

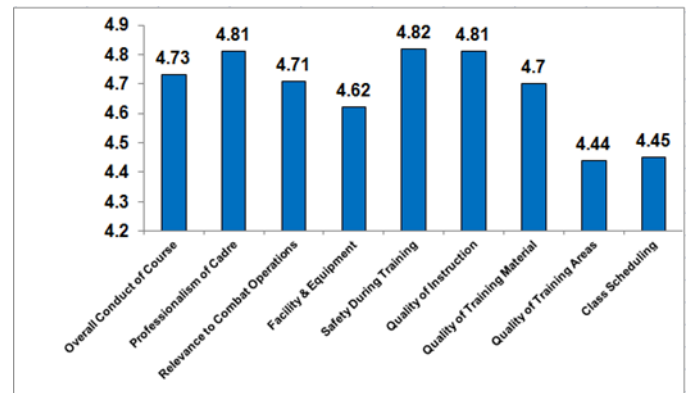
## Maneuver Center of Excellence Program Evaluation Featured at Association for Talent Management

By: Dr. Jay Brimstin, Deputy Director MCoE DOTD

The Association for Talent Development (ATD), formerly known as the Association for Training Development conducted their 2016 annual conference in Denver, Colorado in May of this year. Among the many presentations during the three day conference was one that described how the Maneuver Center of Excellence (MCoE) conducted an evaluation of one of their training courses using the Kirkpatrick four level model. The course that was evaluated was the Dismounted CIED Tactics Master Trainer course (DCT-MT). Dr. Jay Brimstin, the Deputy Director of the MCoE Directorate of Training and Doctrine and Ms. Annie Hester, who was the lead for their Program Evaluation Office during the evaluation described an evaluation effort in which they were able to demonstrate the effectiveness of the training course in improving units' operational effectiveness while conducting combat operations in Afghanistan. The purpose of the DCT-MT course is to prepare Soldiers to integrate training, advise leaders on threat assessments, and plan tactical employment of handheld devices to counter-IED related threats targeting dismounted patrols. The instructors trained Soldiers to effectively assist leaders with training, planning, executing, and supervising at company and battalion levels.

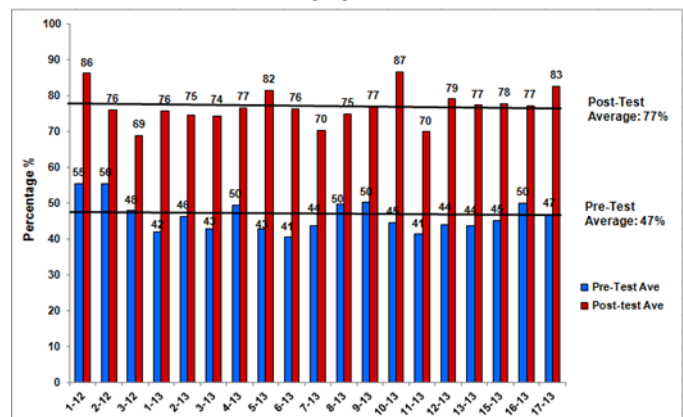
The Kirkpatrick's four-level evaluation model was selected as the framework because it allowed the evaluator to adapt the model to the needs and requirements of evaluating an institutional training course. The flexibility and adaptability of the model allowed the criteria of the evaluation to be aligned with the indicators, or measures of success, for each evaluation level. The four-level model has been the gold standard for evaluating organizational training and provides a guide for the kinds of questions that should be asked and the criteria for each level (Bates,2004).

Level I evaluation measured Soldiers' reactions to the course. End of course surveys were collected at the end of each class and were analyzed to determine the Soldiers' perceptions about the course and their recommendations for improvements. The survey consisted of open ended questions asking Soldiers to recommend improvements to the training. Soldiers also rated the different aspects of the training and their level of preparedness to perform duties as the DCT master trainer.



Level 1

Level II evaluations measured Soldiers learning. Pre and post test scores were compared to determine if and how much the Soldiers' knowledge increased at the end of the course. A total of five tests were administered throughout the course to measure the increase in Soldiers' knowledge. The pre and post-tests consisted of 30 questions that contained multiple choice and matching questions. The test questions for the pre and post tests were the same but not presented in the same order.



Level 2

Level III evaluation measured the level of transfer of knowledge from the course to the organization and to determine if Soldiers were able to apply what they learned during the training once they returned to their units. A mixed method design was used because by itself, a quantitative or qualitative method could not provide the answers to the evaluation questions that were used to guide this evaluation plan. Surveys were collected from Soldiers and their respective commanders while they were deployed and conducting operations in Afghanistan. Focus group interviews were conducted after the units returned from Afghanistan with the graduates of the course, and when possible, their company commanders. The Soldier Survey, which had been routinely administered by the MCoE for units returning from combat

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deployments, provided a unique opportunity for the evaluation team to gain insights about the performance of the master trainers from the perspectives of Soldiers and leaders. The evaluation team developed additional questions that were included in the survey. Observations by the Joint Expeditionary Team (JET) from theater were used to determine the level of transfer of knowledge. The JET advisors conducted C-IED Advisory Missions (CAMs) across the battle-space in Afghanistan where they were embedded in units. During these missions, the advisors observed the master trainers within their units.

Instruments	Class No.	N	Results
In theater Follow-on Survey	1-12 2-12 3-13	8 Soldiers 10 Commanders 7 Soldiers 3 Commanders 18 Soldiers 6 Commanders <b>Total: 33 Soldiers, 19 Cdrs</b>	Soldiers were able to perform their duties as master trainers when dismounted patrols were a part of unit's mission, had the support of unit leaderships, and Soldiers duty position allowed them to train Soldiers. Soldiers were able to apply their knowledge and assist units with updating unit SOPs and advising units on training.
Focus Group	2-13 3-13 4-13	12 Soldiers 3 Commanders 21 Soldiers 5 Soldiers <b>Total: 3 Focus groups, 38 Soldiers, 3 Cdrs</b>	Soldiers recommended that commanders and senior NCOs in units attend training to gain a better understanding of their capabilities as master trainers. Although not able to develop or implement a formal training plan, master trainers assisted units during rehearsals prior to each mission and conducted hip pocket and refresher training. Commanders trusted the recommendations on the integrating of handheld devices into patrols from their master trainers.
JET CAMSUM	3 BDEs	NA	JET advisors observed noticeable differences between trained and untrained units. Trained units had a better understanding to the capabilities of the equipment and observed NCOs conducting training on the devices for their Soldiers.
Soldier Survey	3 BDEs 1 MCCC	23 Leaders 10 Leaders <b>Total: 33</b>	85% of leaders were satisfied or very satisfied with the performance of master trainer. 91% of the leaders were advised on the employment of C-IED handheld devices. 58% of leaders received a training plan from their master trainer.

**Level 3**

Level IV evaluation measured units' operational performance in combat. The number of IEDs found/cleared, the number of IED detonations, and the number of casualties caused by IEDs were the variables used in this study. This data was already being collected by the Joint Trauma Analysis and Prevention of Injury in Combat (JTAPIC) team. The data collected were vetted to determine if the event occurred during a mounted or dismounted operation and what type of weapon system caused the injuries. The DIAT analyst pulled data from the Operations Research System Analysis' (ORSA) data base to analyze the found and cleared rate and the detonation rate. It was not possible to collect data from Afghanistan for all units that completed the course due of the length of the units' deployments and the time line for this evaluation, RFIs were submitted for four units that received the DCT-MT course training and for the units that they replaced in Afghanistan, who had not received the DCT-MT course training. Detailed reports for each of these units were completed by the DIAT analyst and were used in the analysis to determine the overall impact of the course on the operational performance of these units.

Variables	Comparison 1		Comparison 2		Comparison 3		Comparison 4	
	Untrained Unit	Trained Unit	Untrained Unit	Trained Unit	Untrained Unit	Trained Unit	Untrained Unit	Trained Unit
Casualty (%)	21%	71%	54%	16%	100%	46%	58%	23%
Found/Cleared (%)	32%	16%	47%	13%	69%	9%	13%	9%
Detonation (%)	22%	13%	47%	29%	22%	17%	15%	5%

**Level 4**

The results of the evaluation showed that the Soldiers had a very positive reaction to the course. The average rating for each area exceed the desired level of four on a 5-point Likert scale. The Soldiers learned the course material as evidenced by the test score improvements between the pre and post-tests. The average post test score for all classes was 77%, and all but two classes showed a greater than 25% improvement on the post test. Most significantly, two of the three variables of interest for Level 4 (IED found/cleared ratio, IED detonation ratio, casualty ratio) showed significant improvement between the units that had not received the training (the control group) and those that had received the training. The casualty ratio improved for three of the four units that had received the training, while one unit that had received the training experienced one catastrophic event that resulted in an unusually high ratio for that unit.