# **Battle Staff Noncommissioned Officers Prerequisite Training**

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#### **Submitted to:**

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Abstract: This project describes the performance gap that was identified in the Battle Staff Noncommissioned Officers Course (BSNCOC) in the United States Army. The performance problem is that Army enlisted leaders do not have the basic knowledge and skills to properly plot eight-digit grid coordinates and properly identify and construct operational terms, symbols, and graphics. Enlisted leaders appear to lack the basic knowledge and skills needed to complete the BSNCOC, making it challenging for instructors to teach the required block of instructions. Throughout this project, the model that will be used is the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model. The proposed instructional solution includes several mini training tutorials, a digital workbook that is completed in conjunction with the training tutorials, and an online assessment to validate if the students can achieve the key learning objectives. The implementation plan is included to ensure the instructional designer can capture all the key and critical responsibility each stakeholder. This will ensure coordination is made with each stakeholder throughout the implementation phase. Furthermore, the implementation plan will identify some of the barriers and challenges that may arise during this phase. This will assist the instructional designer in developing contingency plans to either eliminate or mitigate these barriers and challenges. The evaluation plan is included to ensure both formative and summative evaluations are being conducted throughout the entire process. The final summative evaluations conducted for both the instructors and the learners will serve as a guide to validate, enhance, refine, and assess the instructional materials that have been developed to close the performance gap. The goal of this project is to assist the United States Army in closing a performance gap that exist within the BSNCOC.

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# **Instructional Analysis: Performance Statement**

**Problem Statement**: Army enlisted leaders do not accurately plot grid coordinates on a map and do not properly identify and construct operational terms, symbols, and graphics.

**Expected performance**: Army enlisted leaders properly plot eight-digit grid coordinates and properly identify and construct operational terms, symbols, and graphics. Developing an understanding of these task will prepare enlisted leaders for the US Army's Battle Staff Noncommissioned Officers Course (BSNCOC) and for future Army operations.

Current performance: Army enlisted leaders do not have the basic knowledge and skills to properly plot eight-digit grid coordinates and properly identify and construct operational terms, symbols, and graphics. Enlisted leaders appear to lack the basic knowledge and skills needed to complete the BSNCOC, making it challenging for instructors to teach the required block of instructions.

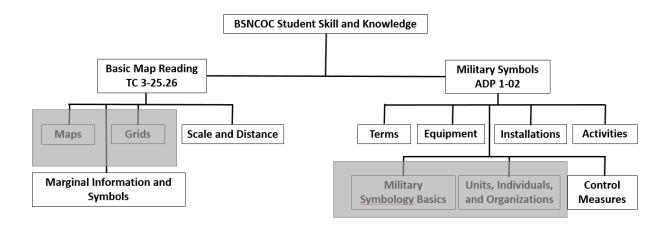
# Analysis: Audience & learning/work environments

**Target Audience**: Enlisted leaders in the ranks of Sergeant through Sergeant Major who are currently serving or soon will serve as a member of a staff at the Battalion or higher level. The Battle Staff Noncommissioned Officer Course (BSNCOC) is a branch-immaterial functional course designed to provide staff members with the tools needed to operate as a coherent team by Warfighting Functions. BSNCOC instructors are competent and committed instructors working in their current position for approximately 1-3 years. Students attending the BSNCOC have approximately between 2-20 years of service in the Army. Students attending the BSNCOC are expected to have a basic knowledge and skills for plotting grid coordinates on a map and identifying and constructing operational terms, symbols, and graphics.

Learning and working environment: There are two types of working environments for the BSNCOC. The first is a 21<sup>st</sup> Century classroom environment for resident students to attend. Students attend a 4-week course, Monday through Friday, from the hours of 9:00 A.M. to 4:30 P.M. and have weekends off. The second is a video teleconferencing instruction with personnel that are not able to attend the resident course. Students in the non-resident course attend a 4-week course, Monday through Friday, from the hours of 9:00 A.M. to 4:30 P.M. mountain time and have weekends off. The learning environment for resident students is a small, very quiet, classroom with desk formed in a horseshoe shape facing the instructors. Students are given a block of instruction and have an opportunity to practice and demonstrate each activity throughout both courses. The learning environment for non-resident students is a classroom environment at various places throughout the world. Students are given a block of instruction through the VTC system and afterwards have an opportunity to practice and demonstrate each activity throughout the course at their perspective locations.

#### **Analysis: Content Analysis**

Content Analysis: The basic knowledge and skills that enlisted leaders need to have prior to the BSNCOC include, properly plotting eight-digit grid coordinates and properly identifying and constructing operational terms, symbols, and graphics. Based on the instructional analysis, students arriving to the BSNCOC lack the basic knowledge and skills to perform these tasks. The instructional analysis suggest developing instructions that include properly locating and plotting an eight-digit grid coordinate, identifying the 5 major terrain features found on a military map, identifying topographic symbols on a military map, identifying the four types of unit frames, properly applying the use of unit icons, and demonstrating the correct use of modifiers 1 & 2. These proposed instructions should be created and implemented as a course prerequisite.



The grey areas indicate the need of instruction for the identified performance gap.

#### Design: Content, Instructional Goals, Objectives, Assessments

**Summarize relationships among performance and content:** 

Performance	Content
Plot eight-digit grid coordinates	Correctly plotting grid coordinates and determine accurate locations on a map within 100 meters (six-digit grid) and 10 meters (eight-digit grid).
Identify and construct operational terms, symbols, and graphics	Correctly identify the 5 major terrain features, typographic symbols, four types of unit frames, use unit icons, and use of modifiers 1 & 2.

**Instructional Goals:** The purpose of this instruction is to prepare enlisted leaders in the ranks of Sergeant through Sergeant Major to attend the Battle Staff Noncommissioned Officer Course (BSNCOC). These periods of instruction will provide the learner with a basis of knowledge crucial to the successful completion of the military terms and symbols examination and course of action sketch and narrative examinations conducted at the course.

Learning Objectives: At the end of this period of instruction, learners will be able to:

- 1) Properly locate and plot an eight-digit grid coordinate.
- 2) Identify the 5 major terrain features found on a military map.
- 3) Identify topographic symbols on a military map.
- 4) Identify the four types of unit frames.
- 5) Properly apply the use of unit icons.
- 6) Demonstrate the correct use of modifiers 1 & 2.

Summarize relationships among goals, objectives, and assessments:

Instructional Goal	Learning Objectives	Learning Assessment
These periods of instruction will provide the learner with a basis of knowledge crucial to the successful completion of the military terms and symbols examination and course of action sketch and narrative examinations conducted at the course.	Learners are able to properly locate and plot an eight-digit grid coordinate.	Formative Assessment: This evaluation has two parts; part one consists of five multiple choice questions, and part two consists of 20 questions which will require the learner to draw / construct unit, individual, and organization symbols utilizing the bounding octagons.  Summative Assessment: The purpose of this evaluation is to gain feedback from the instructor's perspective to confirm or deny the prerequisite instructional videos and workbook enhanced the learner's ability to achieve course standards. Instructors will be
	Learners are able to identify the 5 major terrain features found on a military map.	
	Learners are able to identify topographic symbols on a military map.	
	Learners are able to identify the four types of unit frames.	
	Learners are able to properly apply the use of unit icons.	
	Learners are able to demonstrate the correct use of modifiers 1 & 2.	provided a survey asking a series of pointed questions coupled with open ended suggestions and feedback portions.

## **Development: Storyboard Set**

**Purpose:** To ensure students selected to attend the US Army's Battle Staff Noncommissioned Officers Course (BSNCOC) can accurately plot grid coordinates on a map and properly identify and construct operational terms, symbols, and graphics before they attend the course.

Context: This storyboard presents the flow of activities for the prerequisite training required for Battle Staff Noncommissioned Officers Course students to be successful with no required remedial training. Army Soldiers receive training in the proper plotting of eight-digit grid coordinates but have limited exposure to properly identifying and constructing operational terms, symbols, and graphics. Battle Staff Noncommissioned Officers Course students do not have the same level of proficiency in both tasks. Prerequisite training will ensure all Soldiers entering the course have a base level of knowledge at the beginning of the course.

**Overview:** This storyboard presents the flow of activities for a self-paced prerequisite training session that future students must complete prior to attending the Battle Staff Noncommissioned Officers Course. Prerequisite training will begin with several mini training videos, a digital workbook that will be completed in conjunction with the training videos, and an online assessment.

**Expected Outcomes:** Student prospects will complete the prerequisite training and report to the US Army's Battle Staff Noncommissioned Officers Course and require no remedial training. All students will be able to properly plot eight-digit grid coordinates and properly identify and construct operational terms, symbols, and graphics. Developing a basic understanding of these tasks will prepare these enlisted leaders for the US Army's Battle Staff Noncommissioned Officers Course (BSNCOC) and for future Army operations.

Resources: Internet access, instructional videos, workbook, map, protractor, pen or pencil.

**Facilities:** Suitable workspace and computer access.

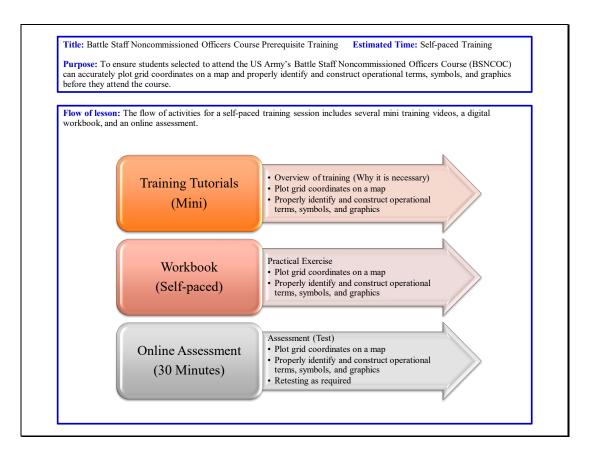
**Key Stakeholders:** Facilitator-trainers to construct the instructional video and provide aid and guidance during prerequisite training, as required. Audience: Soldiers selected to attend the US Army's Battle Staff Noncommissioned Officers Course (BSNCOC).



#### **Development: Flowchart**

**Purpose:** To ensure students selected to attend the US Army's Battle Staff Noncommissioned Officers Course (BSNCOC) can accurately plot grid coordinates on a map and properly identify and construct operational terms, symbols, and graphics before they attend the course.

**Flow of lesson:** The flow of activities for a self-paced training session includes several mini training videos, a digital workbook, and an online assessment.

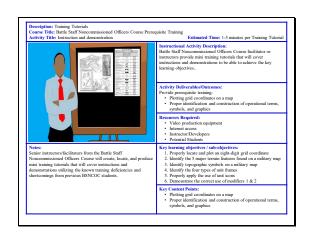


## **Development: Storyboard (Training Video)**

Training Tutorials
(Mini)

- · Overview of training (Why it is necessary)
- · Plot grid coordinates on a map
- Properly identify and construct operational terms, symbols, and graphics

The training tutorials will cover an overview of the training, instructions on properly locating and plotting an eight-digit grid coordinate, identifying the 5 major terrain features found on a military map, identifying topographic symbols on a military map, identifying the four types of unit frames, properly applying the use of unit icons, and demonstrating the correct use of modifiers 1 & 2. Upon completion of these training tutorials, students will have the knowledge to complete and submit the workbook as a prerequisite to attend the BSNCOC.

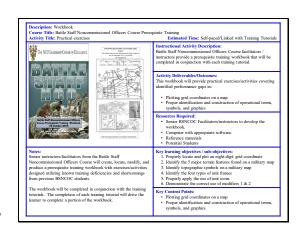


## **Development: Storyboard (Workbook)**

Workbook (Self-paced)

- Practical Exercise
- Plot grid coordinates on a map
- Properly identify and construct operational terms, symbols, and graphics

The workbook will be completed in conjunction with the training tutorials and will serve as formative assessment for students to demonstrate their understanding of the material covered in the training tutorials by completing several practical exercises. Students will review and identify operational terms, symbols and graphics. They will focus on identifying major terrain features, identifying topographic symbols, plotting grid coordinates, determining locations on a map, and will demonstrate their ability to construct graphics. Students will use this workbook as a go to guide (advance organizer) throughout the BSNCOC.



# **Development: Storyboard (Assessment)**

Online Assessment
(30 Minutes)

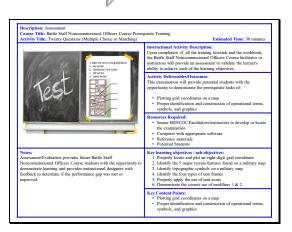
Assessment (Test)

• Plot grid coordinates on a map

• Properly identify and construct operational terms, symbols, and graphics

• Retesting as required

The online assessment will serve as the primary instrument in evaluating the student's knowledge on the material covered in the training tutorials. The assessment will be compromised of approximately 20 questions including both multiple choice and matching. This assessment will be used to provide the instructional designer with feedback to determine if the performance gap was closed or improved. The results of this assessment will assist the instructional designer in validating, enhancing, refining, and assessing the instructional materials that have been developed.



#### Implementation: Dissemination Plan, Cost and Benefits

#### **Stakeholders Responsibilities:**

- Instructional Designers: Monitor the implementation phase and serve as the subject matter expert. Provide direction and guidance as needed and are prepared to adapt to the organizations and student's environment. Follow-up with challenges throughout phase.
- ➤ BSNCOC Instructors: Develop course schedules; prepare technology equipment; develop/maintain proposed products (uploaded and maintained on website); provide students with instructions (links and instructions to proposed products); be available for questions, concerns or guidance; establish and enforce timeline (contact leadership if necessary); provide feedback on digital workbook and online assessment.
- > Students: Upon enrollment, ensure they received the prerequisite requirements; complete prerequisite requirements; ask for assistance/guidance/clarification as needed.
- Training Noncommissioned Officers: Select and enroll students; provide students with a computer and network connectivity; verify students receive prerequisite requirements; monitor progress of students to ensure they meet the requirements and timeline; serve as the liaison between the organization and the Battle Staff instructors/leadership.
- ➤ Department of Educational Technology: Responsible for maintaining the architecture, hardware, software, and network equipment. Provide assistance as needed.
- ➤ Army's Training and Doctrine Command (TRADOC): Approving authority for proposed prerequisite instructions.

#### **Barriers/Challenges:**

- ➤ Receiving approval from the Army's Training and Doctrine Command (TRADOC) to implement proposed instructions.
  - Team members will present recommended instructions to leadership and request approval through TRADOC. Follow-up weekly for a status of this request.
- > Ensuring students complete required prerequisites prior to arriving to the BSNCOC.
  - Instructors and Training Noncommissioned Officers will follow-up with each student. If necessary, contact leadership to enforce compliance.
- Last minute individuals added to the course will not be able to complete prerequisites.
  - Instructors will provide additional instructions to these students as needed upon arrival to the resident course. These students will review the learning tutorials, complete the digital workbook, and the online assessment during the first week of the BSNCOC.

Cost and Benefits: The proposed instruction will benefit the BSNCOC and the entire Army. It will alleviate the need for instructors to provide remedial training for BSNCOC students who cannot meet the requirements and will improve the knowledge and skills throughout the Army. There are no additional budget requirements for this proposal. The only requirement is for military and civilian employees to focus on developing the propose products. Personnel, facilities, and technology equipment is already in place to implement the proposed instruction.

#### **Evaluation: Formative and Summative Evaluation Plan**

Overall Evaluation Plan: The evaluation plan consists of one formative evaluation using practical exercises (PE) followed by a questionnaire and one summative evaluation. We will target the learner and the instructor to gain feedback and perspectives from both parties. The intent of this PE is to reinforce instructions and to build the learners knowledge and confidence in the use of military symbology and reference material ADP 1-02. The formative evaluation has two parts; part one consists of five multiple choice questions, and part two consists of 20 questions which will require the learner to draw / construct unit, individual, and organization symbols utilizing the bounding octagons. This evaluation is designed to provide us with the learner's perspective and understanding of the material covered in the instructional video, along with proof of concept to close the performance gap. The purpose of the summative evaluation is to gain feedback from the instructor's perspective to confirm or deny the prerequisite instructional video and workbook enhanced the learner's ability to achieve course standards. We will achieve this by providing instructors with a survey asking a series of pointed questions coupled with open ended suggestions and feedback portions. We will compile data gathered from said evaluations and use to enhance, refine, and assess the value of the videos and workbook.

**Formative Evaluation:** The practical exercise (PE) will provide the learner with an opportunity to display gained knowledge and understanding of military symbology in accordance with ADP 1-02. The learner will showcase gained knowledge through identification and demonstration of terms and graphics along with basic military map reading.

Component of Instruction	Sample Evaluation Questions	Instrument / Protocol	Stakeholders providing data
Content presentation	<ol> <li>Were the instructional tutorials clear?</li> <li>Did the tutorials flow in logical sequence?</li> <li>Was the pace of instruction adequate?</li> </ol>	Survey	Learners
Activity	<ol> <li>Where you able to follow instructions through the workbook?</li> <li>Did the workbook follow the sequence of instructions?</li> <li>Did the workbook meet your learning expectations?</li> </ol>	Survey	Learners

#### **Summative Evaluation:**

Type of Evaluation	Sample Evaluation Questions	Instrument / Protocol	Uses
For Instructors	Did the students have the knowledge required to begin the BSNCOC?     Explain.	Survey	Enhance, Refine, and Assess the Instructional materials
For Learners	1) Did the knowledge gained from the BSNCOC assist you in your career or current position? Explain.	6-month Survey	

#### **Cited References**

- Department of the Army. (2018). *Terms and military symbols* (ADRP 1-02). Retrieved from https://armypubs.army.mil/epubs/DR\_pubs/DR\_a/pdf/web/ARN12711\_ADP%201-02%20FINAL%20WEB.pdf
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# **Storyboard Checklist**

Final Storyboard Che	Final Storyboard Checklist		
Set includes Three sections	☐ Narrative ☐ Flow chart ☐ Storyboard screens		
Narrative (1-2 pages/slides)	<ul> <li>□ brief description of performance problem</li> <li>□ brief description of proposed instructional solution</li> <li>□ includes title, purpose, estimated time to complete instruction</li> <li>□ includes context of performance, high level overview of instruction</li> <li>□ includes list of major objectives (may have sub-objectives on storyboard screens)</li> <li>□ list of resources, description of facilities, description of stakeholders</li> </ul>		
Flow chart (1-2 pages/slides)	<ul> <li>□ brief description of performance problem</li> <li>□ brief description of proposed instructional solution</li> <li>□ includes title, purpose, estimated time to complete instruction</li> <li>□ graphic that visualizes the flow of events in entire instructional solution</li> <li>□ each event is labeled and includes an estimated time to complete</li> <li>□ each event includes list of key activities within the event</li> <li>□ at a minimum events include intro to content, practice, assessments, debriefs</li> <li>□ OVERALL each event aligns with overall goal to close the performance gap</li> </ul>		
Storyboards (multiple screens/ event)	☐ 1 to 2 screens per event ☐ each screen includes course title, activity title, estimated time to complete ☐ graphic representing the event/activity ☐ short description (bullet list) of instructional activity ☐ list of activity deliverables (what is produced during this section of instruction) ☐ list of resources and materials required for this section of instruction ☐ list of key learning outcomes for this section (objectives or sub-objectives) ☐ list of key content for this section of the instruction ☐ notes to clarify activities, describe teaching ideas, emphasize key points, etc. ☐ OVERALL content/activities align with overall goal to close a performance gap		
Formatting	all sections are written in a professional manner graphics and/or diagrams are used effectively grammar, spelling are accurate		
Overall Storyboard	performance problem is clearly described performance problem is clearly addressed by events of instruction content to resolve performance problem is clearly evident events (content delivery/practice) prompt audience to interact physically with content events (practices/summaries) prompt audience to think about (engage with) content events (assessments) help instructor and audience see learning progress events (practices/assessments) prompt audience to reflect on content they learned resources and materials selected/noted are supportive of content learning		
	entire proposed instructional solution is clearly presented entire proposed instructional solution appears to address the performance problem		