication acts in themselves or as a part of his exploratory language play), to making syntactically or morphologically correct sentences.

The Eco device has a "Language Activity Monitoring" (LAM) feature that creates a time-stamped protocol of each communication act. This feature of the device was active and used almost constantly throughout the first year, allowing a close and possibly unique monitoring of the language development of a child using a speech output device. The protocol it produced has made it possible to track and to interpret the individual steps that Lennart followed in achieving independent language skills. This has been particularly apparent in the path that he has followed to master the morphological and syntactic complexities of German using a communication device. From his attempts and corrections whilst constructing ideas and sentences, a fascinating view of the details of the day to day (and sometimes even hour by hour) development of these skills has become apparent in a degree of detail which was previously unknown in the German literature of AAC.

The language data acquired during this period was by no means of purely academic interest. The LAM data was examined on a regular basis. Aspects of communication that Lennart was trying to master or that might be emphasized became apparent. Through examination of one or more day's protocol, points of interests were identified and so that the help he received related directly to his current interests, often within hours.