

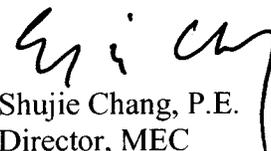
Assessment Report
For
Visual Language Translator (VLT)
FY 03



Prepared By:
Marine Forces Pacific Experimentation Center (MEC)
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This document describes the Visual Language Translator (VLT) Limited User Assessment conducted during FY 03. It reflects our observations, conclusions, and recommendations. It does not necessarily represent the formal position of the Marine Corps or the Department of Navy.

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Shujie Chang, P.E.
Director, MEC

Introduction

The Visual Language Translation (VLT) Card is a foldable picture card featuring approximately 600 color illustrations designed to facilitate two-way communication. Focused questions asked through a one-way speech translation device can be answered by pointing to an illustration on the card. An authorable version of the VLT Card is being developed that allows users to mix and match, and create new images, for use in specific missions. The VLT supports instant 2-way survival-level communication through pictures. In addition, Command and Control panels contain critical words and phrases in the target language. The VLT can be used in conjunction with other language translation tools or as a stand alone capability. The VLT has been used in hospitals, for training in foreign countries and actual combat and peacekeeping operations. An example of a possible application would be in the event a Marine or soldier is approaching a building with hostiles and an informant wishes to communicate what weapons the hostiles have. By showing a VLT with different types of weapons, he can easily communicate how the hostiles are armed.

Technologies & Training

The technology is low-tech consisting of printed sheets. Two variants were used during the assessment. The first version consisted of a laminated card. This proved bulky and stiff. The second version was printed on synthetic tear/water proof paper which proved far superior. Using this material the VLT can be folded down to the size of matchbook, yet is waterproof and tear proof and still has the stiffness to be opened and displayed by hand. Using synthetic paper the VLT weighs only .5 ounces.

Very little training is required to use the VLT. The user points at the pictures on the card to communicate with the target audience.

Data Collection

Data collection focused on (1) whether the cards, if available, are used; (2) how they're used; (3) how effective they are (a) alone, (b) coordinated with oral channel (speech translator or human).

Two methods of data collection were used. The first method was through observation. This consisted of one (or more) IPT member(s) sitting in on a scenario and recording notes such as how the interviewer used the card.

The second method was through the use of other user feedback questionnaires and email comments. Questionnaires were distributed to the individuals who actually had the opportunity to use the VLT. Some of the questionnaires were filled out immediately after completion of the role player "meet", while other questionnaires had to be sent out electronically after the exercise. A sample questionnaire is provided in [Appendix A](#) of this document.

Assessment Results

From the observations and user feedback, the VLT was used successfully in training and during actual operations. Users preferred the synthetic paper version over the laminated version, simply

because it is their belief that the performance of the synthetic over the lamination is better suited for high temperature and wet environments. There were some concerns about the lack of cultural nuances for VLT cards. For example, Arabic Text and Phonetics are written in the colloquial form as opposed to the formal form you would find in written media (writing a word the way it sounds as opposed to spelling correctly). If the target audience is a person that can read the text, then the formal form would be preferred. The VLT proved durable. It was intuitive and easy to use.

When used in conjunction with other language translation devices, it can enhance this device. For example, it can be used to determine what language the individual speaks by pointing at the country flags on the VLT.

Usability was based on the following criteria: the User was asked to circle one choice in each row. The average for the VLT is reflected in the accompanying table.

Usability

	Strongly Disagree		Agree		Strongly Agree	Not Applicable
Criteria	1	2	3	4	5	N/A
The system was highly effective				X		
The system displayed information clearly				X		
The system contained appropriate material/pictures				X		
The system effectively conveyed the interrogator's needs/questions.			X			
The system effectively conveyed the local national's response.			X			

Conclusions

The VLT is cost effective.. When used in conjunction with other language translation systems it becomes highly effective. It is easy to use and requires no training.

Recommendations

- Use synthetic paper versus laminated paper.
- Review content to include cultural nuanaces.
- Consider making this capability Web and CD based so that units can create once they know the assigned area of operation(s). Web Based is suitable for units based at home station. CD Based will allow deployed personnel to create cards without access to the Web.
- Continue to use and test as a stand alone capability as well as with other language translation devices.

• **Appendix A: Questionnaire Sample**

Visual Language Translator (VLT) Questionnaire

Unit: _____ Years in Service: _____

Job Function: _____ Years in current job function: _____

Type/Version of Visual Language Translator (VLT) used: _____

When and where did you received the VLT unit: _____

Usefulness of translator: High Medium Low

Assisted in accomplishing mission: Greatly Somewhat Not at all

Increased effectiveness: Yes No

Scenario:

Force Protection Interrogation of Hostiles Interview of Friendly
Logistic Support Medical Assistance Other: _____

Brief Description of Scenario: _____

Operation:

Was the translator durable: YES NO

Was it intuitive/self-explanatory to use? YES NO

Did you receive user training? YES NO

If so, how much training? (days, hours, minutes) _____

How was the Visual Language Translator (VLT) used?

a. Alone

b. Along with an oral channel (computer speech translator, human translator, etc)

Accuracy:

Did local nationals recognize the pictures easily? YES NO

What percentage of the time where the local nationals able to use the VLT card effectively? _____

Recommendations:

Icons to be removed: _____

Icons to be added: _____

Is the layout suitable? YES NO

What order of panels would be preferred? _____

Usability

Please circle one choice in each row. 1 means “I strongly disagree with this statement” and 5 means “I strongly agree with this statement”.

	Strongly Disagree				Strongly Agree	Not Applicable
	1	2	3	4	5	N/A
The system was highly effective.	1	2	3	4	5	N/A
The system displayed information clearly.	1	2	3	4	5	N/A
The system contained appropriate material/pictures.	1	2	3	4	5	N/A
The system effectively conveyed the interrogator's needs/questions.	1	2	3	4	5	N/A
The system effectively conveyed the local national's response	1	2	3	4	5	N/A

Overall Experience

Please answer the following questions to the best of your knowledge. Use the back of the page if you need more space. Feel free to speak openly – your comments will be pooled with those of

others, with no attribution to you personally. Remember: we are evaluating the system, not you. Thank you.

- 1) What did you like most about the VLT?
- 2) What did you like least?
- 3) What did you find easy to use?
- 4) What did you find hard to use?
- 5) What were the icons/pictures that seemed operationally important?
- 6) What were the icons/pictures that seemed irrelevant?
- 7) What icons/pictures misled/confused the local nationals?
- 8) Was there something you wanted to do with the VLT but couldn't?
- 9) What would you change about the VLT?
- 10) Would you use the VLT as part of your daily job if it were available? YES NO
Why or Why not?
- 11) Additional Comments?

Appendix B: Anecdotal Comments

The following quotes have been taken from emails, letters, and verbal transcriptions.

I am in Mosul, Iraq right now and have found the Iraqi survival guide to be quite helpful. I deal with both military and civilian casualties and it has aided many times in getting the most basic of information across such as, "where is the land-mine"? The one time I was not carrying it I believe an Iraqi child of 15 lost both hands because we could not understand what his mother was trying to tell us about the danger, and our interpreter was unavailable. The Iraqi survival guide is part of my daily uniform now.

SGT CUNEO, May 30, 2003

We are in the middle of Baghdad and the Kwikpoint Iraqi VLSG cards are incredibly helpful and good. They are a hot commodity. We'd like to give some to the hospitals to interface with them. The text is also helpful--our Iraqi translator says any Iraqi can understand it.

Capt. Arosemena, 1st Armored-2nd Brigade, May 29, 2003

Checked with the brigade and they said Kwikpoint products were extremely useful during patrols without linguist support. Engineer and MP teams also found the products useful when communicating intent to linguist whose English was poor.

Craig Bell, LTC SETAF G2, May 13, 2003

Kwikpoint has been used in Afghanistan and been effective. It's considered battle tested.

Mark Roemer, U. S. Special Operations Command

These instructional guides address a subject clearly important to the US Services. The Global War on Terrorism poses unique challenges in communicating with indigenous personnel and visual translators may benefit forces in the field, such as those serving in Operation IRAQI FREEDOM.

General Richard B. Myers, Chairman, Joint Chiefs of Staff, April 17, 2003

These are top quality products and right on the money for our needs! I was requested to show them to my commanding general. He also was very impressed and pleased to be able to deploy with them. He believes that the most useful of all for the soldier on the ground will be the point and talk [Iraqi Kwikpoint] card. We had already started to develop our own and now I have shredded ours because they are not the same quality as what DLI has delivered. [Kwikpoint] will make a significant contribution to our mission success.

Major Scott P. Caldwell, Deputy G5, 1st Armored Division, May 2, 2003

If we need to not buy any furniture or computers for now, we should do that in favor of getting this stuff to the shooter. The clean up phase for this will take some time and the troops out front need to have these in their possession. I would even suggest that if it will speed up shipment to Maj... we cut orders and send someone on a round robin to deliver the VLSGs. Cut orders and fly commercial if needed to get these to the theater. We need to deliver! Thank you.

Captain Frank Von Heiland, Defense Language Institute, Office of Enduring Freedom
April 9, 2003

Here's the utility. When I'm in the field debriefing a foreign national with translation assistance, many times the foreign national doesn't have a robust vocabulary; example airplane may mean anything in the air. There is a process of going through images on KWIKPOINT to obtain more detail from the individual. The airplane the foreign national stated to my translator may actually have been an attack helicopter, but the foreign national's vocabulary couldn't describe this. The benefit is that KWIKPOINT will help facilitate more detailed debriefings that directly result in more detailed reporting created and disseminated via CHIMS. Benefit is even greater for soldiers patrolling without translator support.

Lt. Col. Grekowski, PM CHIMS, February 7, 2003

We, the Army/Navy Science Advisors, USASOC and Defense Lang. Inst. have distributed around 10,000 to date. Everyone wants more, principally, the 18th Corps and MEF's and the 30th MED from V Corps has some number as well. They are in use in both OEF and OIF.

John Grills, Deputy Director, AMC Fast, May 14, 2003

I want to get as many as possible, within reason. They are Weapons and Common Signs translator/recognition cards that would be indispensable for every soldier to have. I would really like to get these for my deploying units (they are awesome!)

MAJ Whetstone, Executive Officer, 1st Mobilization Brigade, March 28, 2003

The VLT is something that a SOF soldier could certainly use as well. For a couple dollars a man it would allow them to communicate with anyone they meet regardless of language. It would be an excellent SERE aid.

Preston E. Johnson, Lieutenant Colonel, Special Forces, January 29, 2003

Visual language translators

The committee commends the Department of Defense for utilizing visual language translators for military field operations. The committee notes that visual language translators enable service members to greatly improve communications by eliminating language barriers. Service personnel in Operation Iraqi Freedom are currently using these devices. The committee supports the use of visual language translators and urges the Department of Defense to expand the use of this important tool.

Committee on Armed Services, United States Senate
National Defense Authorization Act for Fiscal Year 2004, May 2003

The development of the Multi Service Kwikpoint was a joint effort between the Marine Corps, Army, Navy, and U.S. Special Forces. Ideally we'd like to get a visual language translation (VLT) capability to all troops that might need it, particularly in countries with low-density languages. Products like these are a low cost alternative that can easily be customized for use in a host of operational scenarios.

Mike Meyers, CMFL Naval Research Science Advisor, US Marine Corps Forces Atlantic

The visual translator cards (VTCs) are an important addition to the language translation toolkit we are building for the Marines. Simple items such as these provide basic communication capability in foreign areas. Coupled with speech-to-speech tools, the VTCs expand the domain and breadth of communication possibilities

Mr. Ashley G. Johnson, GS15, Naval Research Science Advisor, December 3, 2003

I am wildly enthusiastic [about Kwikpoint]. This looks to me to be one of those rare cases where there is a perfect match between capability and military need. I urge MCIA to talk with Alan at Gaia Communications, to send them their cultural intelligence guides and work out ways to use Gaia's experience in condensing complicated linguistic and cultural issues into compact visual guides to help them make a cultural intelligence and language guide for the individual Marine (and soldiers, too). We are actively considering how both the MCIA and Gaia products could help us in our Rapid Acquisition of Tactical Language project at DARPA.

Dr. Ralph Ernest Chatham, Ph.D., Program Manager, Training Superiority, Defense Advanced Research Projects Agency, April 30, 2003

In a world that expects a silicon-based, high-tech solution, the Kwikpoint solution is refreshingly functional, elegant, and just low-tech enough to work almost anywhere - even Afghanistan!

Jim Bass, DARPA Program Manager, Project Babylon, December 9, 2002

I'm sending five of them to Afghanistan with my son-in-law and extorting a review from him in return. I've looked through the cards and like them. I think the physical size is just about right, handy, but not cumbersome. They look sturdy. Content is the key, and I think you have most of it right. I was initially concerned about scale, but think your choice to keep the pictures about the same is wise. I think it's a good product, useful, and helpful.

Lane Aldrich, Senior Member, Army Foreign Language Proponency Office, Office of the Deputy Chief of Staff, G-2, November 20, 2002