

Analysis of Intelligence Analysts' Mid-Career Experience Level

by Sergeant First Class Ric Craig

Introduction

Most junior to mid-level intelligence analysts have little to no experience conducting their military occupational specialty (MOS) 35F individual tasks, partially because of the length of time that elapses between the analysts' initial MOS training at the 35F10 Intelligence Analyst Course and their attendance at the 35F30 Intelligence Analyst Advanced Leader Course (ALC). Little research exists on the effective experience level of these analysts, specifically as it relates their training to their experience, and vice versa. To fill this void, the author, assisted by other 35F instructors, conducted research on 35F ALC students' pre-training knowledge, skills, and abilities (KSAs) at the 122nd Regional Training Institute in Marietta, Georgia. The One Army School System has increased cross-component training environments; therefore, instructors who prepared the analysis were able to consider all components (Active, Reserve, and National Guard).

The objective of this research was to help courseware developers improve their understanding of the target audience, thereby better informing the analysis phase of the Analysis, Design, Development, Implementation, and



Figure 1. The ADDIE Process¹

Evaluation (ADDIE) process (shown in Figure 1). This information will help instructors at regional training institutes and proponents to generalize their students' abilities and tailor instruction according to a class's knowledge level. It will also help strategic organizations to understand inherent systematic weaknesses so that they can adjust systems, processes, and procedures to strengthen knowledge retention. Additionally, units will get a clearer picture of population statistics to help assess their Soldiers and refine talent management.

One Army School System

The Army created the One Army School System to enable "Active Component and Reserve Component Soldiers [as well as National Guard] to receive high-quality and standardized education from any Army school, regardless of component, thus making the most effective use of existing school capacity and providing the Army with trained and ready Soldiers in a timely and efficient manner. The One Army School System is made up of Active and Reserve Component schools and centers and is designed to provide the most relevant and realistic training feasible to the Army as a whole. It also includes standardized course content, standardized course design and delivery and quality assurance verification of training standards and outcomes."²

Method

In 2018 and 2019, students attending the 35F ALC at the 122nd Regional Training Institute in Marietta, Georgia, performed pre-tests. Of the 161 students who completed the pre-test, data from 2 students was invalid because of a high number of unanswered questions. The student population (n=159) consisted of sergeants (n=123) and staff sergeants (n=36). It represented all three Army components: Active (n=29), Reserve (n=25), and National Guard (n=105). Students (all 3 components) came from 35 different states and 145 different unit identification codes.

During in-processing to the 35F ALC, students received a pre-test packet and instructions to complete the test. The pre-test packet was comprised of a knowledge pre-test, a leader behavior scale, and a KSA assessment. The students answered the pre-test using a handheld student response system.

A limitation to the research project was the low number of questions (11) on the knowledge pre-test. Having fewer questions resulted in a wider margin of error when estimating a student's knowledge. Further, because the knowledge pre-test addressed only 3 of 10 terminal learning objectives (TLOs), 7 TLOs were not measured.

One noted weakness identified during the data collection phase of the research was the potential disparity between the usage of skill level 3 TLO action verbs with skill level 2 (sergeant) and 3 (staff sergeant) Soldiers. The KSA pre-test assessed their performance of each TLO in terms of action verbs, designed as tasks for skill level 3 Soldiers.

Relationship between a Learning Objective Action Verb and the Level of Learning

Certain words tend to imply certain types of behavior. For example, "Name" requires the student to recall the name of a person, place or thing. "Describe" requires the student to know what the person, place or thing is, as well as go a step higher and give examples of the person, place or thing. "Give examples" requires a higher level of cognition on the part of the student, and this elevates the learning level. Instructors and curriculum developers select only one appropriate action verb that corresponds to the learning level of the learning objective per TLO...The action verb indicates the expected student behavior.³

One could argue that skill level 2 Soldiers (sergeants) would not typically have received training or performed a task designed for a skill level 3 Soldier. This would therefore reduce the validity/reliability of the data collected. The author, however, believes that most students taking the pre-test do not have a working knowledge of Bloom's Taxonomy, lesson design, or action verb usage in objective statements. The students would therefore read the action verb in the question stem with a broader definition and would answer the question more generally. For example, while those educated in the usage and meaning of action verbs understand the difference between "lead" and "coordinate," most students would generalize their meanings, resulting in the same answer. Further, decreasing the point value of each question by one would be roughly equivalent to lowering the question stem to the next level of Bloom's Taxonomy. This would result in higher percentages in the area of KSAs. However, it would not change the delta between evaluated categories (i.e., Active versus Reserve versus Guard, or sergeant versus staff sergeant). It would also increase the distance between self-assessed knowledge and performance on the knowledge pre-test (of which the questions fall within the first two levels of Bloom's Taxonomy, shown in Figure 2).





Bloom's Taxonomy is a classification system used to define and distinguish different levels of human cognition—i.e., thinking, learning, and understanding. Educators have typically used Bloom's taxonomy to inform or guide the development of assessments (tests and other evaluations of student learning), curriculum (units, lessons, projects, and other learning activities), and instructional methods such as questioning strategies. Bloom's taxonomy was originally published in 1956 by a team of cognitive psychologists at the University of Chicago. It is named after the committee's chairman, Benjamin Bloom (1913–1999).⁴

Analysis

The knowledge pre-test is an 11-question, multiple-choice test that the U.S. Army Intelligence Center of Excellence developed for the 35F ALC curriculum. The questions cover 3 of the 10 TLOs taught, specifically Intelligence Preparation of the Battlefield (IPB), Information Collection (formerly known as Intelligence, Surveillance, and Reconnaissance), and Targeting.

The leader behavior scale is a 50-question, multiple-choice test that the Center for Army Leadership developed under the Multi-Source Assessment and Feedback program. The students had to complete the self-assessment portion but did not have to obtain feedback from peers, subordinates, or superiors. An example stem is, "Establishes clear intent and purpose." The student selects an answer ranging from "very ineffective" to "very effective."

The research author designed the KSA assessment. Each 35F ALC TLO functioned as a question stem. Development of the alternatives (possible answers) used the U.S. Office of Personnel Management's KSAs. This allowed students to self-assess their experience level with each learning objective. An example question stem is, "Utilizing Distributed

Common Ground Station [System]-Army (DCGS–A) Applications in order to support intelligence operations." The available answers are:

A) I have not had education, training, or experience in performing this task.

B) I have had education or training in how to perform this task, but have not yet performed it on the job.

C) I have performed this task on the job. My work on this task was monitored closely by a supervisor or senior employee to ensure compliance with proper procedures.

D) I have performed this task as a regular part of a job. I have performed it independently and normally without review by a supervisor or senior employee.

E) I am considered an expert in performing this task. I have supervised performance of this task or am normally the person who is consulted by other workers to assist or train them in doing this task because of my expertise.

Additional data came from students' files, such as academic evaluation reports ([Department of the Army] DA Form 1059) from the Warrior Leader Course (WLC) (or relevant legacy course) and the 35F10 Intelligence Analyst Course if provided by the student. Further, limited data was available through the Army Training Requirements and Resource System, such as unit identification codes, component code, grade, and state of residence. Lastly, data came from the students' 35F ALC DA Form 1059, as well as their evaluation grades and grade point averages after the students out-processed from the course.

Results

The KSAs allowed students to express their levels of KSA on a range from "no training" to "expert proficiency." As with any spectrum, students claimed a wide array of selfprofessed experiences. Fourteen percent of students claimed to be an expert in at least 1 TLO. The percentage of students who claimed to be an expert was reduced by half for every additional TLO. No student claimed an expert level proficiency in more than 4 TLOs. This is in contrast with the fact that the number of students who claimed not to have had any training in at least 1 TLO was 64%. Unlike the percentage claiming expertise, this percentage decreases at a steady rate all the way to 9 TLOs. While no student claimed to be untrained in all 10 TLOs, it is disheartening to see that 2% claimed not to have been trained in 9 of the 10 TLOs. Of note, the three students who claimed to have received training in only 1 TLO identified Military Decision-Making Process and IPB. Further, their level of experience in said TLOs was supervised and/or unsupervised performance.

Some slight differences in experience levels were evident between the two ranks. Among staff sergeants, 11% claimed expertise in 1 TLO, while none claimed expertise in multiple TLOs. However, among sergeants, of which 15% claimed expertise in at least 1 TLO, several claimed expertise in multiple TLOs. The rates between sergeant and staff sergeant in TLOs in which they claimed to have had no training were not significantly different. Sixty-five percent of sergeants and 59% of staff sergeants reported not having received training in at least 1 TLO. The claim that multiple TLOs had not been trained indicates sergeants were within plus or minus 3% of the staff sergeants in all categories.

The greatest difference in self-proclaimed experience is between components. Thirty-eight percent of the Active Component Soldiers claimed expertise in at least 1 TLO, compared to 8% of the Reserve Soldiers, and 10% of the National Guard Soldiers. The delta between the percentage of Soldiers who claimed expertise and the percentage of Soldiers who claimed not to have received training was noticeable. While there was a difference of 10% for Active Duty, the delta between Reserve and National Guard was 67% and 55%, respectively.

Three TLOs tied as having 4% of the students claim they were experts: Critical Thinking/Structured Analytical Techniques (CT/SAT), IPB, and Briefing. However, CT/SAT and IPB ranked the highest for overall proficiency because they had the largest number of experts with the fewest number of untrained. Many students (39%) stated they had no training in Targeting, while 32% claimed no previous training in Information Collection. The TLO that rated third highest in the number of students who claimed to have never had any training is Manage All-Source Training at 28%. Information Collection, Targeting, and Manage All-Source Training ranked lowest in experience with the lowest numbers of experts and highest numbers claiming no training.

Three unique patterns in the TLO analysis were evident. All TLO trend lines, except for 2, demonstrated a distinct pattern: each has a moderate percentage of No Training, peaks at Training/No Experience, falls at varying rates to Performed Supervised, and then to Performed Unsupervised, falling to the lowest point of Expert/Supervised Others. However, Manage All-Source Training and CT/SAT stand out. CT/SAT starts with a low (11%) No Training and plateaus at Training/ No Experience and Performed Supervised. It then increases to its peak (57%) at Performed Unsupervised before falling to the low (7%) of Expert/Supervised Others. Targeting starts at its high point (62%) with No Training before it continues the typical pattern of falling to a low point of Expert/ Supervised Others. Figure 3 (on the next page) shows detailed results of the research.





Overall, the passing rate for the 35F ALC was 93%. Of the 12 students who failed to achieve course standards, 8 were sergeants and 4 were staff sergeant. Looking at components, they included 1 Active, 3 Reserve, and 8 Guard. Further, 67% of those students were dismissed because they did not achieve a passing score on the Army Physical Fitness Test or, to put it another way, 5% of ALC students failed the fitness re-test. Of all academic dismissals, 2 were for failure to achieve standards on the military briefing, while 1 was for failure to achieve standards on the written country assessment paper. Three administrative drops occurred: 1 because of illness and 2 resulting from injuries sustained during the Army Physical Fitness Test (which are not included in the 5% shown above).

The analysis did not use the leader behavior scale pre-test extensively. This was largely due to no identifiable potential correlations. The analysis did however include the relationship between the students' average leader behavior scale answer and the rating received for the Demonstrated Abilities of Leadership on the Phase 2 DA Form 1059. There was a –0.07 correlation value, or no significant correlation. This means the students' self-assessment of their own lead-

Discussion

As one would expect, Active Duty Soldiers reported a higher frequency of expertise in TLOs by a large margin over their Reserve and National Guard counterparts. This is likely a direct result of their full-time employment as intelligence analysts, whereas only a handful of Reserve and National Guard Soldiers work as intelligence analysts outside their military capacity.

The TLO related to CT/SAT ranks relatively high in experience rating. That is to say, 34% of Soldiers have no experience, while 40% have performed unsupervised or supervised others. When compared to published research studies, this is not unusual; however, it could potentially lead to overconfidence in Soldiers' abilities. For example, a 1995 study showed, among other findings, that 89% of respondents believed critical thinking was highly important in their teachings; however, only a small minority (9%) were using critical thinking and fewer (8%) could actually describe it.⁵ This would explain why across all TLOs, CT/SAT has almost twice the number of Soldiers who have unsupervised performance or expertise than any other 2 TLOs combined.

Very little identifiable correlation existed between 35F ALC pass rates and other variables. However, one correlation that stood out was the 0.35 moderate positive correlation between the DA Form 1059 Performance Summary from WLC and the DA Form 1059 Performance Summary earned at 35F ALC. Of the ALC students (whose WLC 1059 was obtained [n=89]), 34% had achieved Exceeds Course Standards in WLC. For ALC, 10% received Exceeds Course Standards in Phase 1 and 19% received Exceeds Course Standards in Phase 2. (The Phase 1 rate is generally lower because initial Country Assessment Paper failures prevented students from receiving Exceeds Course Standards.) A remarkably high number of students achieved Exceeds Course Standards in both WLC and ALC: 11% (6 Guard Soldiers and 4 Active Soldiers).

Another way to look at experience level is to focus on the difference between the percentage of students who claim not to have any training on a TLO and the percentage of students who claim to have an expert level of knowledge on a particular TLO. The larger the delta, the more uneven the experience level is across the force. The top 3 TLOs in this category are Manage All-Source Training (24%), Information Collection (30%), and Targeting (37%).

Conclusion

Most junior and mid-level intelligence analysts have little to no experience in conducting 35F individual tasks. Measuring all students against all critical individual tasks shows that 55% have either no training or no experience. This is contrasted with 19% who have performed the critical individual task unsupervised or have supervised others in doing the task. This leaves 26% of intelligence analysts who have conducted the critical individual task under supervision.

Preliminary analytical data suggests that the average time between when a Soldier completes the 35F10 Intelligence Analyst Course and when the Soldier arrives at 35F ALC is 6.2 years. This puts a lot of weight on the shoulders of the unit skill level 2 training program. This unit level training is vital to retention of skill level 1 knowledge, as well as the acquisition of skill level 2 knowledge. The program's design incorporates annual, semiannual, and quarterly training on individual tasks. Anecdotal evidence from students' small group discussions within the Manage All-Source Training lesson plan suggests that very little unit level training on 35F individual tasks is taking place, particularly if the Soldier is in a non-military intelligence unit. An improvement in individual tasks will lead to improved collective tasks and, ultimately, will support unit mission essential tasks and unit readiness.

The subject areas of Targeting, Information Collection, and Training have the highest need for training, as indicated by the difference between the high number of students who claimed not to have had any training and the low number of students who claimed to be an expert. Having a particular emphasis on Training (as in "Implement All-Source Intelligence Training" and "Develop All-Source Intelligence Training") will boost training in the subject areas of Targeting and Information Collection.

Lastly, to increase student success at 35F ALC, unit leaders and potential students should focus on improving their Army Physical Fitness Test score, writing skills, and military briefing abilities. The statistics show these are the top three reasons why 35F ALC students are unsuccessful in ALC.

Endnotes

1. Department of the Army, Training and Doctrine Command (TRADOC) Pamphlet 350-70-7, *Army Educational Processes* (Fort Eustis, VA: TRADOC, 4 October 2018), 22.

2. Patrick Baker, "One Army School System," Army Communicator 38, no. 2 (summer 2013): 20.

3. Department of the Army, TRADOC Pamphlet 350-70-7, *Army Educational Processes*, 26.

4. The Glossary of Education Reform, s.v., Bloom's Taxonomy, last updated March 5, 2014, https://www.edglossary.org/blooms-taxonomy/.

5. Richard W. Paul, Linda Elder, and Ted Bartell, *California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations* (Sacramento, CA: California State Commission on Teacher Credentialing, March 1997), 18, https://eric.ed.gov/?q=California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations&ft=on&id=ED437379.

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During World War II, special playing cards were sent to Allied prisoners of war. The cards held a secret map hidden between the paper layers that showed the prisoners how to escape.