Leadership Gaps in Army Training Organizations: Misunderstanding and Misapplication of the Instructional Systems Specialist

Christina K. Parker, Ed.D,
United States Air Force Special Operations Command
Hurlburt Field AFB, FL
Christina.parker.9@us.af.mil

Leonard S. Momeny, Ed.D.
US Army Warrant Officer Career College
Fort Novosel, AL
Leonard.s.momeny.mil@army.mil

ABSTRACT

This paper serves as the third in a series of studies on job performance and talent management of Army education professionals, specifically Instructional Systems Specialists (ISS), that has stretched from 2020 to 2023. The derived descriptive statistics from this paper provide objective insight into both TRADOC military and civilian Army Leader perceptions and expectations of job tasks and competency performance of the Instructional Systems Specialists (ISS). This information also supplements those previous studies within the series that were completed from 2020 to 2021, in which perceptions and expectations from a sample frame of the Army's current ISS professionals were gathered regarding their own job performance. Those previous studies identified a talent management gap in that ISSs report performing Instructional Systems Design (ISD), otherwise known as ADDIE, specific tasks for which they must fulfill collegiate educational background requirements to be hired. The identified gaps also noted the ISS tended to act in more administrative and information management roles, rather than as the ISD specialist they were hired to be. A follow-on 2022 study focused on job performance of instructors following their graduation from the current Army instructor training course. Given the COVID training environment, the 2022 study looked into whether instructor job performance was influenced by the modality by which the student-instructor received the course – resident or virtually. The 2022 study reported that measures of confidence in instructor ADDIE-related job task performance were impacted because Instructional Systems Specialists were not consulted in the design and delivery of curriculum when transitioning from a resident to a virtual environment. This paper will confirm the noted gap from the previous studies but from the perspective of the Army Leader, thereby identifying, with great fidelity, the educational talent management issue currently plaguing Army efforts to modernize education in support of Multidomain Operations.

ABOUT THE AUTHORS

Christina K. Parker, Ed.D., U.S. Air Force, is a Department of the Air Force civilian since 2023 and serves at the Special Operations Command at Hurlburt Field AFB, FL as the Chief Learning Officer. Christina previously served as a Department of the Army civilian until 2003. She holds degrees from the University of South Alabama and a doctorate from Indiana University. She has served as an adjunct professor for Southern Illinois University for 14 years and with Indiana University since 2020. Dr. Parker has presented at various education conferences and symposiums, publishing articles about talent management, change agency, educational technology, and the instructional design profession.

Leonard S. Momeny, Ed.D., U.S. Army, is a Chief Warrant Officer 5 at the Warrant Officer Career College, Fort Novosel, Alabama. Dr. Momeny currently serves as senior faculty and Chair for the Department of Military History. He holds degrees from Central Texas College, Southwestern College Kansas, American Military University, and Liberty University, where he completed his doctorate. Dr. Momeny has served as an adjunct faculty member for Central Texas College and Liberty University since 2021.

Leadership Gaps in Army Training Organizations: Misunderstanding and Misapplication of the Instructional Systems Specialist

Christina K. Parker, Ed.D,
United States Air Force Special Operations Command
Hurlburt Field AFB, FL
Christina.parker.9@us.af.mil

Leonard S. Momeny, Ed.D.
US Army Warrant Officer Career College
Fort Novosel, AL
Leonard.s.momeny.mil@mail.mil

INTRODUCTION

Previous studies by Parker (2020), Parker and Momeny (2021), and Parker et al. (2022) identified gaps in the management of specific talent and skillsets in Army learning organizations across the Training and Doctrine Command, or TRADOC. Specifically, research determined that the Instructional System Specialists, or ISS, often performed more administrative duties, including information management, rather than being employed to create and design innovative training methods in support of Army desires to modernize education (Parker, 2020). The modernization effort needed by the Army is in part response to a need to revise antiquated instructional methods, but it also seeks to better prepare Soldier students for Multidomain and Large-scale Combat Operations (Parker et al., 2022).

The self-reported misapplication of talent by surveyed ISS convinced the researchers that more information was required to understand who was developing training and their perceptions or expectations for doing so. The researchers confirmed both quantitative and qualitative data (Parker, 2020) that the development and design of new instructional material was being conducted by instructor/instructor writers (1712s) instead of ISSs (1750s) (Parker et al., 2022). Though exceedingly valuable members to the TRADOC team and Army training mission, the 1712s reported feeling underprepared to develop new instructional material as a majority are often only armed with two weeks of training provided via the Common Faculty Development – Instructor Course (CFD-IC). Research would demonstrate that these instructors, who predominantly possess a military background versus an educational one, tend to uncomfortably assume primary design responsibilities in their respective educational organizations, thereby leading to less-than-ideal training and education outcomes (Parker et al., 2022).

With the surveyed ISS commenting within both a qualitative and quantitative capacity, it is clear there is, at minimum, a consistent underutilization of their specific talent and skill set. The skillset inherent to instructional design is typically only cultivated in the realm of graduate-level education. When taken in conjunction with the reality that relatively inexperienced instructors, people usually wholly new to the realm of education, are expected to develop new training and instructional material it becomes clear the crux of this conundrum lies outside both of these positions. Logic indicates a gap in the effective application of skilled educational personnel that can either be attributed to historical organizational culture, e.g., we have always done it this way, or the problem lies with leadership's management of the talent. Should the problem lie with leadership, then the situation is probably one of genuine misunderstanding on the part of the leader responsible for education efforts within the various DoD / Army organizations. Part of this could be just a situation of limited experience with educational professionals. However, if the problem set is external to leadership, then it could be indicative of greater systemic issues across Army education in general, as the continued mismanagement of skilled individuals seems engrained in organizational culture. The leaders of the training organization are typically combat-focused officers moving into service support, or recently retired officers now serving as senior Department of Army Civilians. Selection is done with respect to talent management but their PCC, or pre-command course is not as specialized as one might think, failing to orient the leader to the specifics of their new training or the nuances of educational organizations. That is specifically challenging when they later apply specific personnel to accomplish tasks surrounding educational modernization and curriculum design.

That is not to say that the problem of misunderstanding or misapplication of an ISS is any less severe should it lie with leadership. However, the reality of the Army profession is the necessary focus on the profession of arms rather than the profession of education. Army leaders receive a tremendous amount of education that is honestly more aligned with training and instructional methods. In fact, historical leader development since the inception of TRADOC in

1973 has focused on streamlined training methods that allowed for efficiency of instruction that was simply to be replicated time and again for scores of Soldier students (Malone, 1986). TRADOC was a monumental development in the history of the Army, especially post-Vietnam, as it sought to formalize both training and education for Soldiers at all ranks.

However, given the year of advent, it is no surprise that the Army is still continuing to try and break away from the direct lecture methodology as a primary means of conveying information, also known as the "sage on the stage" (US Department of Army, 2020). The complexity of education has grown since 1973, mostly because of the undeniable proliferation of and increased dependence upon technology in all aspects of military operations. That technological dependence has not diminished but instead increased. The complexity of Army Operations has dramatically grown beyond the days of Field Manual, or FM, 100-5, Air-land Battle, and since matured into Multidomain Operations. Commanders and Soldiers alike have to now balance basic maneuvers against the challenges of additional domains of warfare which now include Space and Cyber. Needless to say, in light of such challenges, reliance on dated instructional methods will not effectively bring the Army into the future state it desires.

The Army and TRADOC certainly wish to embrace change and have recently undertaken great efforts to do so. Whether through the inclusion and dissemination of revised learning concepts or the creation of Army University to guide all institutions through change, the Army has made significant efforts to change. The effort has even included the hiring of instructional system specialists across various Directorates of Training and Doctrine, or DOTD. And yet, despite such changes, the end result remains relatively unchanged. As indicated in previous research (Parker 2020; Parker & Momeny, 2021; Parker et al., 2022), the educational professional hired for change continues to be applied in ways that are inconsistent with their skillset and potential, leaving duties they are specifically educated to perform to be completed by the uninitiated. The real connection being drawn between previous research and this effort is that these dated practices may in fact be linked to leaders that simply lack expertise in education and instruction.

Consider that the higher percentage of Army Leaders in TRADOC, themselves, do not have educational backgrounds but are placed in roles of responsibility that drive the doctrine, policy, and practice of learning and performance throughout the Army. Make no mistake, the profession of arms continues to be the prime focus of the US Army, but the profession of education and its associated gains in educational science and methods should be better applied to the benefit of the Army. Yes, historically speaking, the Army has been slow, if not resistant, to respond to advancements in both education science as well as learning technologies. This is likely driven by unfamiliarity with how education sciences and technologies influence the delivery of educational materials and content, which in turn can unduly influence the ways learners eventually perform and fail to deliver coveted high levels of mission readiness. Now couple this approach to educational adaptiveness and responsiveness with the Army's efforts to modernize the force. Large and sweeping efforts are being made to modernize mission operations and the equipment that supports them, but less consideration has been given to the modernizations needed to train with and for them. Needless to say, for Army leaders at every level, day-to-day business is a constant harrowing balance between readiness, acquisition, and education with each component requiring attention in turn.

Given the outlined challenge, the researchers maintain there is a pressing need to explore the perceptions of senior leaders that maintain and employ these educational specialists. Research into this area should allow for a clearer picture of whether it is a misunderstanding or misapplication of the ISS that is occurring across Army education. This research must happen because learning concepts ultimately lack fidelity in light of failed application and employment of talent necessary to develop and implement the modernized education required to meet the future fight (Daft, 2010).

PURPOSE

This paper provides descriptive statistical evidence on the perspective and assumptions of Army leaders that directly supervise or otherwise employ the skills of those templated as being responsible for the modernization of Army education. The authors determine to better understand the gap in either misunderstanding or misapplication of the ISS, thereby better shining a light on an education-centric problem set confronting the modernizing Army in light of the challenges of Multidomain Operations (FM 3-0, 2022). The presented data collected via a survey mirrors previous studies by the authors (Parker and Momeny, 2021; Parker et al., 2022) that contextualized the elements of the employed instruments via questions or survey elements directly tailored to IBSTPI competencies and have further supplemented those elements with basic questions pertaining to leadership. The final presented data will accompany recommendations for improved talent management regarding Army leader TRADOC assignments, an additional call to create a pre-command course for future leaders of Army educational organizations, and suggestions regarding dissemination of all three interconnected studies throughout all elements of TRADOC. The authors constructed an

initial proposal abstract based on presenting quantitative data via survey to supplement previous studies, thereby completing an entire series on this research topic. The authors were required to utilize Army University (ArmyU) in Fort Leavenworth, Kansas as a third party to assist in both Institutional Review Board approval and finalization and distribution of the *Leader Assessment of Specialists in the Learning Organizations Survey*, data collection, and initial data analysis. As with previous instances, surveys were distributed by ArmyU via email. Participation was completely voluntary, and no external organizational pressure was present. As the designated third party within the research schema, ArmyU managed survey completion timelines and participated in initial data analysis.

LITERATURE REVIEW:

Army Leaders and Training Organizations

As mentioned above, Army leaders are rightly focused on the profession of arms. Whether from initial entry training sources, such as Officer Candidate School or West Point, or graduate-level schooling staff colleges, Army leaders are constantly studying war and all its associated supporting activities. Many of the previously mentioned and complementary government civilian leaders partnered with these commanders are former Commissioned Officers, or in some cases exceptionally senior Non-Commissioned Officers. Doctrine, current events, military history, and leadership classes are just a few of the subject areas that comprise most Army leader curricula. Guidance for all officer education is derived from the Officer Joint Professional Military Education Program or Officer JPME. Further and far more specific guidance is located in CJCSI 1800.01F, or the Officer Professional Military Education Policy (OPMEP, 2020). In that policy, it states that it provides guidance on "learning areas, outcomes…students, faculty, delivery modes," and the like, and there is a section that explains in detail the desired outcomes of students at different levels of officer education. However, none of these areas of education discuss force generation to the degree that a student would understand education science and the specially trained personnel that facilitate training within the greater TRADOC enterprise. The researchers are not declaring these education-centric items necessary to cover, merely pointing out that officers, and many supervisory government civilians in the Army generally lack such education at all levels, thereby confirming unfamiliarity with the information and aspects of education until placed into command or position of staff. Usually, there is a reliance on OJT or on-the-job training.

During a standard career, it is understood that not all officers will be placed in command of units in TRADOC. In fact, many will never serve with TRADOC in any capacity and will instead remain operational for the majority of their career. The operating force is completely different in mission and focus from that of units responsible for force generation. Force generation falls squarely upon the shoulders of TRADOC as far as the US Army is concerned. No matter whether leaders are going to command in an operating force or somewhere in TRADOC, they are all required to attend their respective Pre-Command Courses or PCC. Within these courses, the officer is informed on relevant changes in doctrine, branch and Army training focus, personnel challenges, and the like. No matter the command to be assumed, officers will receive the same pre-command experience, confirming a continued lack of specific preparation for officers assuming responsibility for a command/organization within greater TRADOC. Hence, all are prepared for war, and yet none are educated on how or who can help them best prepare others for war. It is assumed that this results in the Army leader pursuing change and adapting to modernization requirements in TRADOC in a way similar to the approach of most commanders serving in the operating force.

The organizations within TRADOC are not only manned by Soldiers, as that would simply be impossible. In many instances, former experienced Soldiers are hired after military service as government civilians and serve in various capacities, including management, operations, support, and even instructional design. The prior service civilians come with a wide variety of educational backgrounds, usually meeting minimal government requirements for hiring into specialized positions while primarily selected for their prized military experience (Parker & Momeny, 2021; Parker et al., 2022). For this study, 74% of respondents had 3+ years or more experience as a leader or faculty member within a training or educational institution. Still, this is a double-edged sword, as this brings a valued voice of experience to the day-to-day operations but there is the risk of unrelenting compliance with those in leadership roles. Additionally, many will have the same gap as commissioned officer leaders regarding educational specialists like the ISS, as they too were former officers. Those in this study mirrored the discussed educational gaps, with only 23.3% reporting a civilian education that focused on some branch of educational science. This gap results in an acknowledged 45% of respondents understanding some or only a little about the elements of performance of the faculty and staff they manage and lead.

It should be understood that respectful challenge of authority is a mode in which creativity is allowed to thrive, thereby providing energy and creativity to an organization. Some of the most detrimental words in an organizational setting are, "We have always done it that way" (Daft, 2010). All of the best commanders have had trusted change agents by their side and were allowed to offer challenges of opinion to commanders during times of decision and uncertainty. Additionally, the very best commanders and leaders understand the value of tapping into an organization's members to codify common understanding, trust, discernable goals, and a shared direction forward, also known as a guiding coalition (Kotter, 2012). These coalitions are extremely effective when the leader understands the composition and associated areas of expertise of each member in order to best discern the relevance and impact of offered counsel. In the Army's learning organizations, those processes, and elements to be changed involve curriculum, instructional modality, instructor development, and technological resources. The people that conduct most of the activities within such institutions are the instructor cohort and ISSs. In this study, ~30% of respondents thought the ISS serving as the principal point of contact for design action was either not important or no better than moderately important. Of the two (instructor and ISS), the ISS remains the most consistently undiscovered or misapplied element within the Army educational enterprise. Perhaps all that is needed is for the leader to receive a formal introduction to this highly trained specialist.

The Role and Responsibility of the Army Instructional Systems Specialists

ISSs are the government/military job series 1750 and the instructional designers as titled within Army organizations. To be eligible to fill a 1750 or ISS position individuals must fulfill a 24 academic credit hour minimum in education requirement. The Army's TRADOC regulation, Army Learning Policy and Systems, TR-350-70, (U.S. Department of the Army, 2017b) does not offer a definition of instructional design or ISS, however. Rather, it leaves the understanding of position expectations in an ambiguous state for novices, journeymen, experts, and leaders alike. TR-350-70 defines Army Learning as, "the act of acquiring, maintaining, or improving knowledge, skills, and attributes to achieve the required performance. It is the combination of training, education, and experience" (US Department of the Army, 2017b, p. 21) and then assumes that those in related educational positions will understand what they are required to do to aid in the student learning process.

The Army ISS anchors its professional prowess in the execution of the Instructional Systems Design (ISD) process, otherwise known as the ADDIE process, in an attempt to provide focus to an otherwise complex and nuanced effort (Stampley, 2023; Parker, 2020). And while, at one time, Army education policymakers and drivers attempted to root the profession in the well-established and well-acknowledged Instructional Designer Competencies identified by the International Board of Standards, Training, Performance, and Instruction (IBSTPI), they no longer do so. Opting, instead to create their own instructor competency list that reflects the Army Values and mirrors, to some degree, the IBSTPI Instructor competencies while doing away with the linkage to IBSTPI Instructional Designer (ID) competencies with no plan to create their own as yet.

So, where a detailed description of ISS task and competency expectations was put forth through the research by Parker in 2020 reflecting both prescribed IBSTPI ID competencies and ISS position descriptions, now the expectation is only highlighted through the position description, which can vary based on location, organization, and leader understanding of the position as it compares to their specific mission. And where there once was noted a "discernable shift from a technological, audiovisual focus to a systematic and artful science of environment and material design" (Parker, 2020; Kelly, 2016; Reiser, 2001), there is now a need to artfully and skillfully meld advanced technologies, physiological and biological sciences, computer sciences, and learning sciences so that educational programs, especially military educational programs, can keep up with the times as well as the conditions that those times globally imbue.

In general, an ISS position description is broken down into five task performance categories: Product Manager, Analysis Team Member, Developer, Evaluator, and Trainer (Parker, 2020, p. 21). Most ISSs occupy General Schedule (GS) Pay Scale 11 or 12 positions. They are considered journeymen in terms of expertise. GS11 and GS12 positions often share the same position description tasks and should be able to work independently, with GS11 positions requiring only slightly more leader guidance than GS12 positions. For the ISS position at this level, individuals are expected to apply the ADDIE process with the intent of providing educationally sound advice and guidance to all echelons of leadership about the theories and strategies of learning as well as training design and development. The ISS is expected to respond and adapt to information, procedures, and processes that change frequently while at the same time performing a variety of highly complex, intensive tasks which results in multiple instructional products which include audit trail documentation of the design process as well as executable curriculum development courseware materials (FASCLASS, 2005).

Table 1: *Position Duties: 1750 Instructional Systems Specialist GS-11*

Category	Duty Description
Product Manager	• Establishes & maintains historical audit trails for all actions. • Prepares & presents briefings. • Writes studies & correspondence as required. • Uses initiative and judgment in applying & adapting broad educational principles, general administrative policies, & limited guidelines to the development & control of training Programs of Instruction (POIs). • Manages training development actions with other activities, organizations, & agencies. • Develops & recommends command position on assigned subjects & areas. • Evaluates the impact of new software & equipment in advance of initial training, doctrine, evaluation results, & long-range trends. • Recommends cost-effective training strategies. • Coordinates work with higher headquarters, other education or training specialists, counterpart action officers, instructors, Subject Matter Experts (SMEs), TRADOC schools, & other appropriate agencies to plan, develop, & recommend solutions to training problems. • Reviews, comments, & makes recommendations on education, training directives, & contracts for training development, evaluations, and reports.
Analysis Team Member	• Acts as independent action officer or project officer, & advisor. • Analyzes assigned projects to determine appropriate methodology, required research, required subject matter expert assistance, and need for educational surveys & related matters. • Serves as the principal point of contact for design actions within the scope of assigned responsibility. • Applies established criteria in selecting tasks for training & in recommending appropriate instructional settings. • Collects data necessary to support design projects. • Reviews & analyzes internal and external feedback & applies results to determine the adequacy of task analysis and training program documentation. • Evaluates adequacy of material collected & initiates requests for additional data.
Developer	• Develops, coordinates, recommends approval, & makes changes to POIs, Individual Training Plans (ITPs), Course Administrative Data (CADs), and Course Management Plans (CMPs) for Training course materials (i.e., presentations, lesson plans, student handouts, assessments) • Write regulations, pamphlets, procedure guides, policy documents, & SOPs.
Evaluator	• Reviews, coordinates, or initiates surveys & reports to appraise impact on assigned area of operations & programs. • Prepares correspondence in support of assigned projects. • Evaluates & provides guidance & direction a course development proposal, training device requirements, new training media, course design, & training materials. • Determines methods of solving training problems pertaining to the implementation of training concepts, techniques, and procedures.
Trainer	• Trains, advises & evaluates instructor personnel in the development of training materials. Ensures compliance with TRADOC regulations, USAACE guidance & educational soundness. Observes and evaluates instructor performance & recommends corrective actions as needed. Detects needs for & submits recommendations concerning modifications of all portions of the training programs including innovative or advanced training techniques, approaches to subject matter, sound educational principles & procedures & the best-accepted tenets of instructional technology.

ID, as a profession, was established, in 1975, following the Army's efforts to tap into the prolific educational theories at the time of World War II in order to train Soldiers for war faster. Though the profession is not yet 50 years old it considers itself a profession that actively responds to the needs of society, culture, environment, and the like preparing for the knowledge that brings by "evolving to stay relevant and current with the technology for educational purposes" (Parker, 2020; Tracey & Boling, 2014). Given recent global events, ISSs, as change agents, find themselves at a key pivotal moment in the history of military learning and performance. With the rapid increase in consideration of technologies such as Synthetic Training Environments (STE), Virtual Reality (VR), Artificial Intelligence (AI), and Neural Activity Patterning for curriculum design and delivery in conjunction with the change in mission to focus on multiple domains of military operation it is imperative that the ISS evolve once again. Rather than being reactive and evolving to meet the changes that have occurred, however, the difference this time is that ISS must think ahead, identify the impending changes, and proactively prepare for them.

METHODOLOGY

As with previous research (Parker & Momeny, 2021; Parker et al., 2022), and due to inherent circumstances and time constraints, the authors decided to employ quantitative methodologies in support of data collection and analysis. Additionally, time constraints reduced a degree of formality in the approach, this limitation has created a research nature somewhat akin to a case study, as the sample frame and time for data collection were strained. Though strained by both time and various limits in the scope of the study, the authors feel that rigor and value in approach and outcome are best derived from the inclusion of insights gathered from previous research in conjunction with the newly cultivated data of this study. When put together, all three studies create a complete picture of the problems surrounding the understanding and application of instructional systems specialists within the US Army's learning and teaching organizations. The primary methodological design utilized was quantitative descriptive, and the approach of choice was survey methodology.

Design Synopsis (Purpose, Design, and Methodology)

The research purpose and design were focused on the collection of quantitative information to gain insight into the understanding and assumptions of Army leaders regarding their application of Instruction Systems Specialists within organizations attempting to modernize the educational experience of the Modern soldier. While not requiring the collection of data specifically from ISS or Army-trained instructors, the design of the research is believed to be of value to the understanding of the nature of work in the Army's Functional Community 32 – Training and Education Job Series. As the first study conducted by Parker (2020) focused on qualitative information on the experiences of ISS, and the subsequent quantitative studies (Parker and Momeny, 2021; Parker et al., 2022) complemented that original study with quantitative data on both ISS and Instructors, it is assumed that collection on leaders will finalize the body of research work. The authors have consistently demonstrated perceived inefficiencies in the employment of specialized personnel in TRADOC organizations and so the leader is the last element to overturn in the investigation.

A quantitative approach was again selected and mostly for convenience regarding both collection of data and ease of casting a wider net in the selection of an eventual study sample frame. The study is based on small numbers of respondents, but this is in part due to the limited number of leaders from which to draw upon. After all, ISSs are not within every TRADOC unit but instead are typically found within DOTD or Brigade-level organizations. This implies that the population from which to draw is relatively small. It would be difficult to estimate the exact number of leaders, whether military or civilian, that could participate and so it was understood that inferential statistics would not be realistic for this research. In spite of this, the authors maintain that the objective presentation of smartly worded data is still to provide tremendous context to the continued growing body of knowledge on this topic.

Since the research will not employ inferential statistics, the design relies wholly upon descriptive statistics. This again allows for the derived quantifiable data to contribute supplemental data to better support the aforementioned problem set, that of talent management of ISSs, more specifically the leader's role in the problem set. Descriptive statistics are very user-friendly, for both the researcher and the eventual readers of the work, as they are "a medium for describing data in manageable forms" (Babbie, 1998, p. 405). Since Parker (2020) suggested that "ISS personnel lack employment in accordance with their educated strengths," this collected descriptive data on leader perception will combine well with previous work, thereby allowing for reasonable conclusions to be drawn in the absence of inferential statistics (Parker and Momeny, 2021, p. 7).

The population for data collection was mainly civilian managers of ISSs and a small subset of military leaders, currently employed within either government or military organizations. The population sample draws from personnel employed at a specific military training base in the southeastern United States. All those sampled currently hold supervisory positions that allow for specific management of ISSs. There were no other relevant exclusions or delimitations to apply to this research.

Methodology

The authors utilized survey methodology in conjunction with fixed convenience sampling for data collection. It is acknowledged this approach to sampling permits bias but the time and potential increased to return samples outweigh the risk (Creswell & Creswell, 2018). This study, as with the others in the series, has a sense of informality about it as it possesses no deliberate minimum sample size, or in formulaic parlance, $n = \hat{p}\hat{q}[zc/E]^2$. After all, fixed convenience sampling lacks a degree of rigidity in order to acquire more potential participants. Quality and quantity of returns can influence the eventual generalization of information. 80 personnel were contacted via email, and approximately 39% responded with 25 respondents completing the entire survey. And so, *n* is merely the reported sample size or *n* = 25.

Proposed Instrument (Survey)

The aforementioned data collection instrument, or survey, is based on a survey framework relied upon by the researchers in two previous studies (Parker & Momeny, 2021; Parker et al., 2022). The survey, known as the *Leader Assessment of Specialists in the Learning Organizations Survey,* differs slightly from previous iterations as it now only maintains two major components, Part I – Demographics and Part II – Perceptions and Expectations of Specific Faculty in Educational and Training Institutions. The first portion collected basic data on gender, time as faculty or leader at the organization, education, and as required, prior military service. The second part of the survey contains questions 7–47. The 40 questions of Part II seek to contextualize the IBSTPI ID competency model in use by Army University into questions that allow respondents to gauge each point on a scale of perceived importance. Respondents utilized a Likert-scale series of responses that allowed comment on ISS task competency and their perceived importance in the eyes of the leader that manages such personnel. The responses included the following: Not Important at All, Slightly Important, Moderately Important, Very Important, and Absolutely Essential. The subjectivity of these responses relies on the personal experience of the respondents, something that was not necessarily captured by the researchers. As common with most research employing the Likert scale, comparable numerical values of 1 through 5 were assessed for each answer, thereby allowing the eventual calculation of weighted means for eventual statistical analysis. Face validity, or "judgment by a panel of experts," was relied upon to establish instrument validity (Leedy & Ormrod, 2013, p. 91).

As the employed survey is still informal due to being modified from its original use in previous research (Parker & Momeny, 2021), it remains necessary to derive a reliability score. Reliability, or the measure of internal consistency of an instrument, seeks to determine that "all of the items within a single instrument yield similar result(s)" (Leedy & Ormrod, 2013, p. 91). A common score for the internal consistency of an instrument is the Cronbach alpha score, α. The Cronbach alpha is a "value that ranges between 0 and 1, with optimal values ranging between .7 and .9" (Creswell & Creswell, 2018, p. 154). The reliability score of this version of the survey was α = 0.97. The Cronbach alpha was calculated using Microsoft Excel. The authors conducted an Anova: Two-factor without replication. This method was used in previous research by the authors and "provided the necessary information to perform the following equation: α = 1 – (Mean Square Error / Mean Square Rows)" (Parker & Momeny, 2021; Parker et al., 2022). The derived alpha value implies strong reliability / internal consistency and would normally give the authors the necessary confidence in extracted data. However, this alpha value must be taken with a "grain of salt" as it does not have the ideal statistical power required for full confidence. The authors simply feel it necessary to demonstrate consideration was given to instrument reliability.

Data Analysis and Statistical Procedures

Data analysis wholly focused on the use of descriptive statistics in the final preparation of all information. Inferences on provided responses are included and are based upon both the analysis of weighted means for individual questions and data from previous research by Parker and Momeny (2021; 2022). All data analysis was completed using Microsoft Excel. Finally, the authors are once again relying upon an analysis technique used in previous research (Parker & Momeny 2021). As seen below, the Likert-scale derived data, when cast across a number line, can provide a better visual understanding for the interpretation of presented results.
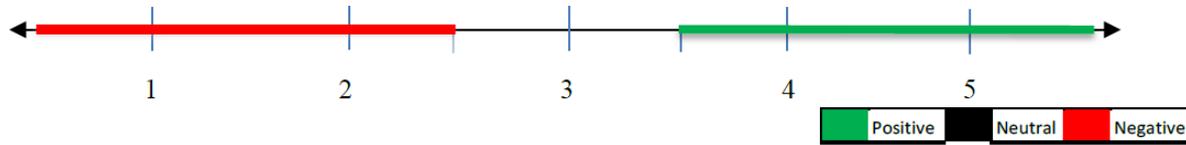
Figure 1. *Qualitative Scoring*

The initial data return of greater than 38% response rate to the survey request was very encouraging. Most responses by participants skew toward the positive, with an overall mean response value of 3.67, or a rating of an element as being either moderately or very important. When taken as individual items, there were 1025 total responses collected. The mode for all collected responses was 4, and values for all ratings break down into the following range: a) Not Important at All – 22, b) Slightly Important – 40, c) Moderately Important – 305, d) Very Important - 521, e) Absolutely Essential – 137. This gives an implied overall positive outlook on the role and importance of the ISS but that is somewhat misleading. Certain areas across the survey feature areas of concern regarding a potential understanding of how to best employ the ISS to the greatest benefit of the US Army and potentially even similar organizations.

FINDINGS AND DISCUSSION

When reviewing the collected data holistically, two questions immediately stand out from the results of the survey, specifically questions 25 and 36. Both of these items had the lowest overall mean score with a corrected 3.08 and 3.16 values respectively, meaning both garnered a near-neutral response. Question 25 queried respondents on their position regarding the ISS and their ability to "develop and recommend(s) command position on assigned subjects and areas." This is directly related to the ISS duty description category of *product manager* and relates to their ability and perceived value as an advisor to the leader or commander. Approximately 60% of respondents rated this competency as being anywhere from only moderately important to not important at all. The implication is a misunderstanding about the ISS's potential as a trusted expert and advisor on matters of education. Question 36 sought to understand the leader's perspective on the ISS with respect to their need to "write regulations, pamphlets, procedure guides, policy documents, and Standard Operating Procedures." This particular survey element aligns with the duty description category of *developer*. Developer is a critical element among the five broad categories of duty description for which the ISS is hired in support of government education activities within the greater Army. Any task tied specifically to the act of development in support of ISS-centric work must be capitalized upon to ensure the greatest possible outcomes.

The other focal point of the research findings focuses on areas less than immediately obvious when looking at aggregated descriptive statistics. Presented are points of both concern and positive emphasis. For instance, nearly 80% of respondents believe that an ISS "must analyze the characteristics of existing and emerging technologies and their potential use," and 55% think an ISS should evaluate both new "software and equipment in advance of initial training, doctrine, evaluation results and long-range trends." However, this is in direct contradiction to other ISS competencies, as greater than 50% think it is between moderately to not important at all that an "ISS writes studies/research and supporting correspondence as required for instructional design or education improvement." For an ISS to be capable of robust analysis of technology, software, equipment, and its eventual application in the learning environment they must be able to conduct research in support of educational improvement. Doing so will allow the ISS to better "recommend cost-effective training and strategies," a competency prized as very important to absolutely essential by nearly 57% of all respondents.

One of the primary concerns from the previous research efforts by Parker and Momeny focuses squarely upon the act of design, the element of performance for the ISS one would find most synonymous with their given specialty. While some may consider 25% of respondents a statistical minority, it is important to note that one-quarter of the leaders that participated in this study think competencies like the development of instructional materials, design of learning assessments, and the management of such design projects are only moderately important to not important at all. One-quarter of those that manage or lead in the surveyed TRADOC organizations have a complete misunderstanding or misapplication of the educational specialist specifically trained to conduct and manage change. Combine that with the earlier stat regarding 45% of those surveyed either understanding some or only a few elements of performance about their faculty and staff and you have a perfect recipe for organizational latency and even potential failure. Similar numbers accompany the perceived value in an ISS planning and designing instructional and non-instructional interventions. Finally, concerns were confirmed when 66% of respondents report that it ranges from moderately important to absolutely essential that an ISS "is responsible for primarily entering data in the designated training

development repository," or TDC. This alone is a mark that confirms the reduction of the ISS to be predominately associated with data entry rather than the instructional design of cutting-edge educational products and experiences.

RECOMMENDATIONS

The authors maintain that the biggest issue surrounding education in the US Army is also one that can be adjudicated with little cost to the greater organization and result in the largest gain in efficiency. The ISS is the often misunderstood and misapplied educational specialist within greater TRADOC organizations across the Army. With a general sense of unfamiliarity with, and therefore misapplication of, the value and capabilities of the ISS position (Parker, 2020; Parker & Momeny, 2021; Parker, et al., 2022) within learning organizations, a campaign of education for leaders and team members specific to the intention of the Instructional Design position, its professionals, and its value in innovation, organizational change, as well as learning and performance improvements is highly recommended. Leaders and teams, both military and civilian, are unaware that they are missing out on a tremendous educational tool within the Army arsenal. To bring awareness to a campaign focused on 1) continued talent management research, publication, and presentation with prestigious conferences, symposiums, forums, etc.; 2) inclusion of tailored educational information embedded with pre-command courses for officers set to specifically lead Army training organizations; and 3) establishment of a mentorship program or community of practice for education personnel that provides guidance and experience with articulating the intended capabilities of the ISS position and how those capabilities link directly to the ISS position descriptions, expected duty performance, as well as the organizational mission are warranted. Research, pre-command education, and mentorship programs could benefit greatly by highlighting the data presented on the misunderstanding and misuse of the ISS position conducted over the past three years.

Furthermore, benchmarking other government and non-government training organizations that have instructional design positions strategically placed as key educational advisors to non-design thinking leaders and team members is recommended. This position can provide consistent education-oriented solutions and insights to leaders making plans and decisions that impact training and education. Developing organizational structures that intentionally include educationally minded positions as part of the command center of organizations serves to provide the educational perspective, which is generally missing, in conjunction with the mission and operationally minded ones.

These recommendations seek to directly address findings from this research as well as the research conducted by the same authors over the last three years: 1) ISSs are not performing ADDIE-specific tasks but are instead used for administrative and data entry tasks (Parker, 2020; Parker & Momeny, 2021); 2) Instructors are uncomfortable with conducting analysis and design-oriented tasks intended for ISS performance by position description (Parker, et.al., 2022) both of which stagnate innovation and improvements in the use of emerging technologies and various instructional delivery methods that enhance and speed learning processes; and 3) Leaders generally find valued input from ISSs, relative to decision making or regulation and doctrine writing and the like, to be of low importance contradicting expectations of duty performance laid out in ISS position description.

Summary

This paper ends a series of studies that have managed to identify the mismanagement and misapplication of the ISS. The first studies identified ISS-reported concerns regarding the frequency of performed duties and competencies (Parker, 2020; Parker and Momeny, 2021). The second study was able to determine that the average Army instructor was conducting the design and development of new educational and instructional material and felt ill-prepared to undertake such tasks (Parker et al., 2022). Finally, this study identified a gap in the understanding of leadership with respect to the importance surrounding the performance of IBSTPI necessary competencies typically attributed to the ISS. The authors recommend the development of both military and civilian leader courses to better prepare and educate those that are responsible for leading and managing organizations that maintain ISS and other education specialists within their units.

ACKNOWLEDGEMENTS

REFERENCES

Babbie, E. (1998). *The practice of social research* (8th). Westford, MA: Wadsworth Publishing.

Brooker, F. E. (1946). *Training films for industry: Final report on the war training program of the division of visual aids for war training*. Federal Security Agency. US Office of Education.

Byun, H. (2000). *Identifying job types and competencies for instructional technologists: A five-year analysis* (Publication No. 9993525) [Doctoral Dissertation, Indiana University]. ProQuest.

Christensen, T. K., & Osguthorpe, R. T. (2004). How do instructional-design practitioners make instructional-strategy decisions? *Performance Improvement Quarterly, 17*(3), 45-65.

Cox, S., & Osguthorpe, R. T. (2003). How do instructional design professionals spend their time? *TechTrends, 47*(3), 45-47.

Creswell, J. W. & Creswell, J. D. (2018). Research design: Qualitative, quantitative, and mix methods approaches. Thousand Oaks, CA: Sage Publishing.

Daft, R. L. (2010). *Organizational theory and design* (10th). Mason, OH: Southwestern Cengage Learning.

Department of the Navy United States Marine Corps (2009). *GS-1700 civilian series front-end analysis report.* Retrieved from https://www.tecom.marines.mil/Portals/90/EducationCOI/ReferencesEdCOI/Civilian%201700%20Series%20FEA.pdf

FASCLASS (2005). *Army position description: Instructional systems specialist*. Retrieved from https://acpol2.army.mil/fasclass/search_fs/search_fs_output.asp?fcp=zutpk3eFRtaToL2jprlGuam0buidbX%2BfmqVYgGC7hLBkaIedkqk%3D

Fowler, F.J. (2014). *Survey research methods* (5th ed.). Thousand Oaks, CA: Sage.

Gray, C. M., Dagli, C., Demiral-Uzan, M., Ergulec, F., Tan, V., Altuwaijri, A. A., Gyabak, K., Hilligoss, M., Kizilboga, R.,Tomita, K., & Boling, E. (2015). Judgment andinstructional design: How ID practitioners work in practice. *Performance Improvement Quarterly, 28*(30),25-49. https://doi.org/10.1002/piq.21198

IBSTPI (1992). About us. Retrieved from http://ibstpi.org

Kelly, W.Q. (2016). *Competencies for instructional designers: A view from employers* (Publication No. 10190299)[Doctoral Dissertation, Florida State University]. ProQuest.

Kenny, R.F., Zhang, Z., Schwier, R.A., & Campbell, K. (2005). A review of what instructional designers do: Questions answered and questions not asked. *Canadian Journal of Learning and Technology, 31*(1), 9-16.

Klein, J. D., & Kelly, W. Q. (2018). Competencies for instructional designers: A view from employers. *Performance Improvement Quarterly, 31*(3), 225-247.

Koszalka, T., Russ-Eft, D., & Reiser, R. (2013). *Instructional design competencies: The standards* (4th ed.). Information Age.

Kurt, S. (2017*). ADDIE model: Instructional design*. Retrieved from https://educationaltechnology.net/the-addie-model-instructional-design/

Larson, M. B., & Lockee, B. B. (2004). Instructional design practice: Career environments, job roles, and a climateof change. *Performance Improvement Quarterly, 17*(1), 22-40.

Larson, M. B., & Lockee, B. B. (2009). Preparing instructional designers for different career environments: A case study. *Education Technology, Research and Development, 57*(1), 1- 24.

https://doi.org/10.1007/s11423- 006-9031-4

Leedy, P. & Ormrod, J. (2013). *Practical research: Planning and design* (3ʳᵈ ed.). Upper Saddle River, NJ: Pearson.

Malone, H. O. (1986). Military History, Command Support, and the Mission: The TRADOC Experience. *The Army Historian*, *10*, 4–6. http://www.jstor.org/stable/26303469

Merrell, M. D., Drake, L., Lacy, M. J., & Pratt, J. (1996). Reclaiming instructional design. *Educational Technology, 36*(5), 5-7.

Osguthorpe, R. T., & Osguthorpe, R. D. (2007). Instructional design as a living practice: Toward a conscience of craft. *Educational Technology, 47*(4), 13-23.

Parker, C. K. (2020). *Instructional design perception and practice in United States Army training organizations: A case study* [Doctoral Dissertation, Indiana University]. IUScholarWorks.http://hdl.handle.net/2022/25601

Parker, C.K., & Momeny, L.S. (2021, December 3). *Army Training and Talent Management: Finding Developmental Leverage in the Rediscovery of the Instructional Systems Specialist* [Presentation]. Inter-service/Industry Training Simulation and Education Conference, Orlando, FL.

Parker, C.K., & Momeny, L.S. (2022, December 1). *Resident or Virtual: The Impact of Foundational Education Modality on New Army Instructor Job Performance Outcomes* [Presentation]. Inter-service/Industry Training Simulation and Education Conference, Orlando, FL.

Patel, L. (2010). Instructional systems design in an on-demand world. *TD Magazine, 64*(12), 42-44. Retrieved from https://www.td.org/magazines/td-magazine/instructional-systems-design-in-an-on-demand-world

Raynis, M. (2018). Analysis of instructional design job announcements (2016). *Current Issues in Emerging eLearning, 4*(1), 166-223.

Richey, R. C., Fields, D. C., & Foxon, M. (2001). *Instructional design competencies: The standards* (3rd ed.). ERIC Clearinghouse on Information and Technology.

Rowland, G. (1992). What do instructional designers actually do? An initial investigation of expert practice. *Performance Improvement Quarterly, 5*(2), 65-86.

Rowland, G. (1993). Designing and instructional design. *Educational Technology Research and Development,41*(1), 79-91.

Schunk, D.H. (2012). *Learning theories: An educational perspective (*6th ed.). Allyn & Bacon.

Smith, P. L., & Ragan, T. J. (2005). *Instructional Design* (3rd ed.). John Wiley & Sons.

The Army University (2017). *About the Army University.* Retrieved from https://armyu.army.mil/about

Tracey, M. W., & Boling, E. (2014). Preparing instructional designers: Traditional emerging perspectives. In J. M.Spector, M. D. Merrill, J. Elen, & M. J. Bishop (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 653-669). Springer.

Tracey, M. W., & Hutchinson, A. (2013). Developing designer identity through reflection. *Educational Technology, 53*(3), 28-32.

U.S. Department of the Army. (2017a). *Army learning army educational processes: TRADOC pamphlet 350-70-7.*Retrieved from http://adminpubs.tradoc.army.mil

U.S. Department of the Army. (2017b). *Army learning policy and systems: TRADOC regulation 350-70.* Retrievedfrom http://adminpubs.tradoc.army.mil

U.S. Department of the Army. (2019). *The Army People Strategy*: Army University. Retrieved from https://www.army.mil/e2/downloads/rv7/the_army_people_strategy_2019_10_11_signed_final.pdf

U.S Department of the Army. (2020a). *U.S. Army in Multi-Domain Operations 2028: TRADOC Regulation 525-3- 1.* Retrieved from https://adminpubs.tradoc.army.mil/pamphlets/TP525-3-1.pdf

U.S. Department of the Army. (2020b). *U.S. Army Training Concept 2035: Training the Multi-Domain operationready force.* Retrieved from https://adminpubs.tradoc.army.mil/pamphlets/TP525-3-1.pdf

U.S. Department of the Army. (2021). Education Modernization Strategy & Implementation Plan 2028. Army University. Retrieved from https://www.army.mil/e2/downloads/rv7/2019_army_modernization_strategy_final.pdf.

Walcutt, J. J. (2019). Cognitive Weaponry: Optimizing the Mind. *Interservice/Industry Training, Simulation, and Education Conference.*

Walcutt, J. J. & Schatz, S. (Eds.) (2019). Modernizing Learning: Building the Future Learning Ecosystem. Washington, D. C.: Government Publishing Office. License: Creative Commons Attribution CC by 4.0IGO

World Atlas (2020). *The World's Largest Employers*. Retrieved from https://www.worldatlas.com/articles/the-world-s-largest-employers.html

Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods* (6th ed.). Sage.