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Collective Performance Measures of Cognitive Skill: Team Cognition Assessment and Quick Reference Guide

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14. ABSTRACT *(Maximum 200 words)*:

This research product describes two tools developed to measure small team performance. This research is part of an ongoing program to develop valid measures of collective performance. The Team Cognition Assessment (TCA) and the Team Cognition Quick Reference Guide (QRG) were developed for, and with the support from, Observer, Coach, Trainers (OC/Ts) coming into their role as new OC/Ts. The focus of the tools is to help OC/Ts better assess the ability of small teams to think more effectively during the execution of training tasks. A primary objective of the research product was to enhance small unit training evaluations through the application of a measure of team-level cognition that facilitates the provision of feedback on cognitive skills indicative of effective team cognition. Throughout the development of the tools, feedback was gathered from OC/Ts across three installations. Those OC/Ts who participated commonly suggested introducing the products to new OC/Ts at their respective OC/T Academy in order to provide an additional set of tools to help with their training observations and evaluations and their mentoring of individuals and teams.

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COLLECTIVE PERFORMANCE MEASURES OF COGNITIVE SKILLS: TEAM COGNITION ASSESSMENT AND QUICK REFERENCE GUIDE

EXECUTIVE SUMMARY

Research Requirement:

This product describes a Team Cognition Assessment (TCA) and Team Cognition Quick Reference Guide (QRG) that Observer, Coach, Trainers (OC/Ts) can use to assess the ability of small Army teams to think more effectively during the execution of training tasks (i.e., team cognition). The current Training & Evaluation Outlines (T&EOs) against which training performance is gauged are effective at evaluating overall readiness, but they lack more nuanced, insight, and guidance that is required to advance individual and team development. Current evaluation methods focus on direct outcomes (i.e., did the individual and/or unit succeed at the tasks, or not) and pinpoint specific tasks that require additional focus and training. However, units could benefit from additional layers of descriptive performance that provide a more robust picture of how well they are performing, particularly in terms of their team cognition. As such, the objective of this research product (i.e., the TCA and QRG) is to enhance small unit training evaluations through the application of a measure of team-level cognition that facilitates the provision of feedback on cognitive skills indicative of effective team cognition.

Procedure:

A prototype TCA and a QRG was developed following a literature review and initial focus groups with OC/Ts. The prototype tools were based on the performance requirements of small units, a model of team cognition in the context of small unit task performance, and inputs from OC/Ts at two Combat Training Centers and one Forces Command installation. They were developed in a format that could be easily integrated into the assessment of current training. The OC/T feedback on the usability and practicality of the TCA and QRG were collected in one data collection with eight OC/Ts at the Joint Readiness Training Center (JRTC) and another data collection with five OC/Ts in First Army. In addition, a senior instructor at an OC/T Academy reviewed the tools and provided his feedback. The tools were refined based on the data collected from those different sources.

Findings:

All of the OC/Ts who reviewed the TCA and QRG responded with positive feedback regarding the usability of the tools. Regarding the practicality of the tools, several OC/Ts indicated that the tools would be most helpful to new OC/Ts and suggested incorporating them into an OC/T Academy.

Utilization and Dissemination:

Based on the findings, it is recommended the TCA and QRG be introduced and provided to OC/Ts during attendance at their respective OC/T Academy as well as provided to new or

guest OC/Ts at other locations. PowerPoint slides were developed for use by OC/T instructors to introduce the tools to new OC/Ts during their initial train up at their OC/T Academy.

COLLECTIVE PERFORMANCE MEASURES OF COGNITIVE SKILLS: TEAM COGNITION ASSESSMENT AND QUICK REFERENCE GUIDE

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Collective Performance Measures of Cognitive Skills: Team Cognition Assessment and Quick Reference Guide

This product describes the Team Cognition Assessment (TCA) and associated Team Cognition Quick Reference Guide (QRG) that Observer, Coach, Trainers (OC/Ts) can use to assess the ability of small Army teams to think effectively as a group during execution of training tasks (i.e., team cognition). The purpose of these tools are to (a) assist OC/Ts in forming judgments of a unit's Team Cognition, (b) help incorporate feedback regarding Team Cognition to enhance the feedback OC/Ts are already providing to units, and (c) supplement, not replace, the expertise and invaluable experience that OC/Ts bring to increasing units' readiness. Army Training and Evaluation Outlines (T&EOs) describe discrete performance steps against which training performance is evaluated. The T&EOs describe which steps were, and were not, completed effectively. The TCA and QRG supplement evaluations based on T&EOs by providing details as to why those performance steps were accomplished effectively or not. Because team cognition and performance are linked, the TCA and QRG can provide additional insight into how teams might improve their performance (Freeman, Harvey, Bryson, Keller-Glaze & Vowels, In Preparation).

The research to develop the tools involved a literature review and initial focus groups with OC/Ts to develop an understanding of the performance requirements of small units, conceptualize a model of team cognition in the context of small unit task performance, and examine how evaluators of small unit training make judgments of small unit performance. Through a synthesis of these findings, a practical way to integrate a measure of team-level cognition that accounts for the judgment processes of raters into current training assessment practices was identified. Freeman, Harvey, Bryson, Keller-Glaze and Vowels (2020) provide a discussion of the theoretical concepts underlying team cognition and steps taken to develop the tools.

Following the development of the TCA and QRG, data were collected from OC/Ts and OC/T instructors on the usability and practicality of the TCA and QRG. Eight OC/Ts were observed evaluating unit performance at the Joint Readiness Training Center (JRTC) and then asked to review the TCA and QRG. After they finished their review, the OC/Ts completed feedback questions about each tool. An additional data collection was conducted with five OC/Ts from First Army, who also reviewed the QRG and TCA, and responded to the feedback questions. Lastly, the TCA and QRG were provided to a senior instructor at an OC/T Academy for his review and feedback.

All of the OC/Ts who reviewed the TCA and QRG responded with positive feedback regarding the usability of the tools. They indicated that the QRG clearly describes Team Cognition and makes a compelling case for why it is important. They also indicated that the QRG would help new OC/Ts detect and document teams' collective cognitive performance. The OC/Ts at JRTC overwhelming agreed the TCA would help OC/Ts provide valuable feedback to teams, over and above what is already being provided. About half of the OC/Ts indicated there is some similarity between the tools and current OC/T practices. As such, several OC/Ts commented that the tools would likely be most helpful to new OC/Ts and suggested

incorporating them into an OC/T Academy or initial OC/T training. The tools were refined and finalized based on this feedback.

The following sections of this report provide a detailed description of the TCA and the QRG. Following the descriptions of the two components is an explanation of how to use the tools, and recommendations and considerations for continued research. PowerPoint briefing slides are provided in the Appendix that can be used by instructors to introduce the TCA and QRG.

Team Cognition Assessment (TCA)

Formal evaluations of Army units are recorded using Training and Evaluation Outlines (T&EOs). Completed T&EOs provide immediate feedback to the unit. They can include written feedback from the evaluator that includes After Action Reviews (AARs) and mentoring and coaching comments (Department of Army, 2016). They are given to the commander for use in scoring the unit's training proficiency. Per FM 7-0, a T&EO "is a summary document that provides information on individual or collective task training objectives, resource requirements, and evaluation procedures" (Department of Army, 2016, p. B-1). It "consists of the major procedures (steps or actions) a unit or individual must accomplish to perform a task to standard" (Department of Army, 2016, p. B-1). The TCA was designed to supplement T&EOs by enabling evaluators to informally assess Team Cognition and provide associated feedback to teams during training events.

Team Cognition Concept

The assessment covers three key components of Team Cognition: Shared Understanding (SU), Shared Situation Awareness (SSA), and Collective Critical Thinking (CCT). These concepts are discussed more thoroughly in Freeman, Harvey, Bryson, Keller-Glaze and Vowels (In Preparation). These components are defined as:

Shared Understanding. The term "understanding" refers to an individual's representation or model of how something works. Shared understanding exists when team members' have a common model of team-relevant factors (e.g., the environment and the team's task and purpose). For example, teams with a SU are more likely to interpret environmental events in a similar manner and apply the same "meaning" to those events as they pertain to the team (e.g., how it affects the team's task or the quality of their plan). When SU exists, teams will spend less time interpreting information and are able to more readily solve problems and adapt to changes in the environment. Teams with good SU interpret factors as they are relevant to the team's task and purpose.

Shared Situation Awareness. Shared situation awareness is the joint knowledge that team members have about ongoing events. Army teams develop SSA by gathering information from the environment and communicating that information to each other. When teams have SSA, they can more effectively coordinate, anticipate, and adapt to changes. Teams with good SSA are better able to process and communicate about factors that are likely to impact their team

members' awareness of relevant and irrelevant changes in the environment as well as those that may help predict future states of the environment.

Collective Critical Thinking. Individual-level critical thinking involves finding facts, thinking through issues, and solving problems which enables warfighters to comprehend the meaning of ongoing events or situations, draw appropriate conclusions, make better decisions, and learn from the outcomes of enacting those decisions. Collective Critical Thinking (CCT) in Army teams shares aspects of individual CCT, but is characterized by the team's collaborative use of available information to determine the best course of action during operations or realistic field training exercises. Teams demonstrating effective CCT will work together to gather information, interpret information, and use the resulting comprehension of the information to solve problems as a cohesive unit.

Team Cognition occurs when team members contribute individual knowledge, skills, and abilities and engage in purposeful interaction to process information, solve problems, and maintain a common awareness and understanding of factors that are relevant to the team and their task (Figure 1). The interaction keeps everyone on a similar page and enables the team to leverage their collective intellect in the course of solving problems and making decisions.

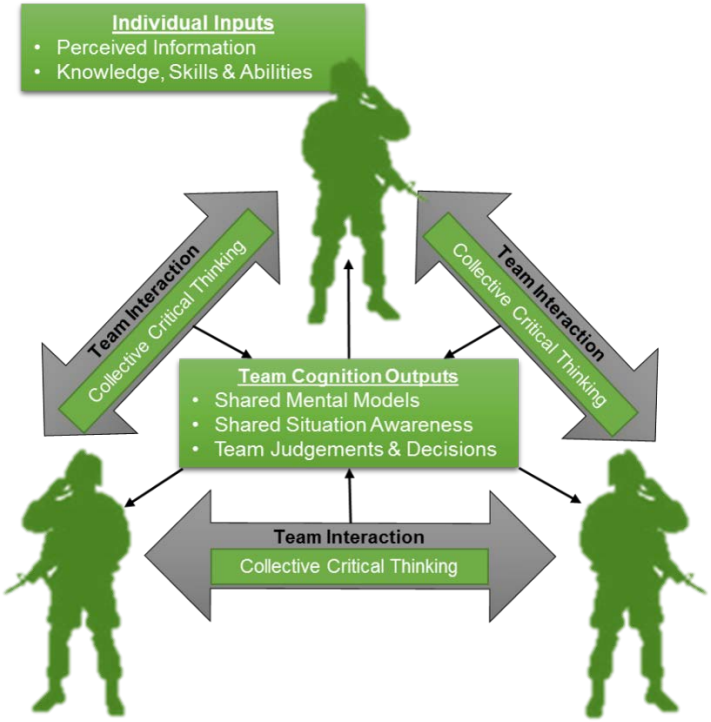


Figure 1. Team Cognition Concept.

Description of Team Cognition Assessment

The TCA is an Excel workbook that contains the following five tabs:

- Overview
- Instructions

- Assessment
- Team Cognition Feedback
- Feedback Statements.

The *Overview* tab describes the purpose of the assessment and the Team Cognition concept (Figure 2). The *Instructions* tab, as shown in Figure 3, provides step-by-step instructions to prepare for the assessment, complete the assessment, and use the feedback generated by the assessment.

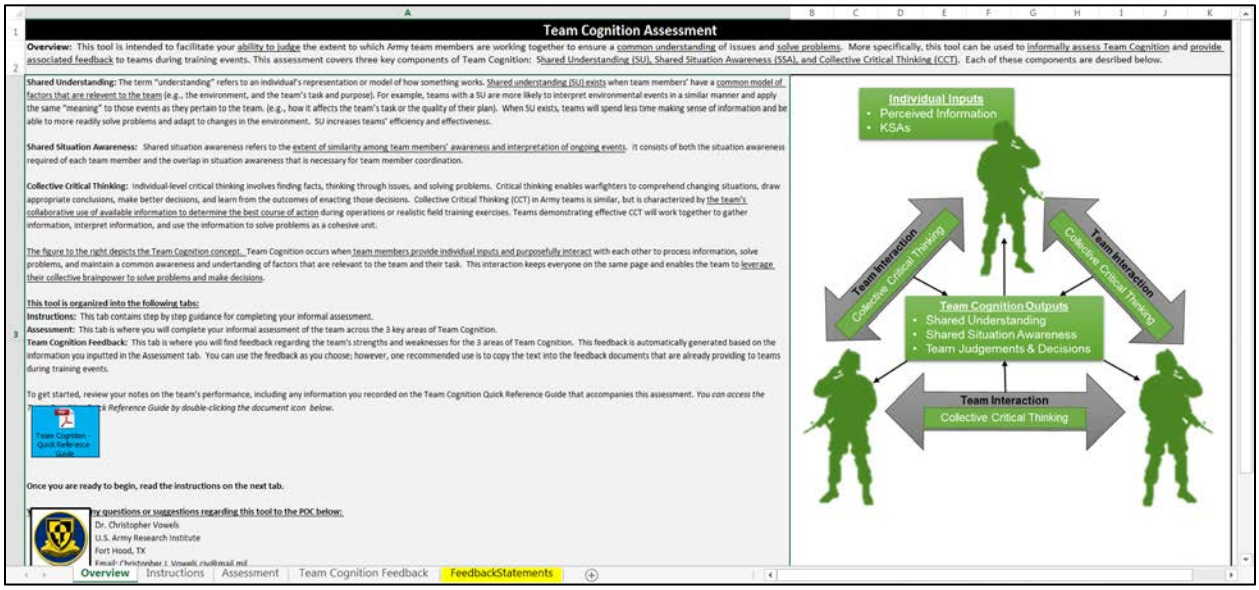


Figure 2. Overview Tab in the Team Cognition Assessment.

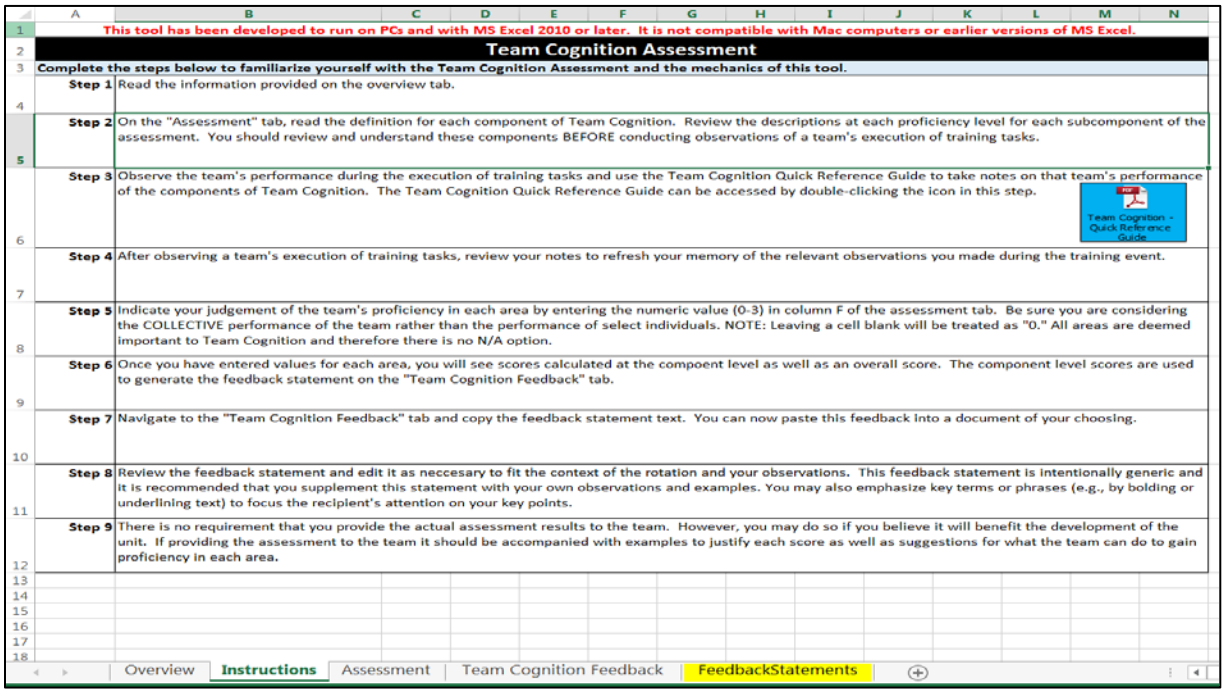


Figure 3. Instructions Tab in the Team Cognition Assessment.

The *Assessment* tab is where OC/Ts (or other training evaluators) complete their assessment of a unit's Team Cognition. The Assessment tab breaks out each Team Cognition component (SU, SSA, and CCT) into three sub-components. The three sub-components for SU are *Task and Purpose*, *Communication*, and *Comprehension*. The three sub-components for SSA are *Current Situation*, *Evolving Situatio*n, and *Future Situation*. The three sub-components for CCT are *Defining the Problem*, *Working the Problem*, and *Solving the Problem*.

Each sub-component has four defined levels of proficiency (columns 2 through 5 in Figure 4). The proficiency levels are on a zero (0) to three (3) rating scale where 0 represents no proficiency and 3 represents high proficiency. To the right of the proficiency level descriptions is where the OC/T enters his or her assigned proficiency rating and notes for each sub-component based on the team's performance. The Assessment tab enables OC/Ts to enter proficiency ratings for up to three iterations of a unit's performance.

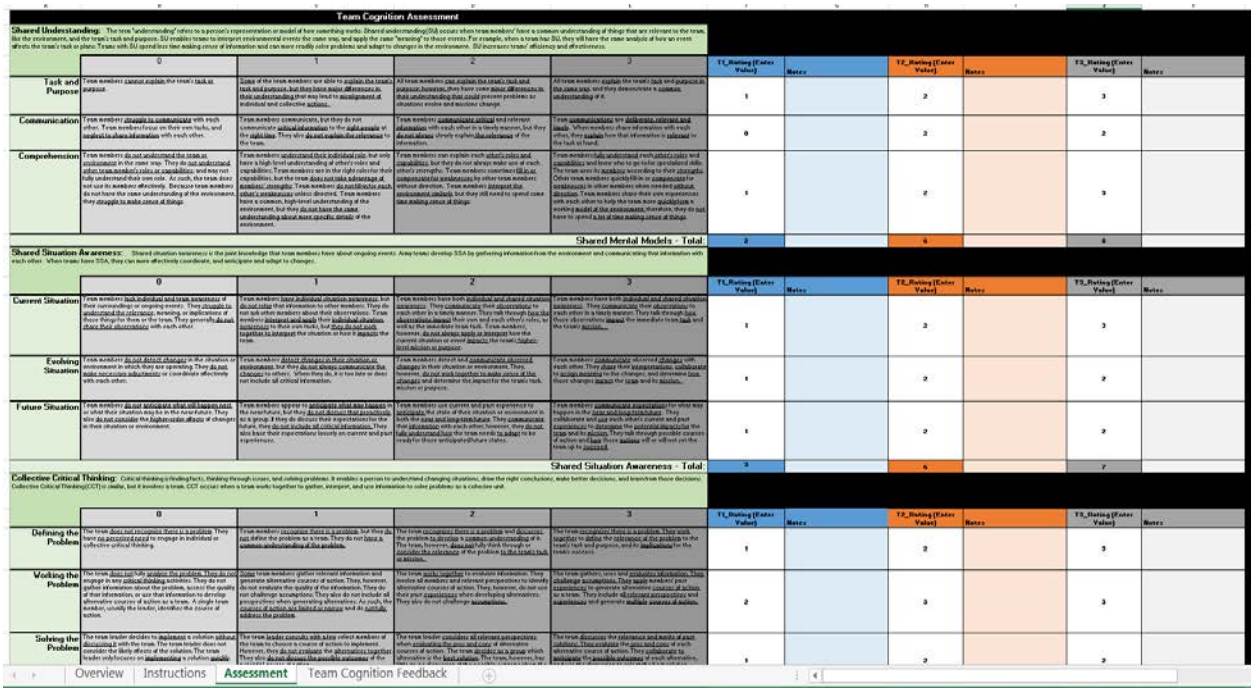


Figure 4. Assessment Tab in the Team Cognition Assessment

Once an OC/T has entered proficiency ratings, total scores are automatically calculated and displayed for each Team Cognition component (SU, SSA, and CCT). Overall Team Cognition scores are also automatically calculated and displayed at the end of the assessment.

On the *Team Cognition Feedback* tab, the OC/T can obtain feedback for the unit that is based on the unit's Team Cognition scores. Feedback statements for each sub-component and a graph that displays the unit's scores are provided on this tab, as shown in Figure 5. The OC/T can then copy and paste the feedback statements and/or graph into a document or slide that aids in providing feedback to the Task Force lead or to the unit regarding their Team Cognition performance. The feedback statements are intentionally generic; therefore, it is recommended that the OC/T supplement the statements with their own observations and examples. Such feedback might benefit the development of the unit's performance, which should be

supplemented with examples to justify each score as well as suggestions for what the unit can do to gain proficiency in each area.

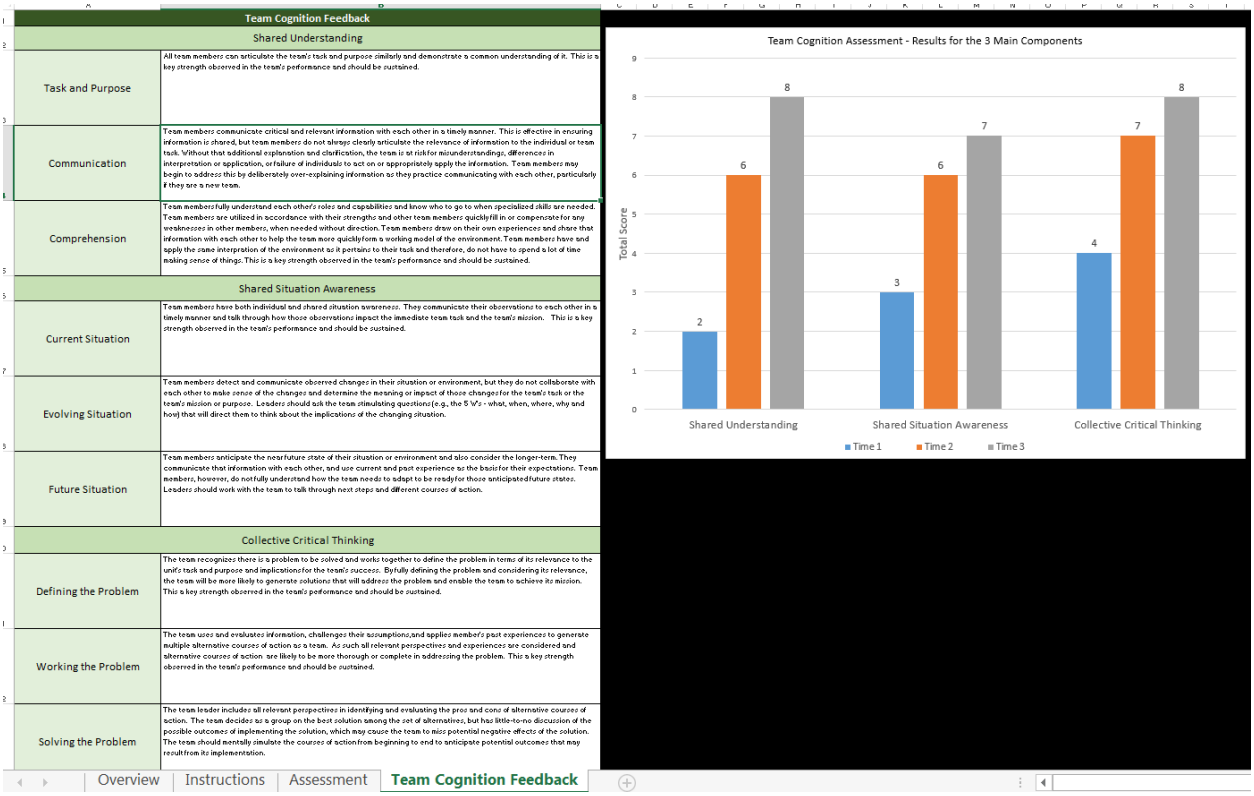
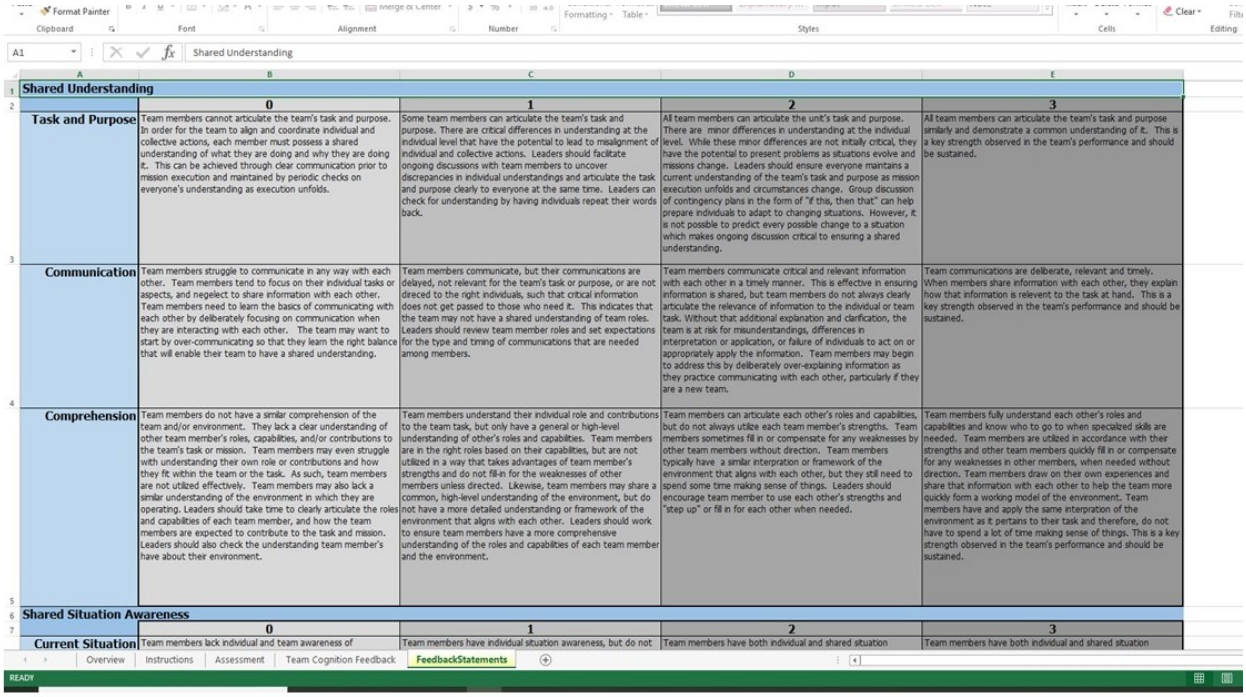


Figure 5. Team Cognition Feedback Tab in the Team Cognition Assessment

The final tab labeled *Feedback Statements* (Figure 6) houses all potential feedback statements and is where the information on the *Team Cognition Feedback* tab is pulled from based on the unit's Team Cognition scores. As OC/Ts record their scores in the Assessment tab, the feedback statements automatically update. The feedback statements are linked to the most recent scores in the Assessment tab. For example, as scores of Task and Purpose under Shared Understanding hopefully increase over time, the Team Cognition Feedback cells will update with appropriate feedback based on those scores.



Shared Understanding	0	1	2	3
Task and Purpose	Team members cannot articulate the team's task and purpose. In order for the team to align and coordinate individual and collective actions, each member must possess a shared understanding of what they are doing and why they are doing it. This can be achieved through clear communication prior to mission execution and maintained by periodic checks on everyone's understanding as execution unfolds.	Some team members can articulate the team's task and purpose. There are critical differences in understanding at the individual level that have the potential to lead to misalignment of individual and collective actions. Leaders should facilitate ongoing discussions with team members to uncover discrepancies in individual understandings and articulate the task and purpose clearly to everyone at the same time. Leaders can check for understanding by having individuals repeat their words back.	All team members can articulate the unit's task and purpose. There are minor differences in understanding at the individual level. While these minor differences are not initially critical, they have the potential to present problems as situations evolve and missions change. Leaders should ensure everyone maintains a current understanding of the team's task and purpose as mission execution unfolds and circumstances change. Group discussion of contingency plans in the form of "if this, then that" can help prepare individuals to adapt to changing situations. However, it is not possible to predict every possible change to a situation which makes ongoing discussion critical to ensuring a shared understanding.	All team members can articulate the team's task and purpose similarly and demonstrate a common understanding of it. This is a key strength observed in the team's performance and should be sustained.
Communication	Team members struggle to communicate in any way with each other. Team members tend to focus on their individual tasks or aspects, and negelect to share information with each other. Team members need to learn the basics of communicating with each other by deliberately focusing on communication when they are interacting with each other. The team may want to start by over-communicating so that they learn the right balance that will enable their team to have a shared understanding.	Team members communicate, but their communications are delayed, not relevant for the team's task or purpose, or are not direced to the right individuals, such that critical information does not get passed to those who need it. This indicates that the team may not have a shared understanding of team roles. Leaders should review team member roles and set expectations for the type and timing of communications that are needed among members.	Team members communicate critical and relevant information with each other in a timely manner. This is effective in ensuring information is shared, but team members do not always clearly articulate the relevance of information to the individual or team task. Without that additional explanation and clarification, the team is at risk for misunderstandings, differences in interpretation or application, or failure of individuals to act on or appropriately apply the information. Team members may begin to address this by deliberately over-explaining information as they practice communicating with each other, particularly if they are a new team.	Team communications are deliberate, relevant and timely. When members share information with each other, they explain how that information is relevant to the task at hand. This is a key strength observed in the team's performance and should be sustained.
Comprehension	Team members do not have a similar comprehension of the team and/or environment. They lack a clear understanding of other team member's roles, capabilities, and/or contributions to the team's task or mission. Team members may even struggle with understanding their own role or contributions and how they fit within the team or the task. As such, team members are not utilized effectively. Team members may also lack a similar understanding of the environment in which they are operating. Leaders should take time to clearly articulate the roles and capabilities of each team member, and how the team members are expected to contribute to the task and mission. Leaders should also check the understanding team member's have about their environment.	Team members understand their individual role and contributions to the team task, but only have a general or high-level understanding of other's roles and capabilities. Team members are in the right roles based on their capabilities, but are not utilized in a way that takes advantages of team member's strengths and do not fill-in for the weaknesses of other members unless directed. Likewise, team members may share a common, high-level understanding of the environment, but do not have a more detailed understanding or framework of the environment that aligns with each other. Leaders should work to ensure team members have a more comprehensive understanding of the roles and capabilities of each team member and the environment.	Team members can articulate each other's roles and capabilities, but do not always utilize each team member's strengths. Team members sometimes fill in or compensate for any weaknesses by other team members without direction. Team members typically have a similar interpration or framework of the environment that aligns with each other, but they still need to spend some time making sense of things. Leaders should encourage team member to use each other's strengths and "step up" or fill in for each other when needed.	Team members fully understand each other's roles and capabilities and know who to go to when specalized skills are needed. Team members are utilized in accordance with their strengths and other team members quickly fill in or compensate for any weaknesses in other members, when needed without direction. Team members draw on their own experiences and share that information with each other to help the team more quickly form a working model of the environment. Team members have and apply the same interpration of the environment as it pertains to their task and therefore, do not have to spend a lot of time making sense of things. This is a key strength observed in the team's performance and should be sustained.
Shared Situation Awareness				
	0	**1**	**2**	**3**
Current Situation	Team members lack individual and team awareness of	Team members have individual situation awareness, but do not	Team members have both individual and shared situation	Team members have both individual and shared situation

Figure 6. Feedback Statements Tab in the Team Cognition Assessment.

Team Cognition Quick Reference Guide (QRG)

The QRG is a pocket-sized, laminated, and reusable manual that was developed to assist OC/Ts in evaluating Team Cognition and completing the TCA. The cover page of the QRG is displayed in Figure 7. The QRG begins with an explanation of the importance of Team Cognition and then provides a description of the three Team Cognition components (SU, SSA, and CCT). Following the description of the Team Cognition concept, the QRG describes what Team Cognition looks like in action to help OC/Ts recognize cues of effective and ineffective Team Cognition within the context of a unit's task performance.

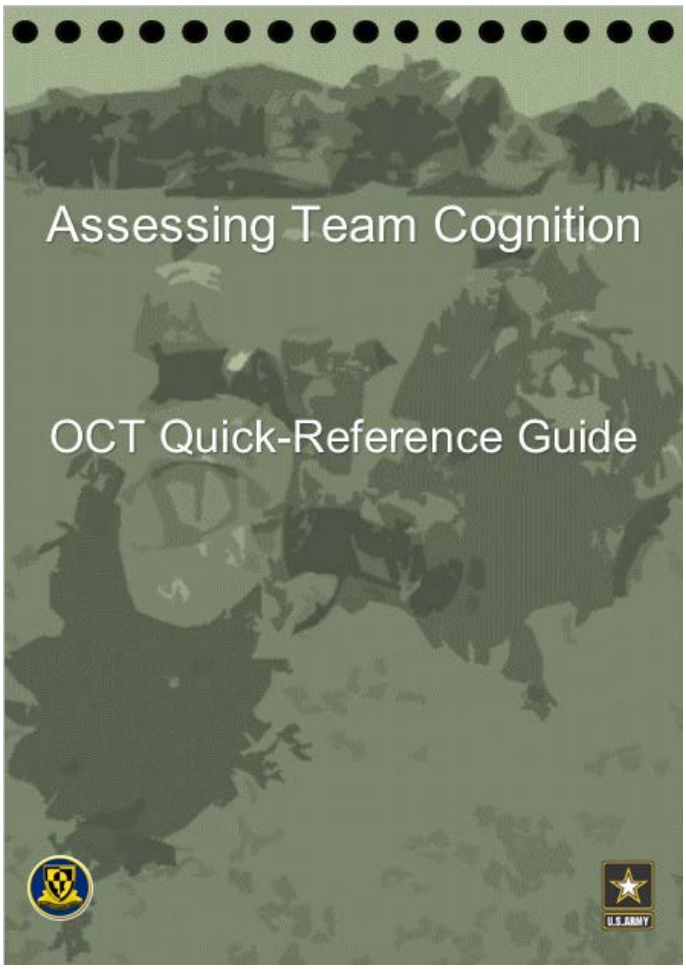
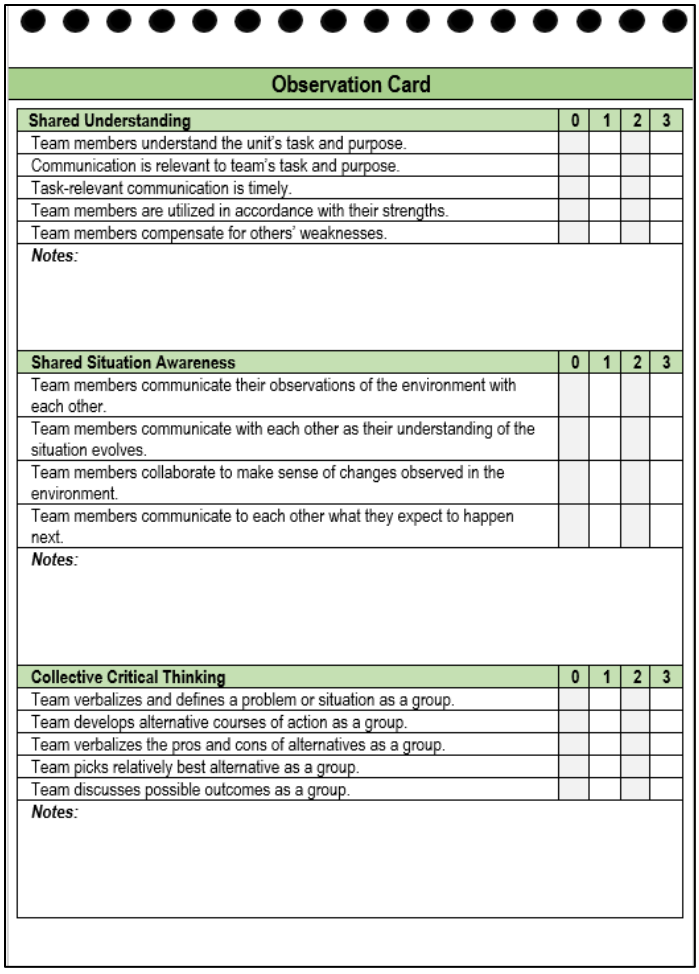


Figure 7. Cover Page of QRG.

At the end of the QRG is an observation card that lists cues OC/Ts can look for to form judgments of a unit's Team Cognition (Figure 8). The cues on the observation card are not an exhaustive list, but help prompt OC/Ts on what to consider along with other evidence of Team Cognition the OC/T might observe. The card mirrors the TCA to help OC/Ts complete it post-observation. Following the observation card in the QRG are a series of notes pages to enable the OC/T to take notes about the unit's Team Cognition during their performance of the training task.



Observation Card

Shared Understanding	0	1	2	3
Team members understand the unit's task and purpose.				
Communication is relevant to team's task and purpose.				
Task-relevant communication is timely.				
Team members are utilized in accordance with their strengths.				
Team members compensate for others' weaknesses.				
Notes:				

Shared Situation Awareness	0	1	2	3
Team members communicate their observations of the environment with each other.				
Team members communicate with each other as their understanding of the situation evolves.				
Team members collaborate to make sense of changes observed in the environment.				
Team members communicate to each other what they expect to happen next.				
Notes:				

Collective Critical Thinking	0	1	2	3
Team verbalizes and defines a problem or situation as a group.				
Team develops alternative courses of action as a group.				
Team verbalizes the pros and cons of alternatives as a group.				
Team picks relatively best alternative as a group.				
Team discusses possible outcomes as a group.				
Notes:				

Figure 8. Observation Card in the QRG.

How to Use the TCA and QRG

The TCA and QRG were developed to be straightforward and intuitive. The OC/T should begin by opening the TCA (Excel workbook) and reading the Overview tab. Next, the OC/T should read the step-by-step instructions provided in the Instructions tab. Before observing a unit's performance, the OC/T should also read the descriptions at each proficiency level for the three Team Cognition components (SU, SSA, and CCT) in the Assessment tab, and should become familiar with the QRG.

The OC/T should then observe the unit's performance of the training tasks and use the observation card and notes pages within the QRG to record notes regarding the unit's demonstration of Team Cognition. After observing the unit, the OC/T should open the Assessment tab of the TCA. The OC/T should review his or her notes in the QRG, and then enter a proficiency rating for each sub-component under T1_Rating (column F). The OC/T should also enter any notes regarding his or her observations that support the assigned rating in column G of the Assessment tab. If the OC/T observes the unit perform the training task during a second and third iteration, the OC/T should repeat the process of using the observation card and notes pages

in the QRG, subsequently entering ratings for each sub-component under T2_Rating (column H) and T3_Rating (column J) on the Assessment tab of the TCA.

Once the OC/T has completed his or her observations of the unit's performance, he or she should review the Team Cognition component and overall scores that are automatically calculated and displayed in the Assessment tab. The OC/T should then open the Team Cognition Feedback tab, copy the feedback statements, and paste the statements into the documents and/or slides that they plan to provide to the unit. The OC/T also has the option to copy and paste the graph into this document. Once the OC/T has added the generic feedback statements to his or her documentation, the OC/T should review the feedback statements and edit them as necessary to fit the context of the training and observations. The OC/T should also provide examples to justify each score as well as suggestions for what the unit can do to gain proficiency in each area.

Recommendations and Considerations for Continued Research

The TCA and QRG are designed to work together to assist OC/Ts in forming judgments about a unit's Team Cognition; therefore, OC/Ts should be provided with both tools and an introductory explanation of the tools and their purpose. Because the tools are relatively self-explanatory, extensive training is not necessary. These tools are likely to be most useful to new OC/Ts; therefore, it is recommended that the tools be introduced and provided to OC/Ts during attendance at an OC/T Academy. To assist instructors on how to introduce these tools to OC/Ts, briefing slides and talking points are provided in the Appendix of this product.

As the TCA and QRG are introduced and used by OC/Ts, additional data collections to capture OC/T feedback on the tools should be conducted. These tools were developed with input and guidance from OC/Ts with the ultimate goal to assist them (especially new OC/Ts) in training observations, the conduct of informal and formal AARs, and with verbal and written reports of unit performance. Because the initial data collections involved only small numbers of OC/Ts, additional OC/T feedback would provide a more stable and representative assessment of the usability and practicality of the tools. In addition to collecting more feedback, it is recommended that the reliability and validity of the TCA be evaluated in future research. The inferences drawn from an assessment are only useful if the assessment is reliable and valid; therefore, it is important to assess the extent to which OC/T ratings using the TCA are consistent and the scores from the assessment relate to other indicators of Team Cognition and/or unit performance.

References

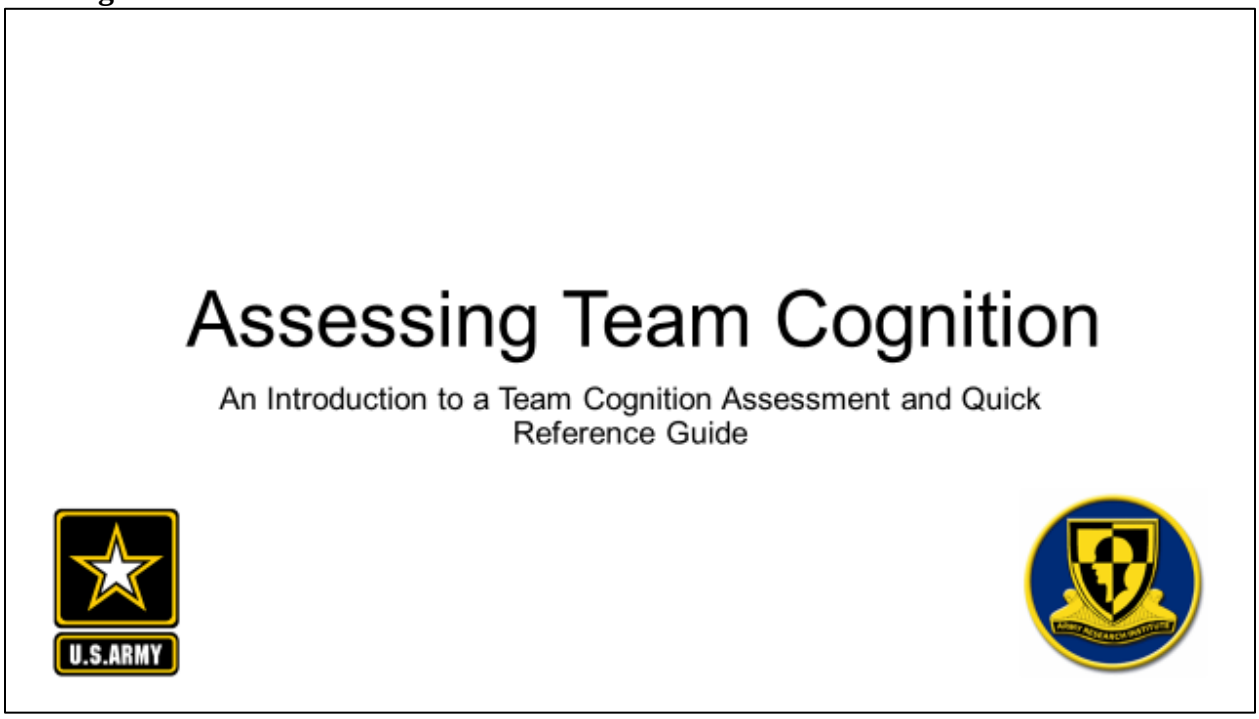
Department of the Army (2016). *Field Manual 7-0: Train to win in a complex world*. Washington, DC: Author.

Freeman, T. E., Harvey, J., Bryson, J., Keller-Glaze, H. & Vowels, C. L. (In Preparation). *Development and validation of performance measures to assess collective cognitive skills.* (Technical Report). Fort Belvoir, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Appendix

Team Cognition Introductory Briefing

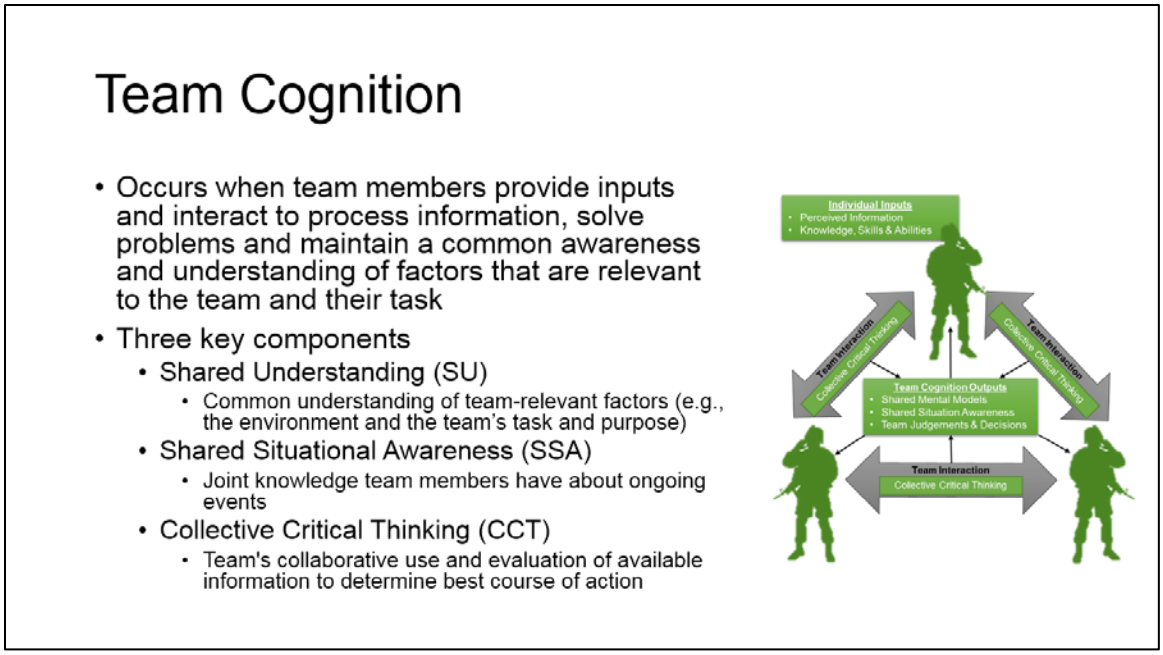
Briefing Cover Slide:



Briefing Cover Slide Talking Points:

- Today I'm going to introduce you to the concept of Team Cognition and two tools that the Army Research Institute has developed to help you assess and give feedback on Team Cognition.

Briefing Slide 1:



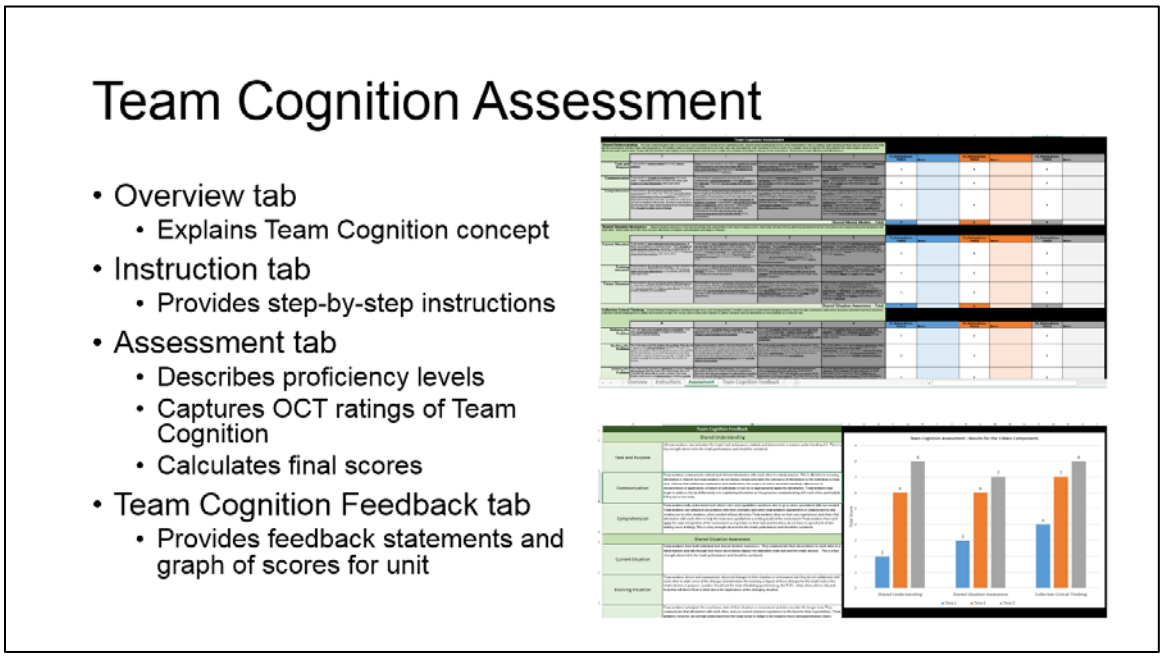
Briefing Slide 1 Talking Points:

- Have you ever noticed that low-performing teams are the ones that struggle to communicate openly, are slow to share information, and leave problem solving to a single or small set of individuals?
- In general, performance is better when team members share their experience and knowledge to help shape the team's courses of action.
- This sharing of information and interacting as a team to process incoming information, solve problems, and maintain situational awareness is referred to as Team Cognition. And, because it is so important to effective team performance, it is important that OC/Ts evaluate and give feedback to teams about their Team Cognition.
- Team Cognition consists of three components.
    - Shared understanding (SU) occurs when team members' have a common understanding of things that are relevant to the team, like the environment, and the team's task and purpose. SU enables teams to interpret environmental events the same way and apply the same "meaning" to those events.
    - Shared situation awareness (SSA) is the joint knowledge that team members have about ongoing events. Army teams develop SSA by gathering information from the environment and communicating that information with each other. When teams have SSA, they can more effectively coordinate, anticipate, and adapt to changes.
    - Collective Critical Thinking (CCT) is similar to individual critical thinking, but it involves a team. CCT occurs when a team works together to gather, interpret, and use information to solve problems as a cohesive unit.
- Given the relevance of Team Cognition to team performance, the Army has developed two tools - a Team Cognition Assessment (TCA) and a Team Cognition Quick Reference Guide (QRG) to help you, as an OC/T, assess and give feedback to units regarding their Team Cognition.
    - The T&EOs that are typically used to evaluate performance lay out performance steps to tell us what was, and what was not completed. The TCA and QRG give us clues

regarding why those performance steps were, or were not, completed effectively and provides some insight about how teams might get better.

- The purpose of these tools is to:
  - Assist you in forming judgments about a small Army team's level of proficiency on Team Cognition
  - Help you incorporate feedback about Team Cognition into the feedback you are already providing to units.
  - Supplement, not replace, your expertise and invaluable experience for increasing teams' readiness.

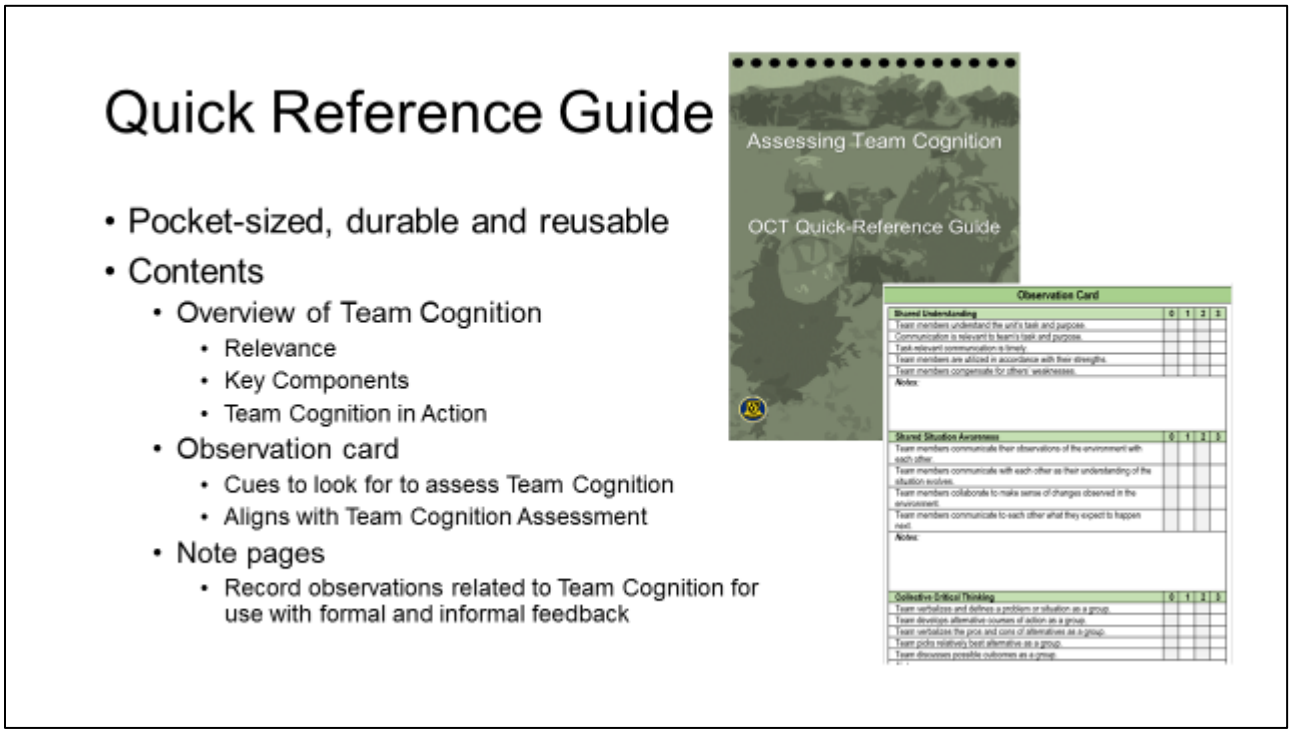
Briefing Slide 2:



Briefing Slide 2 Talking Points:

- The first tool is the Team Cognition Assessment. This is an Excel workbook that contains four tabs.
- The Overview tab describes the purpose of the assessment and the Team Cognition concept.
- The Instructions tab provides step-by-step instructions.
- The Assessment tab is where you will complete your evaluation of a unit's Team Cognition. There are proficiency levels for each Team Cognition component (SU, SSA, and CCT). The proficiency levels are on a zero (0) to three (3) rating scale where 0 represents no proficiency and 3 represents high proficiency.
- The top graphic on the slide is the Assessment tab. The descriptions of the proficiency levels are in the gray cells and to the right of the proficiency level descriptions is where you will enter your assigned proficiency rating and notes. The Assessment tab enables you to enter proficiency ratings for up to three instances of a team's performance.
- The last tab in the workbook is the Team Cognition Feedback tab. This is where you can get feedback statements and a graph to include in your feedback documents for the team. You can copy and paste the statements and/or the graph into your documents, but you should review and tailor them to the specific observations of the team's performance.

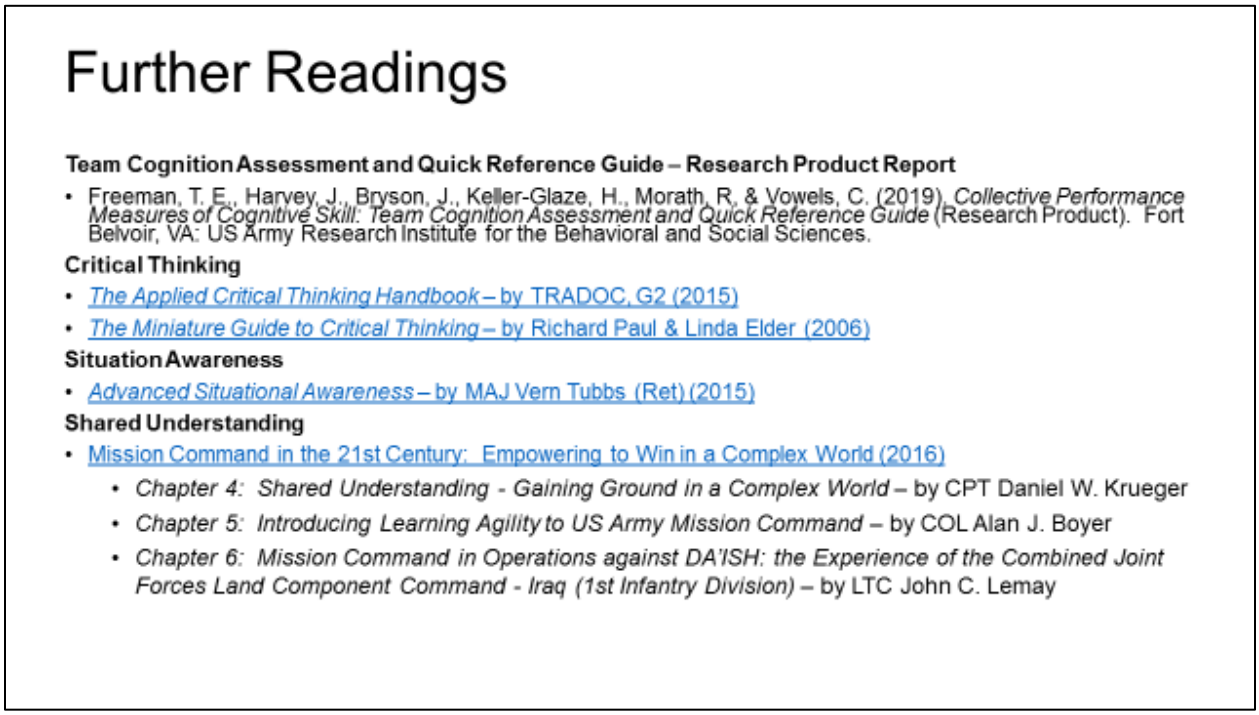
Briefing Slide 3:



Briefing Slide 3 Talking Points:

- The second tool is a Quick Reference Guide (QRG) which you can take into the field. It is a pocket-sized, durable, and reusable tool.
- It was developed to help you complete the Team Cognition Assessment at a later time.
- The QRG begins with an explanation of the importance of Team Cognition and then provides a description of the three Team Cognition components (SU, SSA, and CCT). Following the description of the Team Cognition concept, the QRG describes what Team Cognition looks like in action.
- The QRG, most importantly, includes an observation card that lists cues you can look for to form your judgments about the team's Team Cognition. This card does not provide an exhaustive list of observation statements, but the cues that are included align with the proficiency levels in the Team Cognition Assessment.
- At the end of the QRG are several notes pages where you can record your observations regarding the unit's team cognition.
- We encourage you to read and use these two tools to help you learn how to consistently evaluate and provide better feedback to your small teams so that your teams can be more effective in this area.

Briefing Slide 4:



Briefing Slide 4 Talking Points:

- On this slide are references you can read to learn more about Team Cognition and how to use the Team Cognition Assessment and QRG.