



# Tech Talk

## Using Technology to Improve Polygraph Methodology

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Whether you are a brand new polygraph examiner right out of training, or a well-seasoned veteran in conducting polygraph examinations, you may have at some point wondered if you missed something in the administration of a given test. “Was the examinee biting down while I was reading that question to him,” or “I could have done a better job explaining the physiology to the examinee before the test.” Or even, “Although my conversational Spanish is pretty good, I don’t know technical terms well enough to clearly explain how polygraph works.” What if you are the quality control person for a particular agency or department, have you ever thought, “He usually gives a great pretest, but on this exam, perhaps he was just burnt out, in a hurry, or tired...”

Well, perhaps technology holds the solution to these and other problems. Examiner burnout, translation issues, lack of thoroughness and consistency, and countermeasures are realities for polygraph professionals. Since there are certain portions of a polygraph examination that are routine, it is not implausible to give a presentation exactly the same way every time to every examinee, without ever missing required explanations. For example, the physiology behind why polygraph works can be explained the exact same way to each examinee.

With regards to the administration of the pretest portion of a polygraph examination, Honts, Devitt, Winbush, and Kircher, (1996) demonstrated that standardization of the presentation, and the

presentation given in a pre-recorded manner could be done, and done so very effectively. In these studies, wording of questions, polygraph rationale, and psychological preparation were presented to the examinee with a pre-recorded audio monologue. Additionally, pre-recorded intest questions were presented exactly the same way every time, without stuttering, and without irregular emphasis on particular words or syllables.

With regards to the intest presentation of questions, Lafayette’s polygraph software has a built in speech synthesis feature that allows examiners to allow the computer to ask the questions during the intest phase of the examination. Which voice to use, the speed of the speech, and the speech volume are all adjustable in the Lafayette software. While standard synthesized voices may not be of sufficient quality for your comfort, there are additional high quality, human-like voices available for purchase either through Lafayette itself, or other software vendors.

These same human-like voices, or even your own recorded voice could be used to present the standard pretest contents. This will free you up to carefully observe your examinee during the pretest and intest phases. This also allows you to be a more focused and effective interviewer (pretest) and interrogator (post test).

For questions, comments, war stories, or to submit confirmed chart data on exams utilizing this methodology, email me at [blalock@InternationalPolygraph.com](mailto:blalock@InternationalPolygraph.com).

### References

Honts, C. R., Devitt, M. K., Winbush, M., & Kircher, J. C. (1996). Mental and physical countermeasures reduce the accuracy of the concealed knowledge test. *Psychophysiology*, 33, 84-92. 