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Study to Assess Training and Doctrine Command (TRADOC) School Staff Time Available for Training Activities

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**Study to Assess Training and Doctrine Command (TRADOC) School
Staff Time Available for Training Activities**

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13. ABSTRACT (Maximum 200 words) Recent budget cuts have prompted the United States Army to reduce the number of civilian training developers at TRADOC schools. The purpose of this study was to determine whether TRADOC staff remaining will have sufficient time and expertise to both instruct classes and develop training. A written questionnaire was distributed to 3,200 military and civilian instructors and training developers at 16 TRADOC installations. The adjusted response rate for the combined sites was 83% (2,644). Staff reported little problem with time or expertise availability to complete training activities over the past year. However, this response may merely reflect that the staff was not yet required to perform these activities. Recommendations were for TRADOC to determine what training development tasks were not being accomplished to ensure that a training evaluation system is in place to monitor any change in the caliber of training and suggestions for overcoming training deficiencies, should they develop.					
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Foreword

In November 1993, the Training Career Program Office, Deputy Chief of Staff for Training, United States (U.S.) Army Training and Doctrine Command (TRADOC) requested the U.S. Army Research Institute (ARI) to conduct a study to assess staff time available for instructional delivery and support activities. Inspired by the joint service Training and Personnel Systems Science and Technology Evaluation and Management agreement, ARI entered into a Memorandum of Agreement with the Navy Personnel Research and Development Center (NAVPERSRANDCEN), and provided NAVPERSRANDCEN with the funding to conduct this study. The ARI primary point of contact (POC) for this work was Dr. Robert Wisher. The TRADOC POC was Mr. Claud Rivers.

This report documents the findings of the school staff time questionnaire and is intended for use by TRADOC and the individual commands who participated in the study.

Any questions regarding this report should be directed to Dr. Meryl Baker, Training Department, (619) 553-7676 or DSN 553-7676.

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Summary

The questionnaire to assess Training and Doctrine Command (TRADOC) staff time to conduct training activities was administered in May 1994, to a sample of 237 (8%) civilian instructors, 2,235 (70%) military instructors, 241 (7%) civilian training developers, and 487 (15%) military training developers, for a total sample target of 3,200. This sample proportionately represented the numbers of individuals in each subgroup at 16 designated TRADOC installations. The adjusted response rate for the combined sites was 83% (2,644).

This report contains the questionnaire results for the total sample and selected subgroup comparisons. Among the questionnaire results:

- Of the seven training development activities listed on the questionnaire the combined sample of respondents indicated that they spent the most time revising and developing lesson plans and practical exercises, however, the overwhelming majority of those spending time at these activities did so only 1 to 4 hours per week.
- Instructors spent more time revising and developing lesson plans than performing any of the other training activities. The average amount of time spent revising lesson plan and practical exercises by instructors was 1 to 4 hours.
- Training developers spent more time than instructors on revising training courses, conducting tasks analyses/developing new training. The average amount of time spent on these tasks by training developers was 1 to 4 hours per week.
- Questionnaire respondents indicated that little time was spent validating new training over the past year (60% of respondents spent no time on this task).
- Questionnaire respondents indicated that hardly any time was spent developing doctrine, and reviewing contractor produced training over the past year (approximately 75% of respondents spent no time on these tasks).
- Approximately 50% of the respondents indicated that they revised and/or developed lesson plans or practical exercises 1 to 5 times over the previous year. Approximately 22% never revised lesson plans or practical exercises and 32% never developed them.
- Questionnaire results indicate that instructors rarely, if ever, needed to revise training courses, conduct task analyses/develop new training, or validate new training over the previous year. Training developers on average reported doing these tasks 1 to 5 times over the past year.
- The majority of questionnaire respondents (73%) report that within the last year they never needed to develop doctrine or review contractor training. However, civilian training developers appear to perform these tasks most often (the majority, approximately 1 to 5 times per year).
- Responses indicating lack of time over the past year precluded revision or development of lesson plans and practical exercises occurred in only approximately 40% of the total questionnaire sample. On average, civilians who were both training developers and instructors experienced this problem most frequently (1 to 5 times per year).

- Approximately 70% of respondents answered that over the past year, lack of time to revise training courses, conduct tasks analyses/develop new training, validate training, develop doctrine, and review contractor produced training was not a factor.
- For all seven training development tasks about which respondents were queried, over 86% indicated that over the past year lack of expertise was never a factor in precluding them from completing a training development activity.
- Forty-seven percent (47%) of respondents reported that it would take 1 to 10 man-hours to develop 1 hour of paper-based instruction and 34% reported that it would take 11 to 25 man-hours. Only 19% thought it would take over 25 man-hours to develop 1 hour of paper-based instruction.
- To develop 1 hour of multimedia instruction, 45% of respondents indicated that it would take 1 to 25 man-hours and 31% reported that it would take 26 to 50 man-hours. Only 24% of the respondents thought it would take over 50 man-hours to develop 1 hour of multimedia instruction.
- In response to a question concerning the impact that the recent (or anticipated) decrease in the number of training developers will have on the quality of training, 55% of respondents indicated the impact would be negative.
- Fifty-eight percent (58%) of respondents are already using some form of automated training development system.
- Approximately half of those responding indicated that over the past year they had been asked to make curriculum changes which they thought were unnecessary.
- Almost all civilian training developers responding (97%) had training in Systems Approach to Training (SAT)/Instructional Systems Development (ISD) while only a little more than 35% of the military instructors had this training.
- The majority of respondents (73%) indicated that they would not be responsible for creating Student Development Tests come 1 October 1994.
- Aggregated data analyzed by location showed little, if any, differences between sites. However, when data were disaggregated by current position and location, differences were found in the training developer subgroups among locations.

Conclusions

- Though the responses to questions concerning lack of time and/or expertise to complete training development activities appear to indicate that there is not currently a problem, this may merely reflect that the majority of respondents were not required to perform these tasks over the past year. These tasks may be going undone.
- Responses to questions concerning man-hours to develop 1 hour of instruction and questions concerning training in SAT/ISD indicate civilian training developers appear to have a better understanding of training development than instructors.
- Military instructors, by far the largest subgroup available at TRADOC installations, are not currently revising training courses, conducting task analyses/developing new training, validating new training, developing doctrine, or reviewing contractor training and appear from responses to questions concerning time on platform and SAT/ISD experience not to have the time nor the expertise to accomplish these tasks.

Recommendations

1. Ensure that a training evaluation system is in place to monitor any change in the caliber of training.
2. Determine what training development tasks are not being accomplished, if any.
3. If a training deficiency develops:
 - Hire additional civilian training developers, or
 - Automate training development (ASAT)
 - Lengthen instructor tours
 - Decrease instructor workload
 - Eliminate unnecessary curriculum revisions
 - Increase instructor time between classes
 - Provide SAT training (possibly through video teletraining) to instructors.

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Introduction

Problem

Recent budget cuts have prompted the United States (U.S.) Army to reduce the number of civilian training developers at Training and Doctrine Command (TRADOC) schools. As a consequence, the major responsibility for training development will shift from training developers to instructors. TRADOC is concerned that Army instructors will not have sufficient time to instruct, update current training programs and design, develop and validate new training programs and products.

Purpose

The purpose of this study was to determine whether TRADOC staff remaining after the reduction in numbers of civilian training developers, will have sufficient time and expertise to both instruct classes and develop training.

Approach

Questionnaire Development

A written questionnaire was designed to obtain the data. This approach obtained the largest possible sample size for the resource investment. Information sought by TRADOC personnel provided the basis for the substance of the questions. Questions were aimed at gaining information both directly by straightforwardly asking, and indirectly by asking for information which might serve to corroborate a direct response. For example, Question 13 asked respondents how many times they needed to engage in a specific training development activity, but were unable to do so because they didn't have the expertise to complete the task. Questions 15 and 17 queried respondents' expertise in developing instruction by asking for time estimates to create 1 hour of instruction for paper-based and multimedia courses. In addition, via independent inquiry, information was obtained from the U.S. Air Force and U.S. Navy concerning time estimates for the development of 1 hour of paper-based instruction and 1 hour of multimedia instruction. Averaged, they will provide a baseline estimate for the development of a single hour of instruction employing the two different presentation methods. This information will provide an independent estimate of training development time which may be factored into assessing the feasibility of having instructors perform training development activities.

Descriptive data concerning years in current position and years as instructor and/or training developer were collected. Variables of interest included hours spent revising existing instruction, developing new instruction, time available to complete these tasks, and general expertise in these areas. Questions differentiated between development of lesson plans and development of entire training courses. Questions also focused on time and expertise to conduct training task analyses, and design and validate training courses.

The questionnaire was designed for self-administration. This method of data collection was selected for a variety of reasons. First, increased likelihood that it would yield more consistent data

across respondents than an interview technique. Second, increased response reliability resulting from greater response candor as a result of anonymity. Third, increased accuracy of time estimates through self-administration by providing respondents an opportunity to consult records, or reflect on their responses. Finally, and possibly of greatest importance, a dramatic increase in sample size through the use of a self-administered questionnaire. Given time and money constraints, one-on-one interviews would have resulted in a sample size one tenth of that actually obtained, significantly increasing the probability of sampling error.

As it was going to be necessary to aggregate the data, it was useful to employ closed-ended questions. Closed-ended questions were also more likely to provide a more uniform response and increased response rate. It was not anticipated, given that the population under study were instructors and training developers, that reading and writing skills would be a barrier to questionnaire completion. Also, it was anticipated that as the respondents are all known employees of the U.S. Army, and that questionnaire distribution and collection would be controlled at each data collection site, that response rate for the questionnaire would be high.

A prototype questionnaire was produced and pilot tested with 20 training developers and instructors at Fort Benning, GA. Based on the results of the pilot test minor changes were made to the questionnaire form. One important alteration was to accommodate the responses from both military and civilian personnel who categorized themselves as a combination of both instructor and training developer. As a result Question 6 ("What is your current position?") response options were expanded to include "both" in addition to "instructor" and "training developer."

The final questionnaire consisted of 29 questions, 4 of which were multiple questions with 7 parts each. The questionnaire was designed to take no more than 30 minutes to self-administer. The questionnaire appears in Appendix A.

Questionnaire Distribution and Response

The sample frame included all civilian and military instructors and training developers currently employed at 16 U.S. Army installations,¹ each of which maintain at least one TRADOC school. A stratified sample proportionately targeting 30% of each of the population subgroups of military instructors, military training developers, civilian instructors and civilian training developers at each site was created based upon population data collected from each installation. Appendix B provides the numbers of personnel on-board at each site, by subgroup, and the number of questionnaires mailed and returned by each subgroup. No advance information was obtained on numbers of individuals considering themselves to be in the military/both and civilian/both categories as the sites did not maintain billet information in that manner. Hence, Appendix B provides only questionnaire return information for those two categories.

Table 1 provides a summary of the total on-board, total questionnaires mailed, total questionnaires returned (valid) by instructor/training developer subgroups. Table 2 provides valid return information for each of the 16 sites participating in the study.

¹Fort Benjamin Harrison, IN, was not included in this study as it has been targeted for closing on 30 September 1994 by the Base Realignment and Closure Commission (BRAC).

Table 1**Questionnaire Respondents**

	CI	MI	CD	MD	CB	MB	UK	TOTAL
Total Onboard	786	7,430	789	1,595	0	0	0	10,600
Questionnaires Mailed	237	2,235	241	487	0	0	0	3,200
Questionnaires Valid Return	193	1,354	184	212	148	515	38	2,644
Total % Valid Return								83%

Note: CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both, UK = Unknown.

Table 2**Location of Respondents**

Location	Valid Return	% Valid Return
Aberdeen Proving Grounds	155	61
Fort Benning	237	53
Fort Bliss	125	98
Fort Bragg	204	91
Fort Eustis	187	83
Fort Gordon	361	94
Fort Huachuca	190	85
Fort Knox	297	93
Fort Leavenworth	69	72
Fort Lee	126	79
Fort Leonard Wood	186	97
Fort McClellan	125	98
Fort Monmouth	26	81
Redstone Arsenal	107	84
Fort Rucker	76	79
Fort Sill	160	100
Unknown Location	13	
Total	2,644	83%

Questionnaires were distributed to on-site coordinators designated by TRADOC, for distribution to individual respondents. This strategy eliminated the costs of mailing to each individual respondent. On-site coordinators were provided with an exact number of questionnaires to provide to each subgroup (see Appendix B) and were responsible for distributing the questionnaire by selecting every *n*th number of military and civilian instructors and military and civilian training developers, from school personnel lists, to participate in the study. Though these sampling procedures were recommended, actual procedure varied at each site. On-site coordinators were also responsible for collecting the questionnaires and returning them to Navy Personnel Research and Development Center. The total valid return was 83%.

Data Analysis

Questionnaires were printed on sheets capable of being scanned by machine for data encoding. Data was transmitted directly to an IBM 4341 file and then transferred to a personal computer for analysis using the Statistical Package for the Social Sciences. Frequency distributions were computed for each questionnaire item, and crosstabs were run on variables of particular interest.

The questionnaire plan originally called for data from the following subgroups to be analyzed separately: Military Instructor, Civilian Instructor, Military Training Developer, and Civilian Training Developer. However, results of the pilot test indicated that some military and civilians consider themselves to be a combination instructor/training developer. Data were analyzed to include these combination categories (military/both and civilian/both).

Mean scores for the seven subparts of Questions 10, 11, 12, and 13 were calculated so that these responses could be compared on one graph for each of the six respondent subgroups.

Results²

Sample Characteristics

Of the 2,644 respondents, 2,081 (79%) were military; 525 (20%) were civilians; 38 (1%) were unknown. As shown in Table 1, 193 (7%) of respondents identified themselves as civilian instructors; 1,354 (51%) as military instructors; 184 as civilian training developers (7%); 212 (8%) as military training developers; 148 (6%) as civilian instructor/training developers (both); and 515 (19%) as military instructor/training developer (both). Current position was not identified by 38 (1%) respondents.

Question 1 asked respondents for their Military Occupational Specialty (MOS) code. As responses to other questions indicate that there were no more than 2,119 military (2,081 identified, 38 unidentified) responding to the questionnaire it appears that 35 civilians erroneously responded to this question. The 2,154 responding to this question noted 246 different occupational specialties. Frequencies for each of these MOS codes appear in Appendix C.

²All percentages have been rounded to the nearest whole number.

Again, it appears that 77 civilians included a response to Question 2 which inquired as to military rank. Of the 2,196 responding, the overwhelming majority were Staff Sergeants (42%) and Sergeants First Class (37%) (Figure 1).

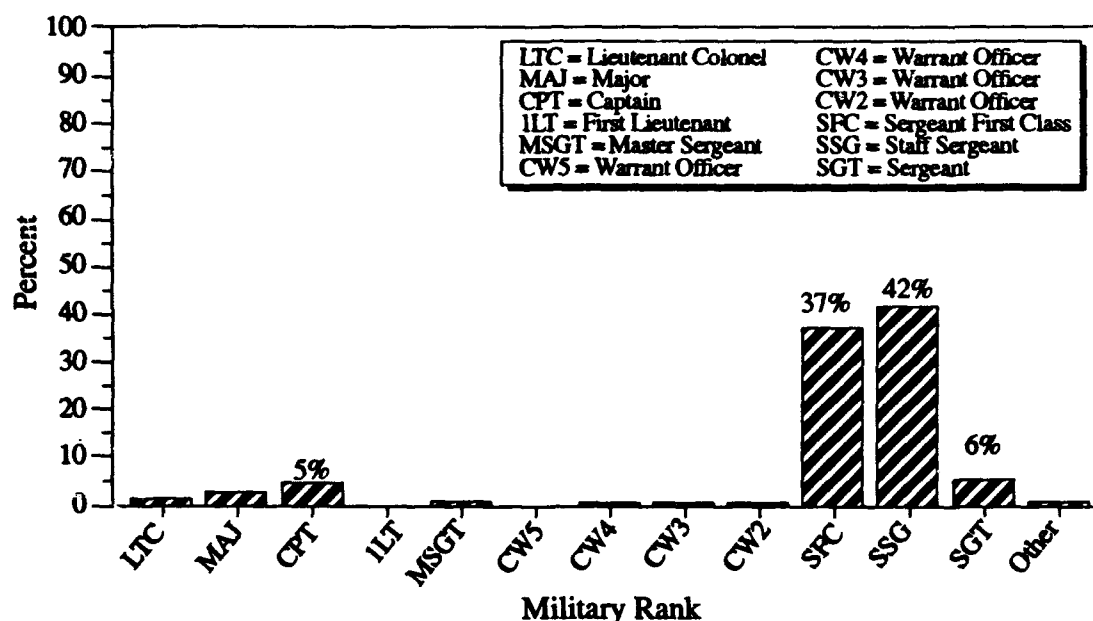


Figure 1. If you are military, what is your rank? (Q2) (2,196 valid cases).

Figures 2 and 3 indicate series and grade levels of civilian respondents. Of the 539 responding to the series question, the majority were GS-1712s (Training Specialist) (57%), and of the 537 responding to the question on civilian grade, the largest group were GS-11s (39%).

Figure 4 shows the percentage of respondents coming from each of the 16 sites. The largest percentage (14%) were from Fort Gordon, the smallest percentage from Fort Monmouth (1%).

Of the 2,618 individuals who responded with their current position (Question 6), 59% considered themselves instructors, 15% as training developers, and 25% as a combination of training developer and instructor (both) (Figure 5). Categorizing these data into six subgroups results in 7% Civilian Instructor, 52% Military Instructor, 7% Civilian Training Developer, 8% Military Training Developer, 6% Civilian/Both, and 20% Military/Both (Figure 6).

About 41% of the 2,638 respondents to Question 7 have been in their present position less than 1 year, 44% between 2 and 4 years (Figure 7). Not surprisingly, almost all of the military respondents have been in their positions for less than 4 years while less than half of the civilians have been in their present position for less than 4 years (Figure 8).

Sixty-one percent (61%) of the 2,604 respondents to Question 8 served less than 1 year as an instructor prior to coming to their present position (Figure 9). The majority (72%) of the 2,341 respondents to Question 9 served less than 1 year as a training developer prior to coming to their present position (Figure 10).

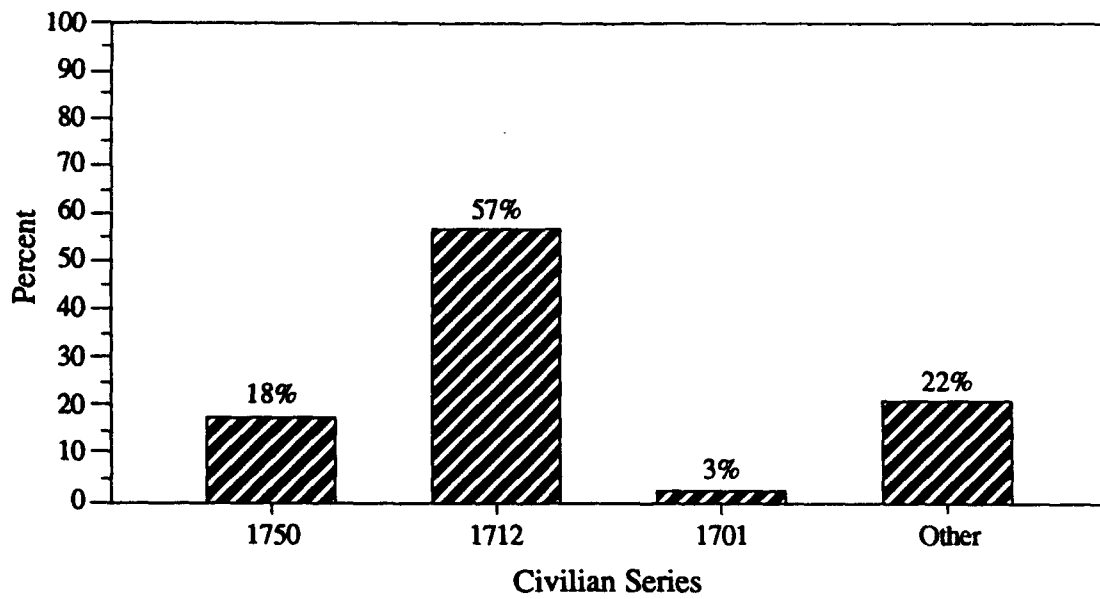


Figure 2. If you are a civilian, what is your series? (Q3) (539 valid cases).

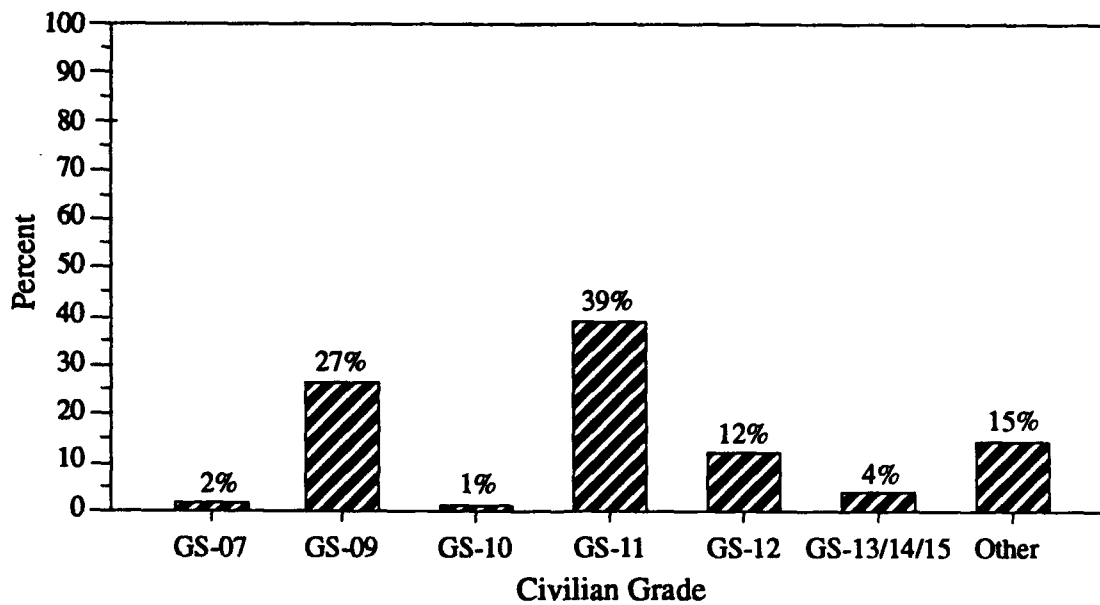


Figure 3. If you are a civilian, what is your grade? (Q4) (537 valid cases),

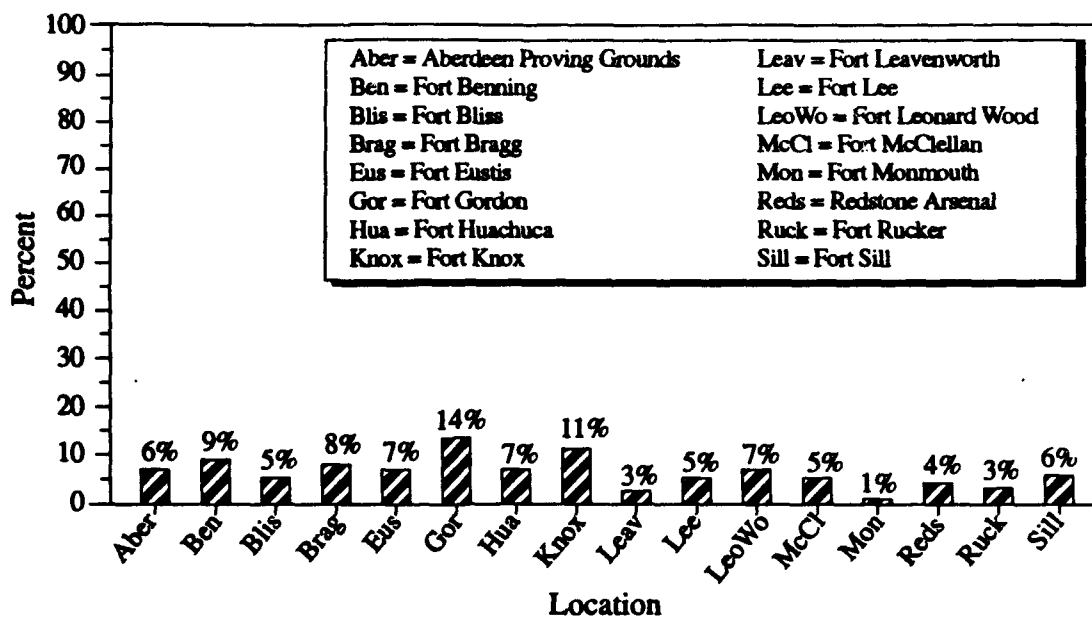


Figure 4. Where are you stationed/located? (Q5) (2,631 valid cases).

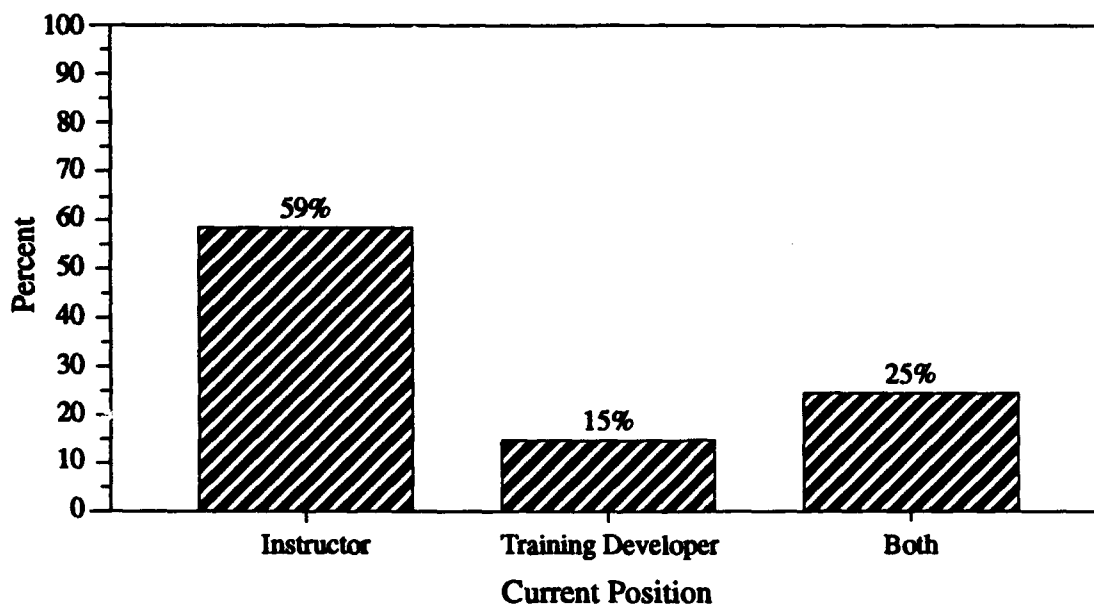
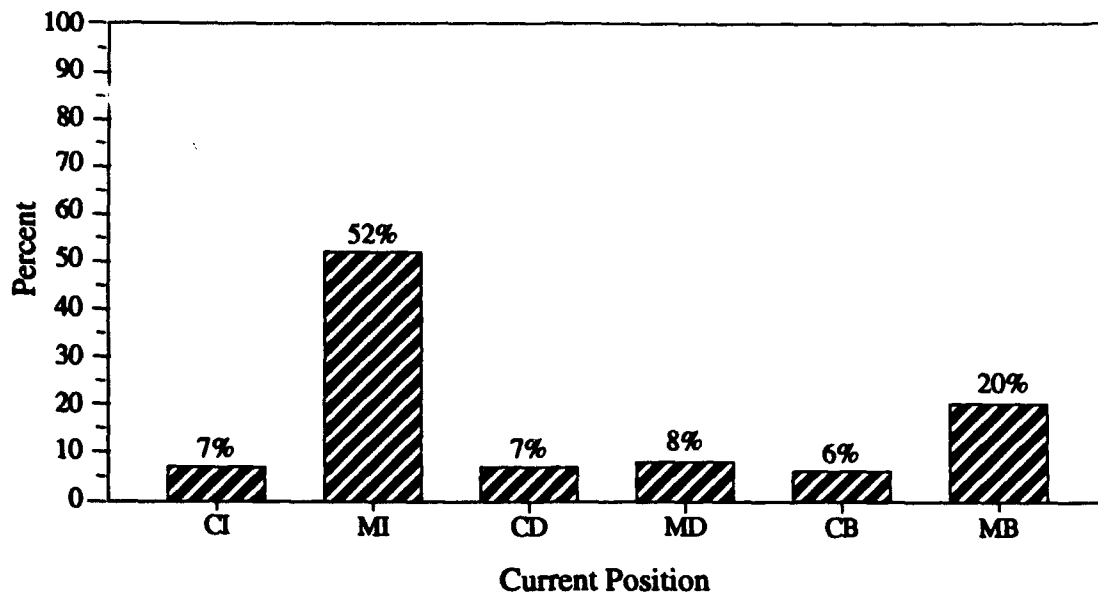


Figure 5. What is your current position? (Q6) (2,618 valid cases).



Note. CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both.

Figure 6. Current position with military/civilian status (2,618 valid cases).

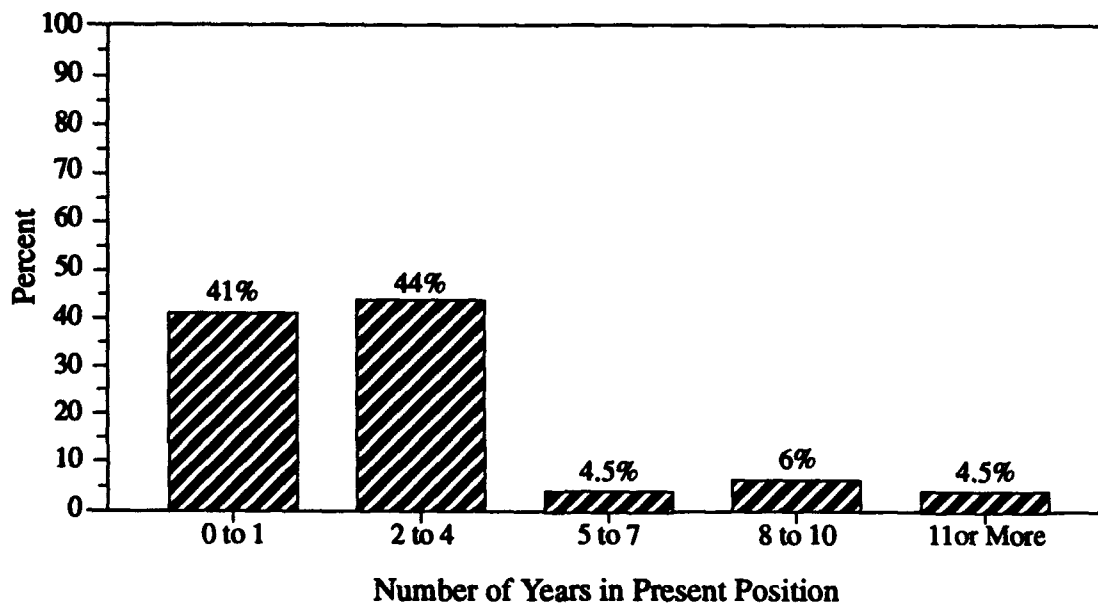


Figure 7. How many years have you been in your present position? (Q7) (2,638 valid cases).

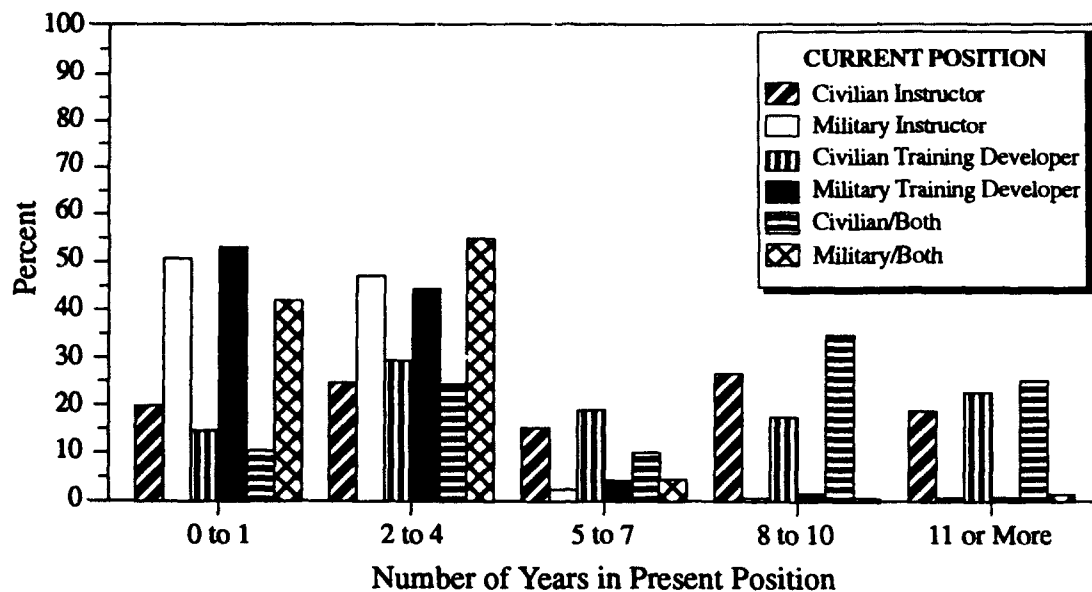


Figure 8. Number of years in present position by current position (2,614 valid cases).

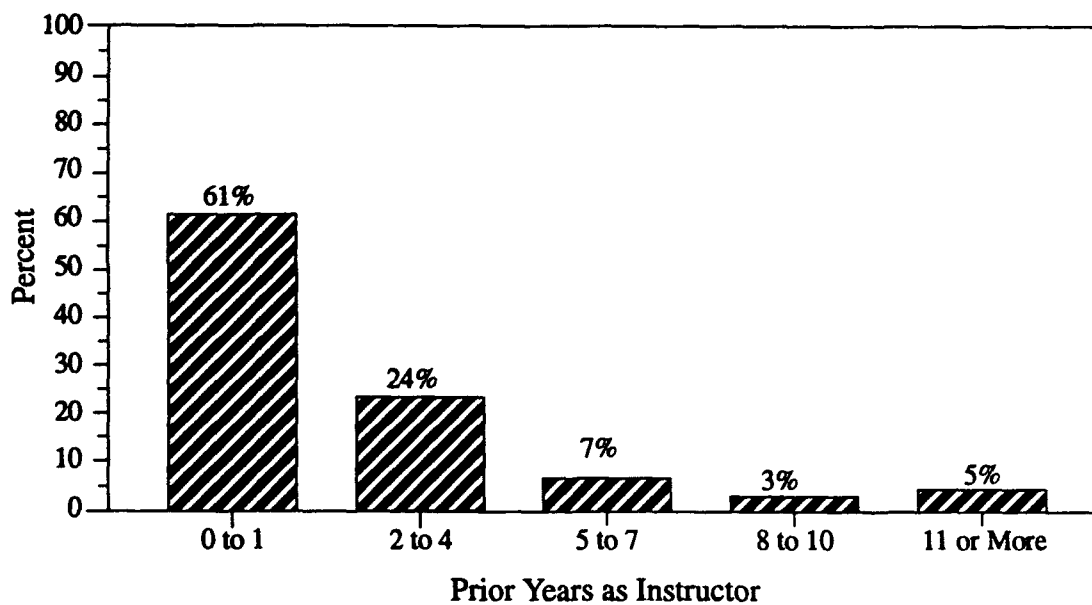


Figure 9. How many years were you an instructor prior to coming to your present position? (Q8) (2,604 valid cases).

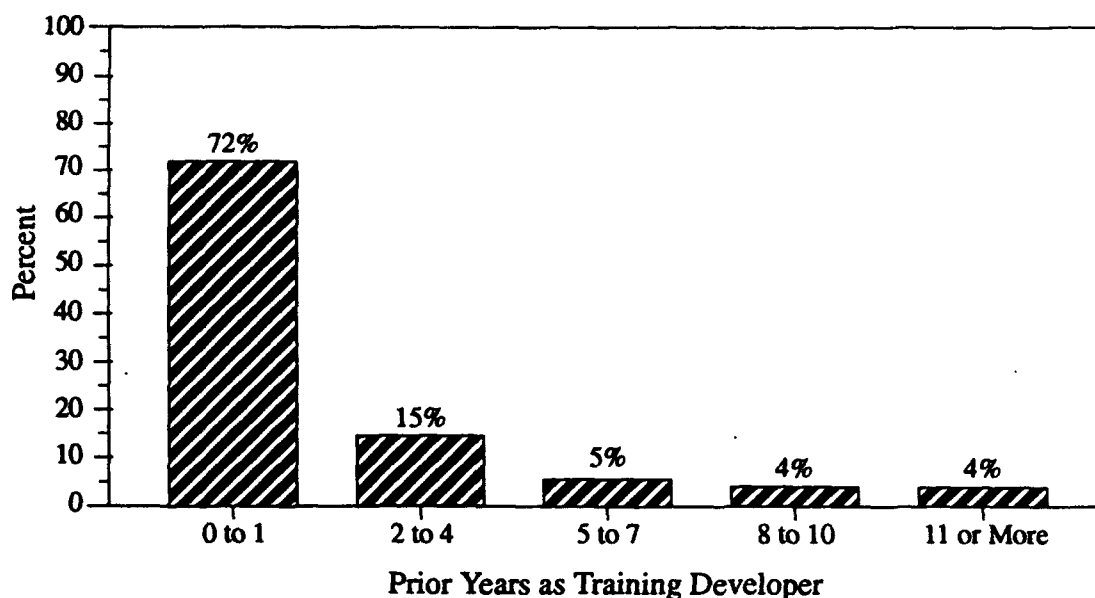


Figure 10. How many years were you a training developer prior to coming to your present position? (Q9) (2,341 valid cases).

Staff Time Available for Training Activities

Questions 10 through 13 asked respondents to provide an indication of time and expertise available to accomplish the following seven training activities:

- Revising lesson plans and practical exercises
- Developing new lesson plans and practical exercises
- Revising training courses
- Conducting task analyses and/or designing new training courses
- Validating new training courses
- Developing doctrine
- Reviewing contractor produced training

Figures 11 through 17 indicate how many hours, within an average work week, respondents engaged in each of the seven training activities listed above. Respondents spent the most time revising and developing lesson plans. Only 31% (Figure 11) of respondents indicated they never revised lesson plans and only 43% reported that they never developed them (Figure 12), while 50% indicated they never revised training courses (Figure 13), 59% reported that they never conducted task analyses and/or designed new courses (Figure 14), 60% reported that they never validated new training (Figure 15), 74% reported that they never developed doctrine (Figure 16), and 76% indicated that they never reviewed contractor training (Figure 17). However, even though respondents spent the most time, among the seven training activities, revising and developing lesson plans, the overwhelming majority of those spending time at these activities did so only 1 to 4 hours per week (Figures 11 and 12).

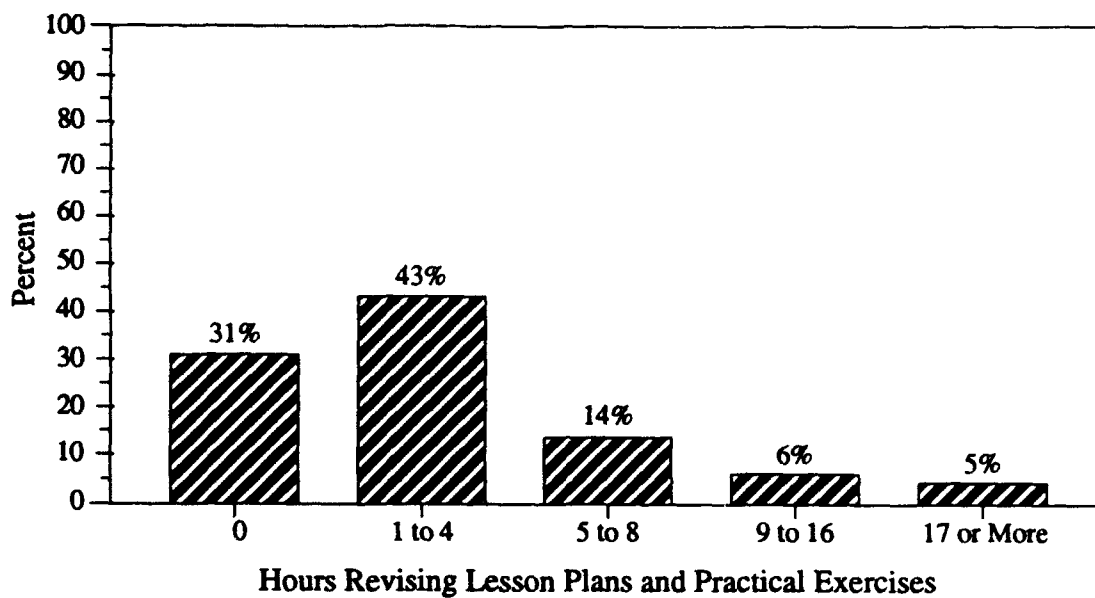


Figure 11. Within an *average* work week, how many *hours* do you spend revising lesson plans and practical exercises? (Q10a) (2,537 valid cases).

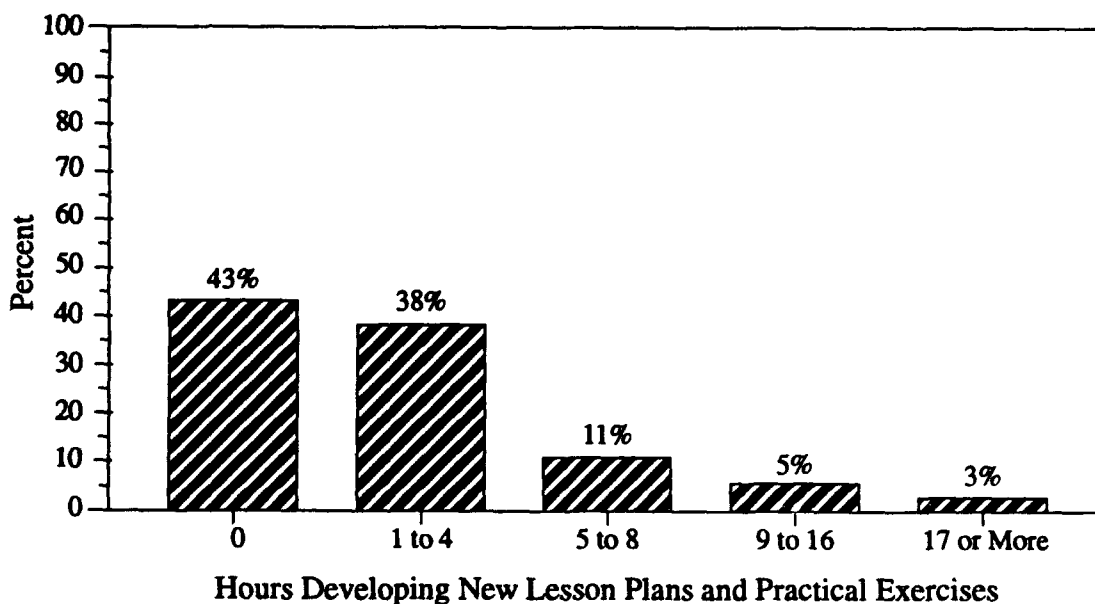


Figure 12. Within an *average* work week, how many *hours* do you spend, developing new lesson plans and practical exercises? (Q10b) (2,520 valid cases).

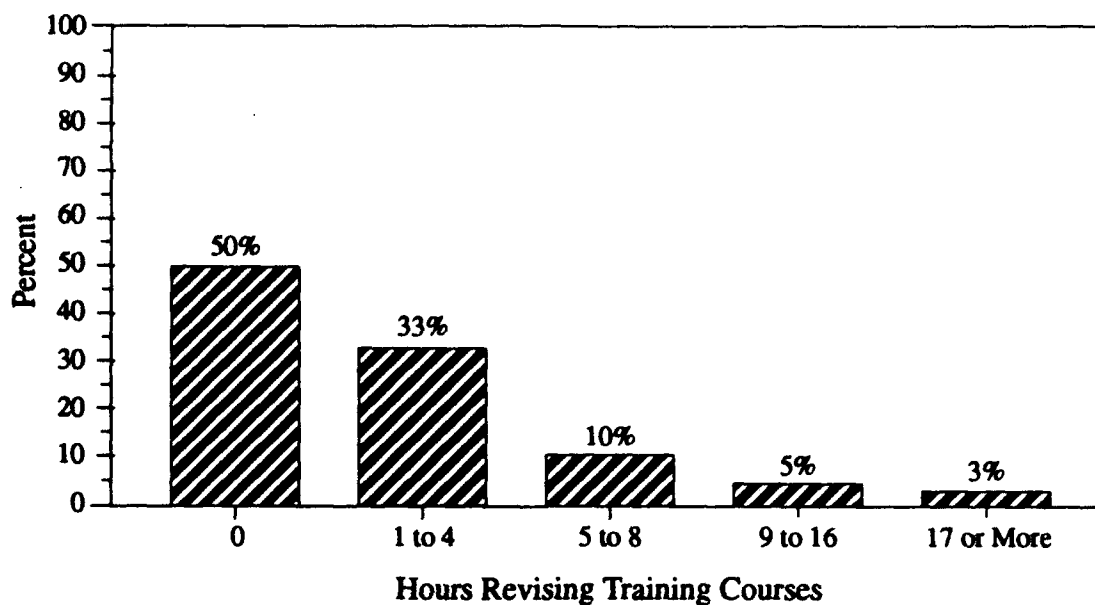


Figure 13. Within an *average* work week, how many *hours* do you spend revising training courses? (Q10c) (2,458 valid cases).

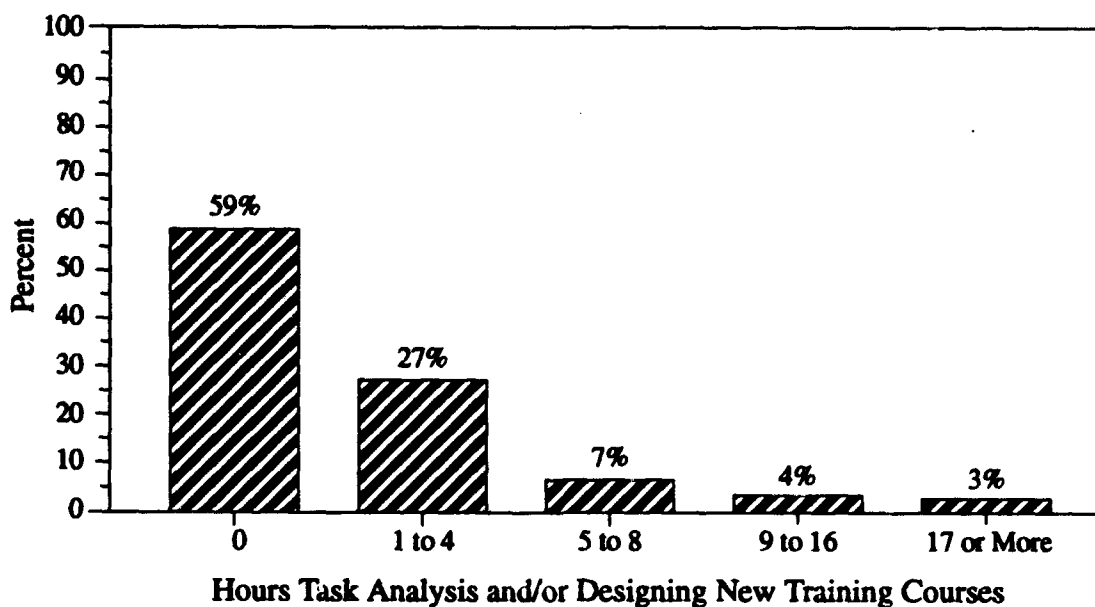


Figure 14. Within an *average* work week, how many *hours* do you spend conducting task analyses and/or designing new training courses? (Q10d) (2,493 valid cases).

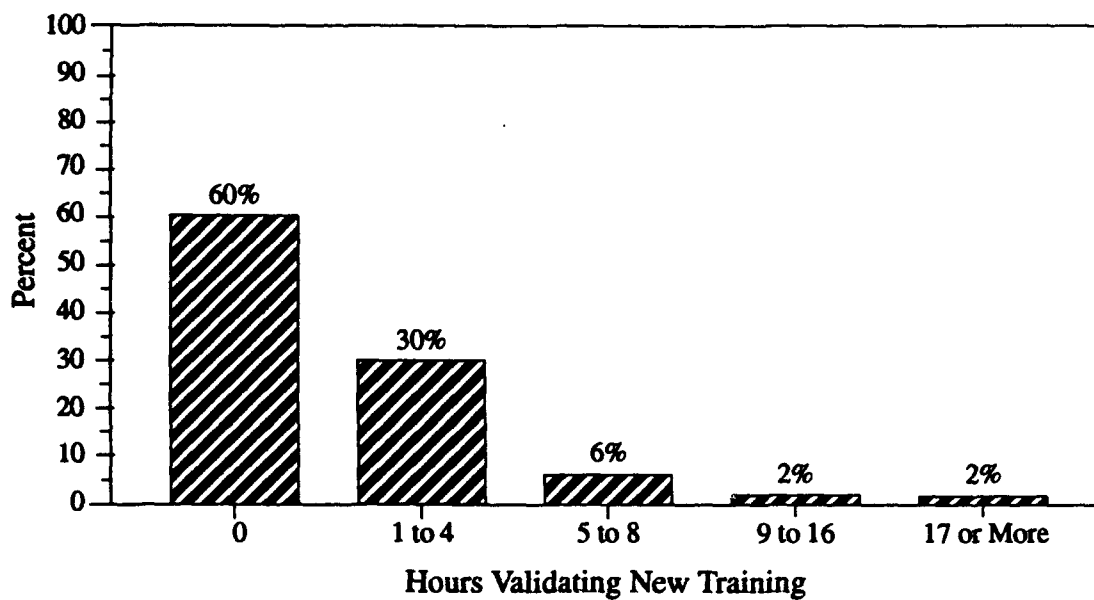


Figure 15. Within an *average* work week, how many *hours* do you spend validating new training courses? (Q10e) (2,452 valid cases).

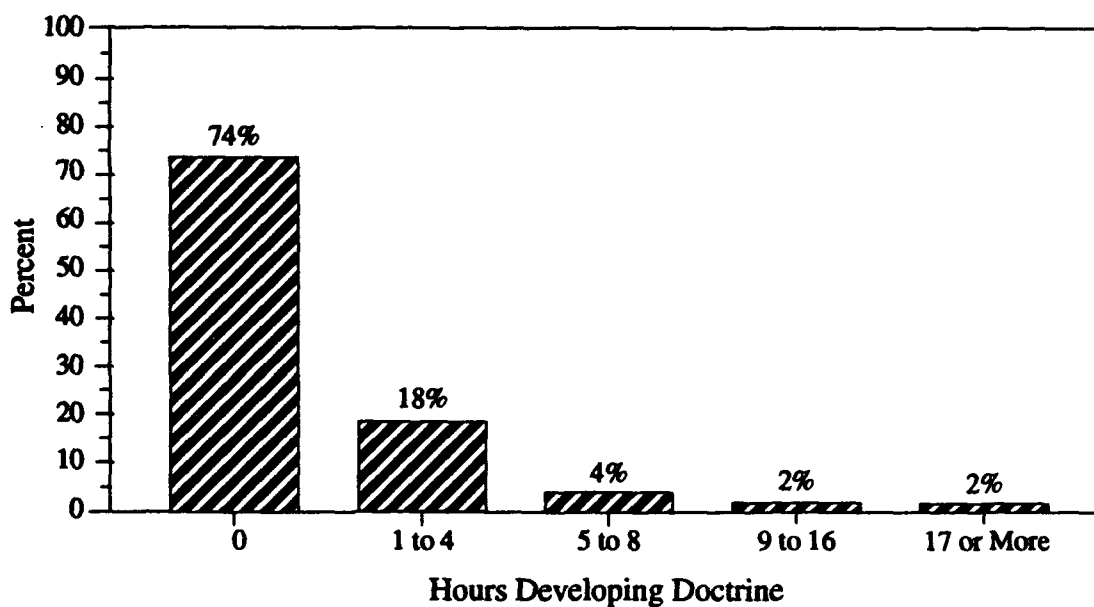


Figure 16. Within an *average* work week, how many *hours* do you spend developing doctrine? (Q10f) (2,449 valid cases).

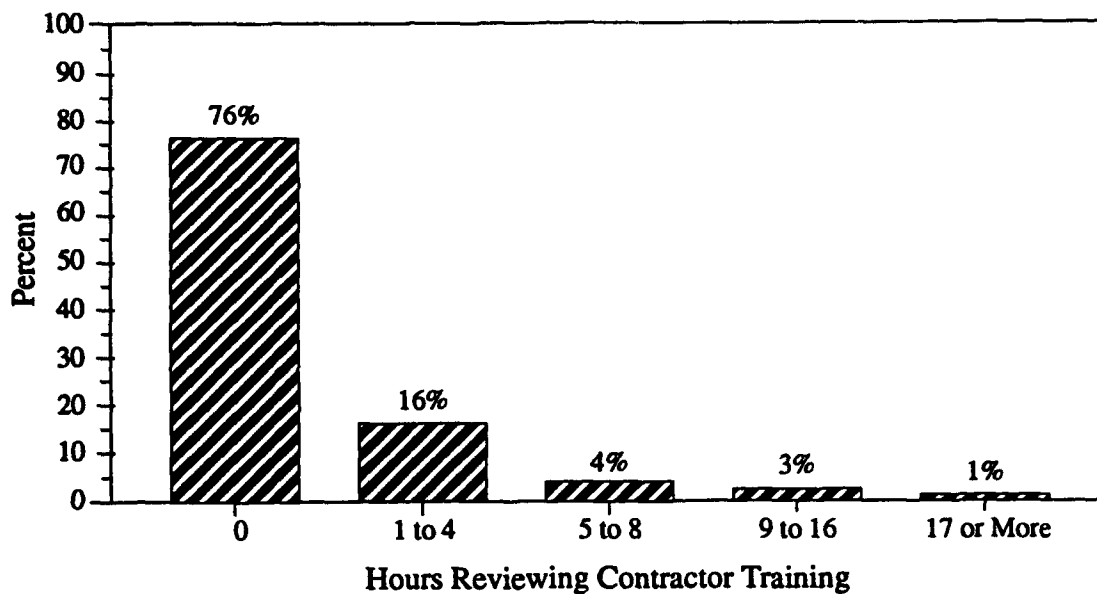
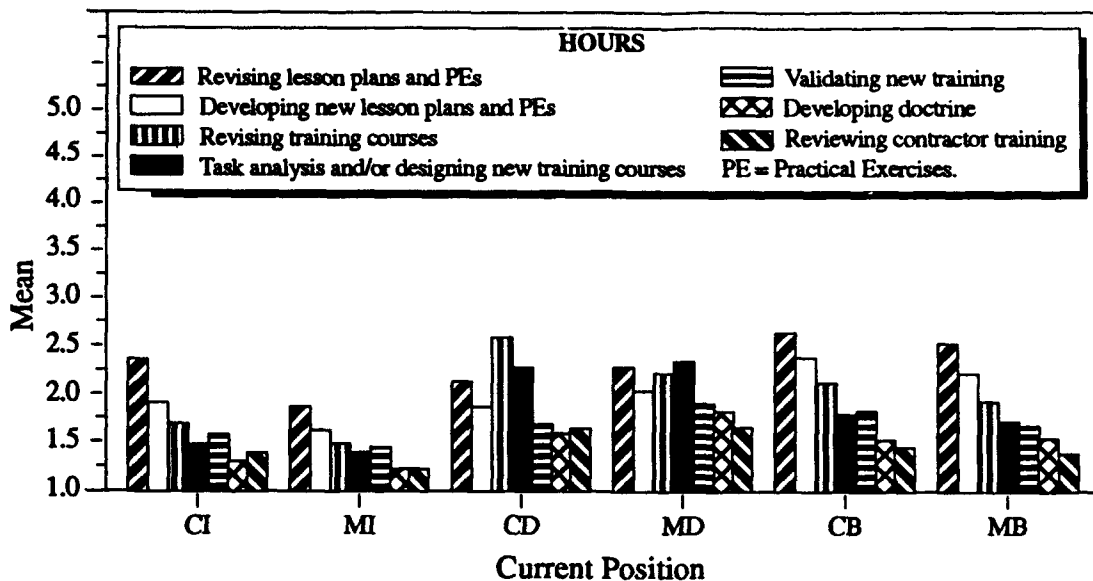


Figure 17. Within an *average* work week, how many *hours* do you spend reviewing contractor produced training? (10g) (2,475 valid cases).

In an effort to compare subgroup responses across the hours per week spent on training activities, means were calculated for each subgroup of respondents for each activity. Figure 18 illustrates the variation among the subgroups. (Note that 1 = 0 hours, 2 = 1 to 4 hours, 3 = 5 to 8 hours, 4 = 9 to 16 hours, and 5 = 17 or more hours.) Not surprisingly, instructors spent more time revising and developing lesson plans than performing the other training activities. Among the seven training activities, civilian training developers spent more time revising training courses, while military training developers spent almost equal time revising lesson plans, revising training courses, and conducting task analysis/developing new training courses. Like instructors, those respondents indicating that they were both instructors and training developers spent more time revising and developing lesson plans than engaging in the other activities. However, they spent more time than instructors in revising training courses, though less time than training developers in conducting task analyses/developing new training. Little time was spent by any of the subgroups on validating new training, developing doctrine or reviewing contractor training though training developers and combined instructors/training developers spent more time engaged in these activities than instructors.

Figures 19 through 25 indicate how many times, within the last year, respondents performed each of the seven training activities. Of the seven activities, respondents engaged the most in revising and developing lesson plans. Only 22% (Figure 19) of respondents indicated they never once revised a lesson plan and only 32% that they never once developed a lesson plan (Figure 20), while 45% indicated they never revised training courses (Figure 21), 55% that they never conducted task analyses and/or designed new courses (Figure 22), 46% that they never validated new training (Figure 23), 73% that they never developed doctrine (Figure 24), and 73% that they never reviewed contractor training (Figure 25). However, even though respondents engaged in revising and developing lesson plans most often among the seven training activities, the overwhelming majority of those performing these activities only did so 1 to 5 times within the past year (Figures 20 and 21).



Notes:

- 1 = 0 hours, 2 = 1 to 4 hours, 3 = 5 to 8 hours, 4 = 9 to 16 hours, 5 = 17 or more hours.
- CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both.

Figure 18. Current position by mean number of hours per week spent on training development activities.

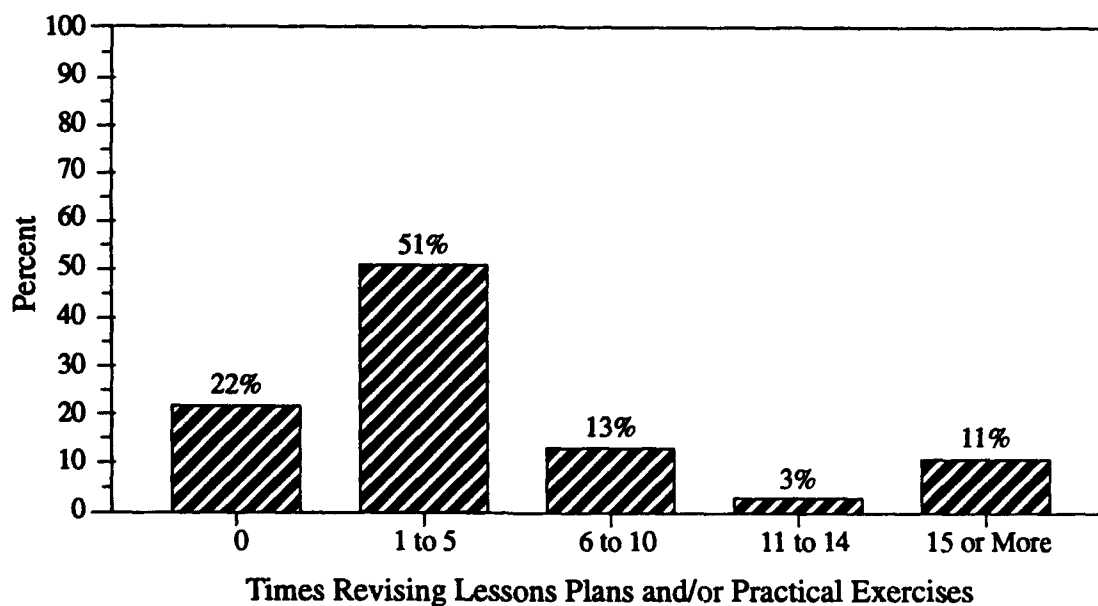


Figure 19. Within the last year, approximately how many times have you needed to revise a lesson plan and/or practical exercise? (Q11a) (2,585 valid cases).

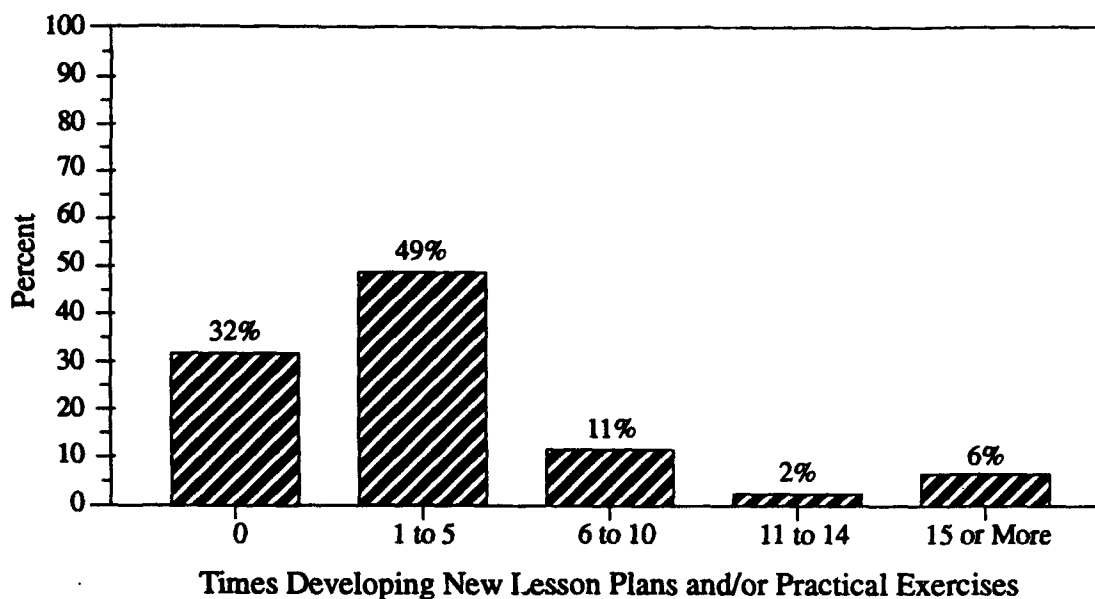


Figure 20. Within the last year, approximately how many *times* have you needed to develop new lesson plans and/or practical exercises? (Q11b) (2,546 valid cases).

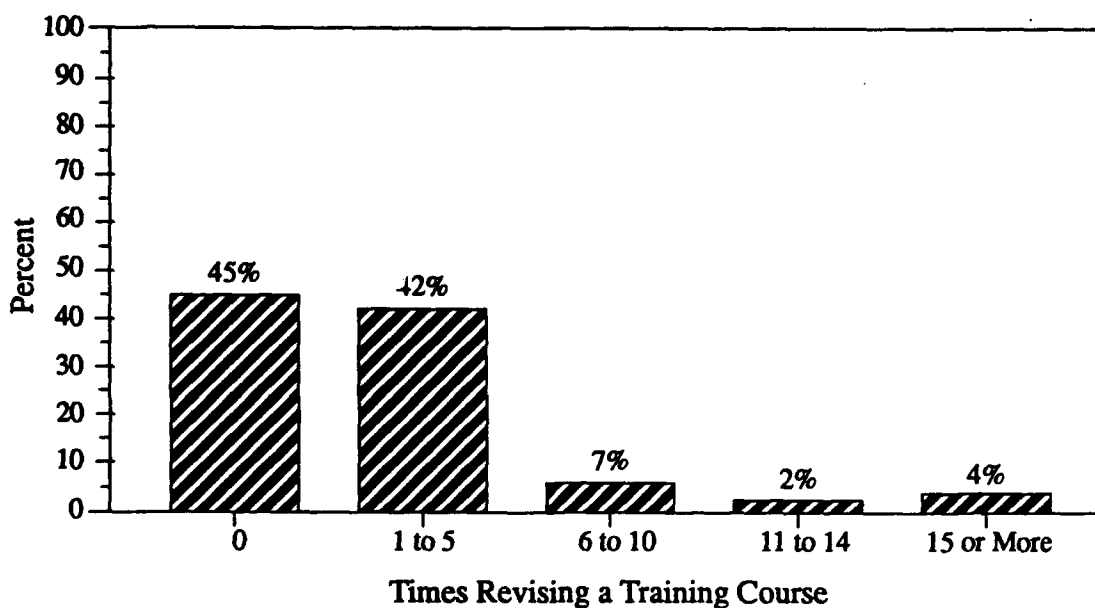


Figure 21. Within the last year, approximately how many *times* have you needed to revise a training course? (Q11c) (2,476 valid cases).

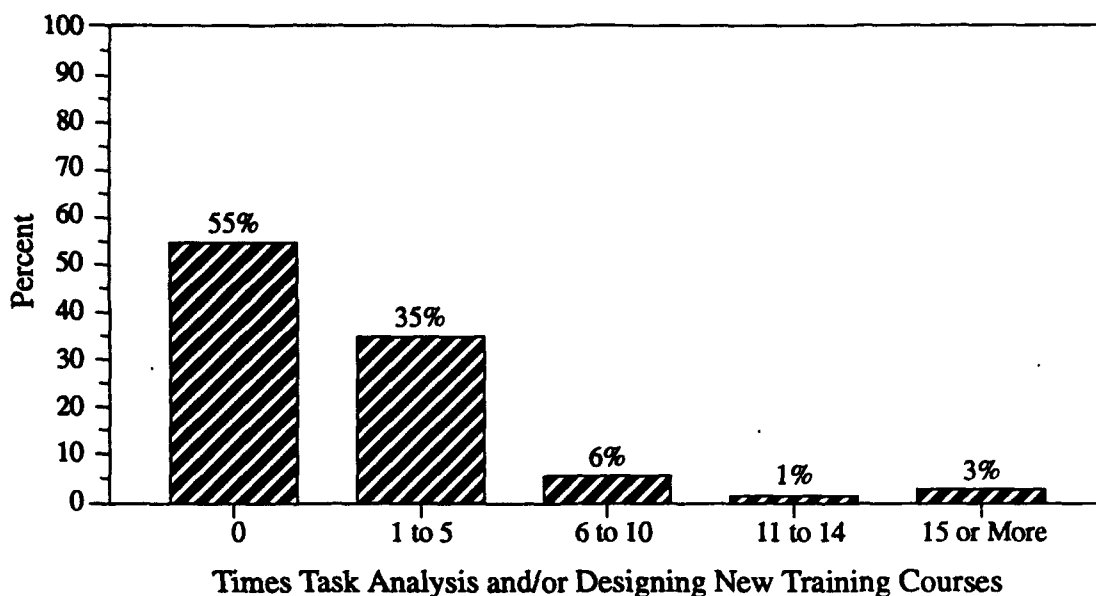


Figure 22. Within the last year, approximately how many *times* have you needed to conduct a task analysis and/or design a new training course? (Q11d) (2,519 valid cases).

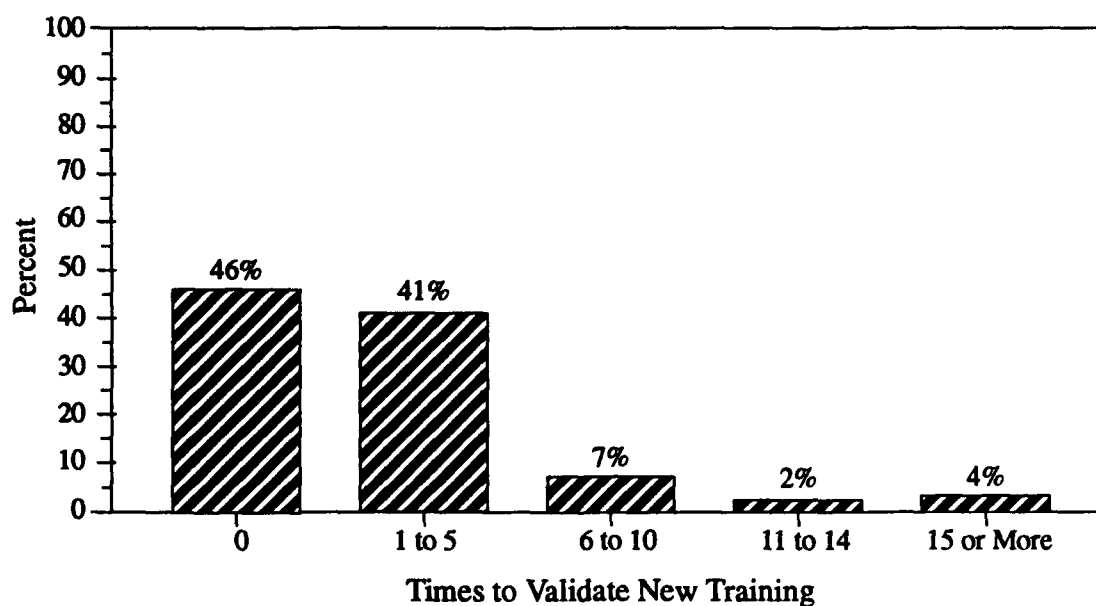


Figure 23. Within the last year, approximately how many *times* have you needed to validate new training? (Q11e) (2,498 valid cases).

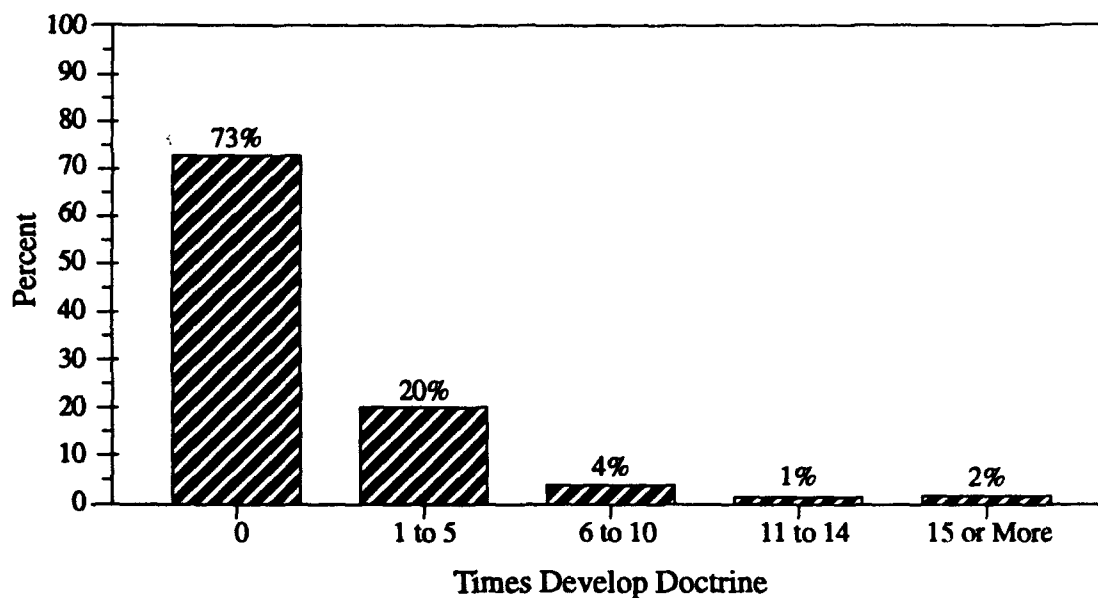


Figure 24. Within the last year, approximately how many *times* have you needed develop doctrine? (Q11f) (2,470 valid cases).

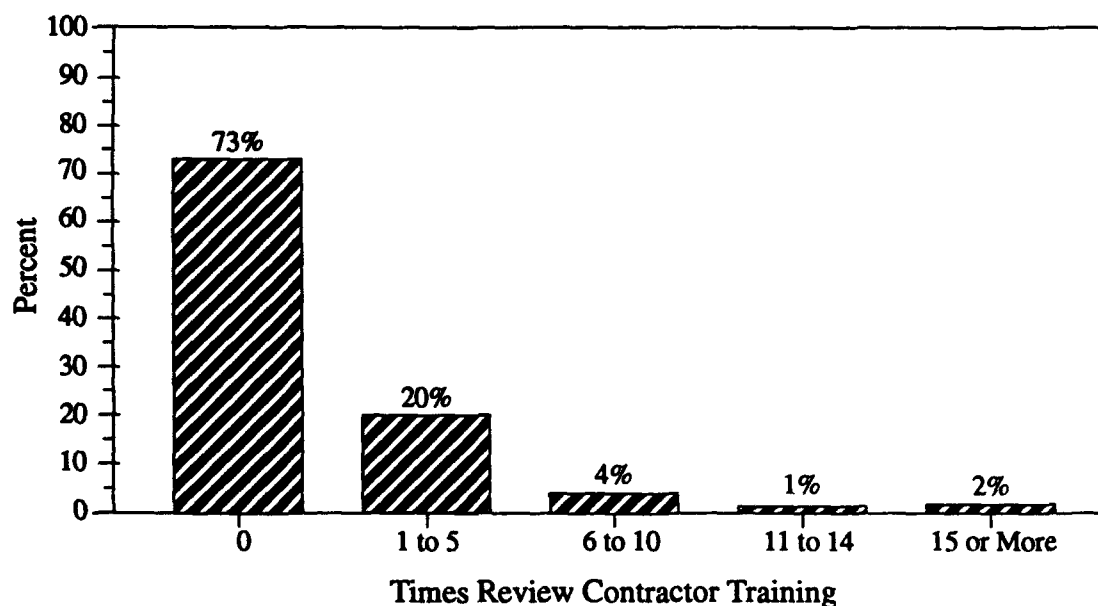


Figure 25. Within the last year how many *times* have you needed to review contractor produced training? (Q11g) (2,500 valid cases).

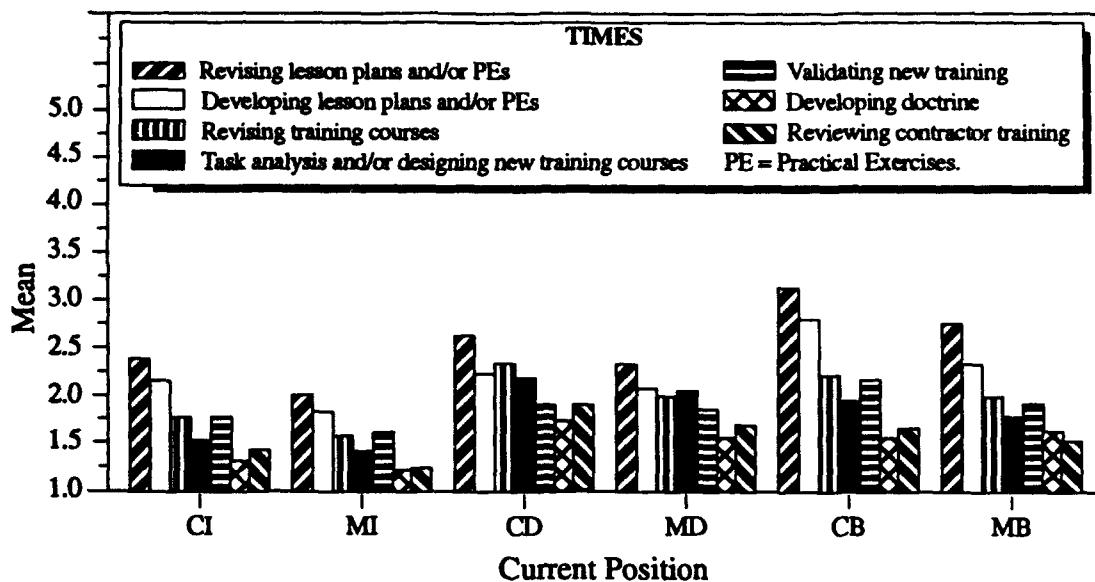
In an effort to compare subgroup responses across number of times, over the past year, engaged in training activities, means were calculated for each subgroup of respondents for each activity. Figure 26 illustrates the variation among the subgroups. (Note that 1 = 0 times, 2 = 1 to 5 times, 3 = 6 to 10 times, 4 = 11 to 14 times, and 5 = 15 or more times.) Again, not surprisingly, instructors spent more time revising and developing lesson plans than performing other training activities. Contrasted with the number of hours per week spent in each activity, frequency of activity over the past year seems to favor revising and developing lesson plans for all subgroups. However, training developers and those considering themselves both training developers and instructors engaged in the other training activities more frequently than instructors, with civilian training developers engaging in all five of the other training activities (revising a training course, task analysis/new training, validating new training, developing doctrine, reviewing contractor training) with greater frequency than the other subgroups. However, responses indicate that even civilian training developers only performed each of these activities between 1 to 5 times over the last year.

Like the instructors, respondents indicating that they were both instructors and training developers engaged more often in revising and developing lesson plans than in the other training activities (Figure 26). However, this subgroup engaged in revising training courses, conducting task analyses/new training development, and validating new training more often than instructors. It was only infrequently that any of the subgroups developed doctrine or reviewed contractor training, though civilian training developers engaged in these activities more often than any other subgroup.

Figures 27 through 33 indicate how many times, within the last year, respondents needed to engage in each of the seven training activities but were unable to do so because they didn't have the time. The overwhelming majority reported, across the seven training activities, that this problem never occurred. As might be expected though, this problem was reported more frequently in relation to revising and developing lesson plans and practical exercises as these were the activities engaged in most frequently by respondents. But even for these activities, more than 60% of respondents indicated that over the past year there was no instance where they did not have enough time to complete these duties (Figures 27 and 28).

In an effort to compare subgroup responses across the number of times, over the past year, that there was no time to conduct training activities, means were calculated for each subgroup of respondents for each activity. Figure 34 illustrates the variation among the subgroups. (Note that 1.0 equals 0 times, 2.0 equals 1 to 5 times, and 3.0 equals 6 to 10 times.) The only subgroup experiencing any time difficulty appears to be the civilian training developer/instructor or (both/civilian) group (Figure 34). They indicated that they experienced a lack of time revising and developing lesson plans and practical exercises approximately 1 to 5 times over the past year. Overall though, among the subgroups, not having sufficient time to complete training activities has not been a problem.

Figures 35 through 41 indicate how many times, within the last year, respondents needed to engage in each of the seven training activities but were unable to do so because they didn't have the expertise. Almost all respondents (> 85%) indicated that this problem never occurred for any of the seven training activities.



- Notes:**
- 1 = 0 times, 2 = 1 to 5 times, 3 = 6 to 10 times, 4 = 11 to 14 times, 5 = 15 times or more.
 - CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both.

Figure 26. Current position by mean number of times, over the past year, necessary to conduct training activities.

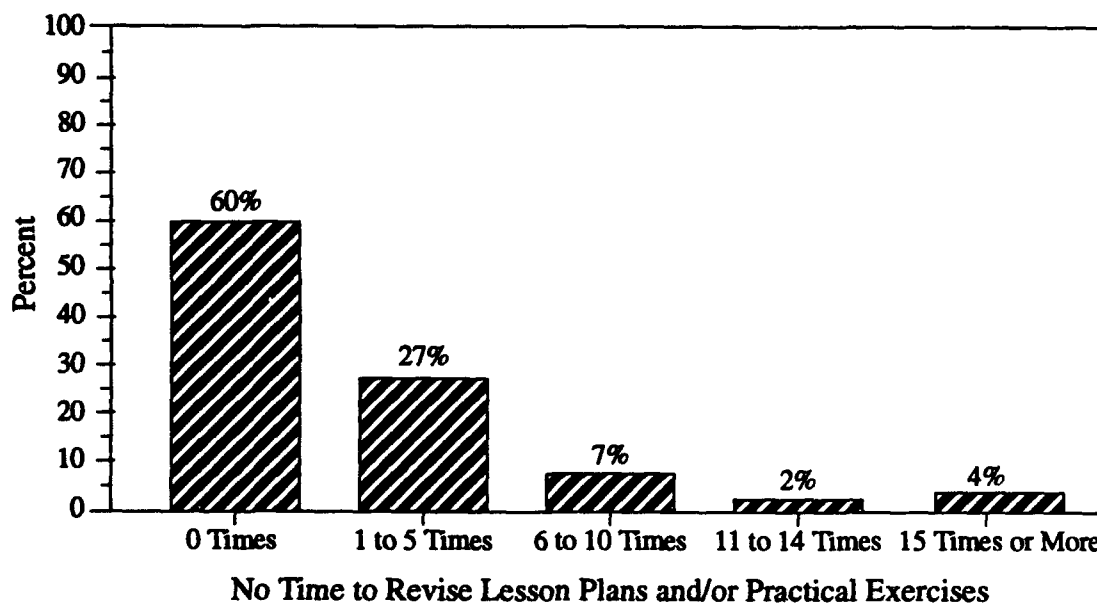
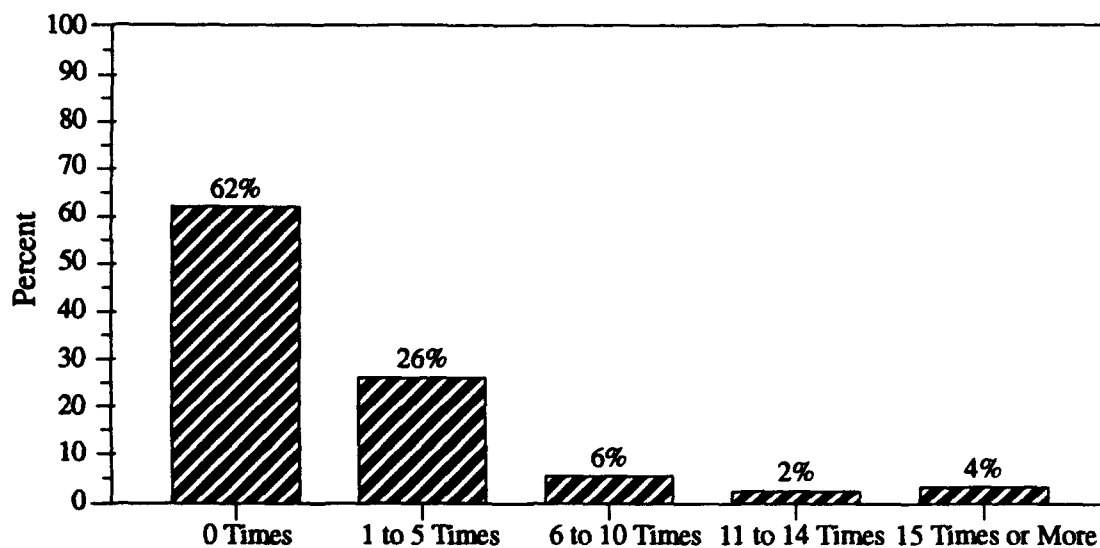
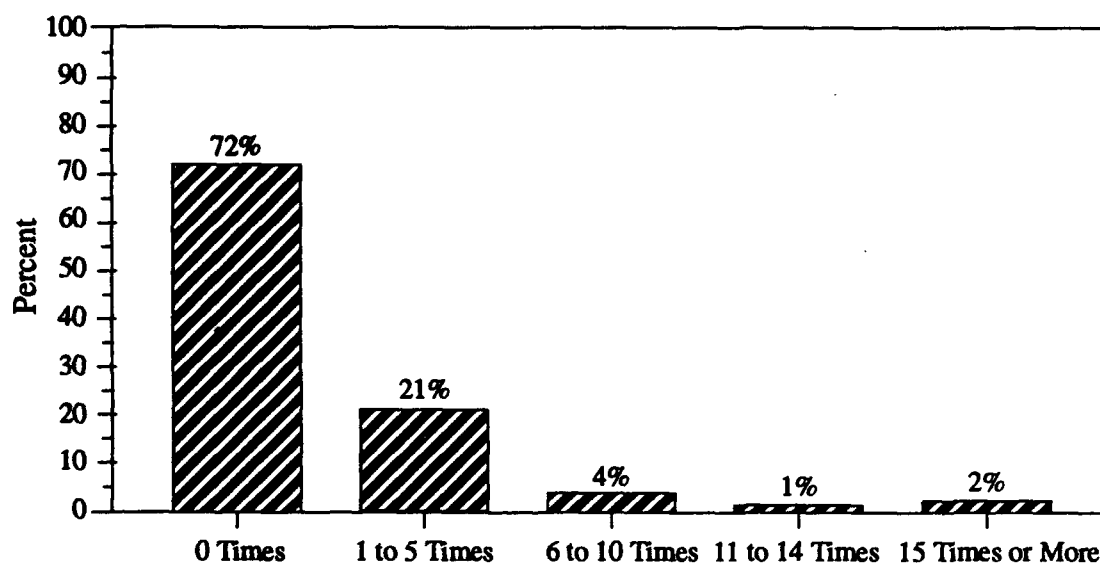


Figure 27. Within the last year, approximately how many times have you needed to revise a lesson plan and/or practical exercise, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12a) (2,555 valid cases).



No Time to Develop New Lesson Plans and/or Practical Exercises

Figure 28. Within the last year, approximately how many times have you needed to develop new lesson plans and/or practical exercises, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12b) (2,524 valid cases).



No Time to Revise Training Courses

Figure 29. Within the last year, approximately how many times have you needed to revise a training course, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12c) (2,469 valid cases).

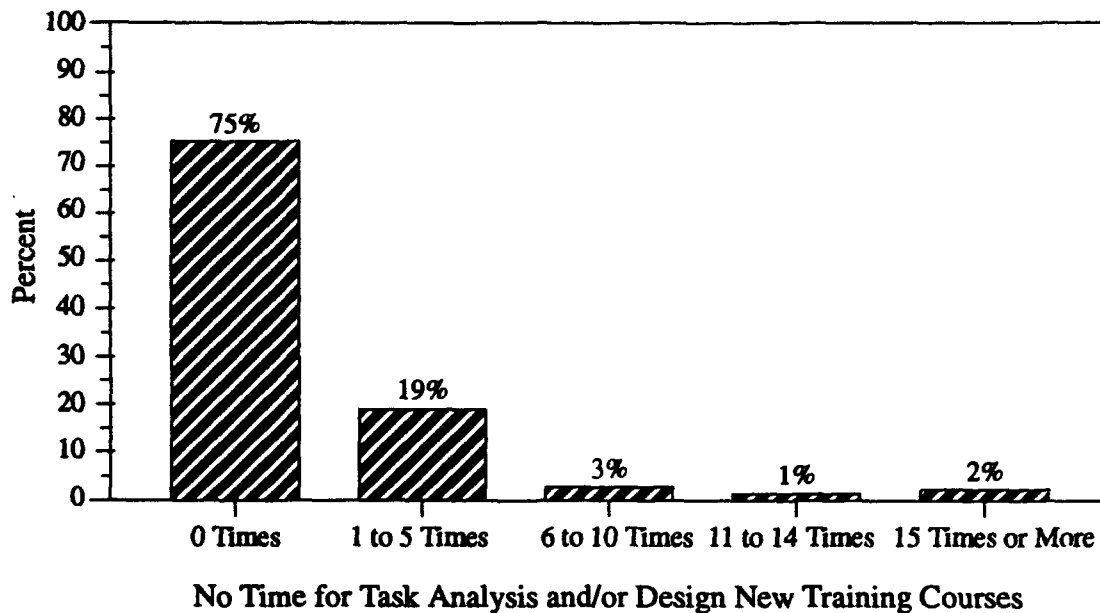


Figure 30. Within the last year, approximately how many times have you needed to conduct a task analysis and/or design a new training course, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12d) (2,493 valid cases).

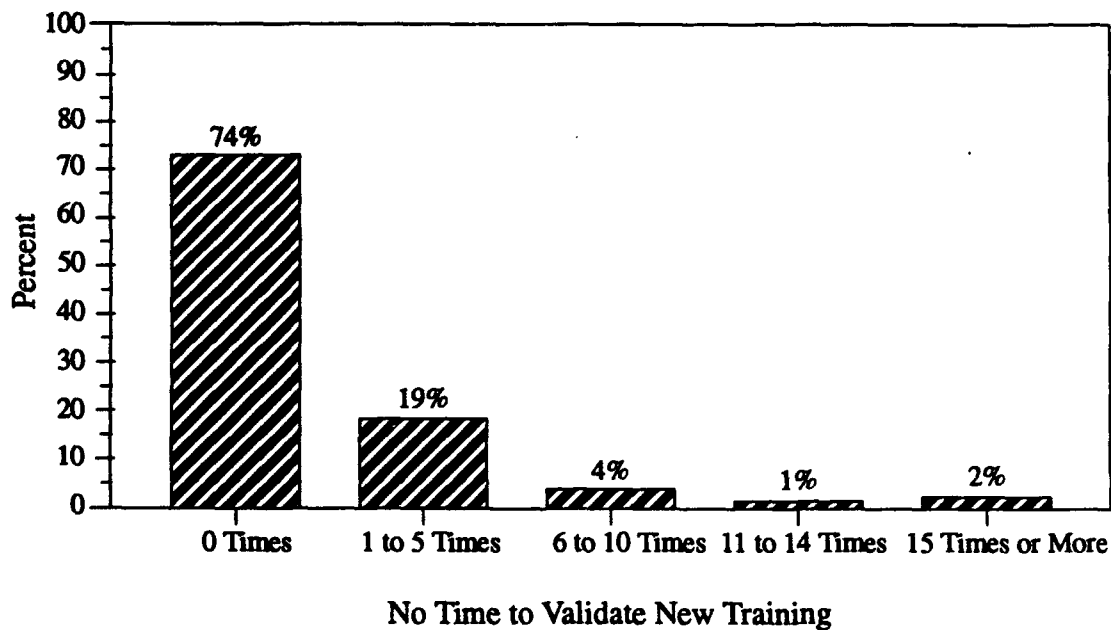


Figure 31. Within the last year, approximately how many times have you needed to validate new training, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12e) (2,484 valid cases).

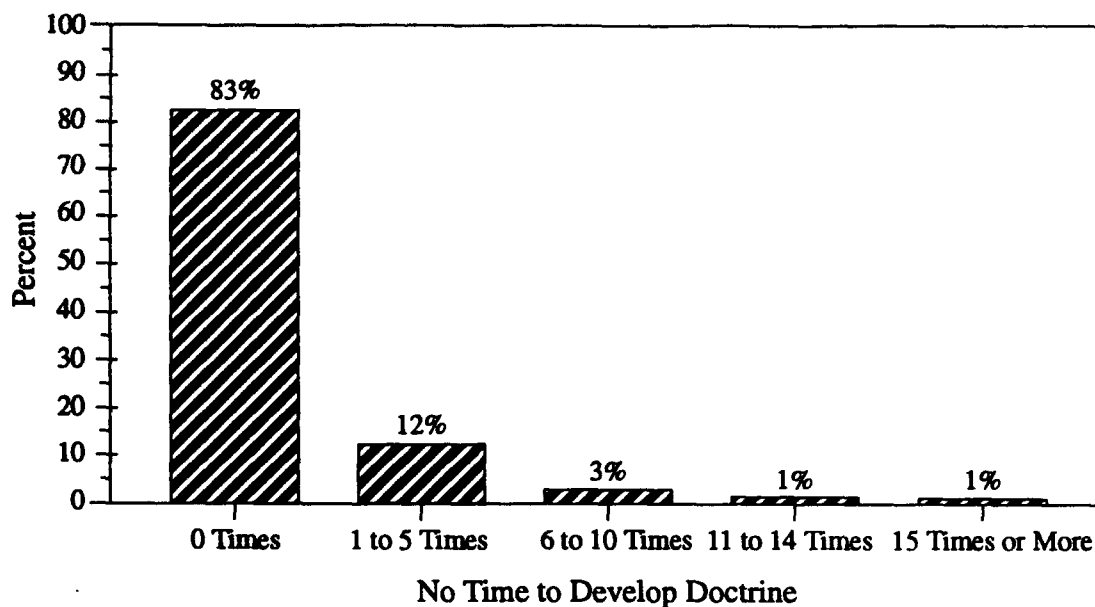


Figure 32. Within the last year, approximately how many times have you needed to develop doctrine, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12f) (2,479 valid cases).

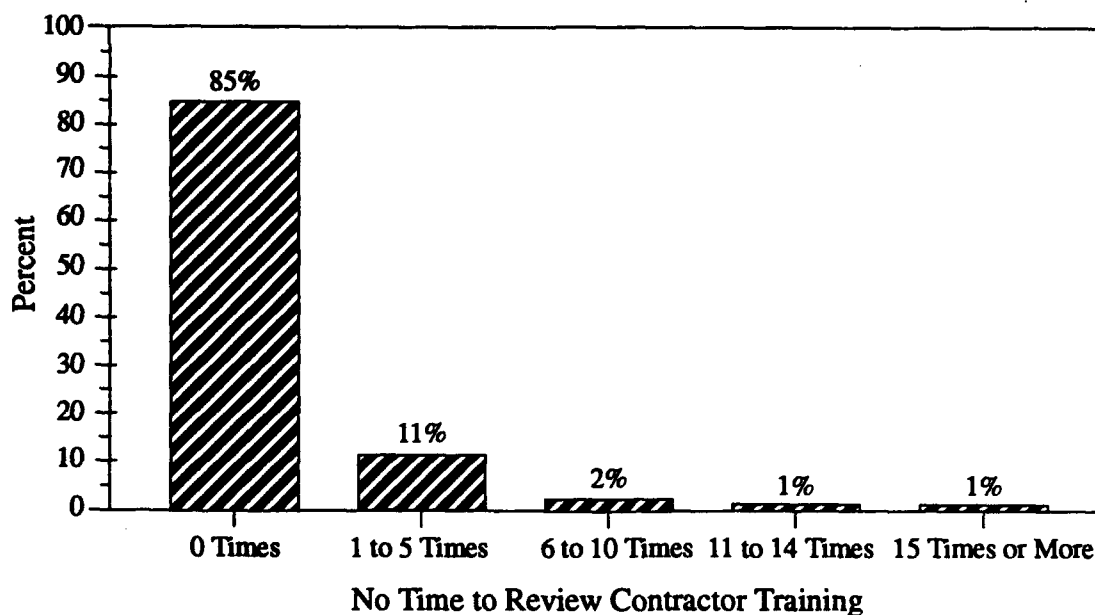
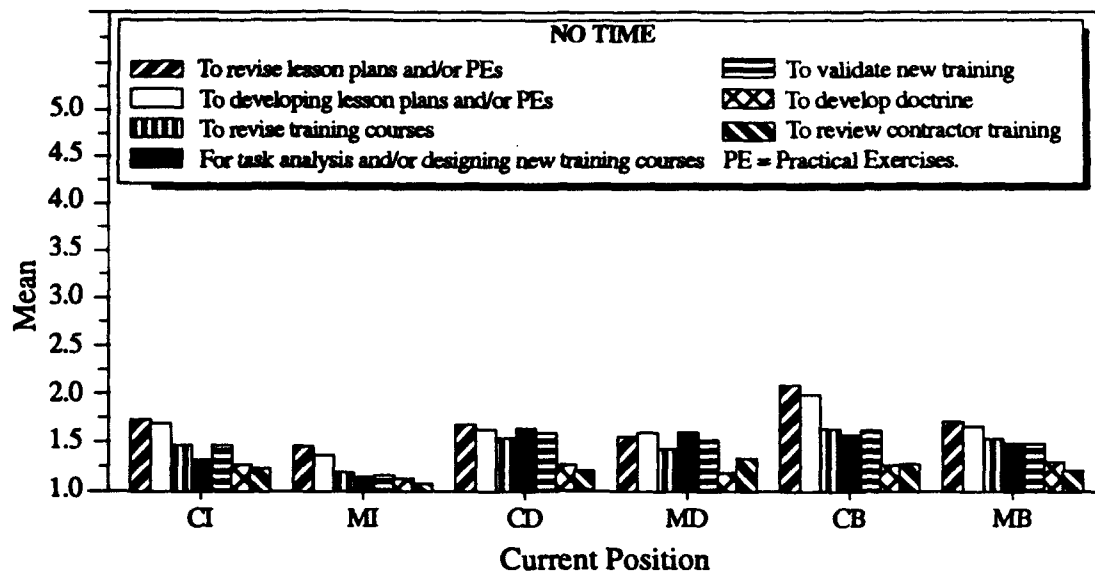


Figure 33. Within the last year, approximately how many times have you needed to review contractor produced training, but were unable to do so because you didn't have the *TIME* to complete the task? (Q12g) (2,482 valid cases).



Notes: 1. 1 = 0 times, 2 = 1 to 5 times, 3 = 6 to 10 times, 4 = 11 to 14 times, 5 = 15 times or more.
 2. CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both.

Figure 34. Current position by mean number of times, over the past year, that there was no time to conduct training activities.

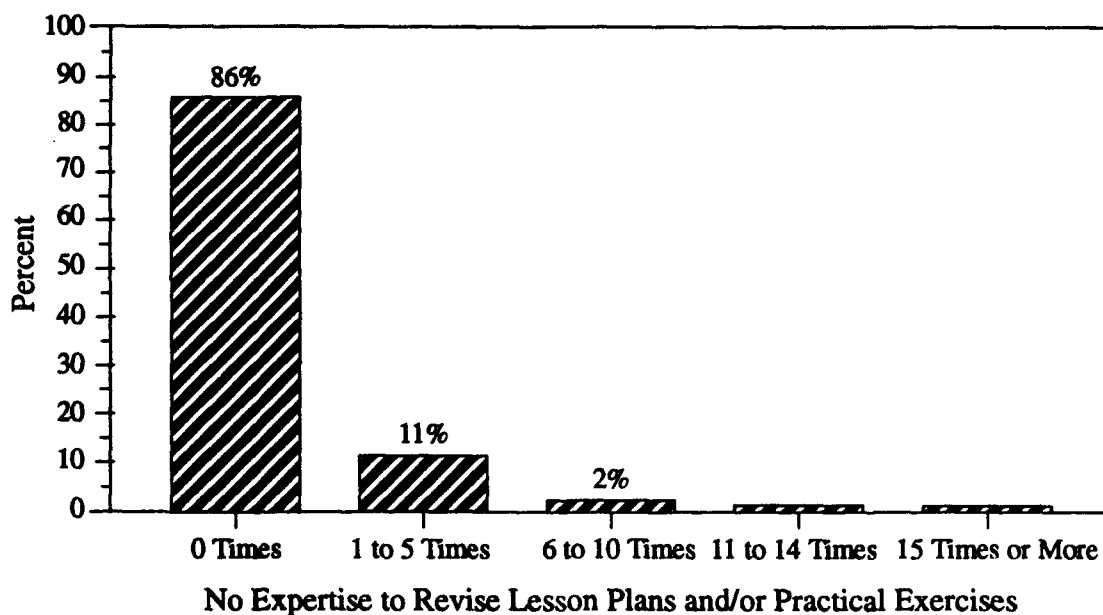


Figure 35. Within the last year, approximately how many times have you needed to revise a lesson plan and/or practical exercise, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13a) (2,535 valid cases).

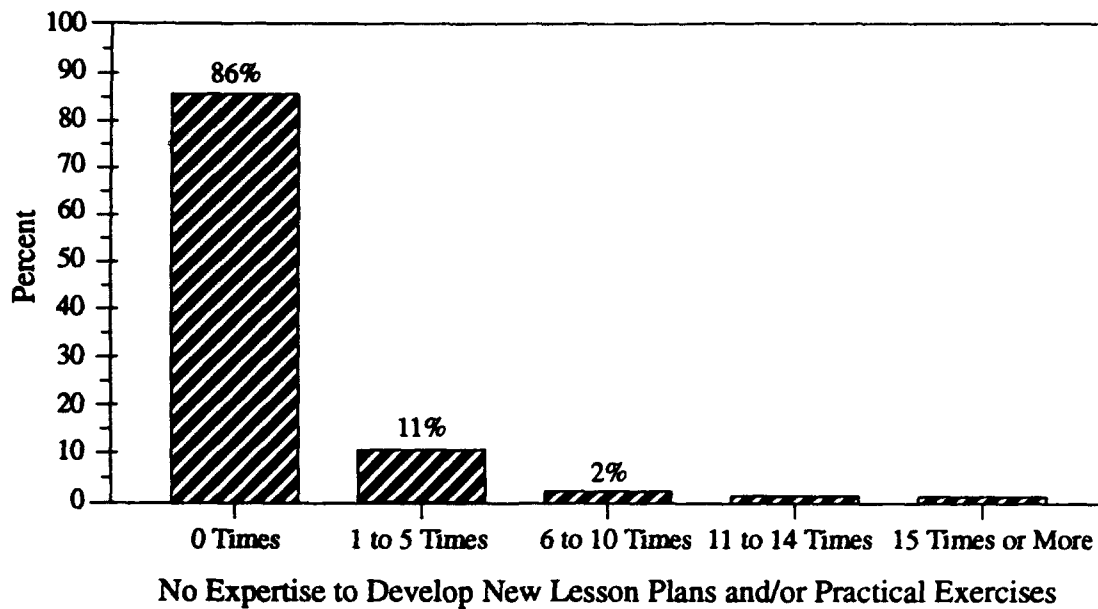


Figure 36. Within the last year, approximately how many times have you needed to develop new lesson plans and/or practical exercises, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13b) (2,515 valid cases).

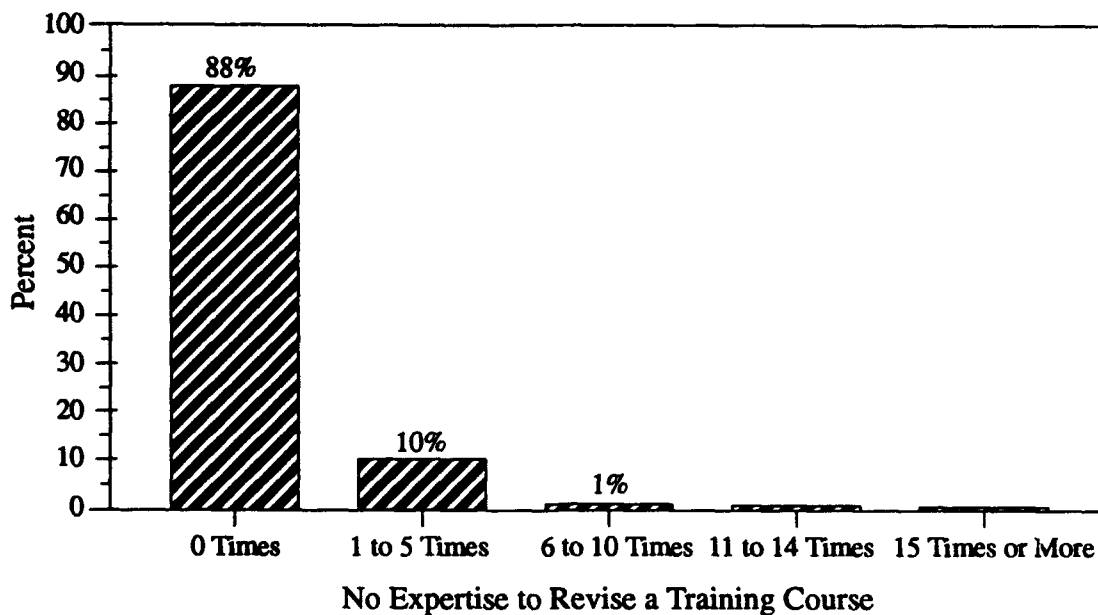


Figure 37. Within the last year, approximately how many times have you needed to revise a training course, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13c) (2,483 valid cases).

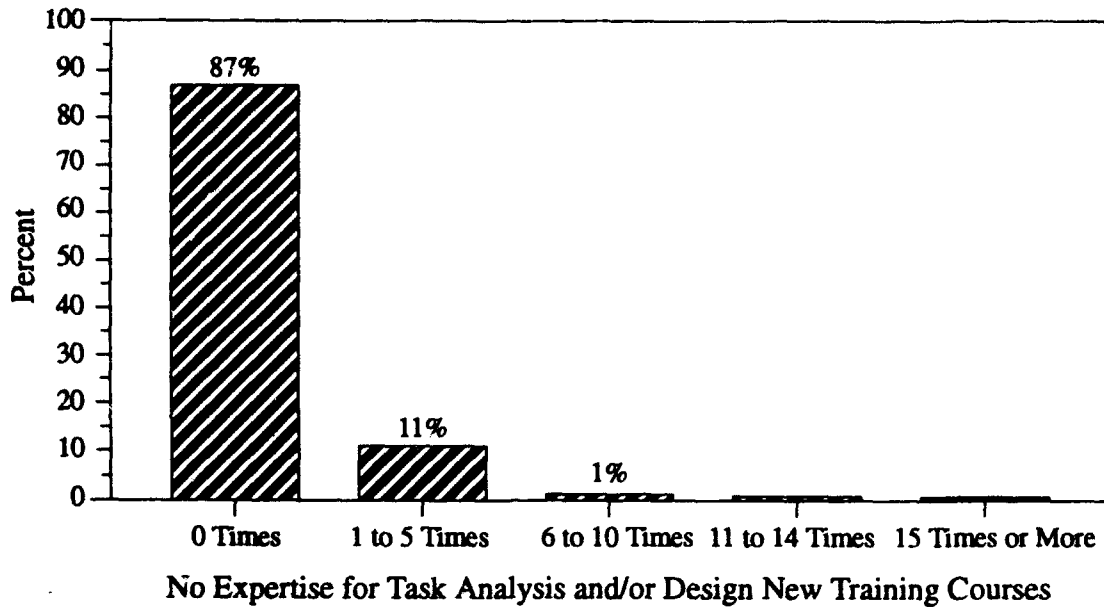


Figure 38. Within the last year, approximately how many times have you needed to a task analysis and/or design a new training course, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13d)) (2,491 valid cases).

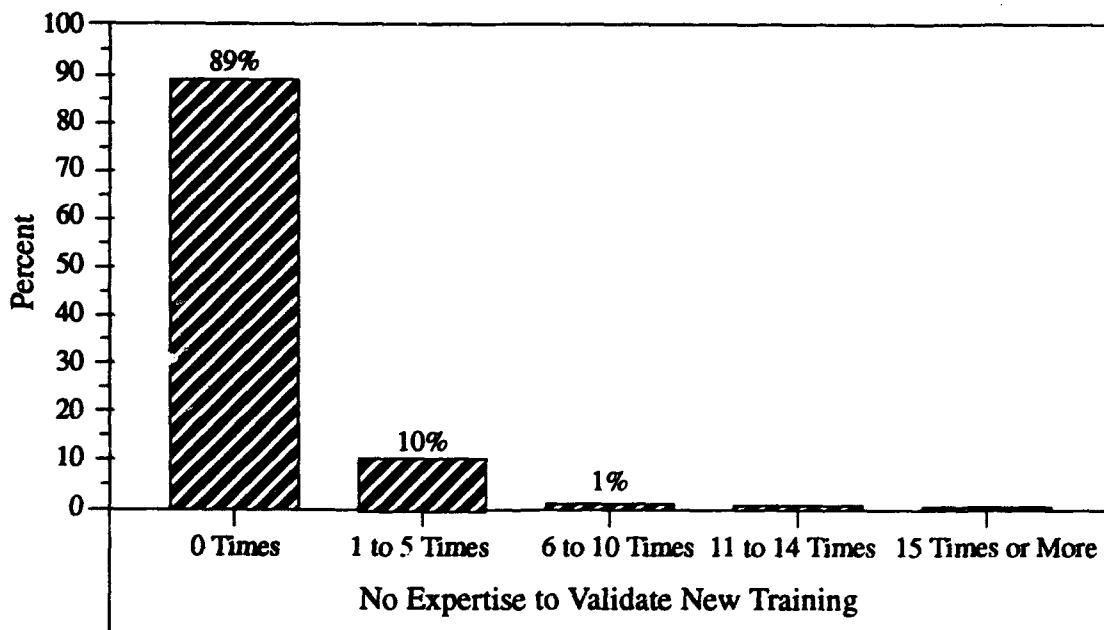


Figure 39. Within the last year, approximately how many times have you needed to validate new training, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13e) (2,479 valid cases).

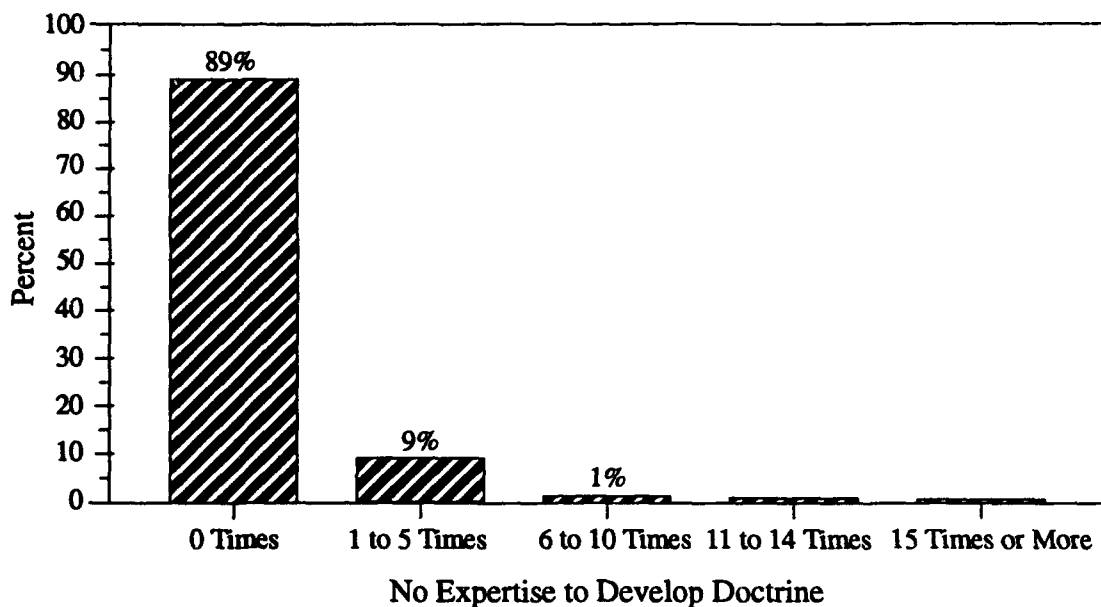


Figure 40. Within the last year, approximately how many times have you needed to develop doctrine, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13f) (2,483 valid cases).

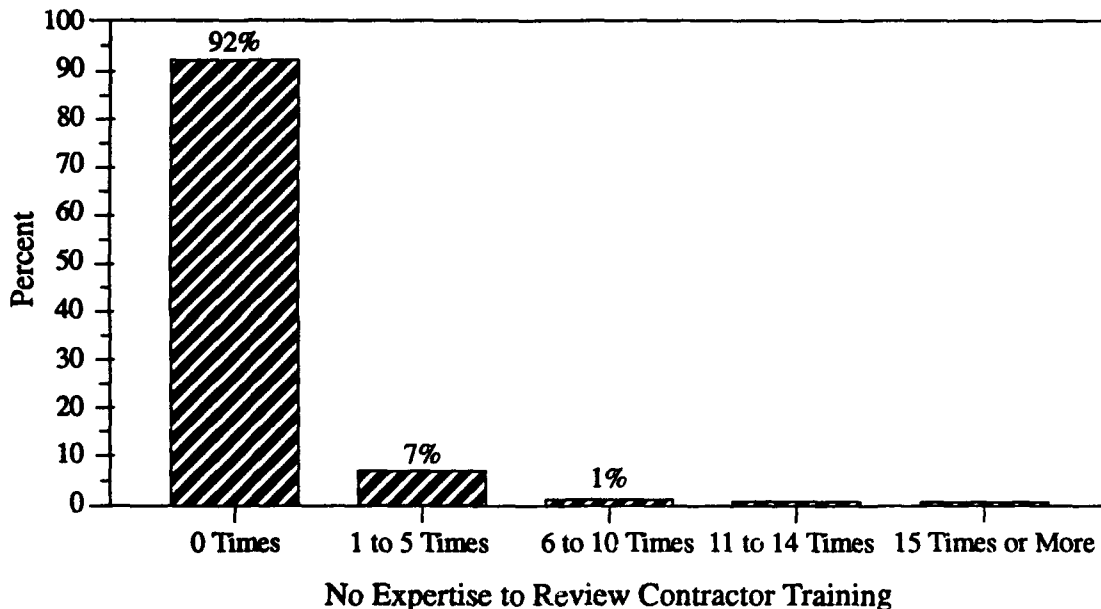
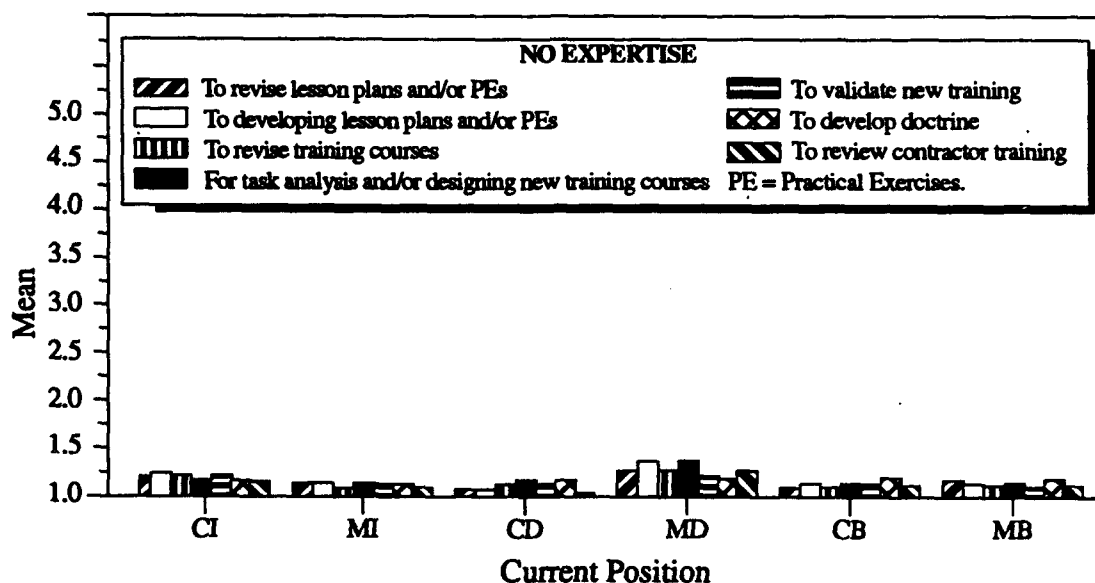


Figure 41. Within the last year, approximately how many times have you needed to review contractor produced training, but were unable to do so because you didn't have the *EXPERTISE* to complete the task? (Q13g) (2,476 valid cases).

In an effort to compare subgroup responses across the number of times, over the past year, that lack of expertise precluded the performance of training activities, means were calculated for each subgroup of respondents for each activity. Figure 42 illustrates little variation among the subgroups. (Note that 1.0 equals 0 times and 2.0 equals.) Overall, within all subgroups, respondents indicated that lack of sufficient expertise to complete training activities is not a problem.



- Notes. 1. 1 = 0 times, 2 = 1 to 5 times, 3 = 6 to 10 times, 4 = 11 to 14 times, 5 = 15 times or more.
 2. CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both.

Figure 42. Current position by mean number of times, over the past year, that respondents lacked expertise to conduct training activities.

Figure 43 indicates how many times, within the last year, respondents were asked to determine whether a field exercise deficiency was a schoolhouse or a unit problem. The majority of respondents (63%) indicated that at no time were they requested to perform this task. However, among those respondents indicating they do engage in this activity, civilian training developers and both civilians and military who consider themselves combination training developers/instructors, appear to do so more frequently than instructors and military training developers (Figure 44).

Training Development Characteristics of Respondents

In an attempt to obtain a measure of the expertise of training developers and instructors to perform training development activities, independent of their own self report, Questions 15, 16, 17 and 18 were included in the survey. Question 15 asked for the number of man-hours the respondent would need to develop 1 hour of traditional paper-based instruction. Question 16 asked if the respondent's answer to Question 15 was a guess or based upon previous experience. Question 17 asked for the number of man-hours the respondent would need to develop 1 hour of multimedia instruction. Question 18 asked if the respondent's answer to Question 17 was a guess, or based upon previous experience.

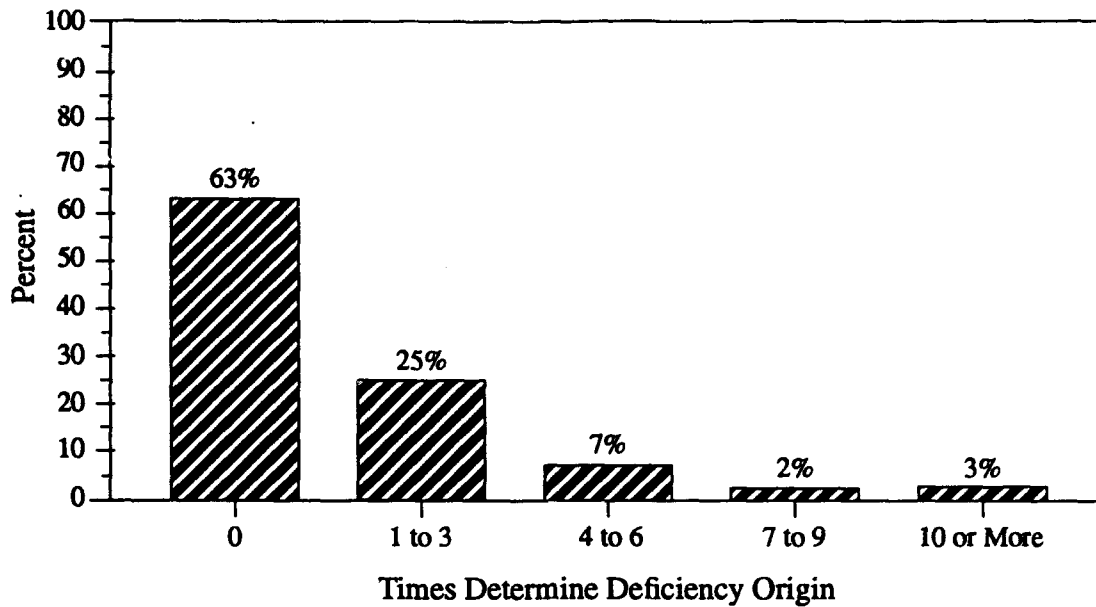


Figure 43. Within the last year, approximately how many times have you been asked to determine whether a field exercise deficiency was a schoolhouse or a unit problem? (Q14) (2,619 valid cases).

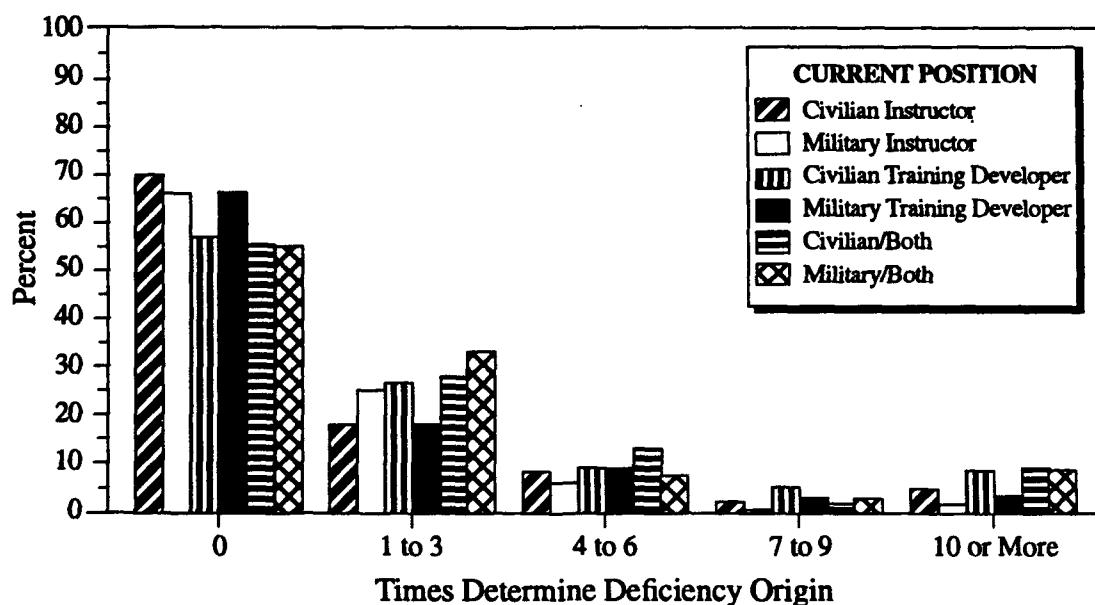


Figure 44. Number of times, within the last year, required to determine field deficiency origin by current position (2,595 valid cases).

Figure 45 indicates that 47% of respondents believed that it would take 1 to 10 man-hours to develop 1 hour of paper-based instruction and 34% believed that it would take 11 to 25 man-hours. Only 19% thought it would take over 25 man-hours to develop 1 hour of paper-based instruction.

U.S. Navy³ and U.S. Air Force⁴ estimates for the development of 1 hour of paper-based instruction are 30 to 40 man-hours and 20 to 30 man-hours respectively. Given that the U.S. Navy and U.S. Air Force estimates are based on the development of thousands of hours of instruction they are most probably reliable estimates. Contrast these estimates with the 1 to 10 man-hours suggested by almost half of the 2,607 respondents to Question 15 and doubt arises as to some respondent's expertise in this area.

Figure 46 shows that compared with civilian training developers, a greater percentage of civilian instructors and all the military subgroups thought it would take only 1 to 10 man-hours to develop 1 hour of paper-based instruction. Figure 47 illustrates that number of years as an instructor appeared to have little bearing on estimates and Figure 48 shows estimates were little effected based by number of years as a training developer.

When asked whether responses to Question 15, regarding the number of man-hours to develop 1 hour of paper-based instruction, were a guess or based on previous experience, 62% indicated previous experience (Figure 49). Overall, military more often than civilians indicated that they were guessing and instructors more often than training developers indicated that their response to Question 15 was a guess (Figure 50). Those respondents with less years as an instructor were more likely to call their response a guess (Figure 51), and those respondents with less than 1 year as a training developer were more likely to call their response to Question 15 a guess (Figure 52).

Figure 53 indicates that 45% of respondents reported that it would take 1 to 25 man-hours to develop 1 hour of multimedia instruction and 31% reported that it would take 26 to 50 man-hours. Only 24% thought it would take over 50 man-hours to develop 1 hour of multimedia instruction. However, U.S. Navy⁵ estimates for the development of 1 hour of multimedia instruction are 500 to 600 man-hours. Hence, 97% of respondents indicated that such development would take less than one third the time of U.S. Navy estimates. This result may be a consequence of the ambiguity of the question, that is, the term "multimedia" may mean any one or combination of a variety of media. However, a response that instructional development for any two or more media, other than paper, would take less than 100 man-hours per hour of instruction may be cause for concern about the adequacy of the resulting instruction. Yet, 92% of the 2,585 respondents to Question 17 indicated that it would take them less than 100 man-hours to develop 1 hour of multimedia instruction (Figure 53).

³Personal communication with Mr. Gerald Aldridge, Head, Instructional Program Development Division, Navy Education and Training Program Management Support Office, Pensacola, FL.

⁴Personal communication with Mr. Gary Beitzel, Chief of Policy and Technology Branch, Air Education and Training Command, San Antonio, TX.

⁵Personal communication with Mr. Gerald Aldridge, Head, Instructional Program Development Division, Navy Education and Training Program Management Support Office, Pensacola, FL.

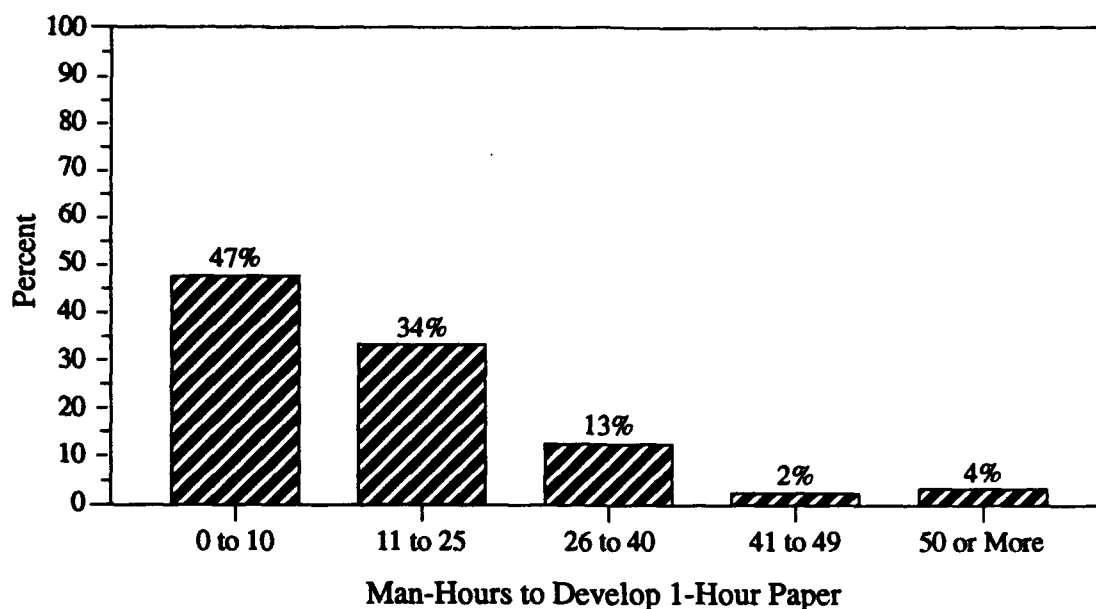


Figure 45. How many man-hours would you need to develop 1 hour of traditional paper-based instruction? (Q15) (2,607 valid cases).

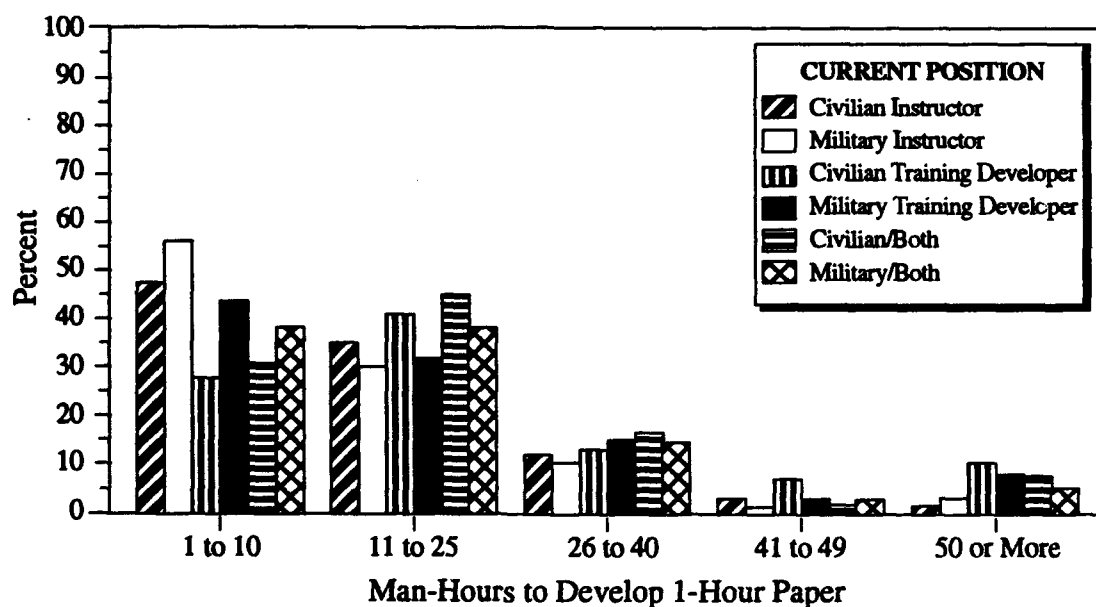


Figure 46. Man-hours estimated to develop 1 hour of paper-based instruction by current position (2,585 valid cases).

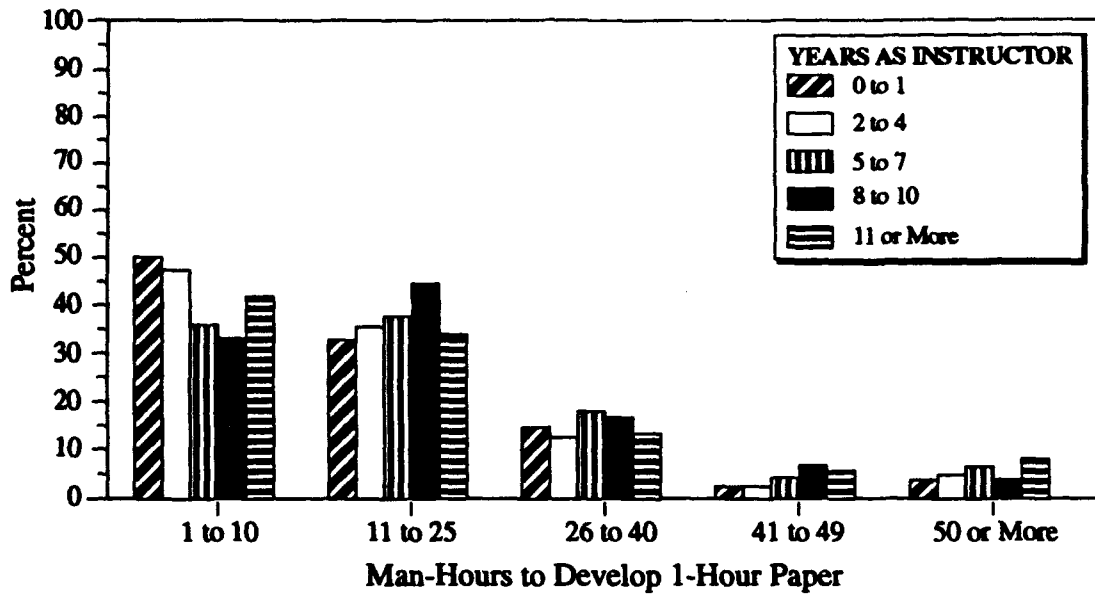


Figure 47. Man-hours estimated to develop 1 hour of paper-based instruction by number of years as an instructor (2,573 valid cases).

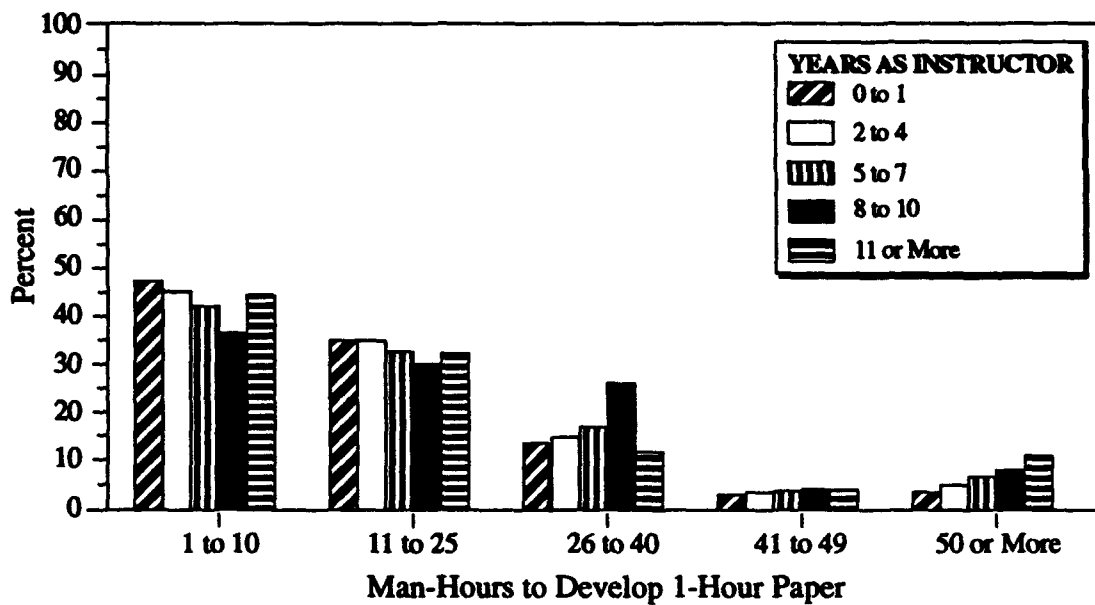


Figure 48. Man-hours estimated to develop 1 hour of paper-based instruction by number of years as a training developer (2,316 valid cases).

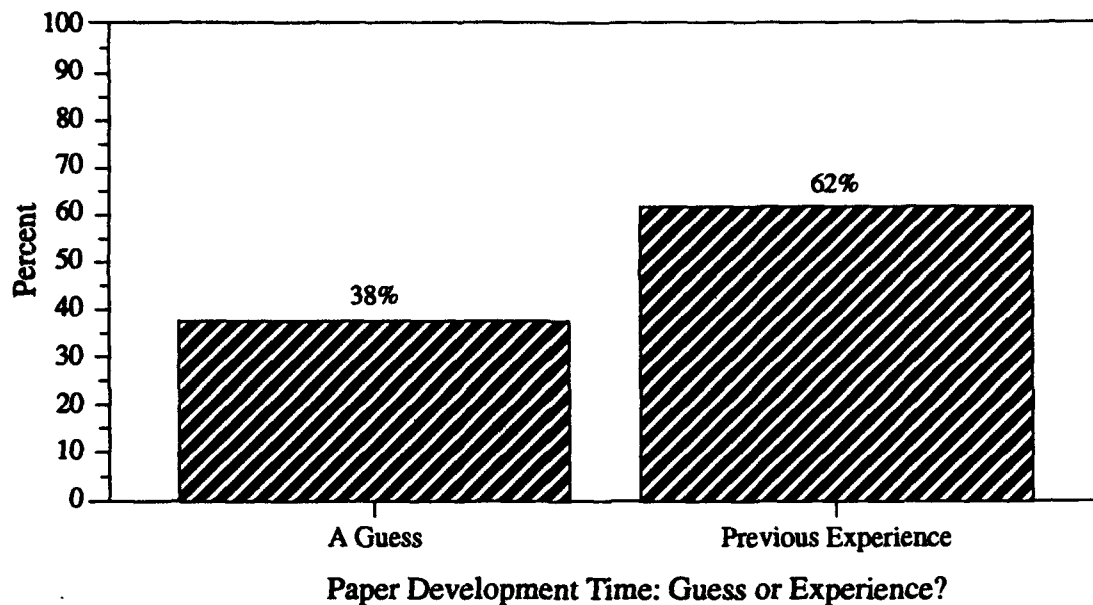


Figure 49. Was your answer to question 15 a guess or based on previous experience developing traditional paper-based instruction? (Q16) (2,597 valid cases).

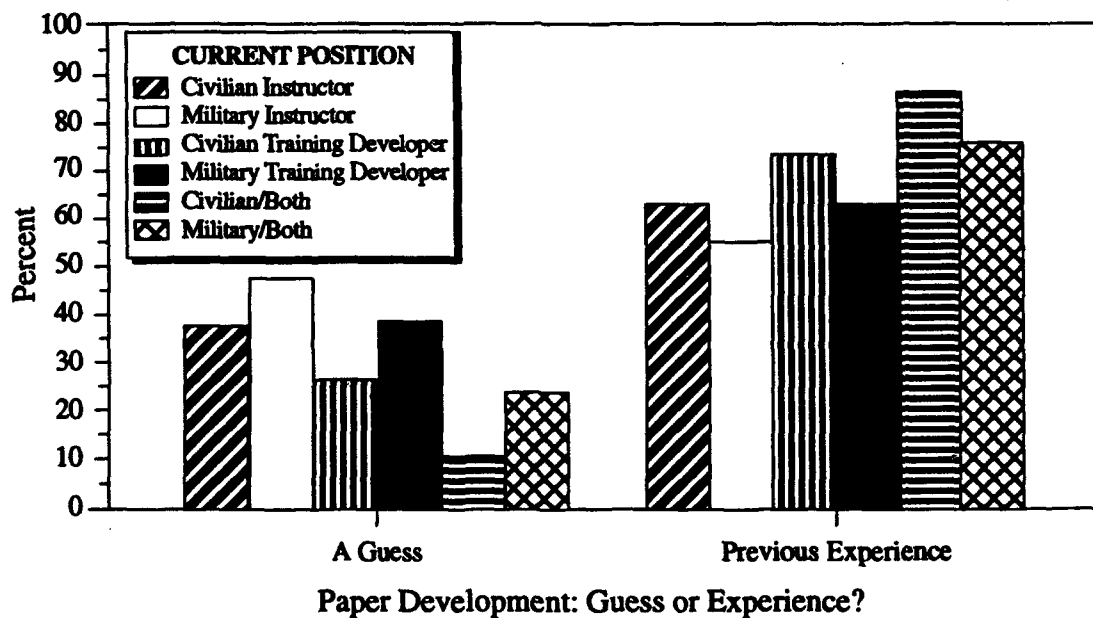


Figure 50. Whether answer to question on man-hours to develop paper-based instruction was a guess or based on previous experience by current position (2,576 valid cases).

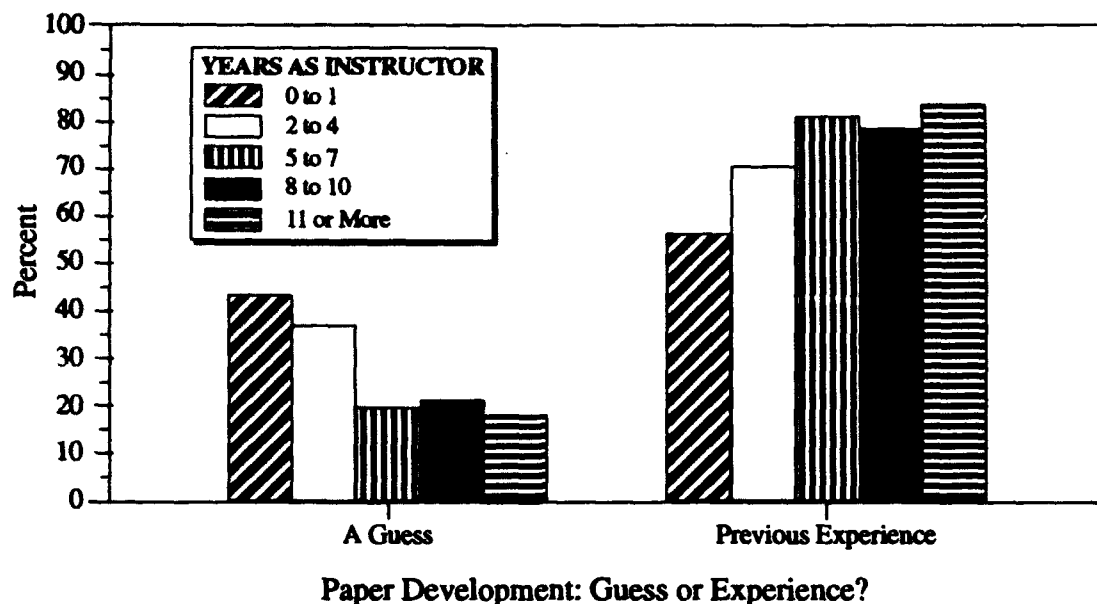


Figure 51. Whether answer to question on man-hours to develop paper-based instruction was a guess or based on previous experience by year as an instructor (2,563 valid cases).

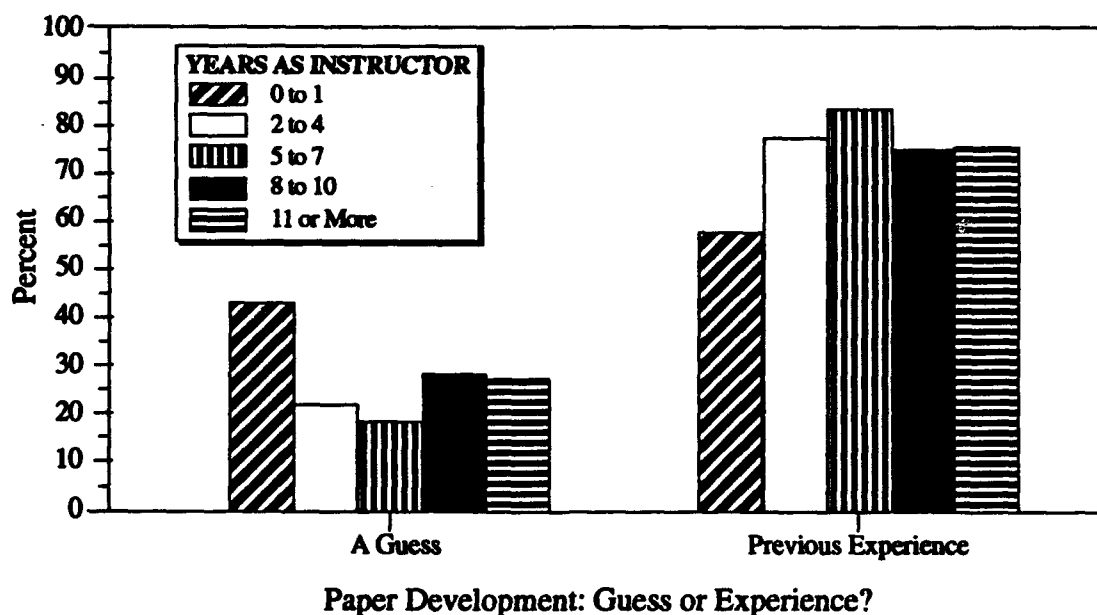


Figure 52. Whether answer to question on man-hours to develop paper-based instruction was a guess or based on previous experience by number of years as training developer (2,306 valid cases).

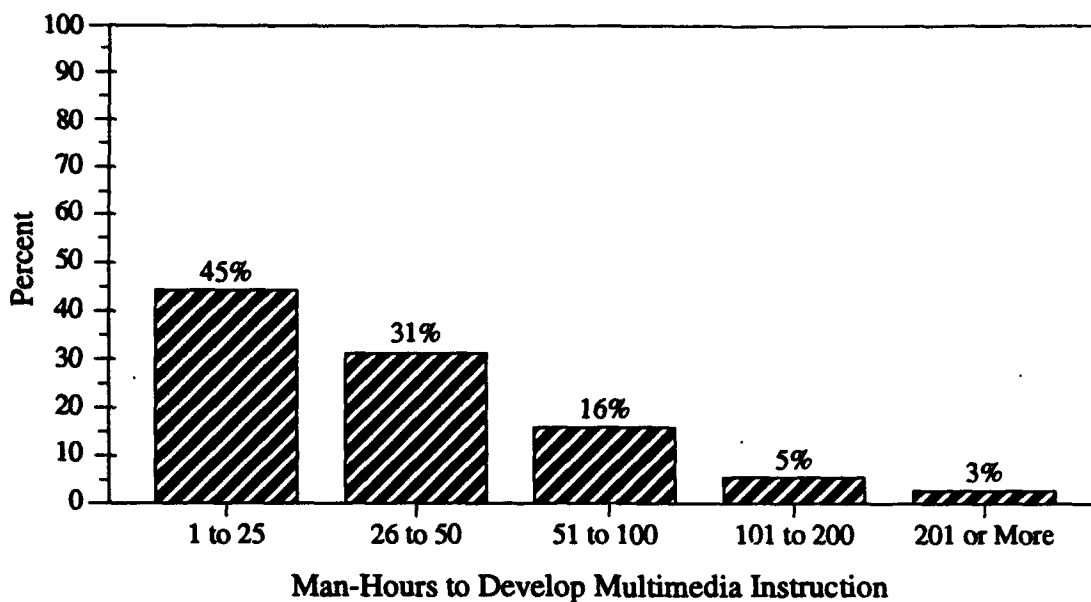


Figure 53. How many man-hours would you need to develop 1 hour of multimedia instruction? (Q17) (2,585 valid cases).

Figure 54 shows that compared to civilian training developers, a greater percentage of instructors and all military subgroups thought it would take only 1 to 25 man-hours to develop 1 hour of multimedia instruction. Figure 55 illustrates that number of years as an instructor appeared to have only some bearing on instructional development time estimates and Figure 56 shows these estimates were only marginally effected by number of years as a training developer.

When asked whether responses to Question 17, regarding number of man-hours to develop 1 hour of multimedia instruction, were a guess or based on previous experience, 62% indicated previous experience (Figure 57). Overall, military more often than civilians indicated that they were guessing and instructors more often than training developers indicated that their response to Question 17 was a guess (Figure 58). Those respondents with less years as an instructor were more likely to call their response a guess (Figure 59), and those respondents with less than 1 year as a training developer were more likely to call their response to Question 17 a guess (Figure 60).

When queried as to the impact that the recent (or anticipated) decrease in the number of training developers will have on the quality of training 55% of the 2,622 respondents indicated that there will be a negative impact, 9% no impact, and 12% a positive impact (Figure 61). Not surprisingly training developers anticipated the greatest negative impact (Figure 62).

Respondents were asked about their usage of computer assisted or automated training development, if they had been requested to make what they perceived as unnecessary curriculum changes, if they had had training in Systems Approach to Training (SAT) or the Instructional Systems Development (ISD), and if they would be responsible for the development of Soldier Development Tests (SDT) on 1 October 1994. These questions were asked to ascertain information concerning potential alternatives which may be suggested to compensate for the paucity of training developers at TRADOC installations, if a problem was exposed regarding staff time to conduct training activities.

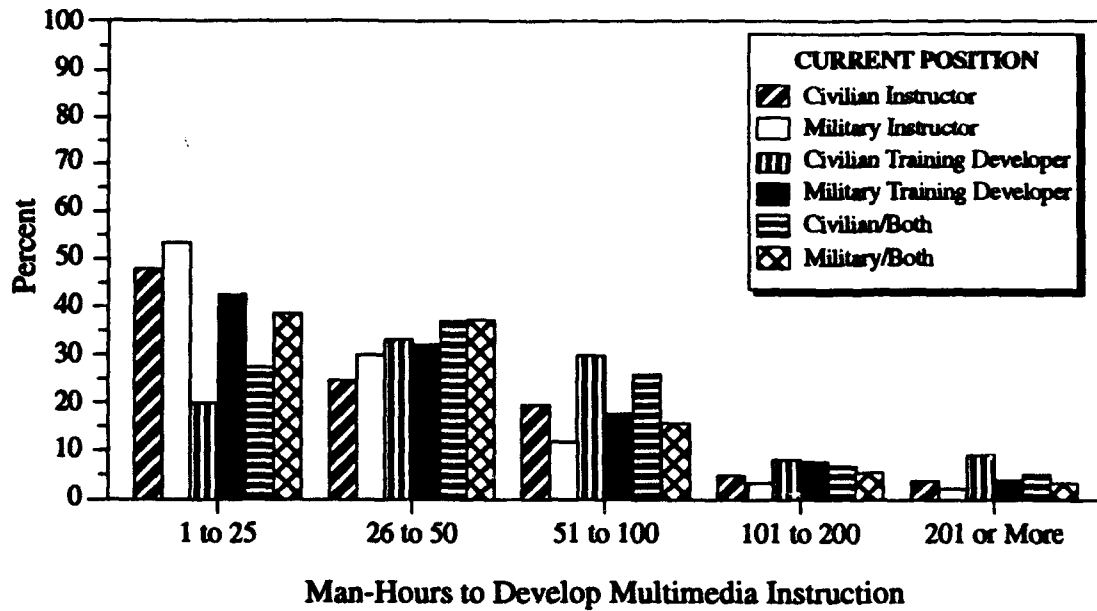


Figure 54. Man-hours estimated to develop 1 hour of multimedia instruction by current position (2,563 valid cases).

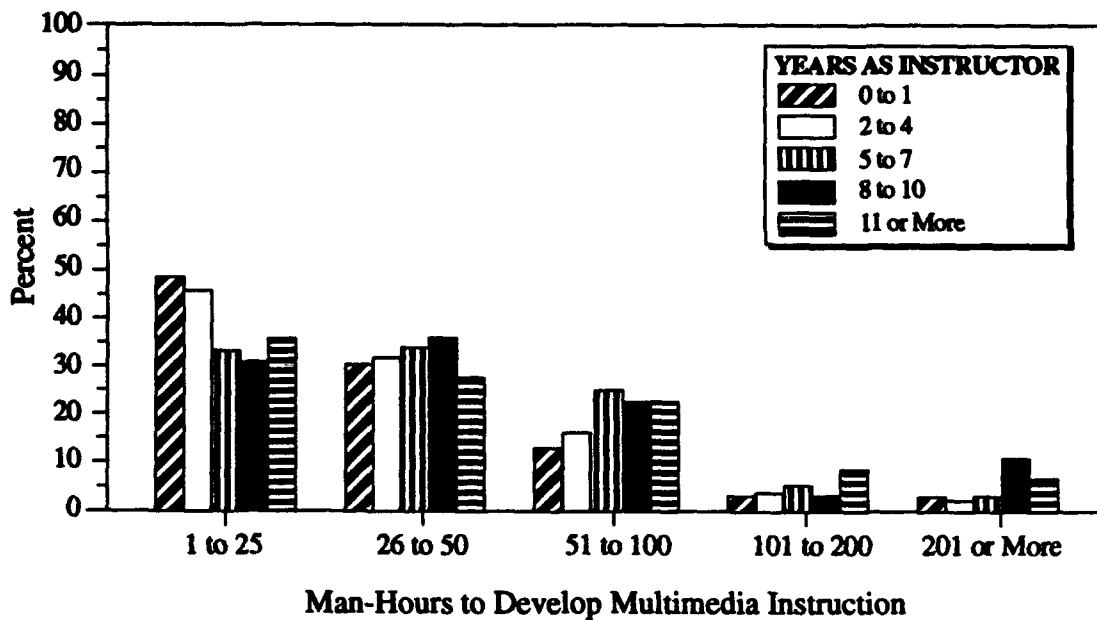


Figure 55. Man-hours estimated to develop 1 hour of multimedia instruction by years as an instructor (2,553 valid cases).

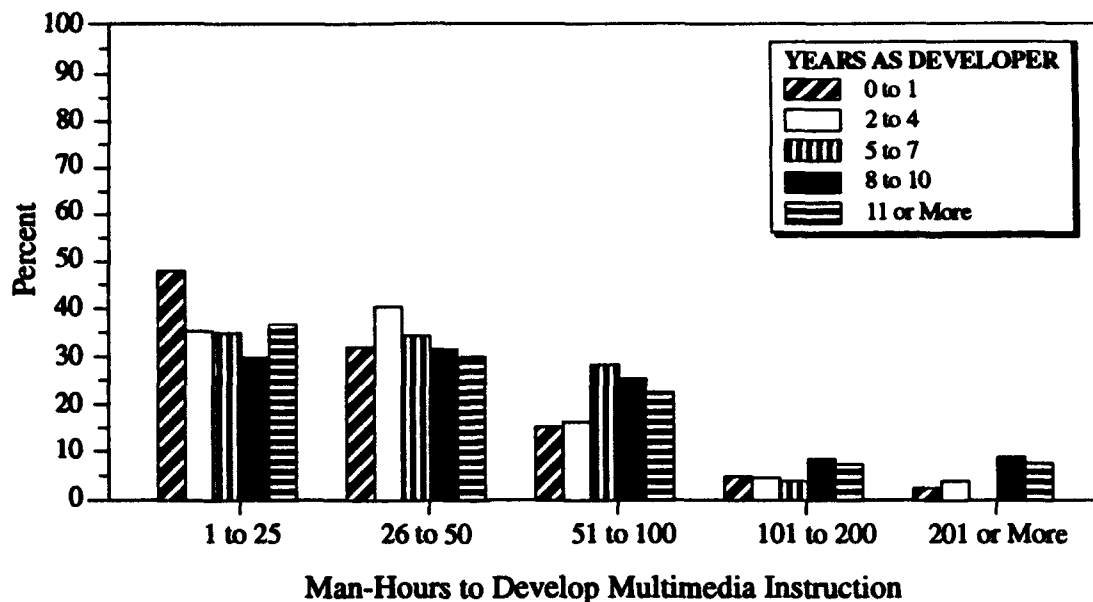


Figure 56. Man-hours estimated to develop 1 hour of multimedia instruction by years as a training developer (2,302 valid cases).

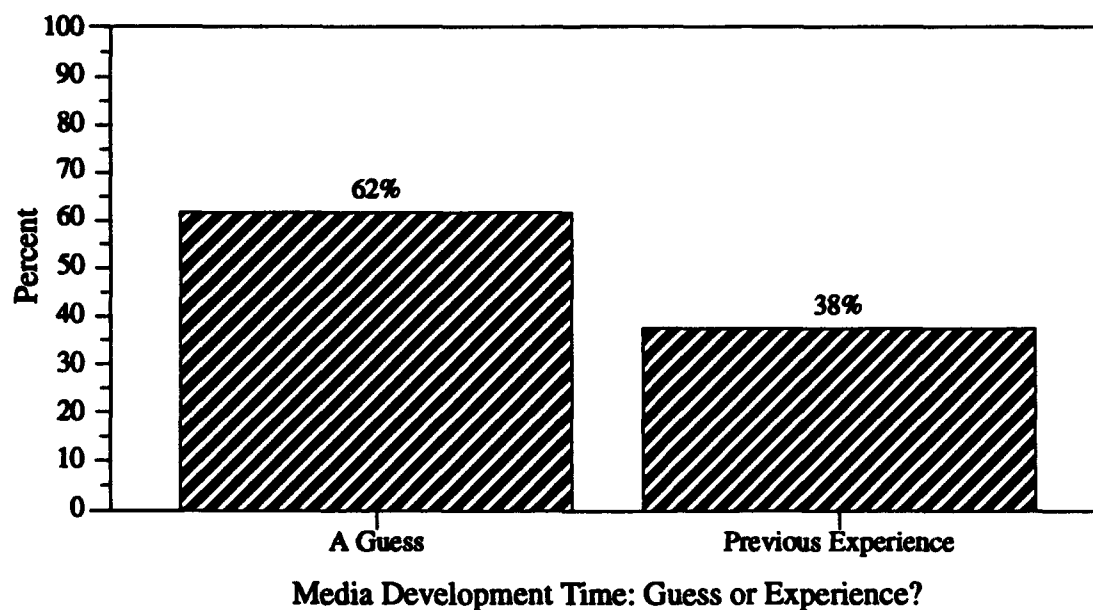


Figure 57. Was your answer to Question 17 a guess or based on previous experience developing multimedia instruction? (Q18) (2,585 valid cases).

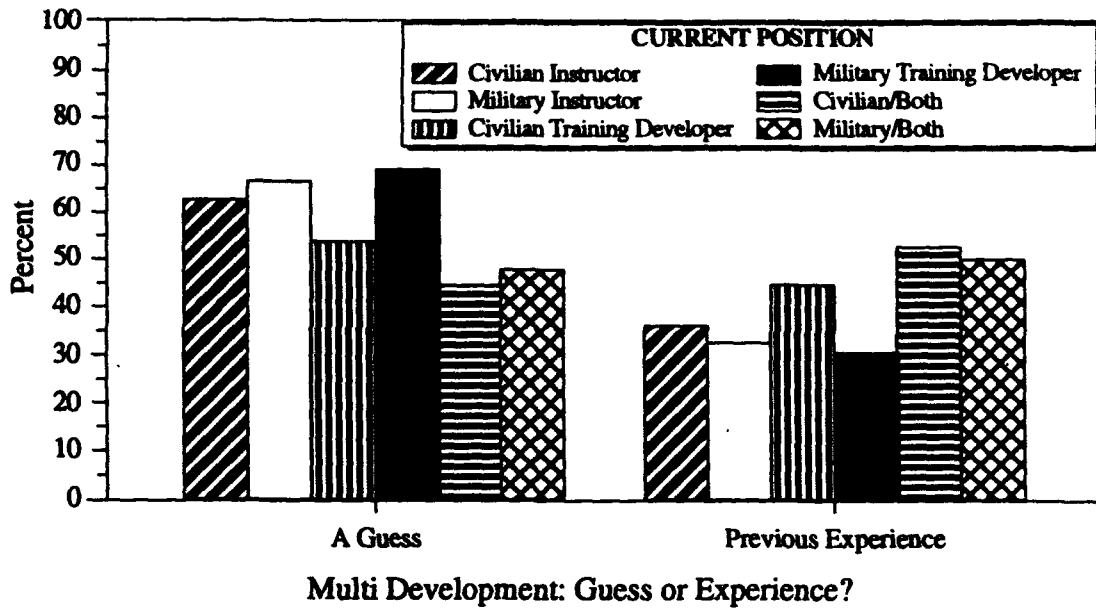


Figure 58. Whether answer to question on man-hours to develop multimedia instruction was a guess or based on previous experience by current position (2,564 valid cases).

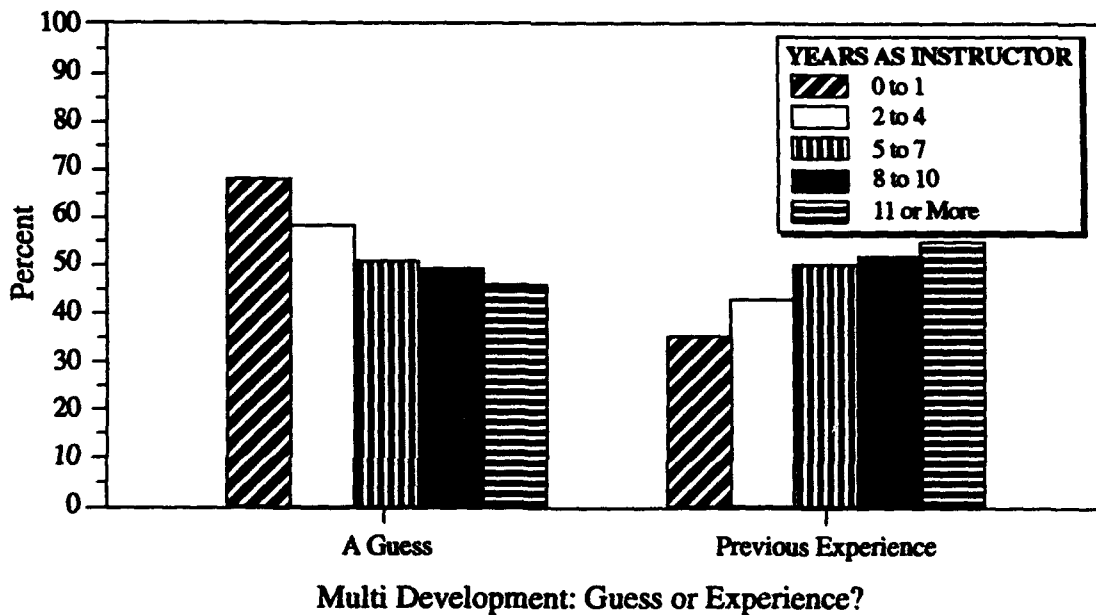


Figure 59. Whether answer to question on man-hours to develop multimedia instruction was a guess or based on previous experience by number of years as an instructor (2,553 valid cases).

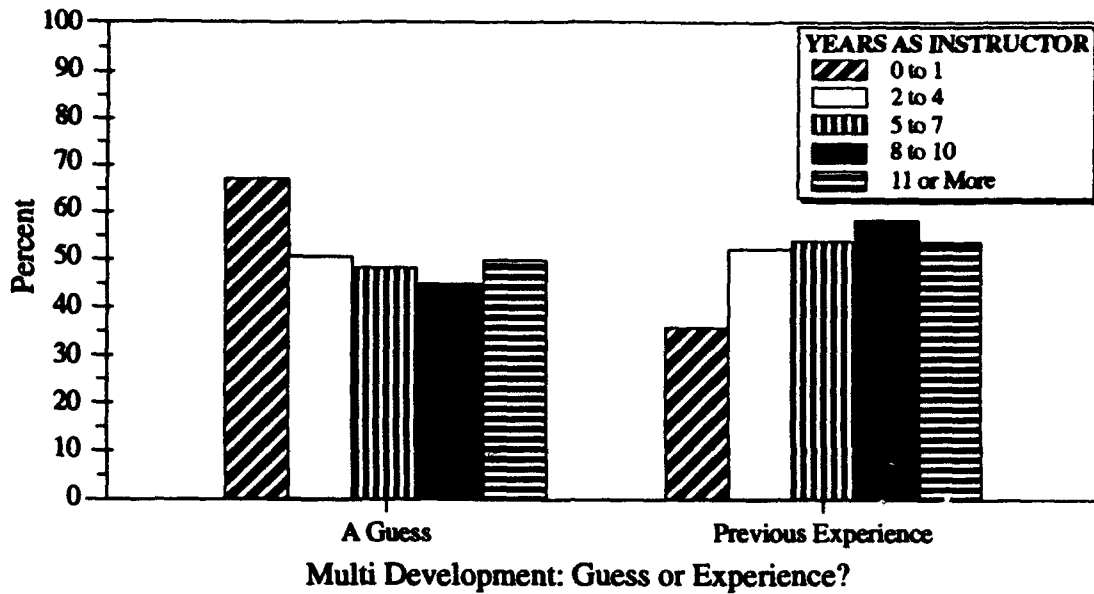


Figure 60. Whether answer to question on man-hours to develop multi-media instruction was a guess or based on previous experience by number of years as a training developer (2,304 valid vases).

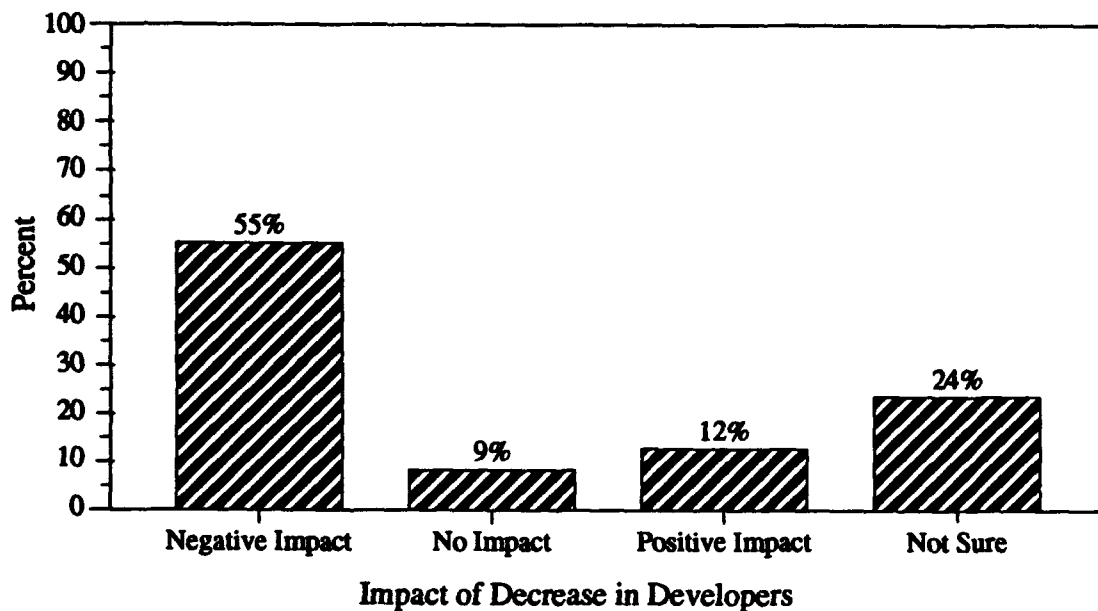


Figure 61. What impact will the recent (or anticipated) decrease in the number of training developers have on the quality of training at your post? (Q19) (2,622 valid cases).

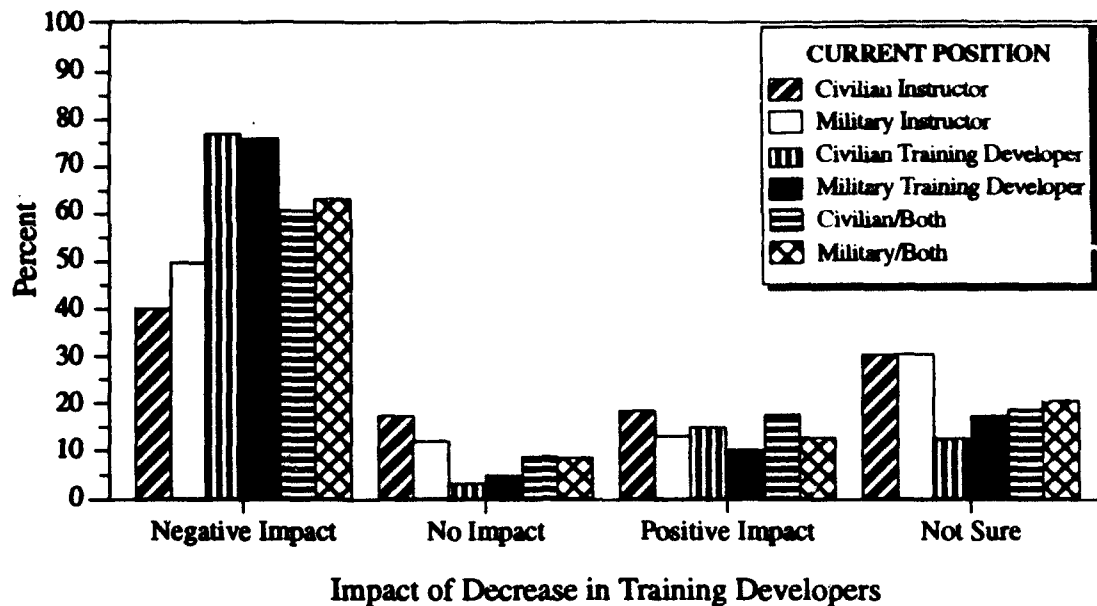


Figure 62. Impact of decrease in training developers by current position (2,600 valid cases).

Figure 63 shows that 58% of the 2,614 respondents to Question 20 are already using some form of automated training development system. Compared with the other subgroups, a greater percentage (70%) of civilian developers responded affirmatively to the use of automated training development. However, even the subgroup responding least often affirmatively, military instructors, indicated greater than 50% usage (Figure 64).

Forty-eight percent (48%) of the respondents to Question 21 indicated that over the past year they were required to make unnecessary curriculum changes (Figure 65). There were no major differences among subgroup responses to this question (Figure 66).

Figure 67 shows that 51% of the 2,629 respondents to Question 22 had training in either or SAT/ISD. There were significant differences between subgroup responses to this question (Figure 68). Almost all civilian training developers (97%) reported training in SAT/ISD while only a little more than 25% of the military instructors had this training.

Response to Question 23, on whether they would be responsible for developing SDTs on 1 October 1994, brought an overwhelming negative response (73%) from the 2,634 respondents (Figure 69). Individuals responding affirmatively to this question were more likely to be training developers than instructors (Figure 70).

Instructor Time Usage

Instructors were queried concerning time and other issues related to their positions as instructors. As with questions concerning training development characteristics, the purpose of these questions was to collect information which may be used in formulating solutions to the potential problem of insufficient staff time for training activities.

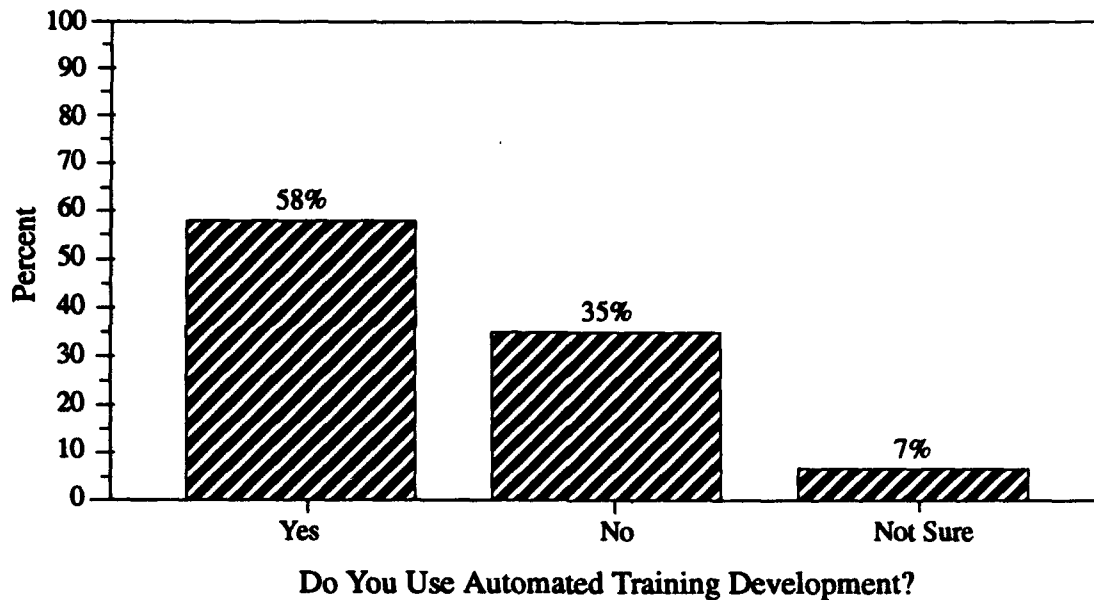


Figure 63. Do you use any type of computer assisted or automated training development system when you develop instruction? (Q20) (2,614 valid cases).

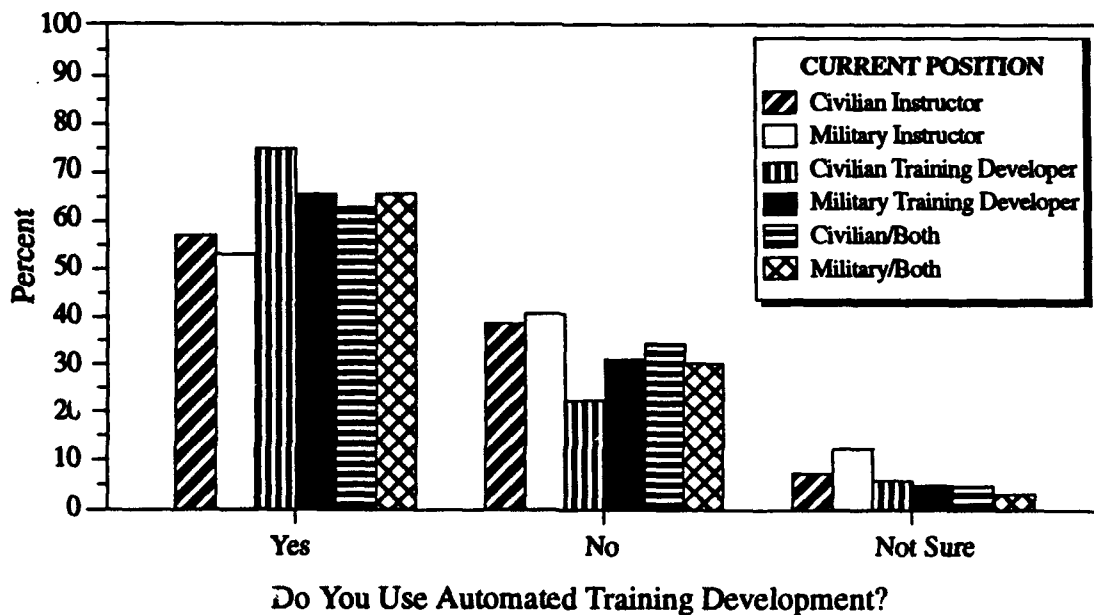


Figure 64. Use of automated training development by current position (2,594 valid cases).

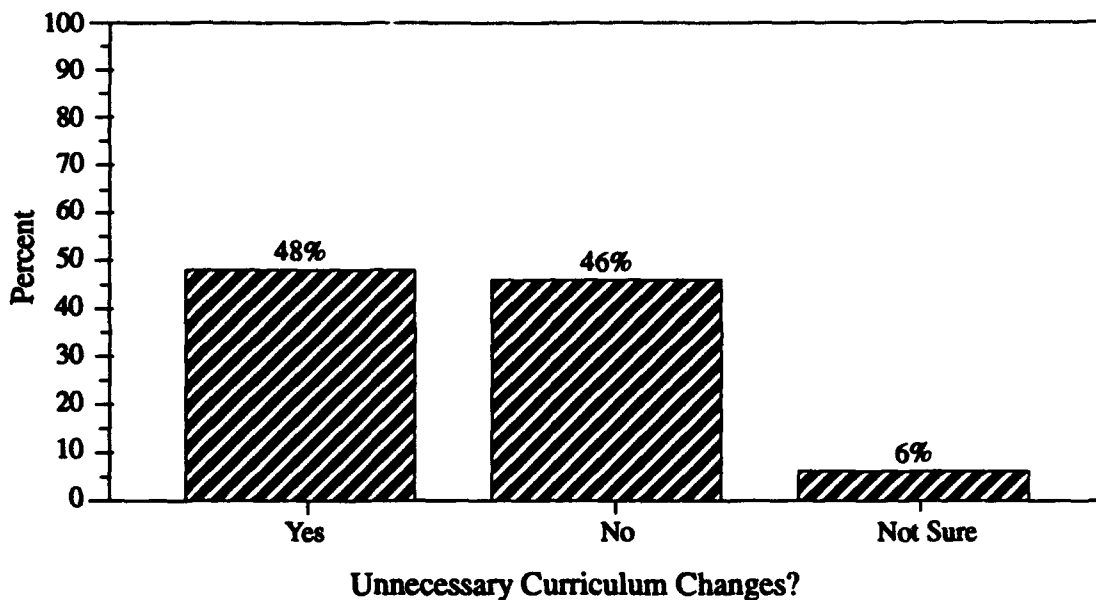


Figure 65. In the past year have you been required to make changes in the training materials which you thought were not really necessary? (Q21) (2,617 valid cases).

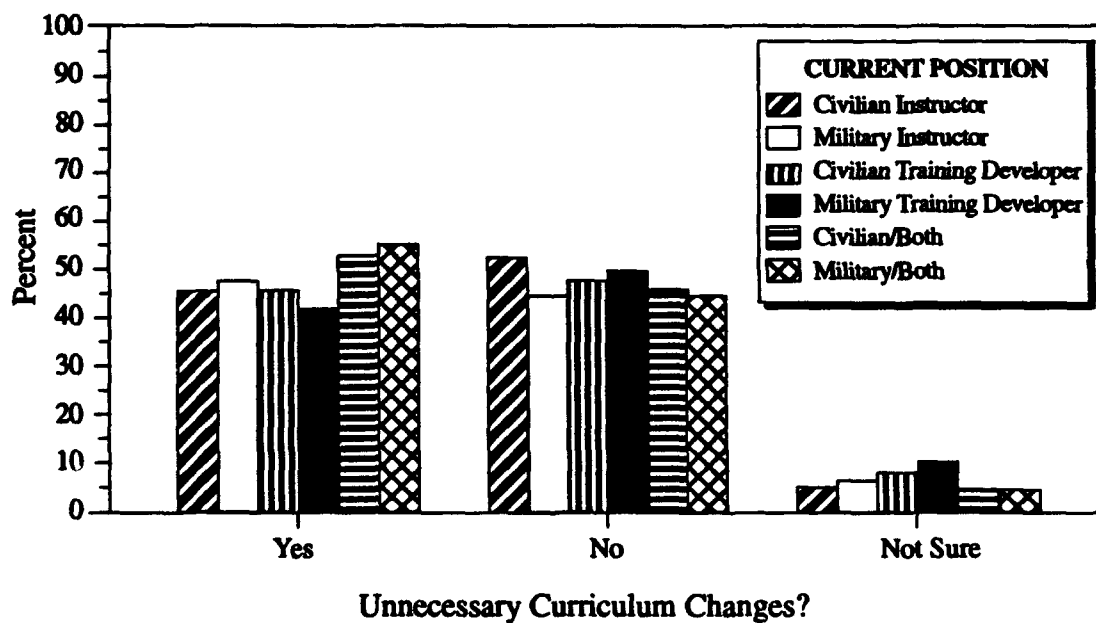


Figure 66. Whether perceived being asked to make unnecessary curriculum changes by current position (2,597 valid cases).

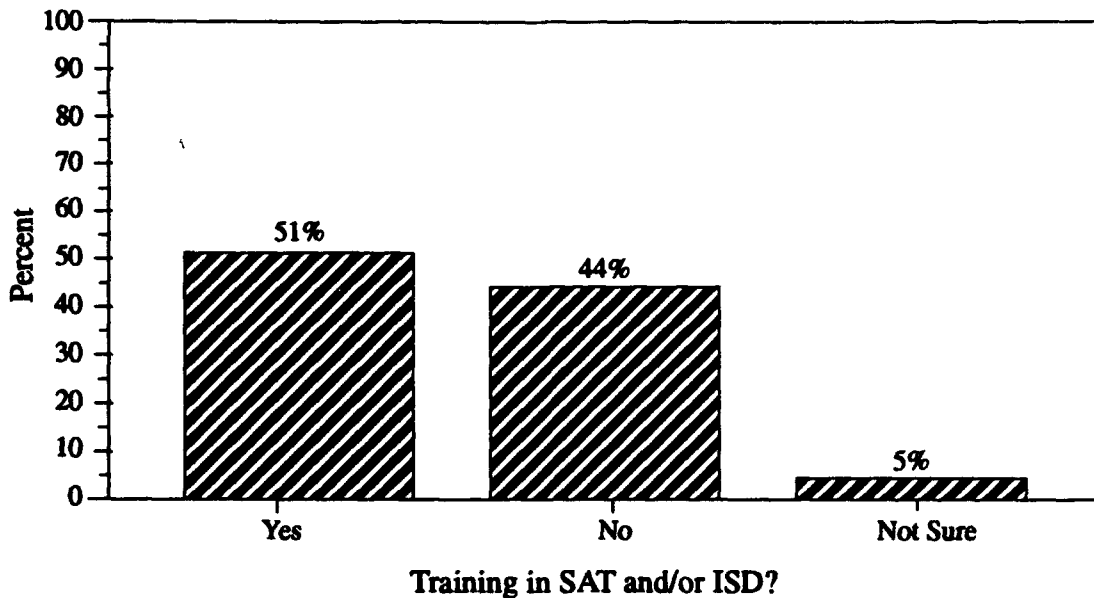


Figure 67. Have you ever had training in the System Approach to Training SAT) and/or Instructional Systems Development (ISD)? (Q22) (2,629 valid cases).

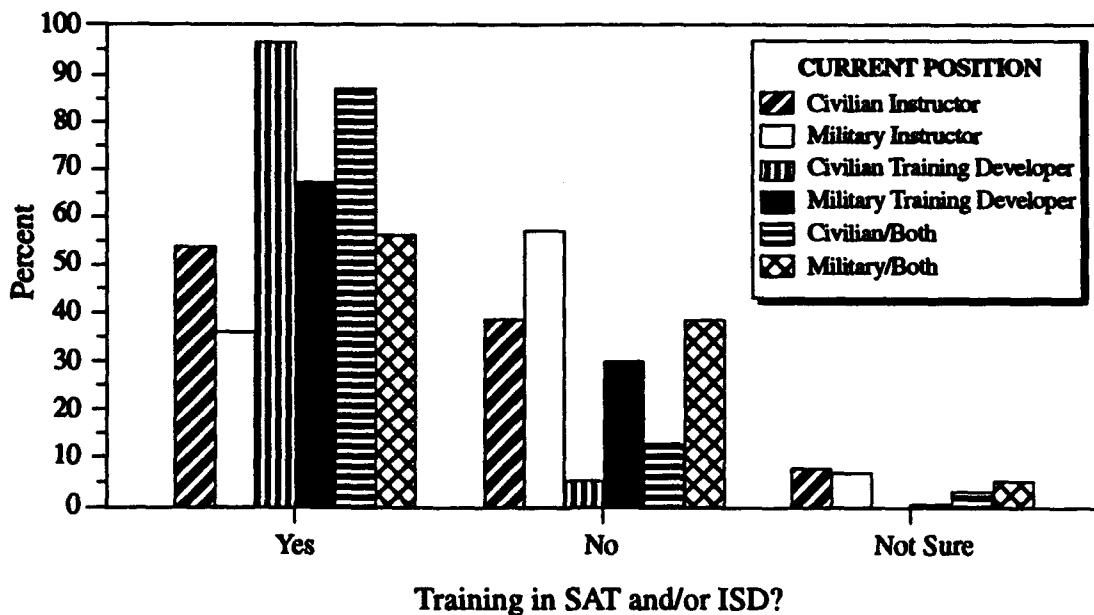


Figure 68. Received training in System Approach to Training (SAT) and/or Instructional Systems Development (ISD) by current position (2,606 valid cases).

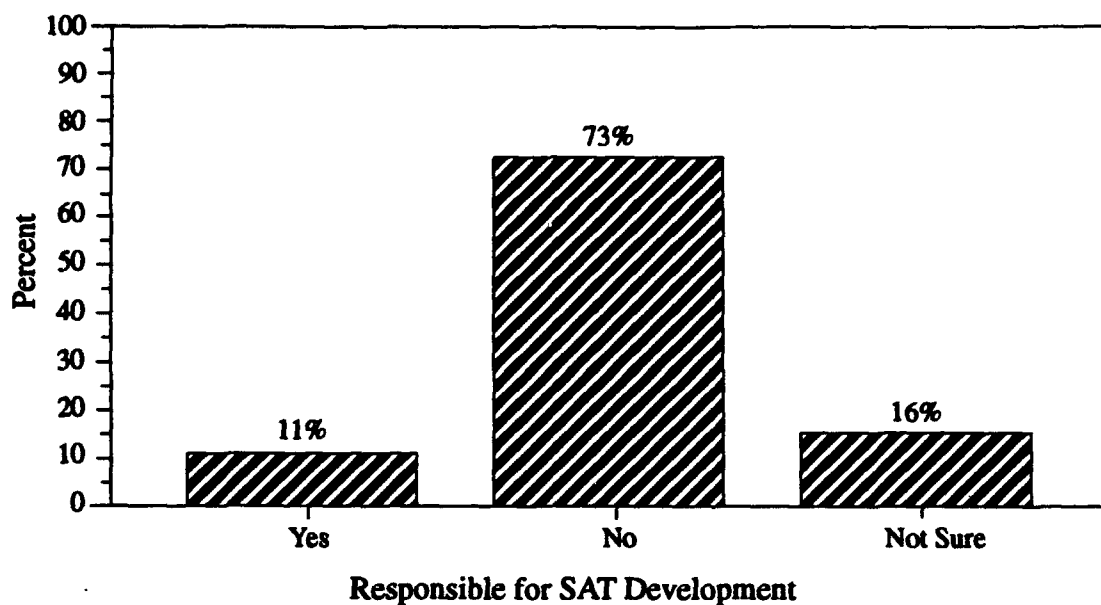


Figure 69. On 1 October 1994, will you be responsible for developing Soldier Development Tests (SATs)? (Q23) (2,634 valid cases).

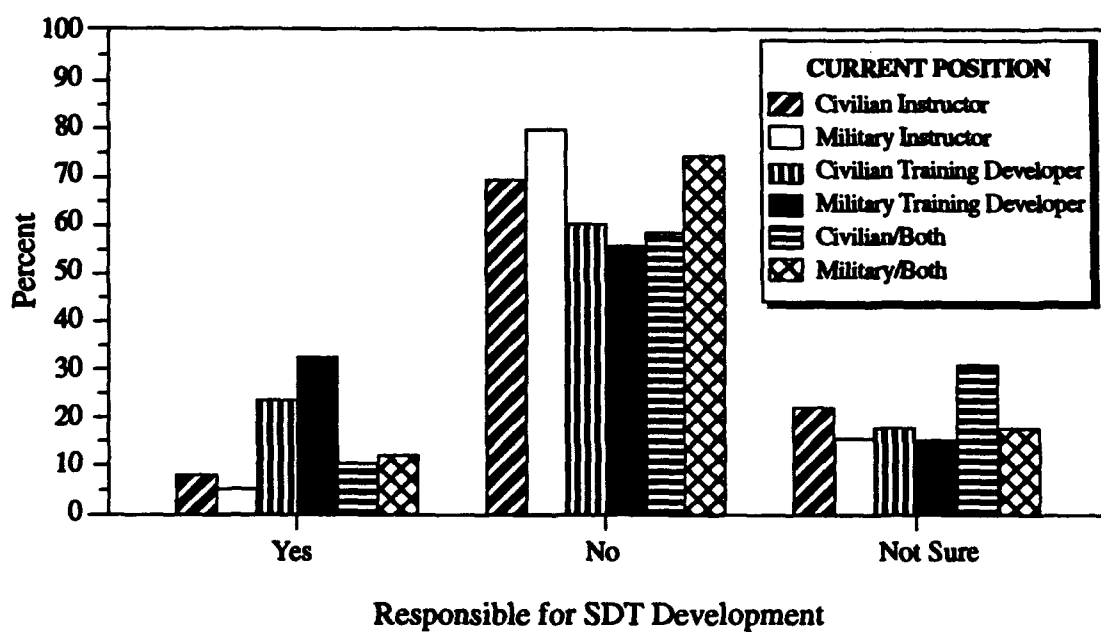


Figure 70. Responsibility for developing Soldier Development Tests (SDTs) by current position (2,611 valid cases).

Figure 71 indicates that 34% of 2,215 respondents spent 1 to 16 hours on platform instructing, 18% 17 to 24 hours, 30% 25 to 40 hours and 11% more than 40 hours. When queried about time between class sessions, 24% of the 2,182 respondents indicated that they had no time between class sessions, 41% responded that they had less than one week, 15% said 1 week, 10% indicated 2 weeks, and 10% reported they had more than two weeks between class sessions (Figure 72). The amount of this between session time spent on developing training was less than one week for 73% of 2,177 respondents (Figure 73). Fifty-eight percent (58%) of 2,168 respondents to Question 27, concerning average number of students in classes, responded less than 25, while 19% responded 45 or more (Figure 74).

Military Characteristics

Information was collected from military personnel concerning the length of their tour of duty and whether they held an Additional Skill Identifier (ASI) to be an instructor. Figure 75 indicates that 63% of 2,114 respondents will serve at their duty stations between 2 and 3 years. Figure 76 shows that the overwhelming majority of respondents (90%) do hold the proper ASI to be an instructor.

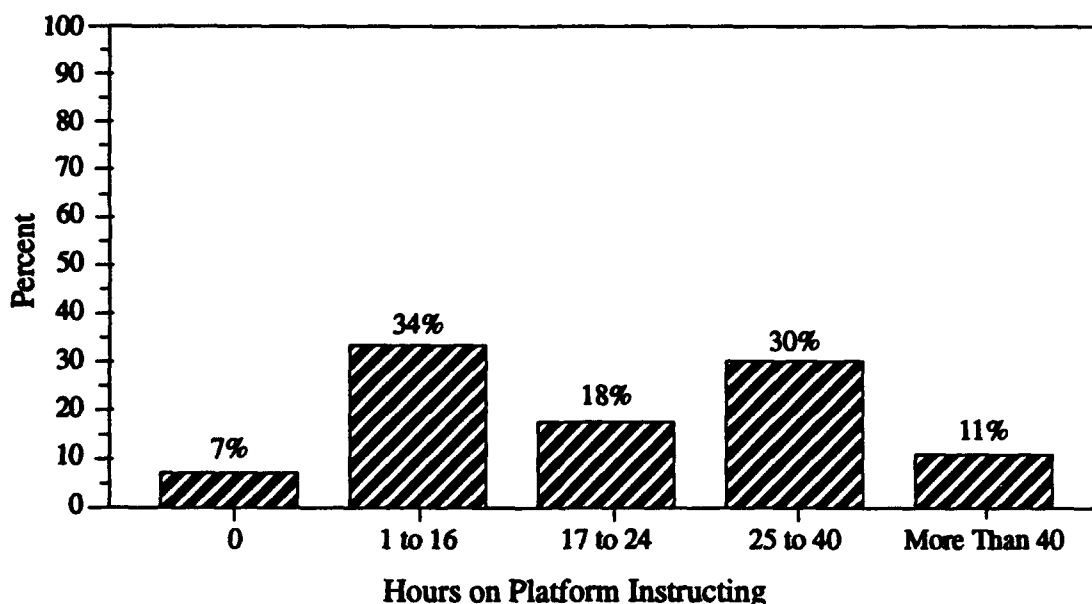


Figure 71. Within an average work week, how many hours do you spend on platform instructing students? (Q24) (2,215 valid cases).

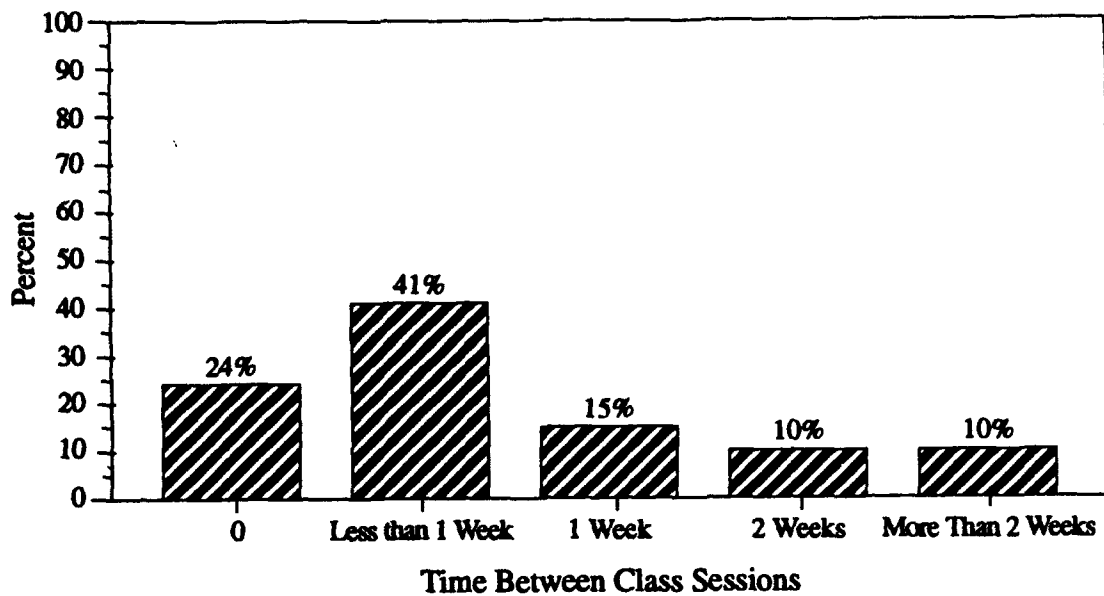


Figure 72. How much time do you have between class sessions? (Q25) (2,182 valid cases).

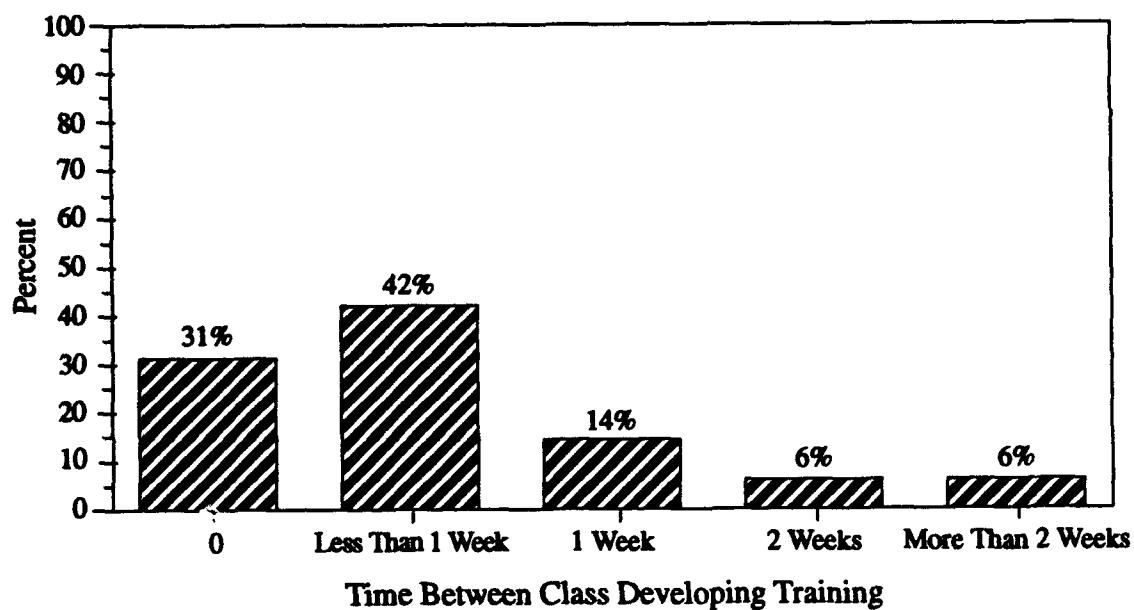


Figure 73. How much time between class sessions do you spend developing training? (Q26) (2,177 valid cases).

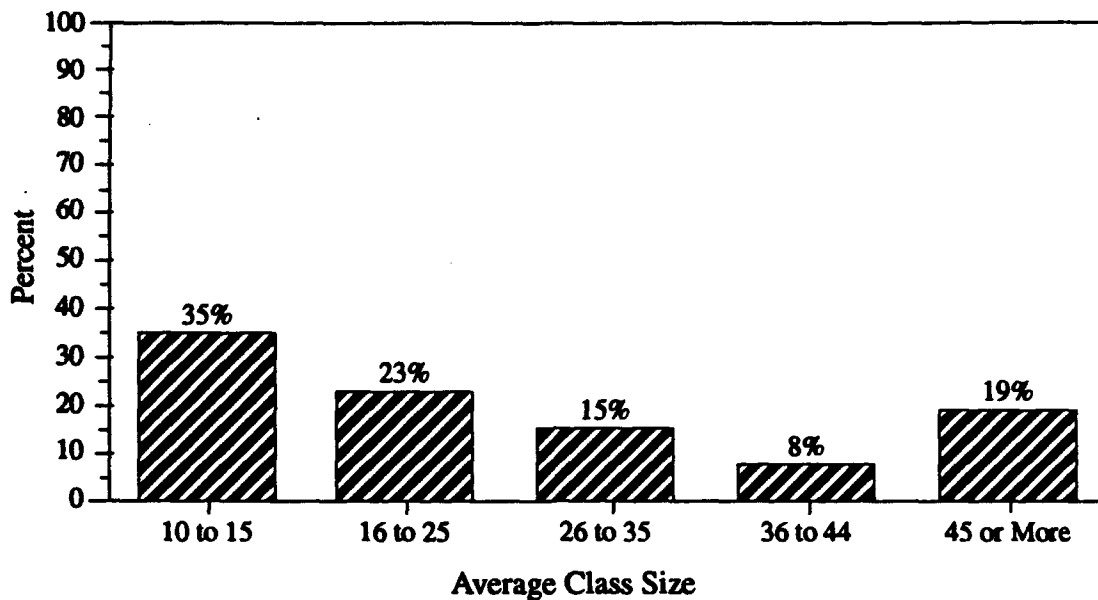


Figure 74. What is the average number of students in the classes you instruct? (Q27) (2,168 valid cases).

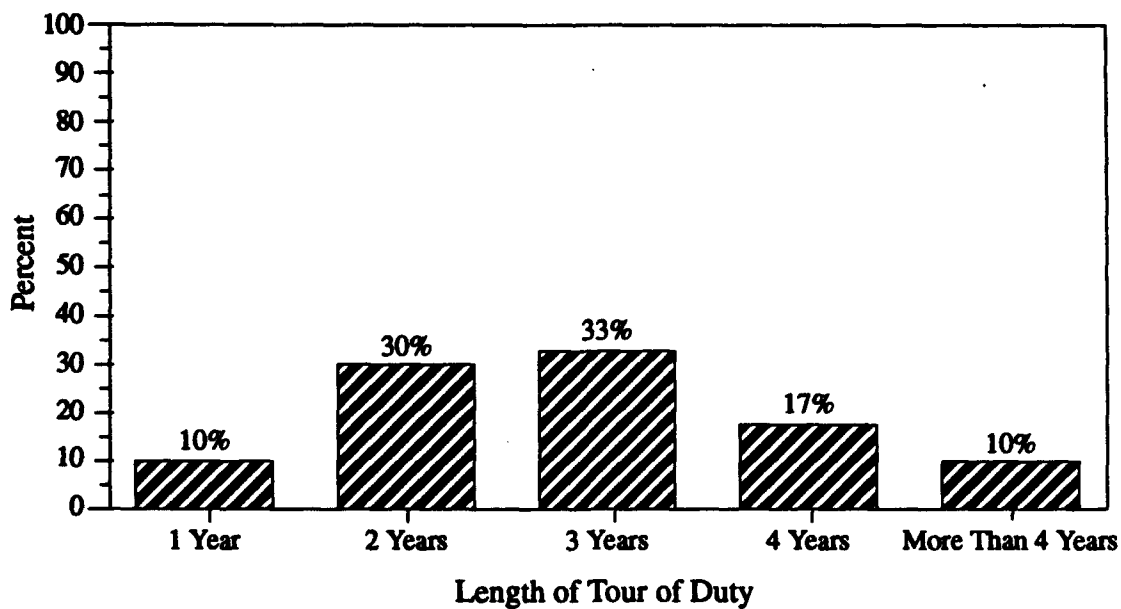


Figure 75. How long will your tour of duty be at your current job? (Q28) (2,144 valid cases).

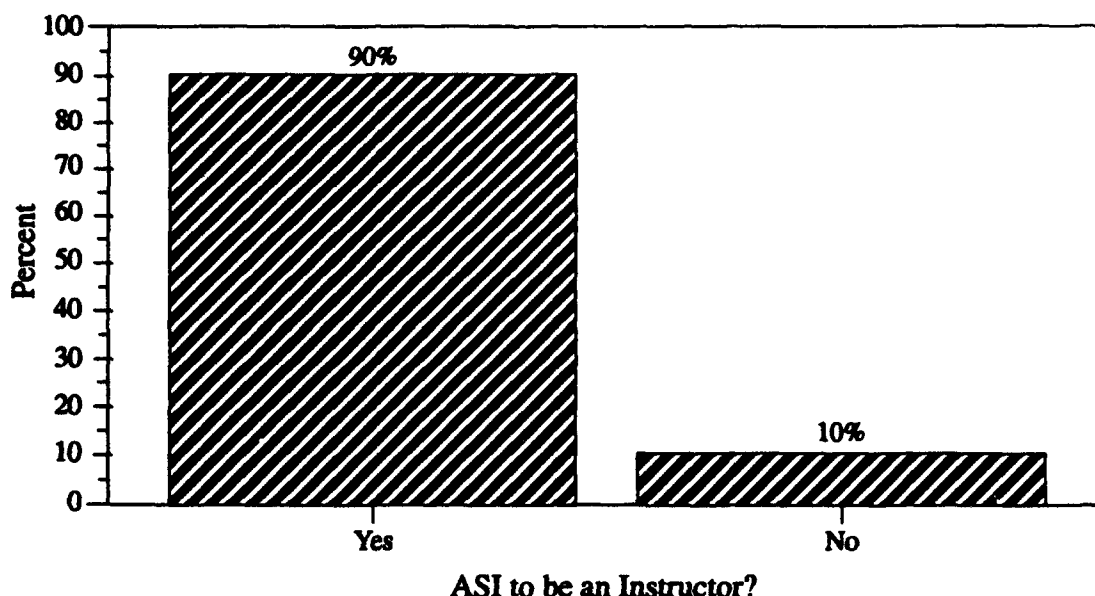


Figure 76. Do you hold the proper Additional Skill Identifier (ASI) to be an instructor? (Q29) (2,143 valid cases).

Analysis by Location

Aggregated data analyzed by location showed little, if any, differences between sites. However, when data were disaggregated by current position and location, differences were found. The majority of variance occurred in training developers subgroups, both military and civilian, among each location. Responses from military instructors were most consistent from location to location and the military/both subgroup responses most resembled the military instructor responses.

Given that the training developer subgroups, even when combined, are approximately only one third the number of the military instructor and military/both subgroups, it is not surprising that the training developer responses are not apparent when the data are aggregated. More importantly though, as the total population of the training developers is comparatively limited, the burden of instructional development may fall to the instructors. This, of course, will depend on the amount of instructional development necessary to be accomplished. If it is necessary to require instructors to perform these tasks, instructor responses concerning time on platform instructing and estimated man-hours to develop 1 hour of paper-based and 1 hour of multimedia instruction, indicate that instructors may not have the time, nor the expertise to accomplish these tasks.

Data by location for each of the 16 sites appear in Appendices D through S as follows:

1. Aberdeen Proving Grounds (Appendix D)
2. Fort Benning (Appendix E)
3. Fort Bliss (Appendix F)
4. Fort Bragg (Appendix G)
5. Fort Eustis (Appendix H)
6. Fort Gordon (Appendix I)
7. Fort Huachuca (Appendix J)
8. Fort Knox (Appendix K)
9. Fort Leavenworth (Appendix L)
10. Fort Lee (Appendix M)
11. Fort Leonard Wood (Appendix N)
12. Fort McClellan (Appendix O)
13. Fort Monmouth (Appendix P)
14. Redstone Arsenal (Appendix Q)
15. Fort Rucker (Appendix R)
16. Fort Sill (Appendix S)

Prior to reviewing these data, special note should be made of the number of respondents in each subgroup at each site (see page 1 of each site appendix). In certain cases the sample size by subgroup is quite small. For instance, civilian training developer respondents at Fort Benning indicated that they performed all seven instructional development activities more than 16 hours per week and 15 times per year. In addition, this subgroup was most accurate in estimating number of man-hours required to develop 1 hour of paper-based instruction and number of man-hours required to develop 1 hour of multimedia instruction. However, a perusal of the frequency chart at the front of Appendix E indicated that there are only two civilian training developers in the sample. Similarly, the Fort Rucker data (Appendix R) indicate that more than 14 times over the past year military training developers did not have the time nor the expertise to conduct all seven training development activities. The sample size here is 1. The small sample size of the disaggregated data will also lead to increased sampling error, which was not a problem with the total sample that exceeded 2,500 cases.

Conclusions

- Though the responses to questions concerning lack of time and/or expertise to complete training development activities appear to indicate that there is not currently a problem, this may merely reflect that the majority of respondents were not required to perform these tasks over the past year. **These tasks may be going undone.**
- Responses to questions concerning man-hours to develop 1 hour of instruction and questions concerning training in SAT/ISD indicate civilian training developers appear to have a better understanding of training development than instructors.
- Military instructors, by far the largest subgroup available at TRADOC installations, are not currently revising training courses, conducting task analyses/developing new training, validating new training, developing doctrine, or reviewing contractor training and appear from responses to questions concerning time on platform and SAT/ISD experience not to have the time nor the expertise to accomplish these tasks.

Recommendations

1. Ensure that a training evaluation system is in place to monitor any change in the caliber of training.
2. Determine what training development tasks are not being accomplished, if any.
3. If a training deficiency develops:
 - Hire additional civilian training developers, or
 - Automate training development (ASAT)
 - Lengthen instructor tours
 - Decrease instructor workload
 - Eliminate unnecessary curriculum revisions
 - Increase instructor time between classes
 - Provide SAT training (possibly through video teletraining) to instructors.

Appendix A
Instructor/Training Developer Questionnaire

INSTRUCTOR/TRAINING DEVELOPER QUESTIONNAIRE

The U. S. Army Training and Doctrine Command (TRADOC) seeks to determine whether Army instructors at TRADOC schools have sufficient time and expertise to conduct training development tasks. Please assist TRADOC in making this determination by providing accurate and complete responses to the questions in this booklet. Thank you for your cooperation in this effort.

PRIVACY ACT STATEMENT

Authority to request this information is granted under Title 5, U. S. Code 301 and the memorandum, Headquarters, Training and Doctrine Command, ATTG-CR, 10 June 1993.

The purpose of this questionnaire is to gather information concerning your time and expertise to conduct training development tasks.

The information provided in this questionnaire will be analyzed by and stored at the Navy Personnel Research and Development Center. Information you provide will be considered only when statistically summarized with the responses from others and will not be attributable to any single individual.

Completion of this questionnaire is voluntary. Failure to respond to any of the questions will NOT result in any penalties except lack of representation of your views in the final results and outcomes.

IMPORTANT INSTRUCTIONS

- * USE NO. 2 PENCIL ONLY.
- * Do NOT use ink, ballpoint, or felt tip pens.
- * Erase cleanly and completely any changes you make.
- * Make black marks that fill the circle.
- * Do NOT make any stray marks on the form.



CORRECT MARK: ●
INCORRECT MARKS: ○, ◐, ◑, ◒, ◓, ◔, ◕, ◖, ◗, ◘, ◙, ◚, ◛, ◜, ◝, ◞, ◟, ◠, ◡, ◢, ◣, ◤, ◥, ◦, ◧, ◨, ◩, ◪, ◫, ◬, ◭, ◮, ◯

EXAMPLES

For questions that look like the next two examples, blacken the circle corresponding to the answer you selected.

1. What is your gender?

- ☐ Male
☒ Female

2. For the following statements, blacken the circle corresponding to the answer you select.

- a. The command has a separate Training Office
b. I have received training in the past year
c. I have developed training in the past year

No	Yes	Don't Know
☐	☐	☒
☐	☒	☐
☒	☐	☐

1. If you are military, what is your MOS code?

Example: Infantryman would be 11B

0	0	A
1	1	B
2	2	C
3	3	D
4	4	E
5	5	F
6	6	G
7	7	H
8	8	I
9	9	J
		K
		L
		M
		N
		O
		P
		Q
		R
		S
		T
		U
		V
		W
		X
		Y
		Z

2. If you are military, what is your rank?

- | | | |
|----------------------------|---------------------------|-----------------------------|
| ☐ LTC | ☐ CW5 | ☐ SFC |
| ☐ MAJ | ☐ CW4 | ☐ SSG |
| ☐ CPT | ☐ CW3 | ☐ SGT |
| ☐ 1LT | ☐ CW2 | ☐ Other |
| ☐ 2LT | ☐ WO2 | |
| ☐ CPL | ☐ WO1 | |
| ☐ MSGT | | |

3. If you are a civilian, what is your series?

- ☐ 1750
☐ 1712
☐ 1701
☐ Other

4. If you are a civilian, what is your grade?

- ☐ GS-07
☐ GS-09
☐ GS-10
☐ GS-11
☐ GS-12
☐ GS-13/14/15
☐ Other

5. Where are you stationed/located?

- ☐ Aberdeen Proving Grounds
☐ Ft. Benning
☐ Ft. Bliss
☐ Ft. Bragg
☐ Ft. Eustis
☐ Ft. Gordon
☐ Ft. Huachuca
☐ Ft. Knox
☐ Ft. Leavenworth
☐ Ft. Lee
☐ Ft. Leonard Wood
☐ Ft. McClellan
☐ Ft. Monmouth
☐ Redstone Arsenal
☐ Ft. Rucker
☐ Ft. Sill

6. What is your current position?

- ☐ Instructor
☐ Training developer
☐ Both

7. How many years have you been in your present position?

- ☐ 0-1
☐ 2-4
☐ 5-7
☐ 8-10
☐ 11 or more years

8. How many years were you an instructor prior to coming to your present position?

- ☐ 0-1
☐ 2-4
☐ 5-7
☐ 8-10
☐ 11 or more years

9. How many years were you a training developer prior to coming to your present position?

- ☐ 0-1
☐ 2-4
☐ 5-7
☐ 8-10
☐ 11 or more years

10. Within an average work week, how many hours do you spend:

- a. revising lesson plans and practical exercises
- b. developing new lesson plans and practical exercises
- c. revising training courses
- d. conducting task analyses and/or designing new training courses
- e. validating new training courses
- f. developing doctrine
- g. reviewing contractor produced training

0 (zero) hours	1-4 hours	5-8 hours	9-16 hours	17 or more hours
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

11. Within the last year, approximately how many times have you needed to:

- a. revise a lesson plan and/or practical exercise
- b. develop new lesson plans and/or practical exercises
- c. revise a training course
- d. conduct a task analysis and/or design a new training course
- e. validate new training
- f. develop doctrine
- g. review contractor produced training

0 (zero) times	1-5 times	6-10 times	11-14 times	15 or more times
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

12. Within the last year, approximately how many times have you needed to do the following tasks, but were unable to do so because you didn't have the TIME to complete the task:

- a. revise a lesson plan and/or practical exercise
- b. develop new lesson plans and/or practical exercises
- c. revise a training course
- d. conduct a task analysis and/or design a new training course
- e. validate new training
- f. develop doctrine
- g. review contractor produced training

0 (zero) times	1-5 times	6-10 times	11-14 times	15 or more times
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

13. Within the last year, approximately how many times have you needed to do the following tasks, but were unable to do so because you didn't have the EXPERTISE to complete the task:

- a. revise a lesson plan and/or practical exercise
- b. develop new lesson plans and/or practical exercises
- c. revise a training course
- d. conduct a task analysis and/or design a new training course
- e. validate new training
- f. develop doctrine
- g. review contractor produced training

0 (zero) times	1-5 times	6-10 times	11-14 times	15 or more times
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐
☐	☐	☐	☐	☐

14. Within the last year, how many times have you been asked to determine whether a field exercise deficiency was a schoolhouse or unit problem?

- ☐ 0
- ☐ 1-3
- ☐ 4-6
- ☐ 7-9
- ☐ 10 or more

15. How many manhours would you need to develop one hour of traditional paper-based instruction?

- ☐ 1-10
- ☐ 11-25
- ☐ 26-40
- ☐ 41-49
- ☐ 50 or more

16. Was your answer to question 15:

- ☐ a guess
- ☐ based on previous experience developing traditional paper-based instruction

17. How many manhours would you need to develop one hour of multimedia instruction?

- ☐ 1-25
- ☐ 26-50
- ☐ 51-100
- ☐ 101-200
- ☐ 201 or more

18. Was your answer to question 17:

- ☐ a guess
- ☐ based on previous experience developing multimedia instruction

19. What impact will the recent (or anticipated) decrease in the number of training developers have on the quality of training at your post?
- ☐ Negative impact
 - ☐ No impact
 - ☐ Positive impact
 - ☐ Not sure
20. Do you use any type of computer assisted or automated training development system when you develop instruction?
- ☐ Yes
 - ☐ No
 - ☐ Not sure
21. In the past year have you been required to make changes in the training materials which you thought were not really necessary?
- ☐ Yes
 - ☐ No
 - ☐ Not sure
22. Have you ever had training in the Systems Approach to Training (SAT) and/or Instructional Systems Design (ISD)?
- ☐ Yes
 - ☐ No
 - ☐ Not sure
23. On 1 October 1994 will you be responsible for developing any Soldier Development Tests (SDT)?
- ☐ Yes
 - ☐ No
 - ☐ Not sure

If you are an INSTRUCTOR (civilian or military), please proceed to Question 24.

If you are not an instructor, but you are MILITARY PERSONNEL, please skip to Question 28.

If you are not an instructor, and you are a CIVILIAN, you have completed the questionnaire.

FOR INSTRUCTORS ONLY:

24. Within an average work week, how many hours do you spend on platform instructing students?
- ☐ 0
 - ☐ 1-16
 - ☐ 17-24
 - ☐ 25-40
 - ☐ More than 40
25. How much time do you have between class sessions?
- ☐ 0
 - ☐ Less than one week
 - ☐ 1 week
 - ☐ 2 weeks
 - ☐ More than 2 weeks
26. How much time between class sessions do you spend developing training?
- ☐ 0
 - ☐ Less than one week
 - ☐ 1 week
 - ☐ 2 weeks
 - ☐ More than 2 weeks
27. What is the average number of students in the classes you instruct?
- ☐ 10-15
 - ☐ 16-25
 - ☐ 26-35
 - ☐ 36-44
 - ☐ 45 or more

FOR MILITARY PERSONNEL ONLY:

28. How long will your tour of duty be at your current job?
- ☐ 1 year
 - ☐ 2 years
 - ☐ 3 years
 - ☐ 4 years
 - ☐ More than 4 years
29. Do you hold the proper Additional Skill Identifier (ASI) to be an instructor?
- ☐ Yes
 - ☐ No

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE!

Appendix B
Respondents by Location

Table B-1

Respondents by Location

Location		CI	MI	CD	MD	CB	MB	UK	Total
Aber	OnBoard	60	470	81	185				805
	Questionnaires Mailed	19			59				256
	Questionnaires Valid	12	99	3	9	8	23	1	155
	% Valid Return								61%
Ben	OnBoard	2	1,357	76	53				1,488
	Questionnaires Mailed	2	407	23	16				448
	Questionnaires Valid	20	165	2	7	2	37	4	237
	% Valid Return								53%
Blis	OnBoard	44	299	40	38				421
	Questionnaires Mailed	13	91	12	12				128
	Questionnaires Valid	11	62	9	5	11	25	2	125
	% Valid Return								98%
Brag	OnBoard	67	516	69	102				754
	Questionnaires Mailed	20	153	21	30				224
	Questionnaires Valid	19	101	15	17	9	39	4	204
	% Valid Return								91%
Eus	On Board	59	502	48	141				750
	Questionnaires Mailed	18	150	14	42				224
	Questionnaires Valid	18	85	38	13	6	25	2	187
	% Valid Return								83%
Gor	OnBoard	158	937	46	190				1,331
	Questionnaires Valid	46	270	13	55				384
	Questionnaires Valid	27	195	16	42	23	57	1	361
	% Valid Return								94%
Hua	OnBoard	35	292	57	304				688
	Questionnaires Mailed	11	95	19	99				224
	Questionnaires Valid	5	53	19	61	9	42	1	190
	% Valid Return								85%
Knox	OnBoard	104	794	63	73				1,034
	Questionnaires Mailed	32	246	20	22				320
	Questionnaires Valid	32	177	14	2	10	58	4	297
	% Valid Return								93%
Leav	OnBoard	43	238	10	19				310
	Questionnaires Mailed	13	74	3	6				96
	Questionnaires Valid	7	41	1	3	4	12	1	69
	% Valid Return								72%

Notes. 1. CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both, UK = Unknown.

2. Aber = Aberdeen Proving Grounds, Ben = Fort Benning, Blis = Fort Bliss, Brag = Fort Bragg, Eus = Fort Eustis, Gor = Fort Gordon, Hua = Fort Huachuca, Knox = Fort Knox, Leav = Fort Leavenworth, Lee = Fort Lee, LeoWo = Fort Leonard Wood, McCl = Fort McClellan, Mon = Fort Monmouth, Reds = Redstone Arsenal, Ruck = Fort Rucker, Sill = Fort Sill.

Table B-1 (Continued)

Location		CI	MI	CD	MD	CB	MB	UK	Total
Lee	OnBoard	6	474	36	28				544
	Questionnaires Mailed	2	139	11	8				160
	Questionnaires Valid	7	76	11	6	4	22	0	126
	% Valid Return								79%
LeoWo	On Board	36	548	22	57				663
	Questionnaires Mailed	10	158	7	17				192
	Questionnaires Valid	9	113	6	19	8	30	1	186
	% Valid Return								97%
McCl	OnBoard	12	303	30	75				420
	Questionnaires Valid	2	63	9	13	7	31	1	126
	Questionnaires Valid	2	63	9	13	7	31	0	125
	% Valid Return								98%
Mon	OnBoard	0	26	21	30				77
	Questionnaires Mailed	0	11	9	12				32
	Questionnaires Valid	0	9	4	2	3	7	1	26
	% Valid Return								81%
Reds	OnBoard	50	234	60	95				439
	Questionnaires Mailed	15	68	17	28				128
	Questionnaires Valid	9	41	7	1	15	32	2	107
	% Valid Return								84%
Ruck	OnBoard	52	117	77	119				365
	Questionnaires Mailed	14	31	20	31				96
	Questionnaires Valid	8	14	11	1	13	29	0	76
	% Valid Return								79%
Sill	OnBoard	58	314	53	86				511
	Questionnaires Mailed	18	98	17	27				160
	Questionnaires Valid	7	60	19	11	16	46	0	160
	% Valid Return								100%
Unattributable								13	13
Total Onboard		786	7,430	789	1,595				10,600
Questionnaires Mailed		237	2,235	241	487				3,200
Questionnaires Valid		193	1,354	184	212	148	515	38	2,644
Total % Valid Return									83%

Notes. 1. CI = Civilian Instructor, MI = Military Instructor, CD = Civilian Training Developer, MD = Military Training Developer, CB = Civilian/Both, MB = Military/Both, UK = Unknown.

2. Aber = Aberdeen Proving Grounds, Ben = Fort Benning, Bliss = Fort Bliss, Bragg = Fort Bragg, Eus = Fort Eustis, Gor = Fort Gordon, Hua = Fort Huachuca, Knox = Fort Knox, Leav = Fort Leavenworth, Lee = Fort Lee, LeoWo = Fort Leonard Wood, McCl = Fort McClellan, Mon = Fort Monmouth, Reds = Redstone Arsenal, Ruck = Fort Rucker, Sill = Fort Sill.

Appendix C
Military Occupational Specialty

AA1 Military Occupational Specialty

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
		490	18.5	18.5	18.5
B		1	.0	.0	18.6
6E		1	.0	.0	18.6
6T		1	.0	.0	18.6
00B		1	.0	.0	18.7
1		1	.0	.0	18.7
11		1	.0	.0	18.8
11*		10	.4	.4	19.1
11A		11	.4	.4	19.6
11B		95	3.6	3.6	23.1
11C		23	.9	.9	24.0
11D		1	.0	.0	24.1
11H		22	.8	.8	24.9
11M		87	3.3	3.3	28.2
11S		1	.0	.0	28.2
12*		2	.1	.1	28.3
12A		12	.5	.5	28.7
12B		34	1.3	1.3	30.0
12C		13	.5	.5	30.5
12F		9	.3	.3	30.9
12Z		1	.0	.0	30.9
13		1	.0	.0	30.9
13*		1	.0	.0	31.0
13A		27	1.0	1.0	32.0
13B		27	1.0	1.0	33.0
13C		8	.3	.3	33.3
13E		7	.3	.3	33.6
13F		15	.6	.6	34.2
13M		8	.3	.3	34.5
13P		9	.3	.3	34.8
13R		4	.2	.2	34.9
14		1	.0	.0	35.0
14A		9	.3	.3	35.3
14B		1	.0	.0	35.4
14D		5	.2	.2	35.6
14J		7	.3	.3	35.8
14R		8	.3	.3	36.1
14S		24	.9	.9	37.0
15		4	.2	.2	37.2
15A		4	.2	.2	37.3
15B		12	.5	.5	37.8
15C		1	.0	.0	37.8
15D		2	.1	.1	37.9
16P		1	.0	.0	37.9
16T		17	.6	.6	38.6
16Z		1	.0	.0	38.6
18		1	.0	.0	38.7

18*	4	.2	.2	38.8
18A	9	.3	.3	39.1
18B	42	1.6	1.6	40.7
18C	18	.7	.7	41.4
18D	25	.9	.9	42.4
18E	7	.3	.3	42.6
18F	29	1.1	1.1	43.7
18O	1	.0	.0	43.8
18Z	4	.2	.2	43.9
19*	1	.0	.0	43.9
19D	56	2.1	2.1	46.1
19K	63	2.4	2.4	48.4
19Z	2	.1	.1	48.5
21A	2	.1	.1	48.6
21B	10	.4	.4	49.0
23R	6	.2	.2	49.2
24K	1	.0	.0	49.2
24N	2	.1	.1	49.3
24R	1	.0	.0	49.4
24T	21	.8	.8	50.2
25	4	.2	.2	50.3
25B	1	.0	.0	50.3
25C	9	.3	.3	50.7
25O	1	.0	.0	50.7
27*	3	.1	.1	50.8
27B	1	.0	.0	50.9
27E	5	.2	.2	51.1
27F	1	.0	.0	51.1
27G	1	.0	.0	51.1
27H	5	.2	.2	51.3
27J	4	.2	.2	51.5
27K	1	.0	.0	51.5
27M	3	.1	.1	51.6
27T	4	.2	.2	51.8
27X	1	.0	.0	51.8
27Z	2	.1	.1	51.9
29*	1	.0	.0	51.9
29E	11	.4	.4	52.3
29J	3	.1	.1	52.5
29N	3	.1	.1	52.6
29S	7	.3	.3	52.8
29V	3	.1	.1	53.0
29W	12	.5	.5	53.4
29Y	4	.2	.2	53.6
31	3	.1	.1	53.7
31*	4	.2	.2	53.8
31A	6	.2	.2	54.0
31C	13	.5	.5	54.5
31D	2	.1	.1	54.6
31F	5	.2	.2	54.8
31L	14	.5	.5	55.3
31M	18	.7	.7	56.0
31N	3	.1	.1	56.1

AA1

Military Occupational Specialty

31P	21	.8	.8	56.9
31S	23	.9	.9	57.8
31U	49	1.9	1.9	59.6
31W	19	.7	.7	60.4

31Y	23	.9	.9	61.2
33R	8	.3	.3	61.5
33T	3	.1	.1	61.6
33Y	11	.4	.4	62.1
33Z	1	.0	.0	62.1
35	4	.2	.2	62.3
35A	1	.0	.0	62.3
35B	1	.0	.0	62.3
35C	2	.1	.1	62.4
35D	8	.3	.3	62.7
35G	2	.1	.1	62.8
35H	2	.1	.1	62.9
35Y	2	.1	.1	62.9
36L	2	.1	.1	63.0
37F	4	.2	.2	63.2
39*	2	.1	.1	63.2
39B	6	.2	.2	63.5
39C	4	.2	.2	63.6
39D	1	.0	.0	63.7
39E	3	.1	.1	63.8
39G	4	.2	.2	63.9
39V	3	.1	.1	64.0
42A	1	.0	.0	64.1
42B	1	.0	.0	64.1
43E	7	.3	.3	64.4
43M	2	.1	.1	64.4
44E	23	.9	.9	65.3
45B	1	.0	.0	65.4
45D	1	.0	.0	65.4
45E	1	.0	.0	65.4
45K	28	1.1	1.1	66.5
51*	2	.1	.1	66.6
51H	13	.5	.5	67.1
51M	1	.0	.0	67.1
51T	2	.1	.1	67.2
52C	12	.5	.5	67.6
52D	13	.5	.5	68.1
52G	1	.0	.0	68.2
52X	13	.5	.5	68.6
53B	2	.1	.1	68.7
54*	1	.0	.0	68.8
54B	59	2.2	2.2	71.0
55A	1	.0	.0	71.0
55B	17	.6	.6	71.7
55D	5	.2	.2	71.9
55Z	1	.0	.0	71.9
56A	13	.5	.5	72.4
57E	3	.1	.1	72.5
57F	1	.0	.0	72.5

AA1 Military Occupational Specialty

6 T	1	.0	.0	72.6
62	1	.0	.0	72.6
62*	1	.0	.0	72.7
62B	17	.6	.6	73.3
62G	1	.0	.0	73.3
62N	21	.8	.8	74.1
63	1	.0	.0	74.2
63*	3	.1	.1	74.3
63B	13	.5	.5	74.8

63D	11	.4	.4	75.2
63E	42	1.6	1.6	76.8
63H	30	1.1	1.1	77.9
63T	41	1.6	1.6	79.5
63Z	1	.0	.0	79.5
67B	2	.1	.1	79.6
67J	1	.0	.0	79.6
67N	5	.2	.2	79.8
67R	9	.3	.3	80.1
67S	4	.2	.2	80.3
67T	61	2.3	2.3	82.6
67U	19	.7	.7	83.3
67V	4	.2	.2	83.5
67Y	11	.4	.4	83.9
68*	2	.1	.1	84.0
68F	3	.1	.1	84.1
68J	16	.6	.6	84.7
68K	1	.0	.0	84.7
68L	3	.1	.1	84.8
68N	2	.1	.1	84.9
68P	7	.3	.3	85.2
68Q	2	.1	.1	85.2
68R	1	.0	.0	85.3
68X	8	.3	.3	85.6
71*	1	.0	.0	85.6
71L	1	.0	.0	85.7
71M	8	.3	.3	86.0
73C	1	.0	.0	86.0
74*	2	.1	.1	86.1
74A	5	.2	.2	86.3
74B	1	.0	.0	86.3
74C	8	.3	.3	86.6
74D	11	.4	.4	87.0
74F	9	.3	.3	87.4
77F	13	.5	.5	87.9
77L	1	.0	.0	87.9
81C	1	.0	.0	87.9
81Q	1	.0	.0	88.0
82C	4	.2	.2	88.1
83F	1	.0	.0	88.2
88A	1	.0	.0	88.2
88M	19	.7	.7	88.9
88Z	2	.1	.1	89.0
9 A	1	.0	.0	89.0

AA1 Military Occupational Specialty

9 Y	1	.0	.0	89.1
9*Y	1	.0	.0	89.1
90	2	.1	.1	89.2
91	3	.1	.1	89.3
91B	8	.3	.3	89.6
91C	1	.0	.0	89.6
91D	8	.3	.3	89.9
91E	1	.0	.0	90.0
91S	1	.0	.0	90.0
92A	17	.6	.6	90.7
92B	4	.2	.2	90.8
92D	1	.0	.0	90.8
92G	1	.0	.0	90.9
92Y	31	1.2	1.2	92.1

93C	2	.1	.1	92.1
93D	6	.2	.2	92.4
93F	2	.1	.1	92.4
93P	1	.0	.0	92.5
94B	43	1.6	1.6	94.1
95*	1	.0	.0	94.1
95B	31	1.2	1.2	95.3
95C	6	.2	.2	95.5
95D	4	.2	.2	95.7
96*	1	.0	.0	95.7
96B	18	.7	.7	96.4
96D	7	.3	.3	96.7
96H	6	.2	.2	96.9
96R	2	.1	.1	97.0
97*	1	.0	.0	97.0
97B	13	.5	.5	97.5
97E	3	.1	.1	97.6
97G	2	.1	.1	97.7
98	1	.0	.0	97.7
98*	2	.1	.1	97.8
98C	7	.3	.3	98.1
98D	4	.2	.2	98.2
98G	24	.9	.9	99.1
98H	8	.3	.3	99.4
98J	6	.2	.2	99.7
98K	8	.3	.3	100.0
98Z	1	.0	.0	100.0

	-----	-----	-----
Total	2644	100.0	100.0

Valid cases 2644

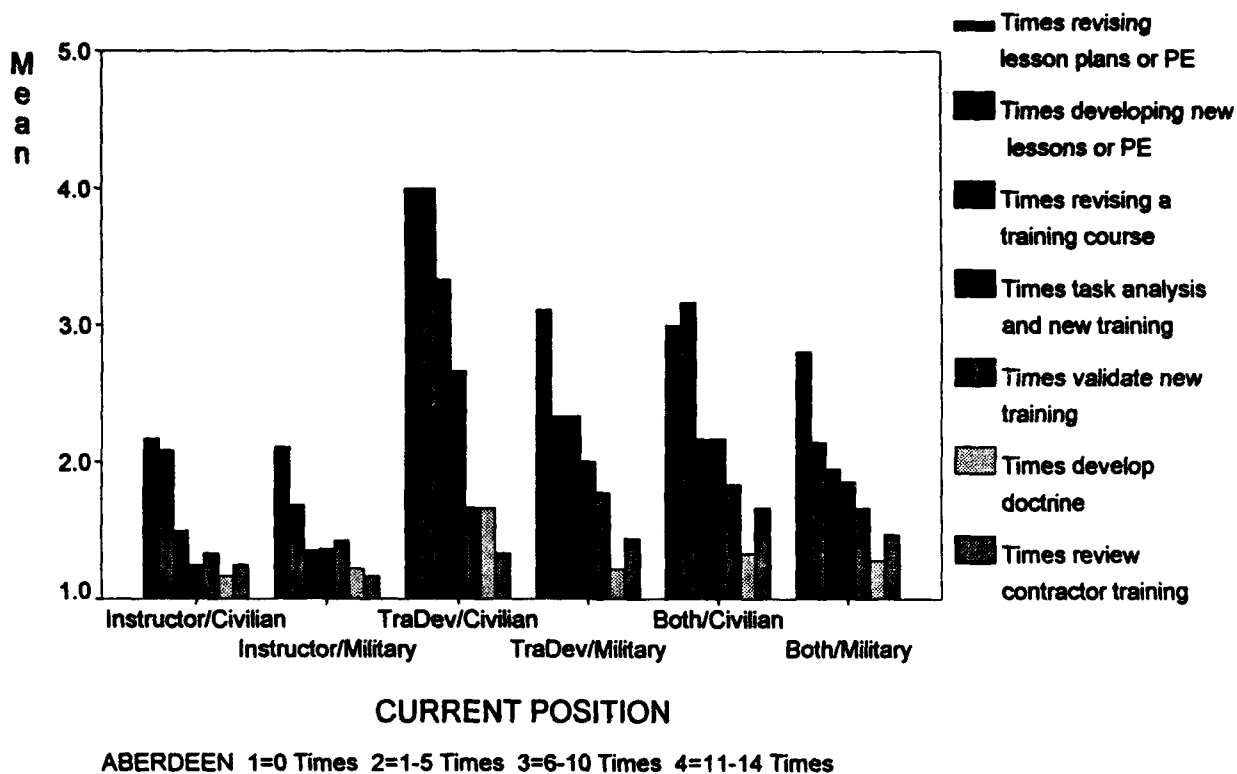
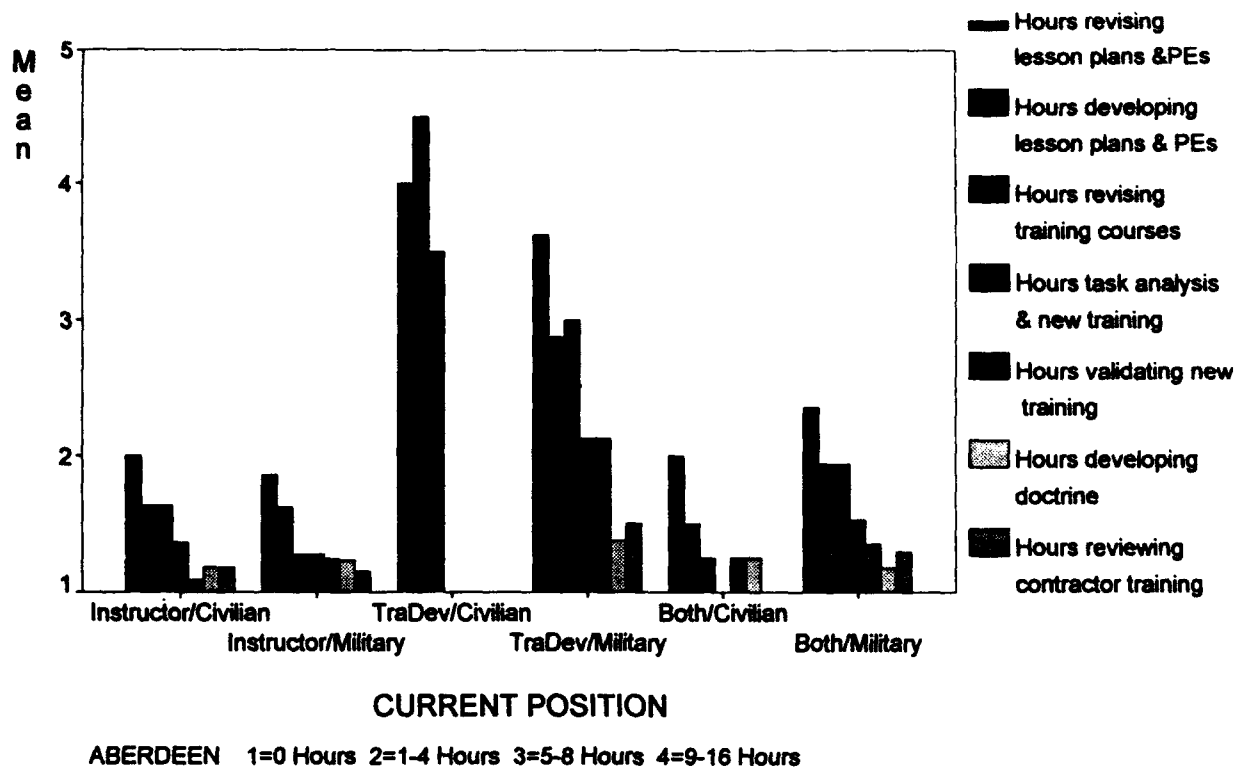
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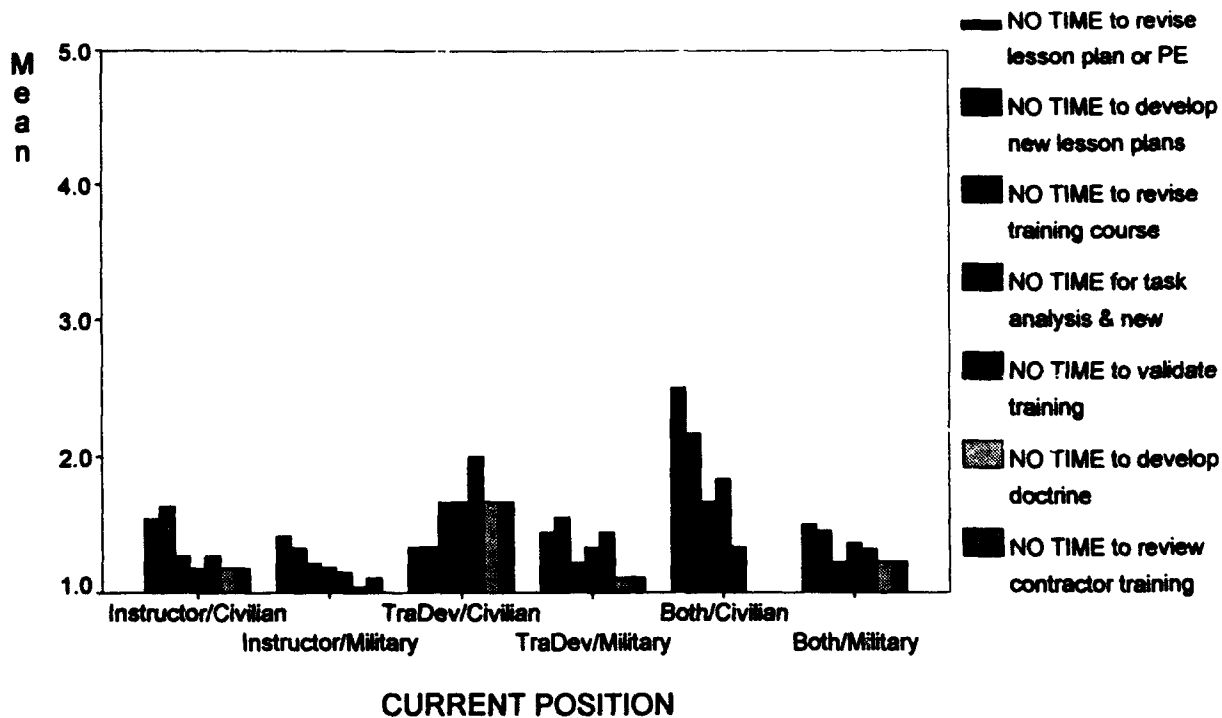
Appendix D
Aberdeen Proving Grounds

ABERDEEN PROVING GROUNDS

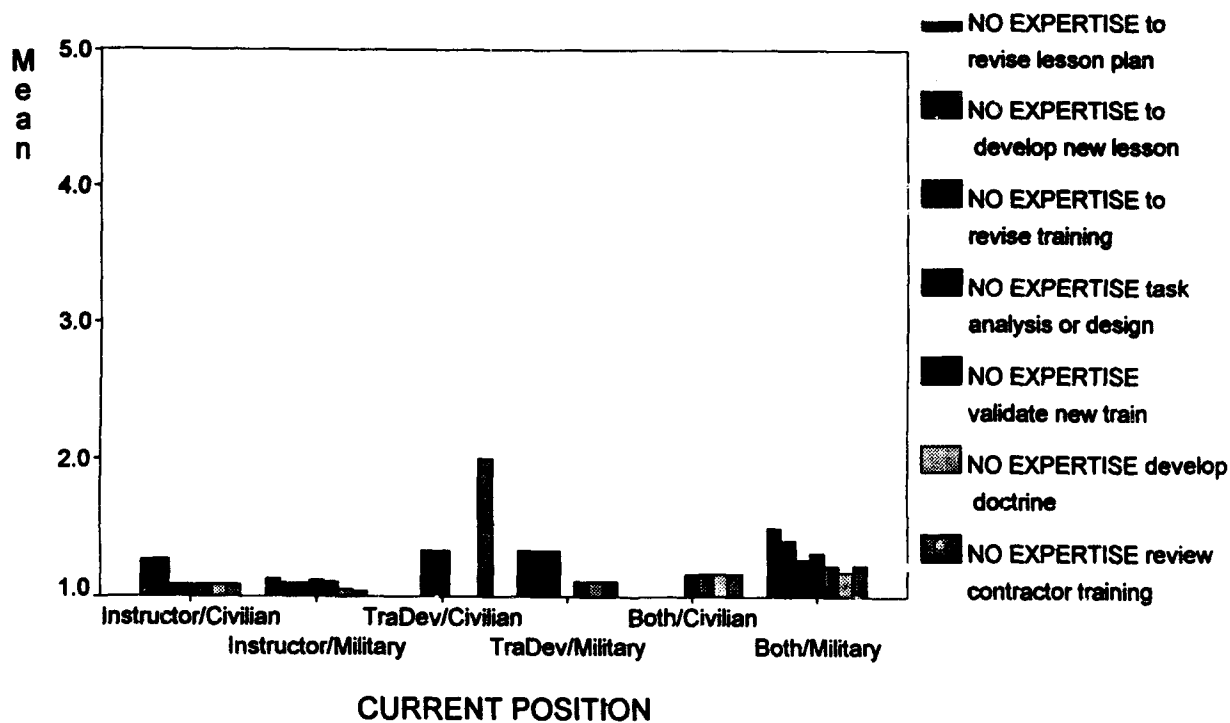
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	12	7.7	7.8	7.8
Instructor/Military	2.00	99	63.9	64.3	72.1
TraDev/Civilian	3.00	3	1.9	1.9	74.0
TraDev/Military	4.00	9	5.8	5.8	79.9
Both/Civilian	5.00	8	5.2	5.2	85.1
Both/Military	6.00	23	14.8	14.9	100.0
.		1	.6	Missing	
		-----	-----	-----	
Total		155	100.0	100.0	
Valid cases	154	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



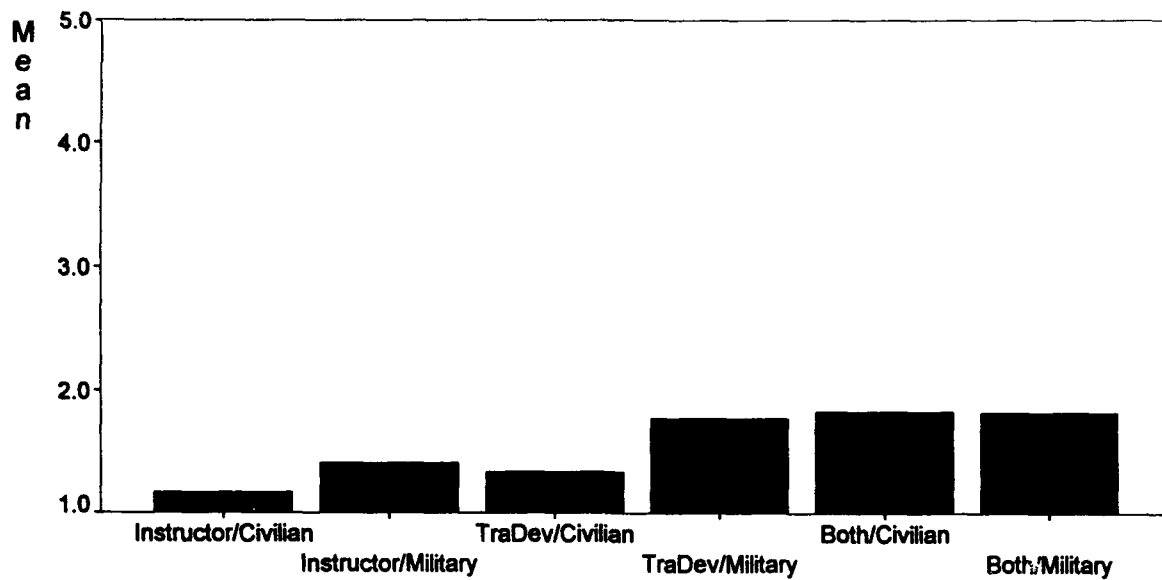


ABERDEEN 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



ABERDEEN 1= 0 Times 2=1-5 Times 3=6-10 Times

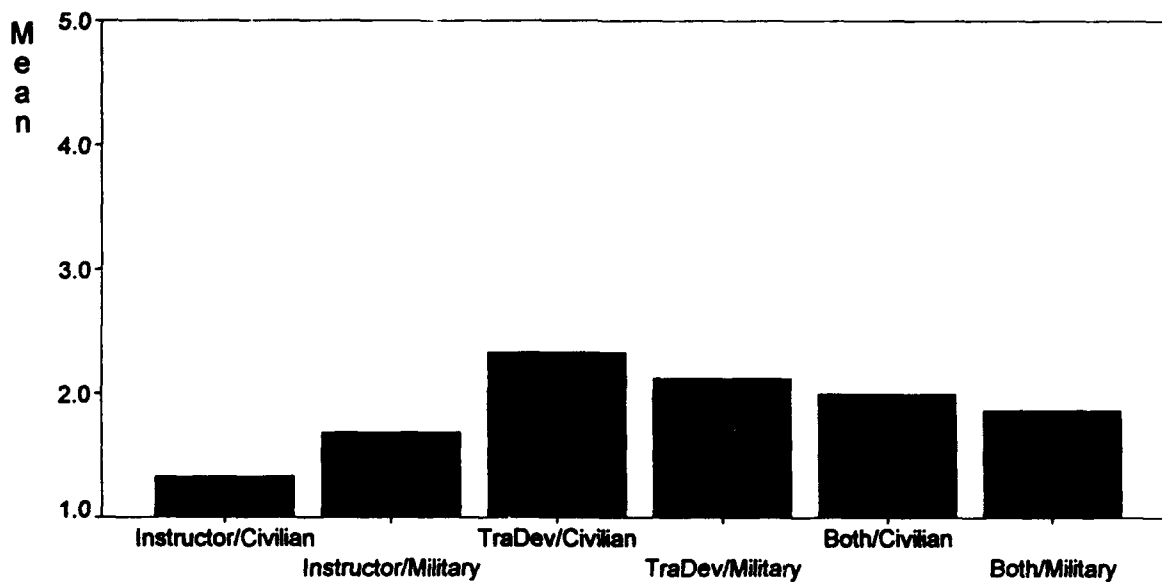
MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

ABERDEEN 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

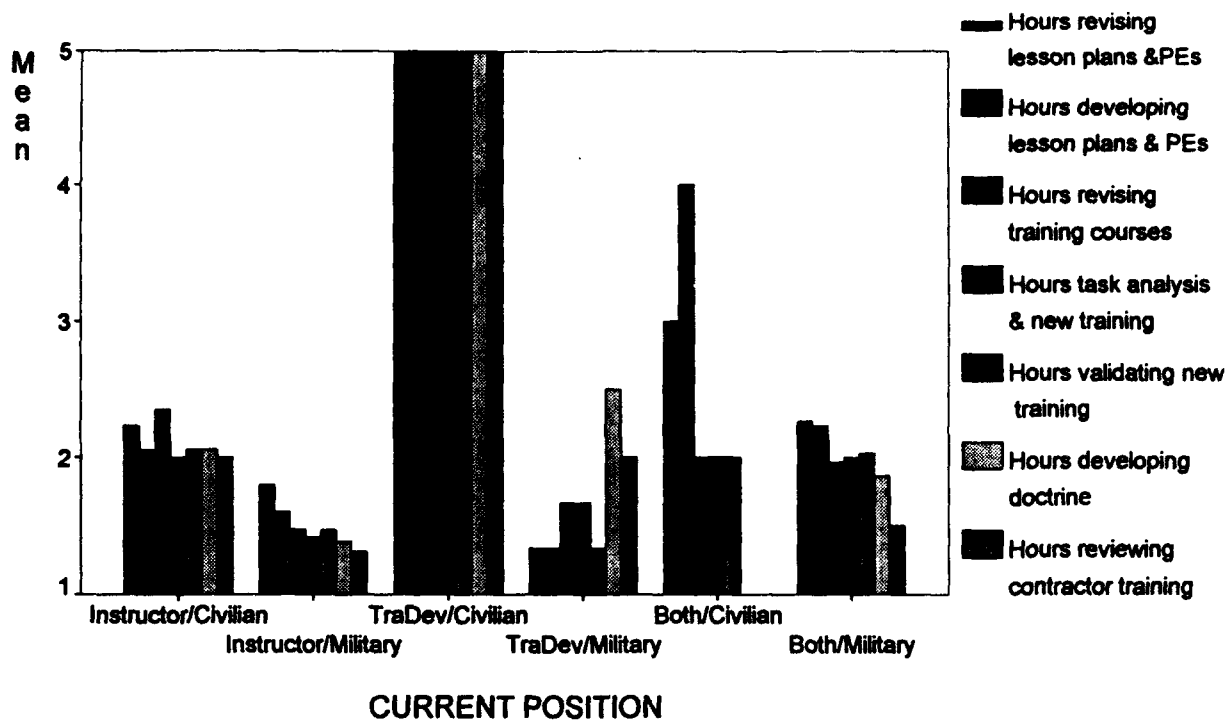
ABERDEEN 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

Appendix E
Fort Benning

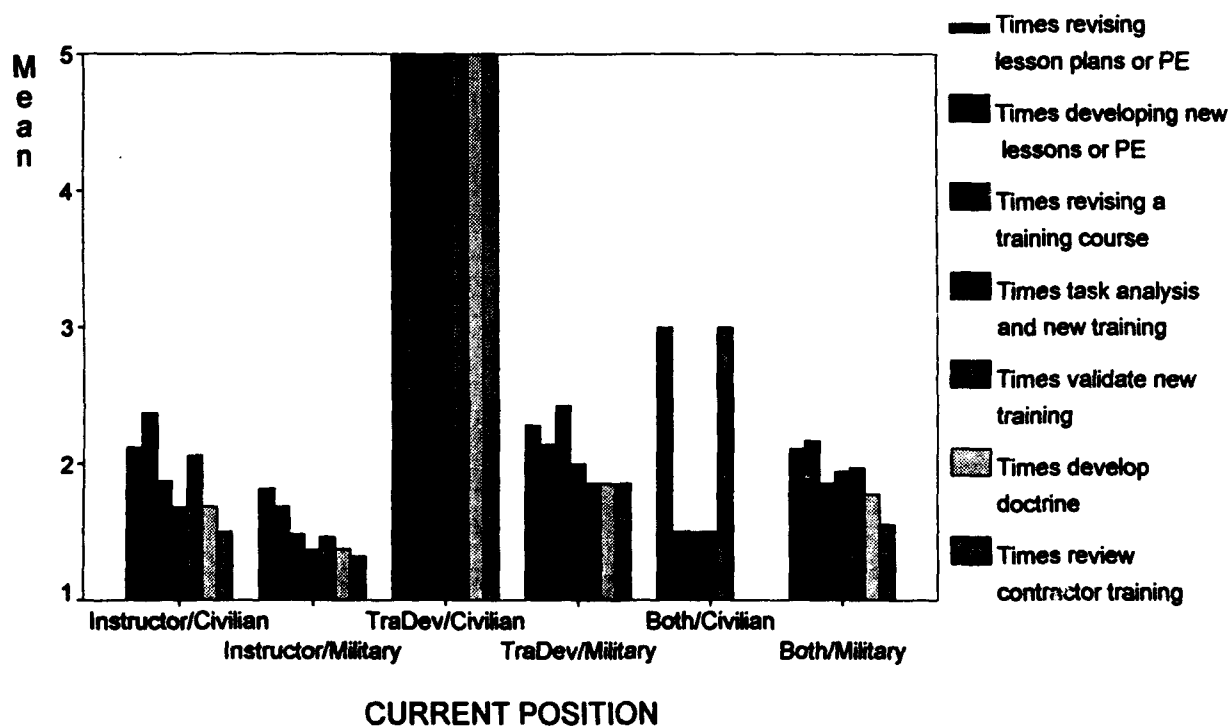
FT. BENNING

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	20	8.4	8.6	8.6
Instructor/Military	2.00	165	69.6	70.8	79.4
TraDev/Civilian	3.00	2	.8	.9	80.3
TraDev/Military	4.00	7	3.0	3.0	83.3
Both/Civilian	5.00	2	.8	.9	84.1
Both/Military	6.00	37	15.6	15.9	100.0
.	.	4	1.7	Missing	
Total		237	100.0	100.0	
Valid cases	233	Missing cases	4		

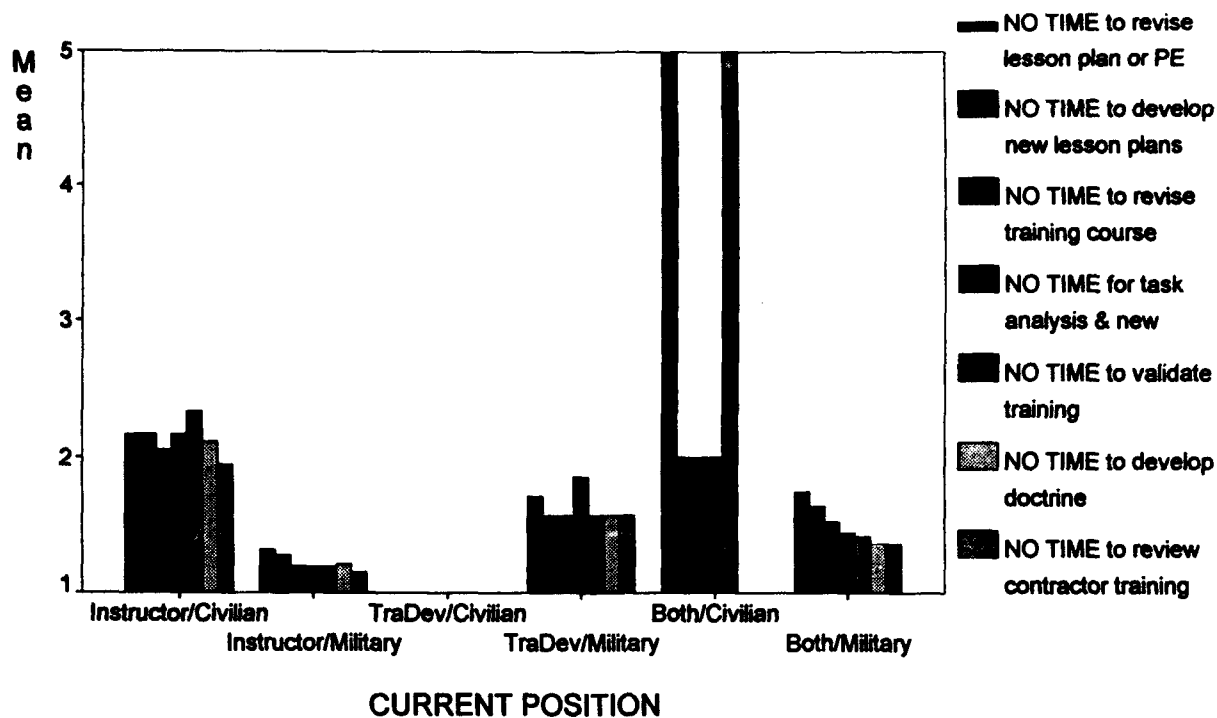
Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



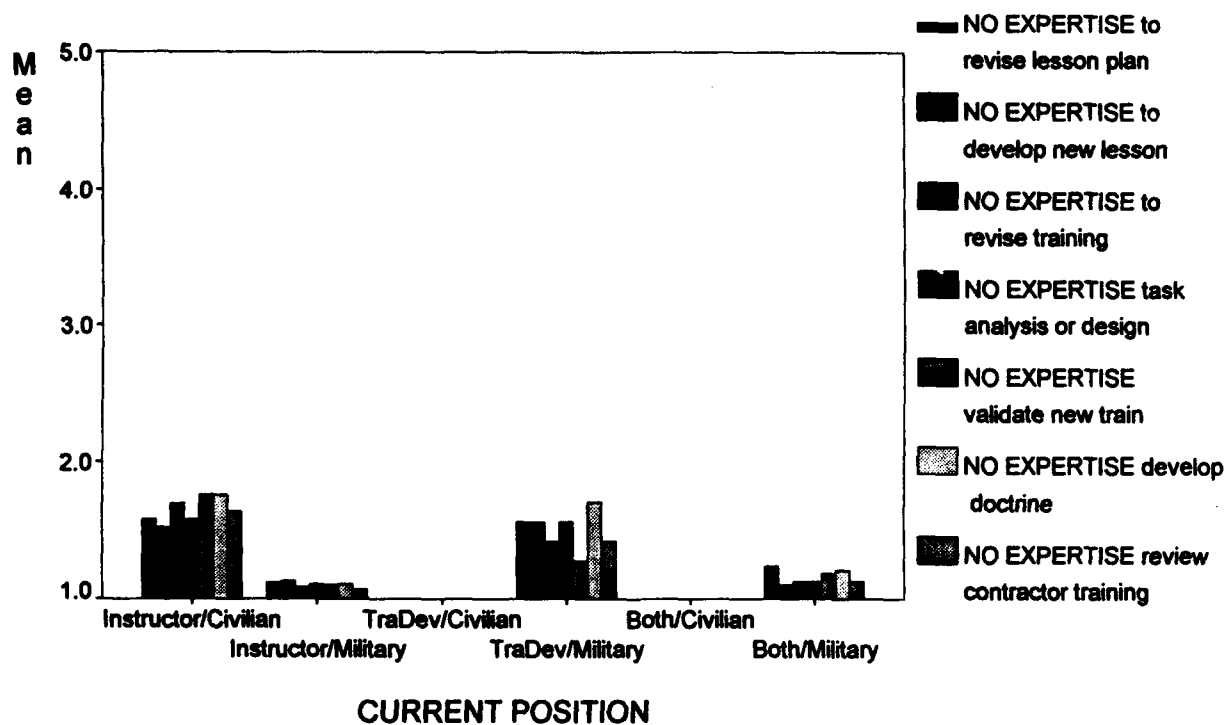
BENNING 1=0 Hours 2=1-4 Hours 3=5-8 Hours 4=9-16 Hours 5>16 Hours



BENNING 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times 5=>15

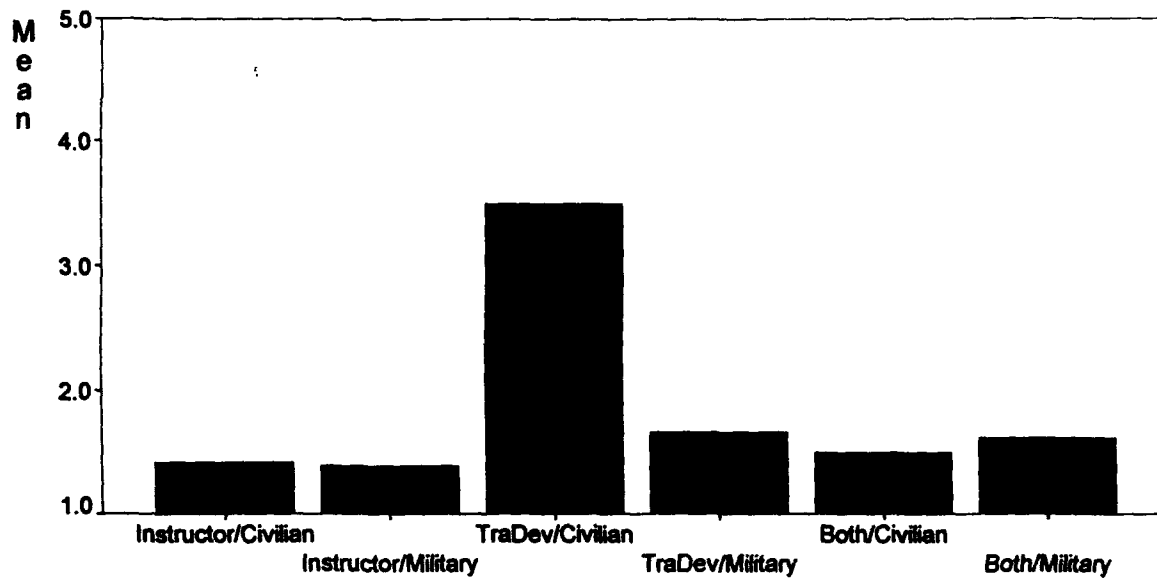


BENNING 1=0 Times 2= 1-5 Times 3=6-10 Times 4=11-14 Times 5=>15



BENNING 1= 0 Times 2= 1-5 Times 3=6-10 Times

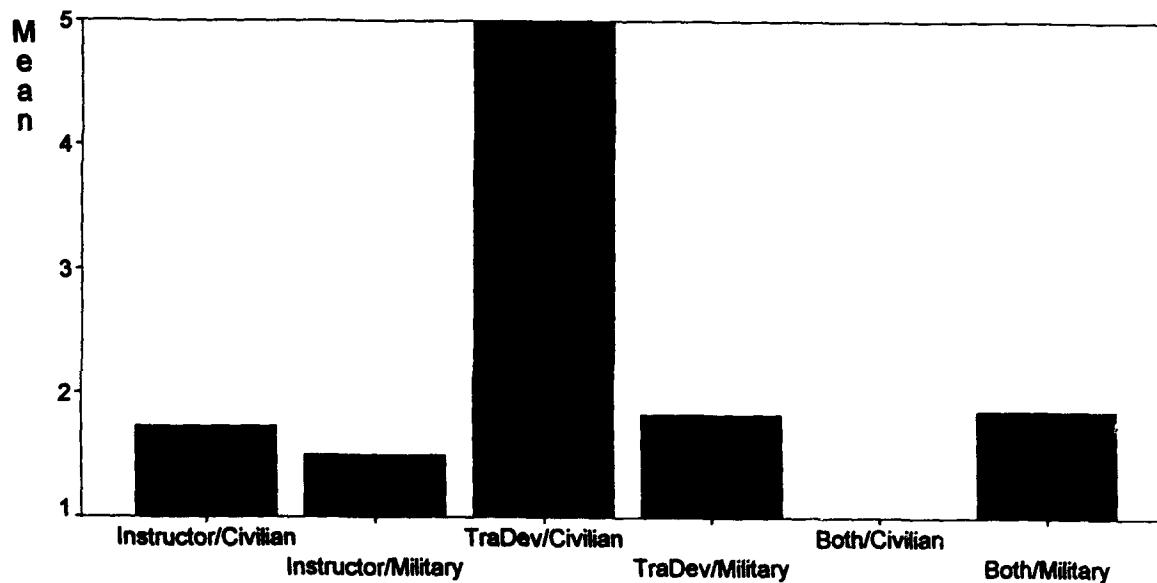
MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

BENNING 1=10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOURS MULTIMEDIA



CURRENT POSITION

BENNING 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

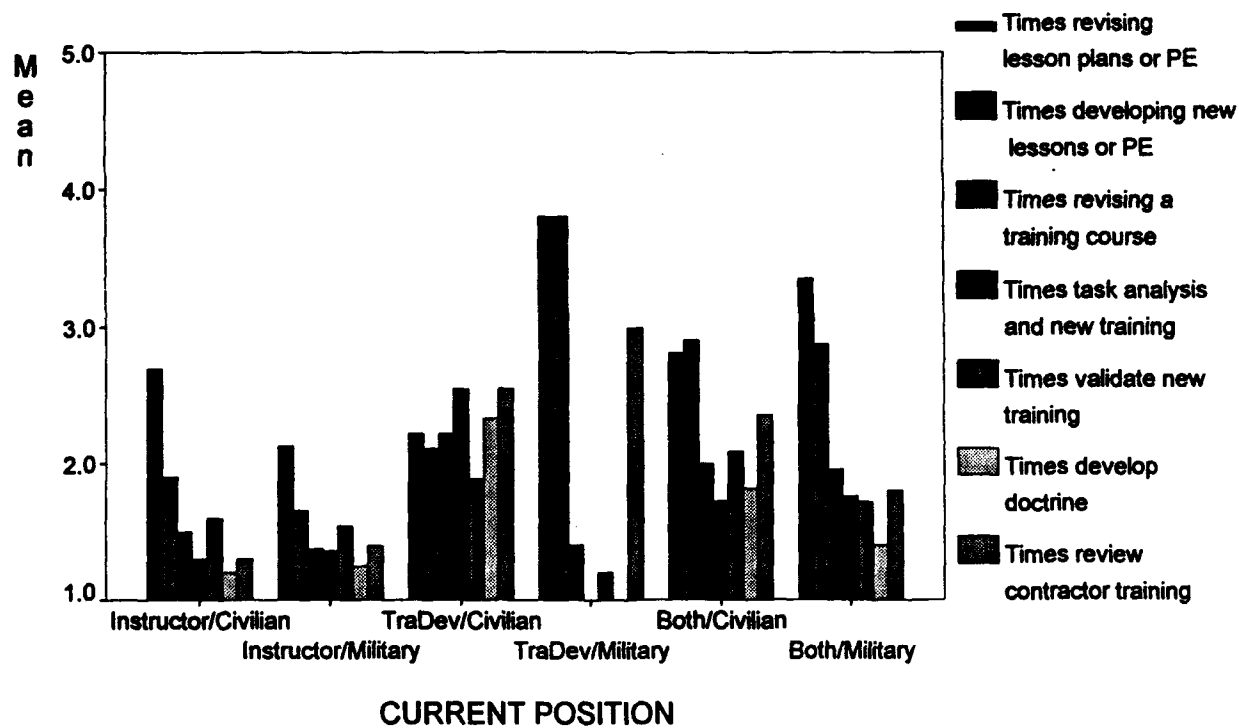
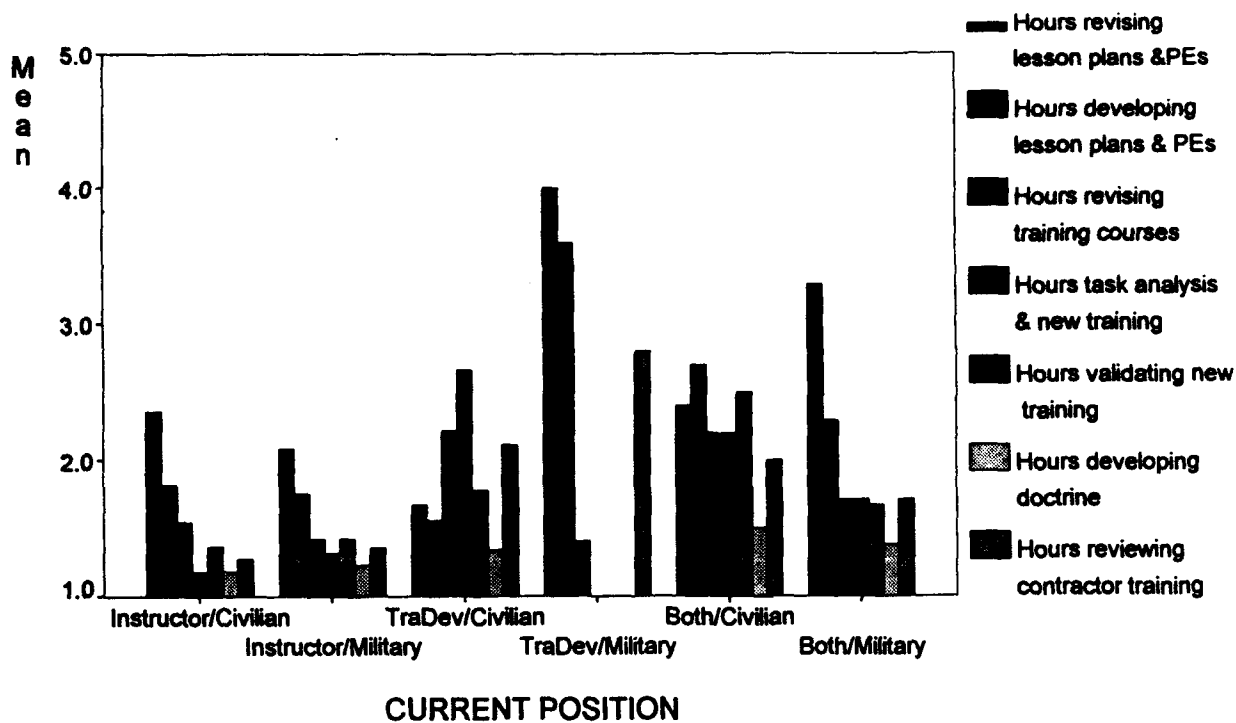
Appendix F

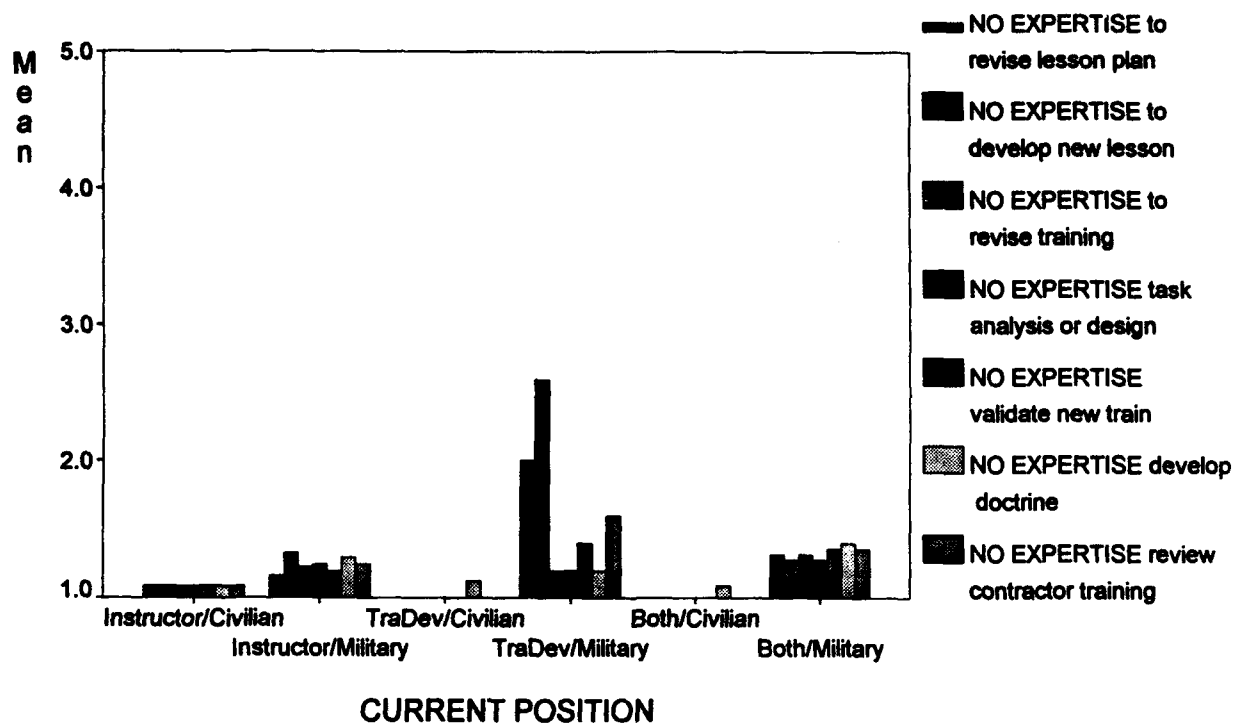
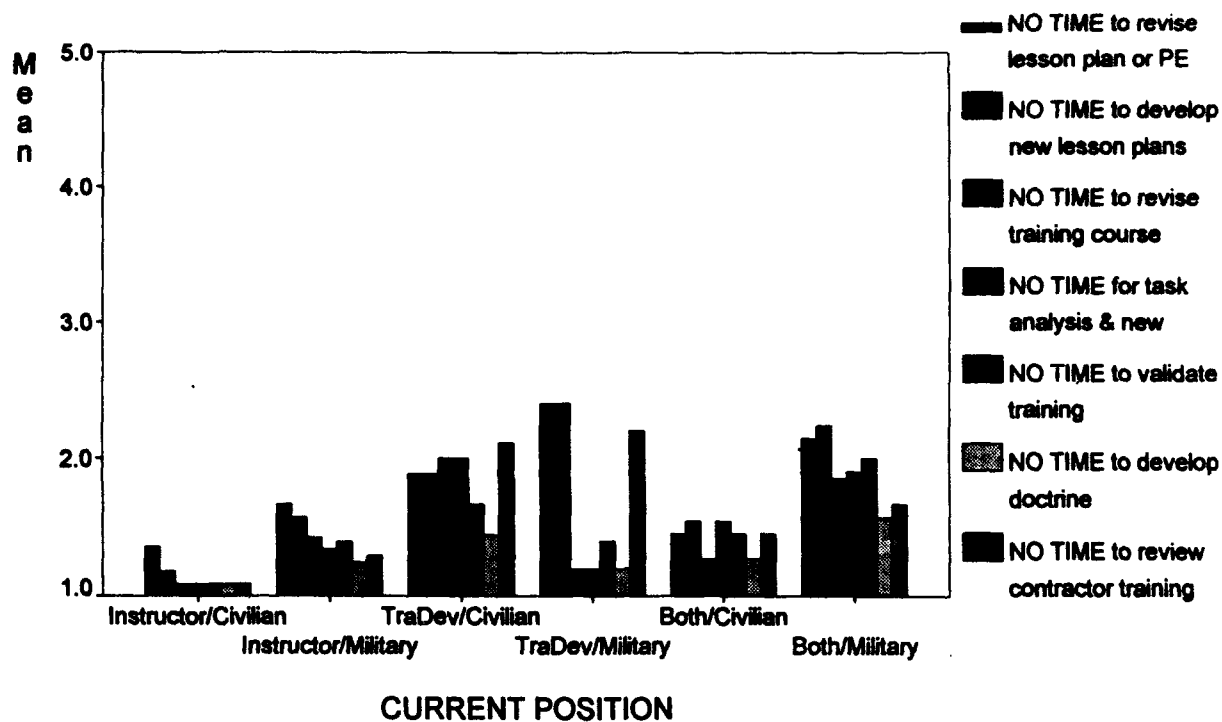
Fort Bliss

FT. BLISS

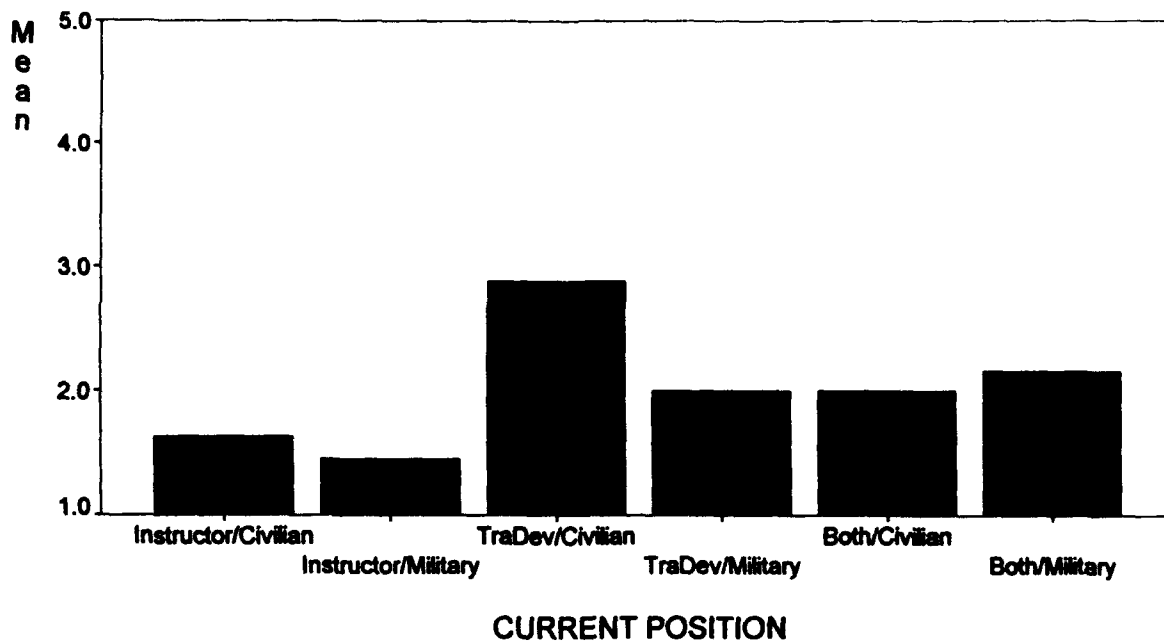
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	11	8.8	8.9	8.9
Instructor/Military	2.00	62	49.6	50.4	59.3
TraDev/Civilian	3.00	9	7.2	7.3	66.7
TraDev/Military	4.00	5	4.0	4.1	70.7
Both/Civilian	5.00	11	8.8	8.9	79.7
Both/Military	6.00	25	20.0	20.3	100.0
.		2	1.6	Missing	
		-----	-----	-----	
Total		125	100.0	100.0	
Valid cases	123	Missing cases	2		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



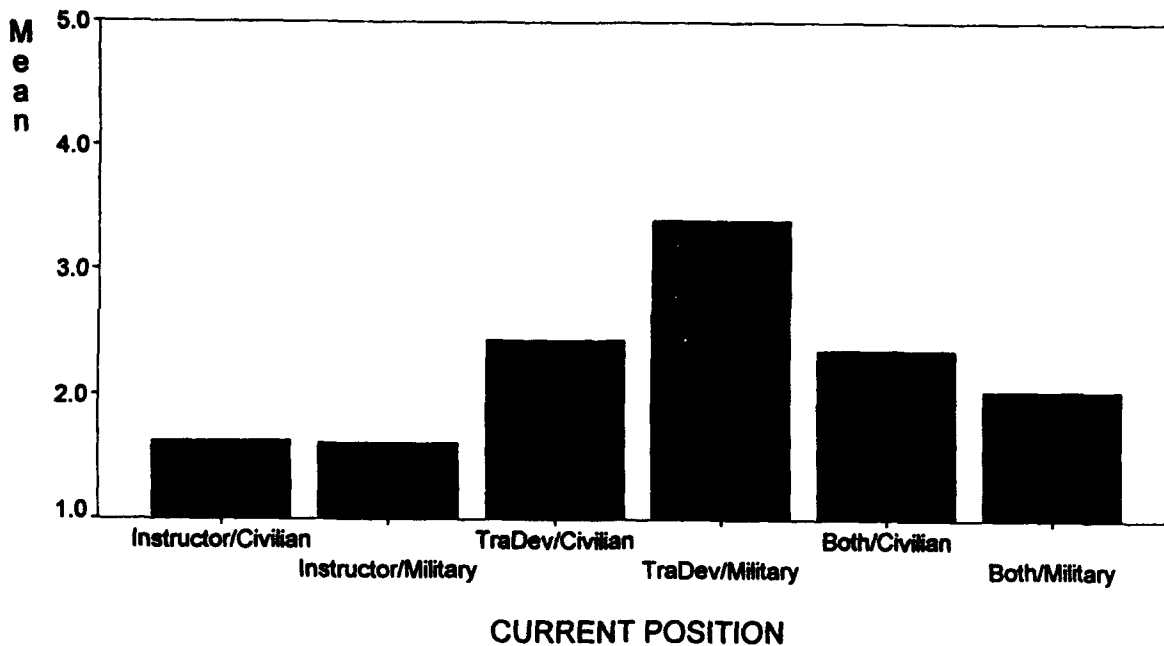


MANHOURS 1 HOUR PAPER-BASED



BLISS 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



BLISS 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

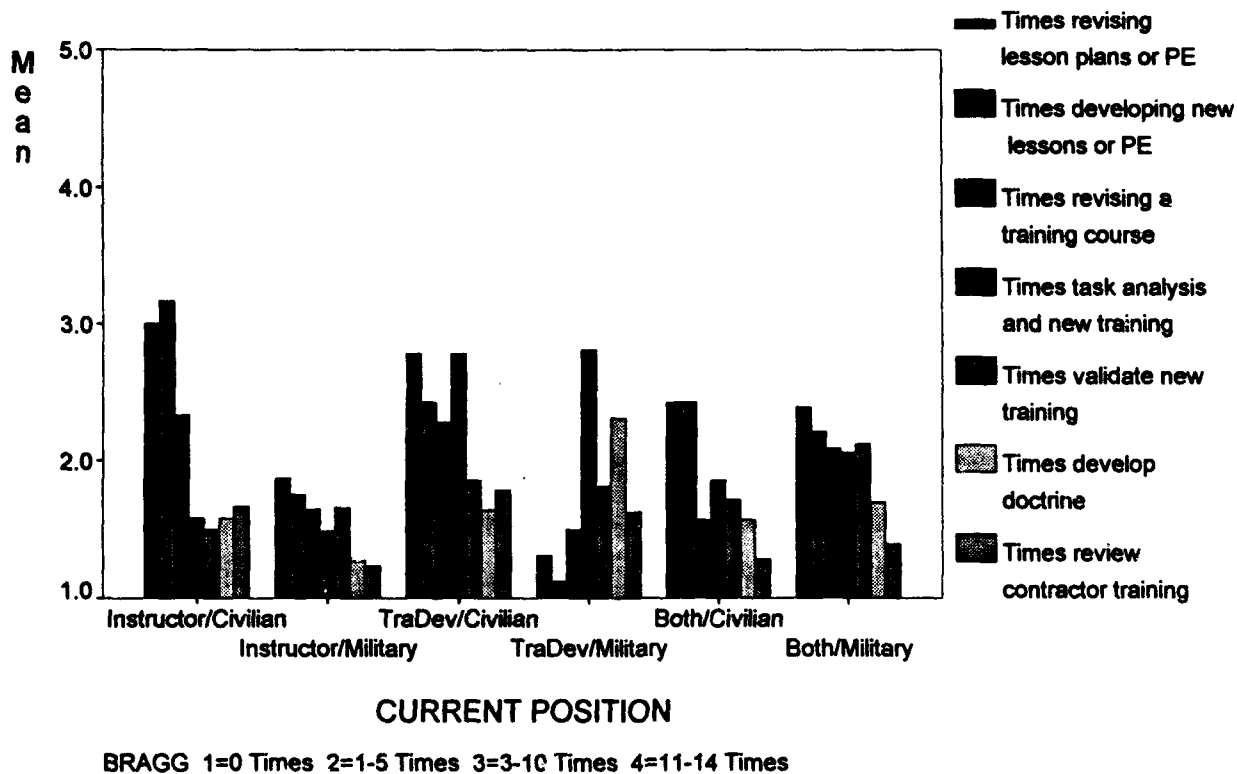
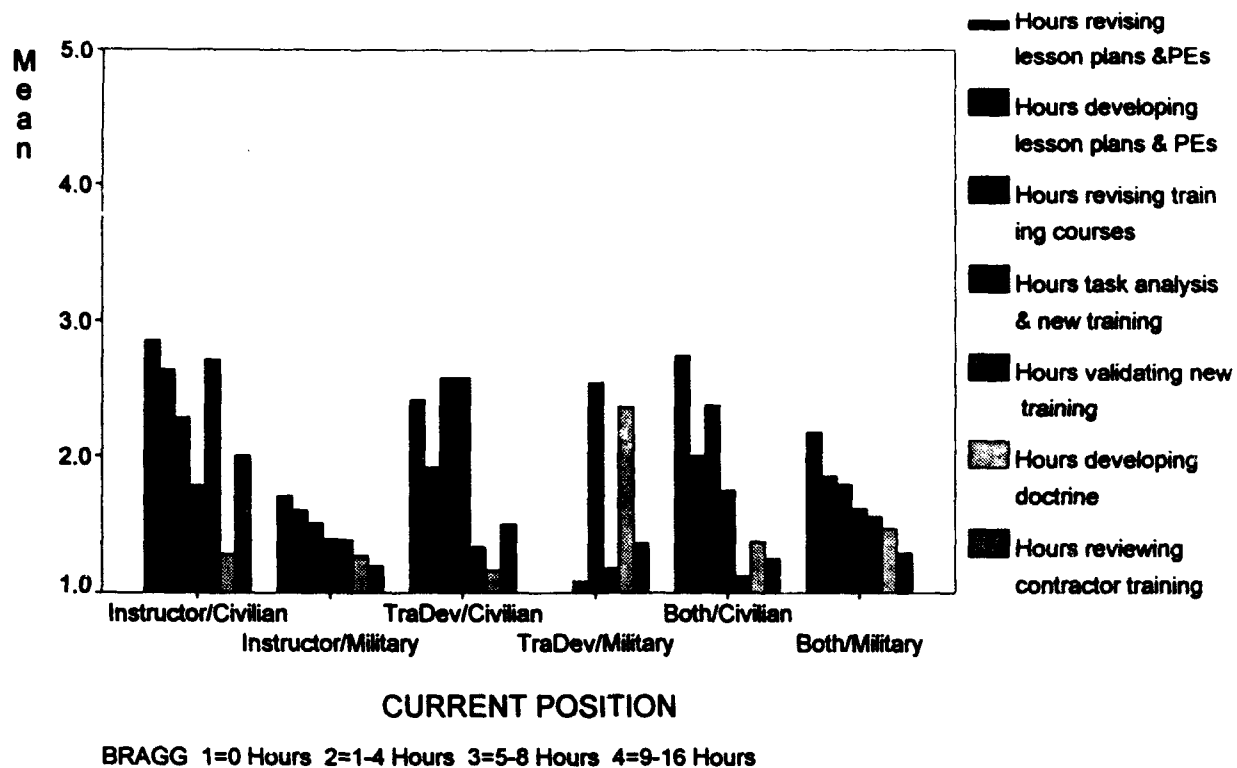
Appendix G

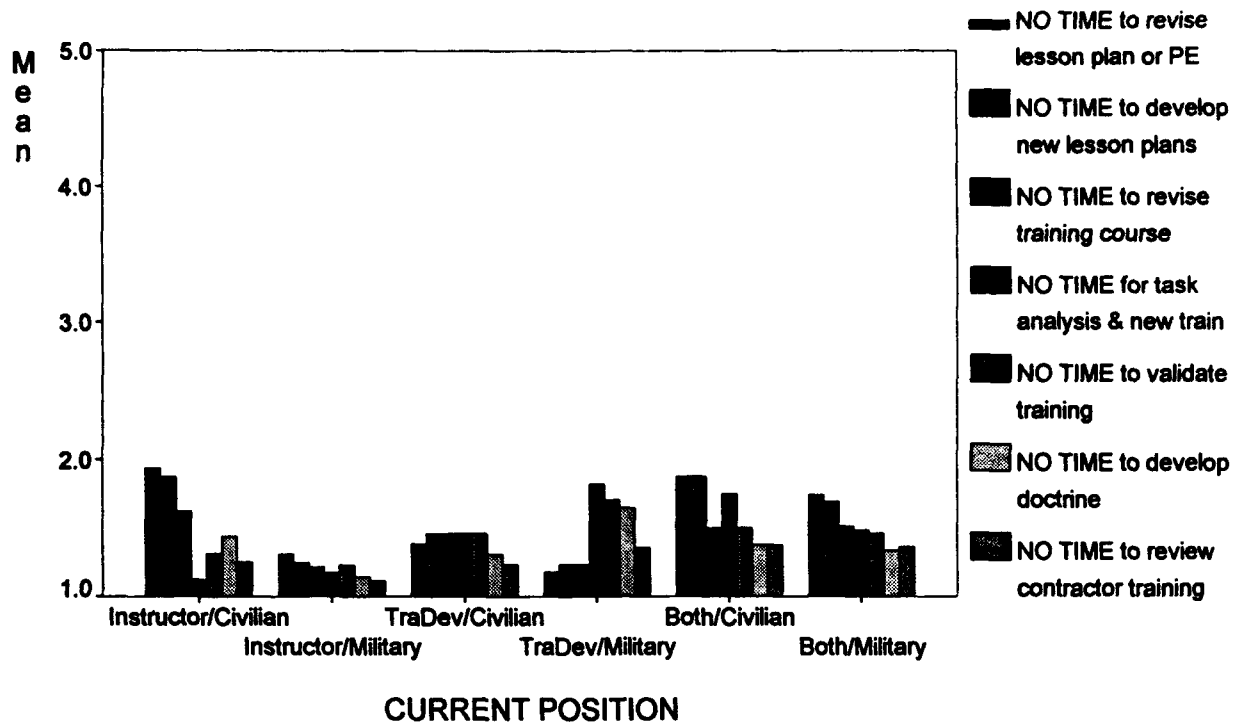
Fort Bragg

FT. BRAGG

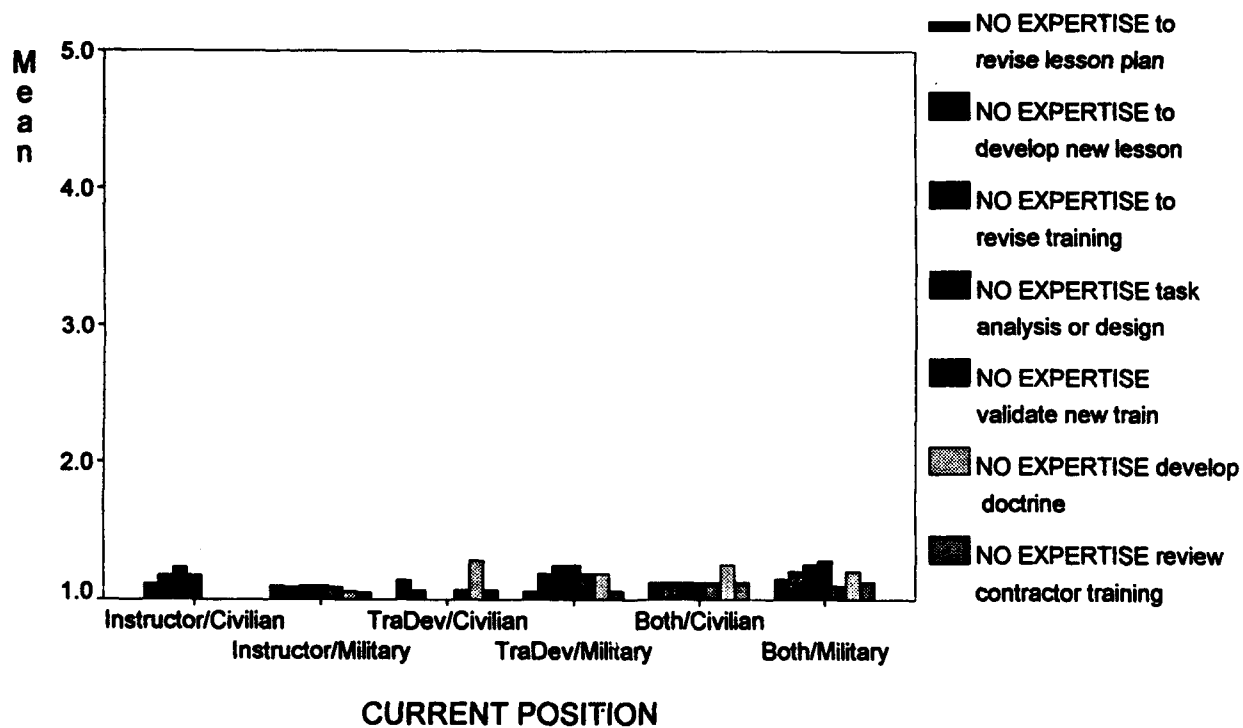
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	19	9.3	9.5	9.5
Instructor/Military	2.00	101	49.5	50.5	60.0
TraDev/Civilian	3.00	15	7.4	7.5	67.5
TraDev/Military	4.00	17	8.3	8.5	76.0
Both/Civilian	5.00	9	4.4	4.5	80.5
Both/Military	6.00	39	19.1	19.5	100.0
.	.	4	2.0	Missing	
	Total	204	100.0	100.0	
Valid cases	200	Missing cases	4		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



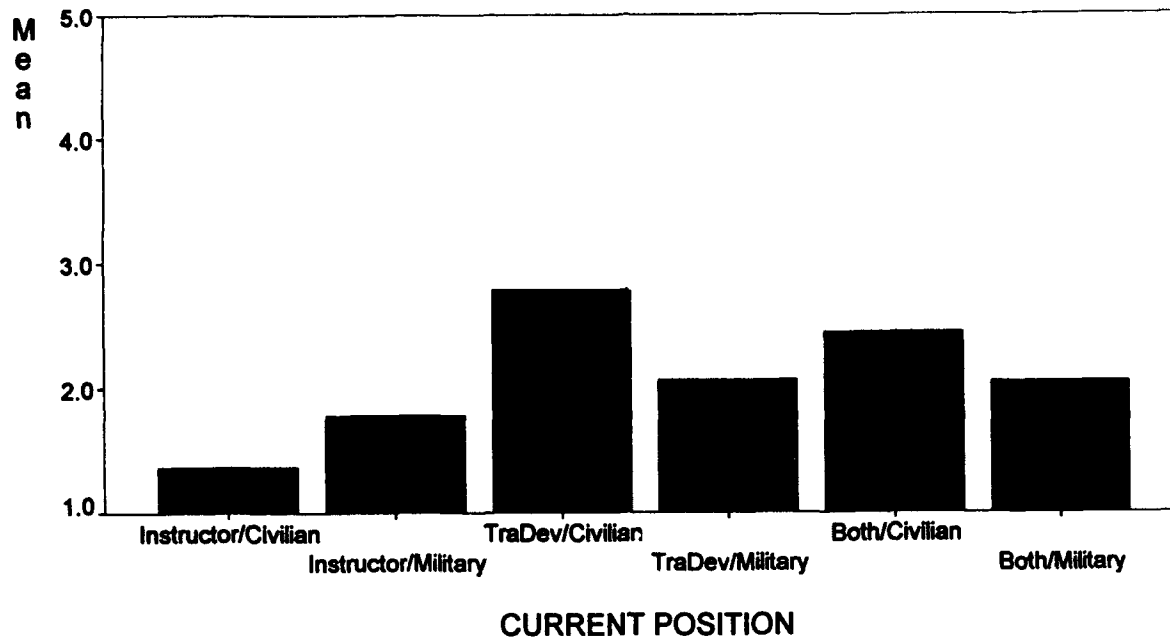


BRAGG 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



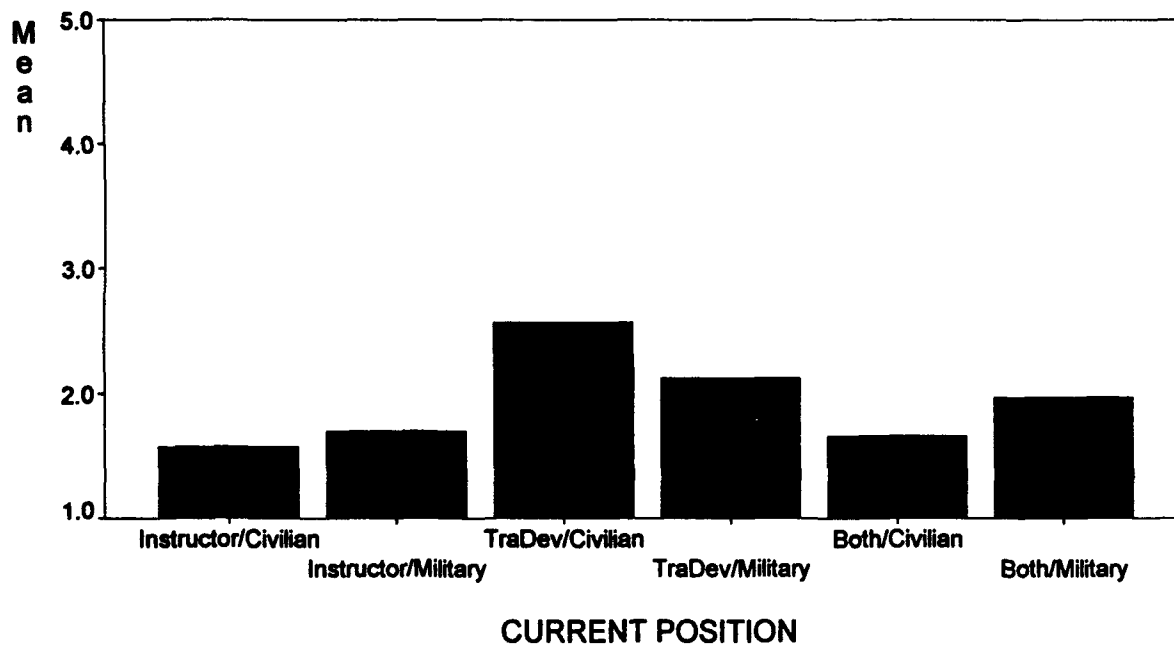
BRAGG 1=0 Times 2=1-5 Times 3=6-10 Times

MANHOURS 1 HOUR PAPER-BASED



BRAGG 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



BRAGG 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

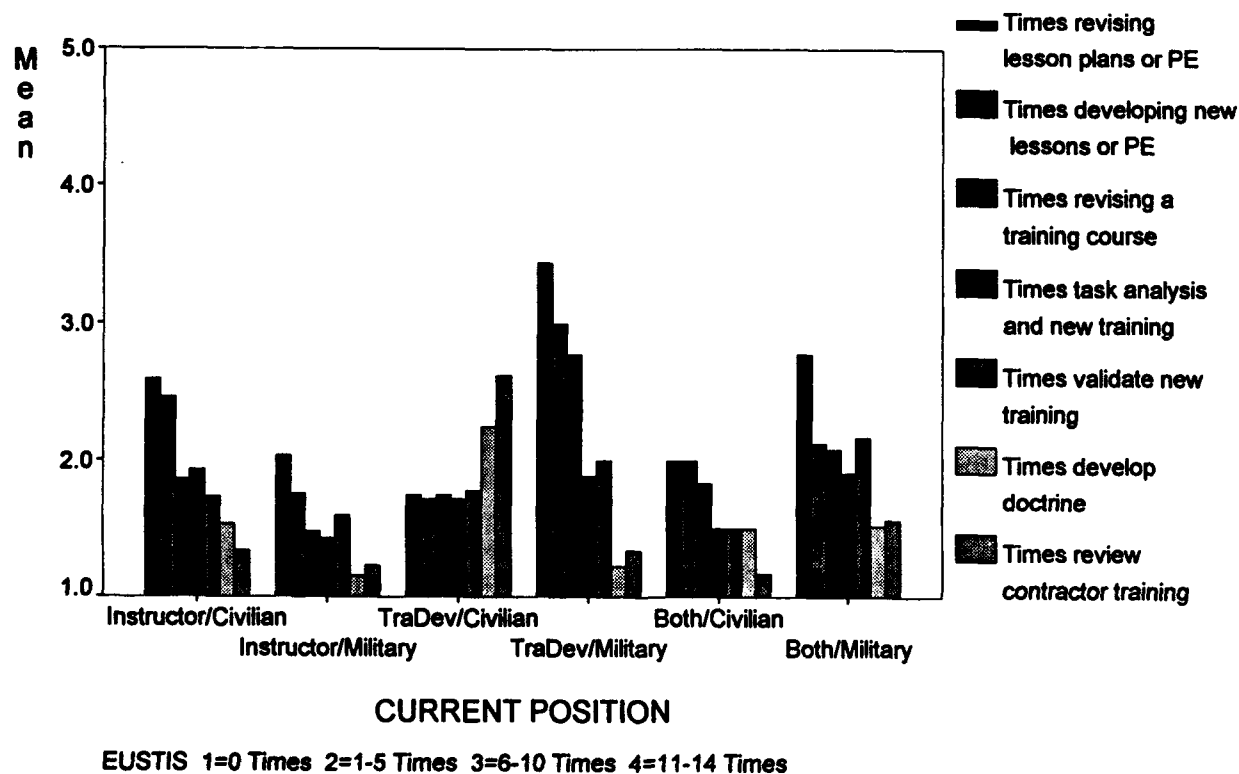
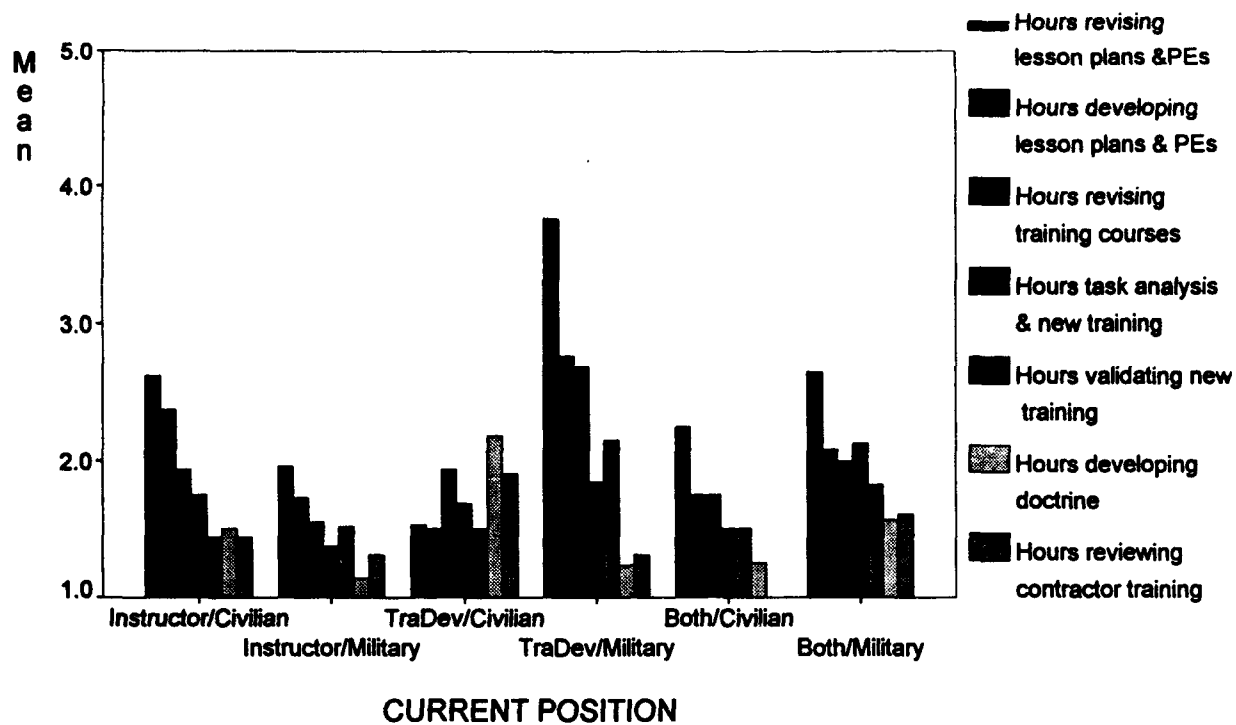
Appendix H

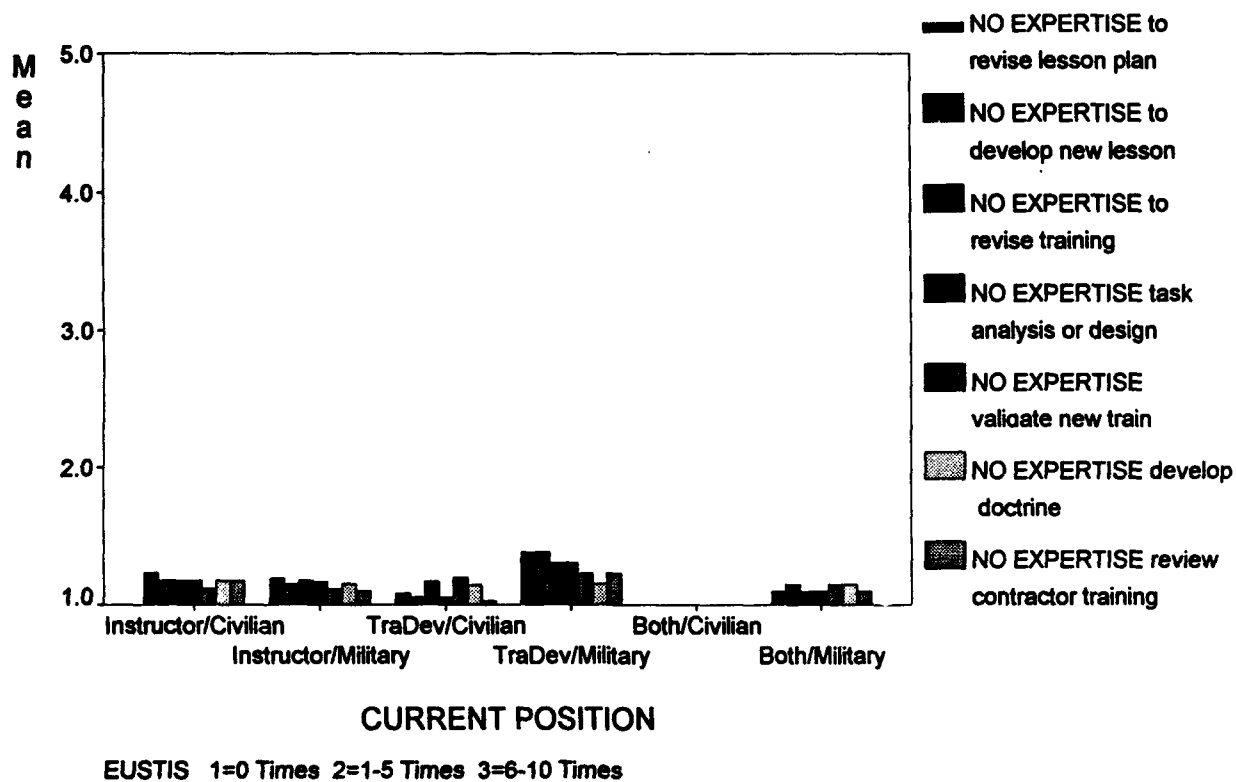
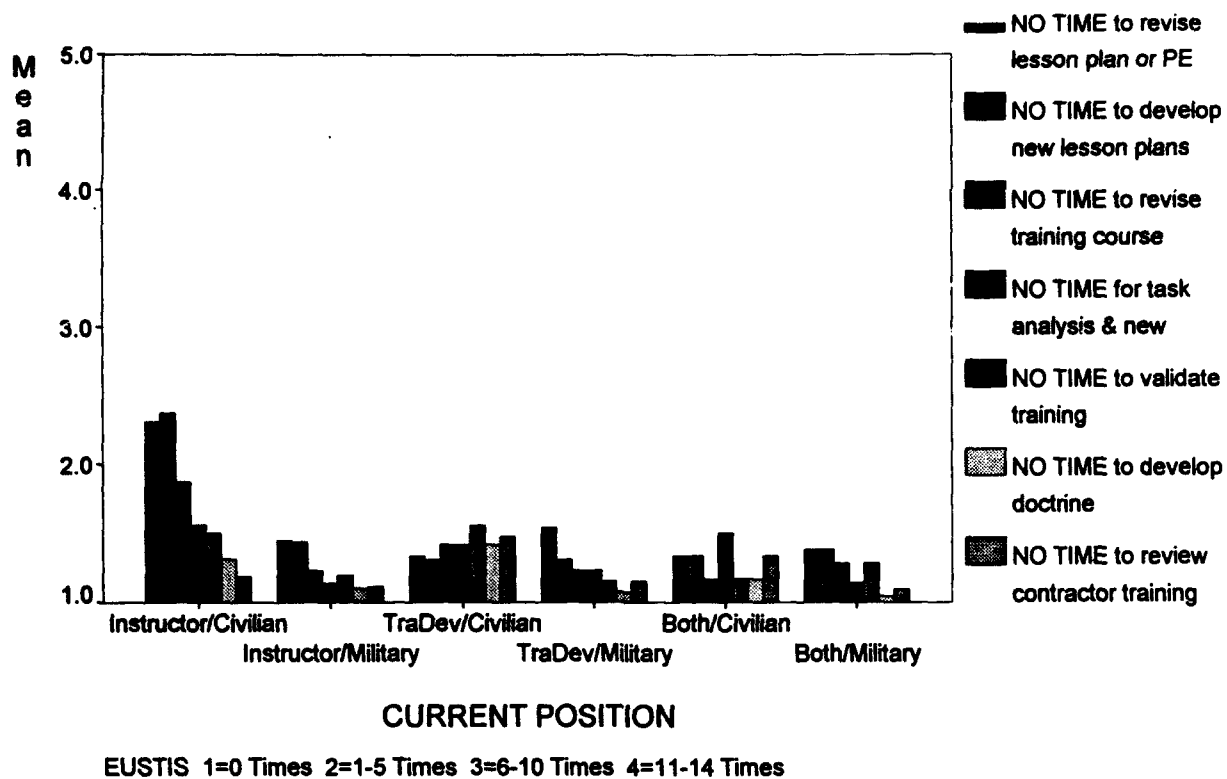
Fort Eustis

FT. EUSTIS

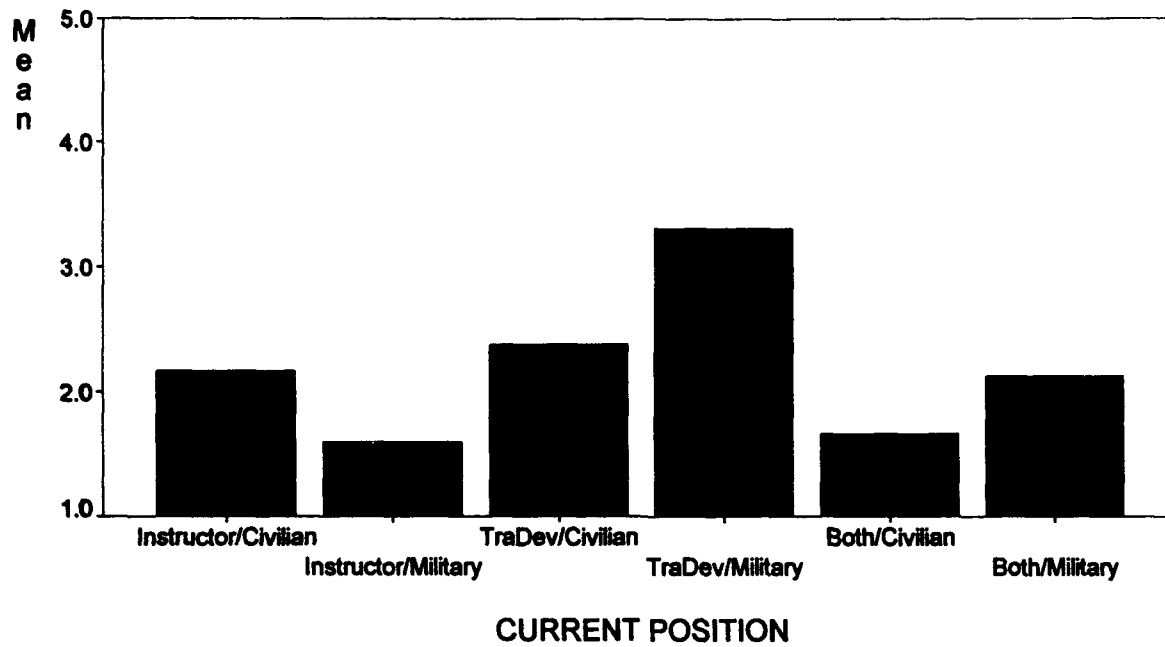
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	18	9.6	9.7	9.7
Instructor/Military	2.00	85	45.5	45.9	55.7
TraDev/Civilian	3.00	38	20.3	20.5	76.2
TraDev/Military	4.00	13	7.0	7.0	83.2
Both/Civilian	5.00	6	3.2	3.2	86.5
Both/Military	6.00	25	13.4	13.5	100.0
.		2	1.1	Missing	
	Total	187	100.0	100.0	
Valid cases	185	Missing cases	2		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



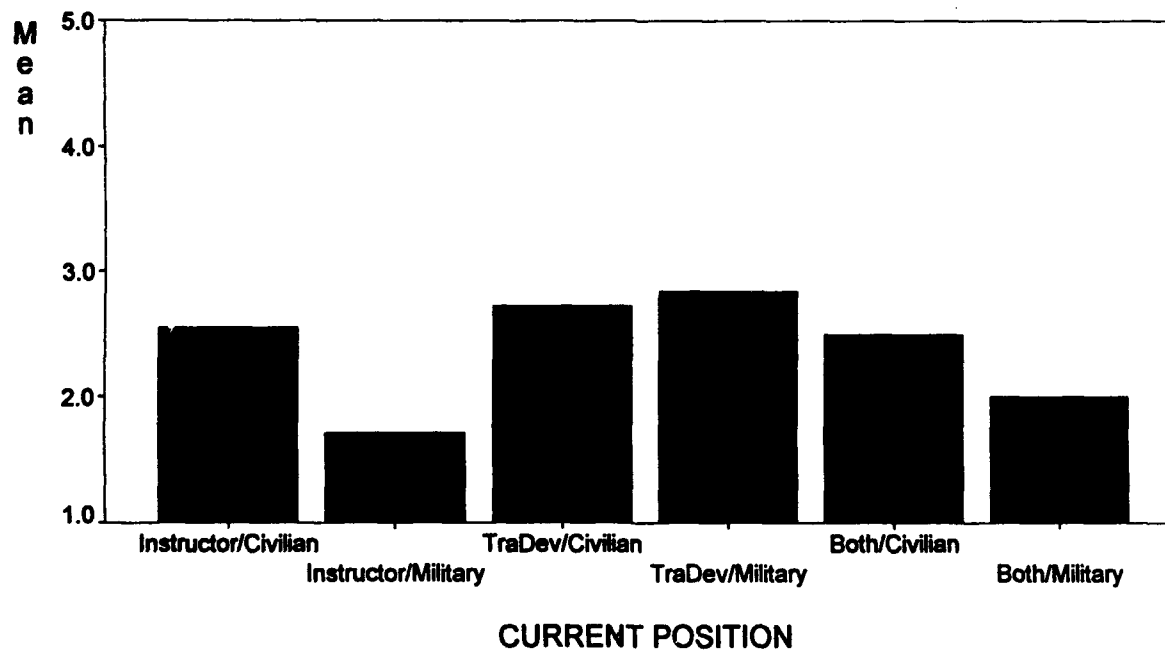


MANHOURS 1 HOUR PAPER-BASED



EUSTIS 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



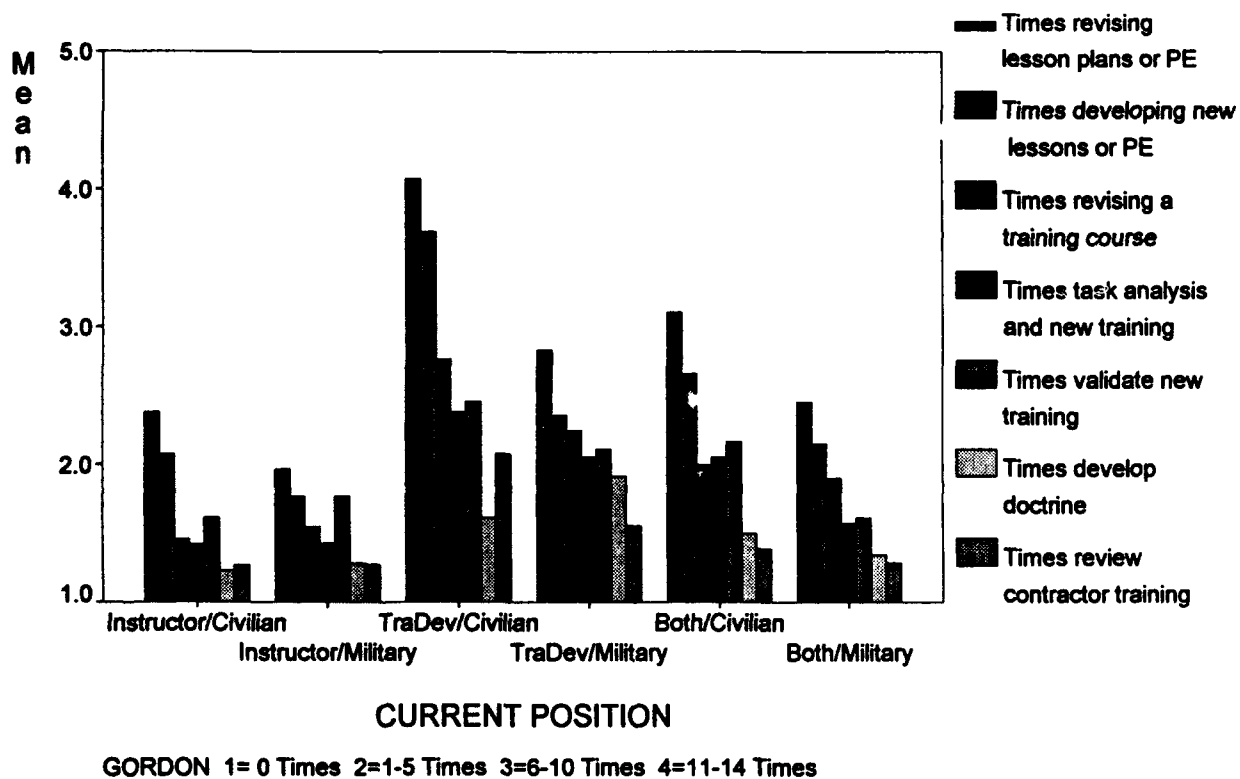
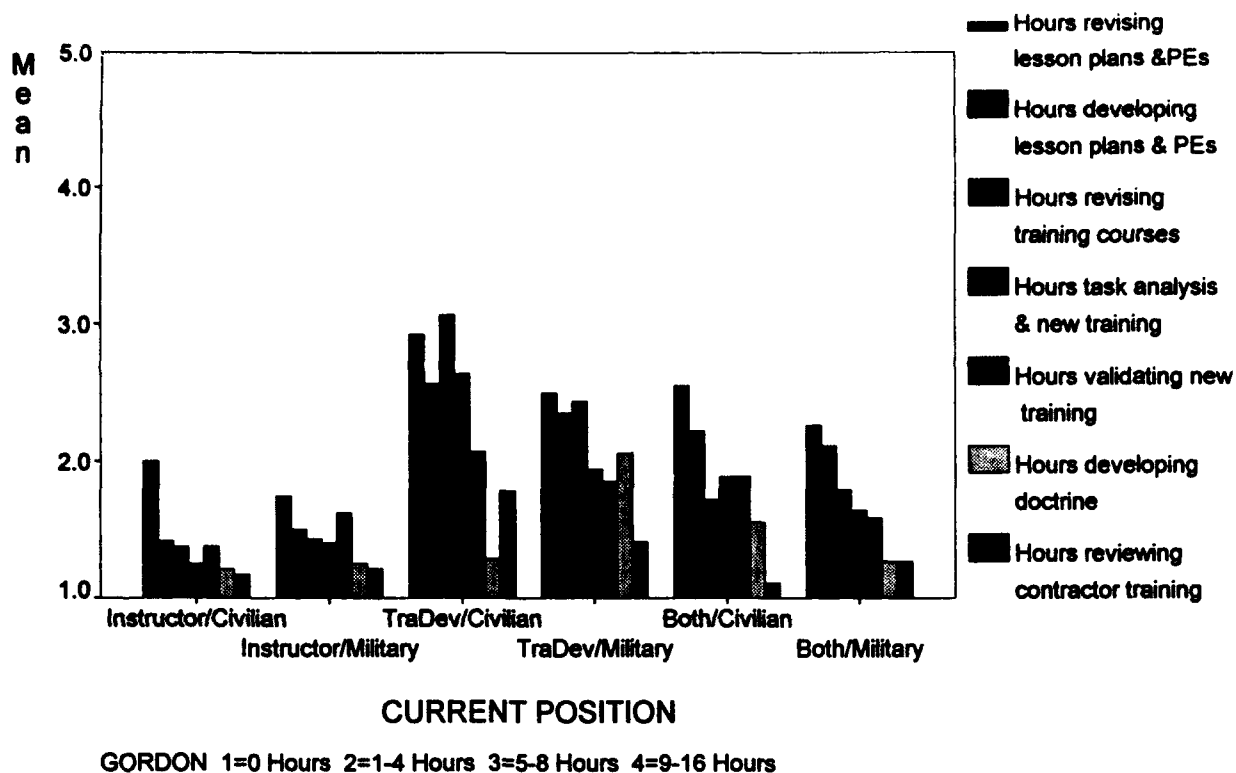
EUSTIS 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

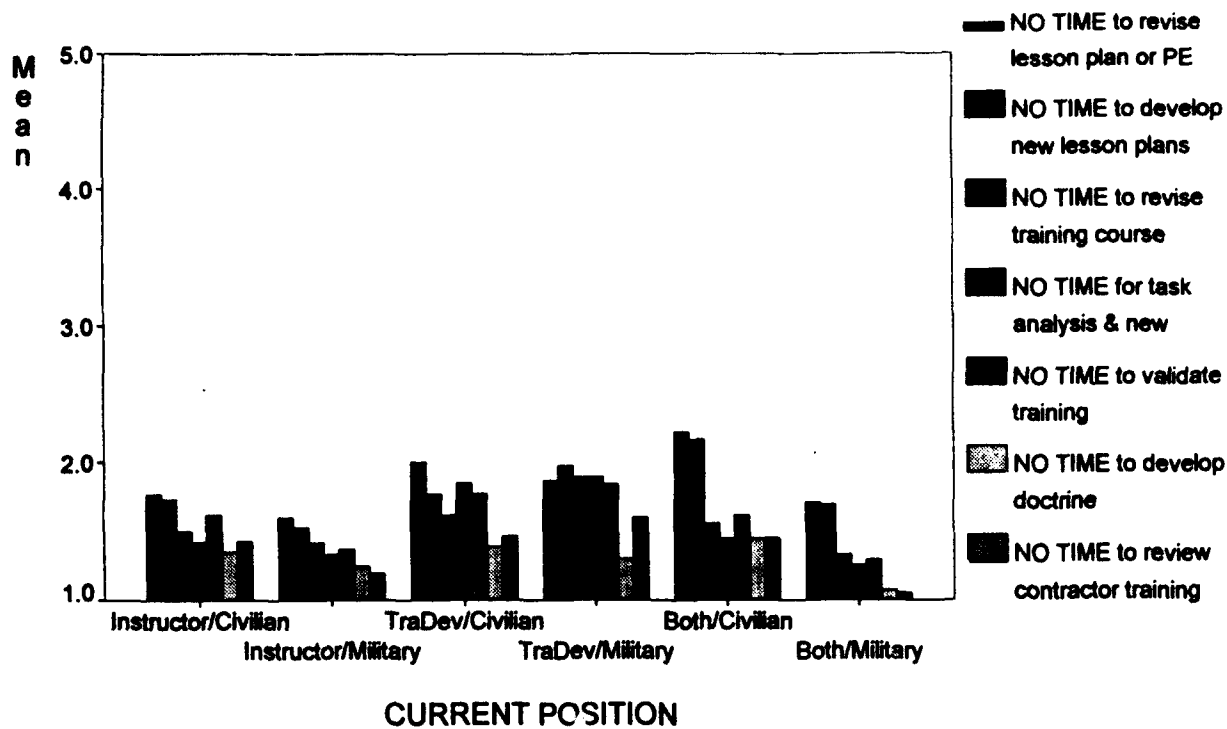
Appendix I
Fort Gordon

FT. GORDON

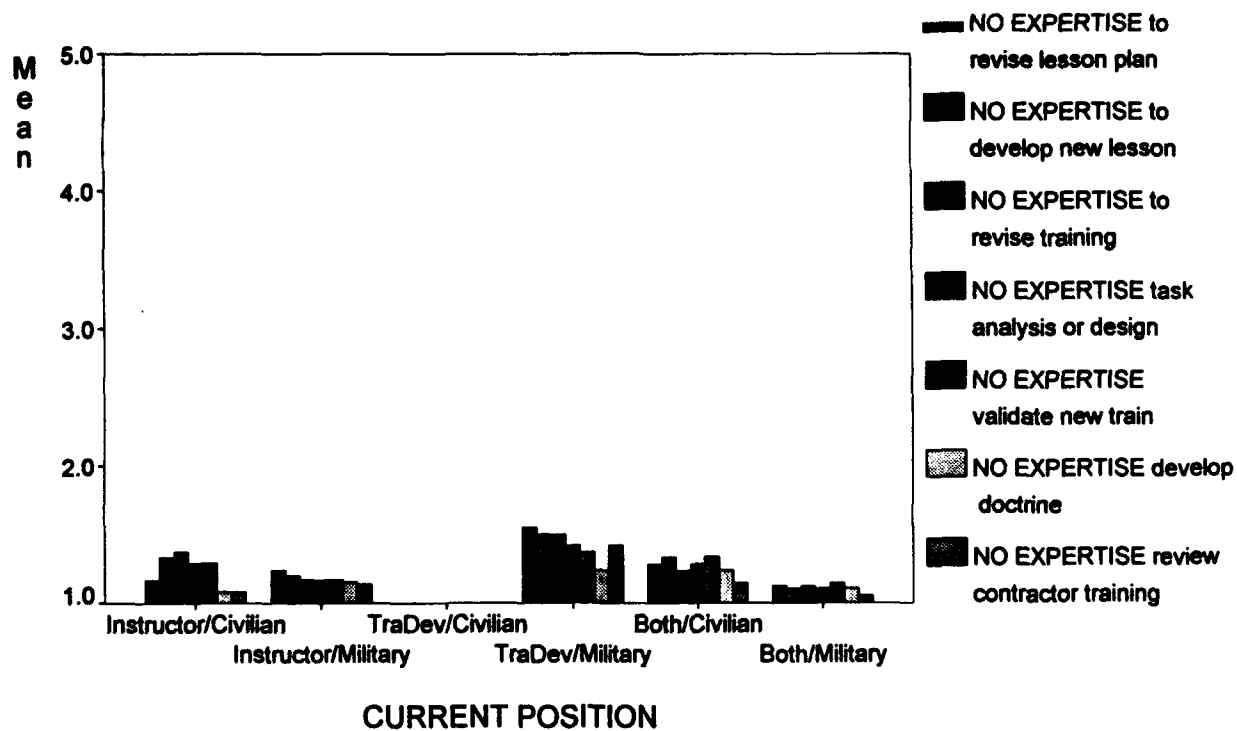
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	27	7.5	7.5	7.5
Instructor/Military	2.00	195	54.0	54.2	61.7
TraDev/Civilian	3.00	16	4.4	4.4	66.1
TraDev/Military	4.00	42	11.6	11.7	77.8
Both/Civilian	5.00	23	6.4	6.4	84.2
Both/Military	6.00	57	15.8	15.8	100.0
.		1	.3	Missing	
		-----	-----	-----	
	Total	361	100.0	100.0	
Valid cases	360	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



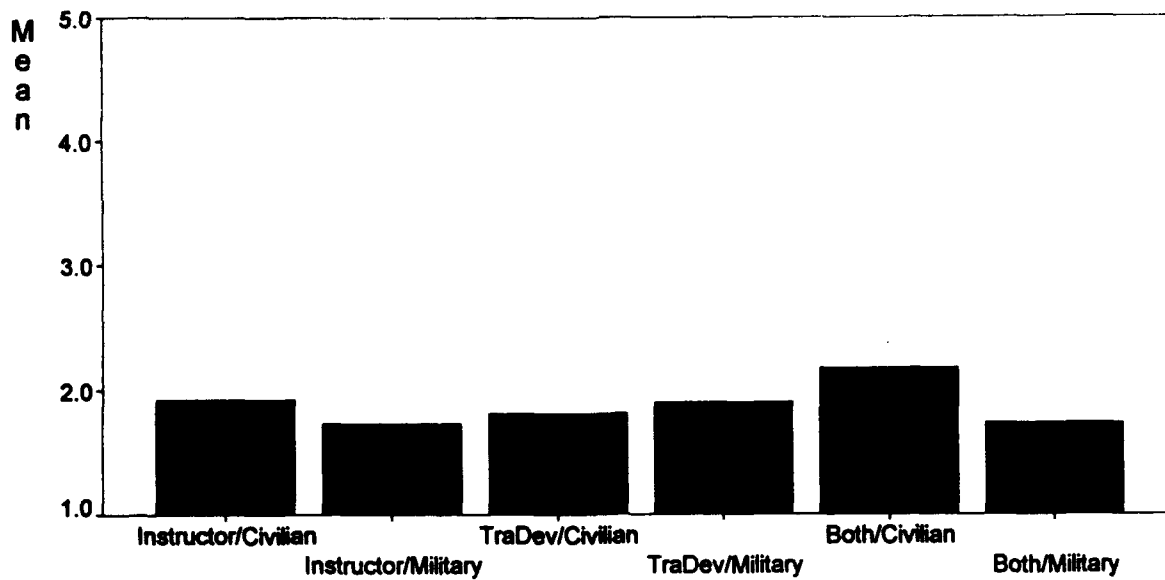


GORDON 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



GORDON 1=0 Times 2=1-5 Times 3=6-10 Times

MANHOURS 1 HOUR PAPER-BASED



GORDON 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



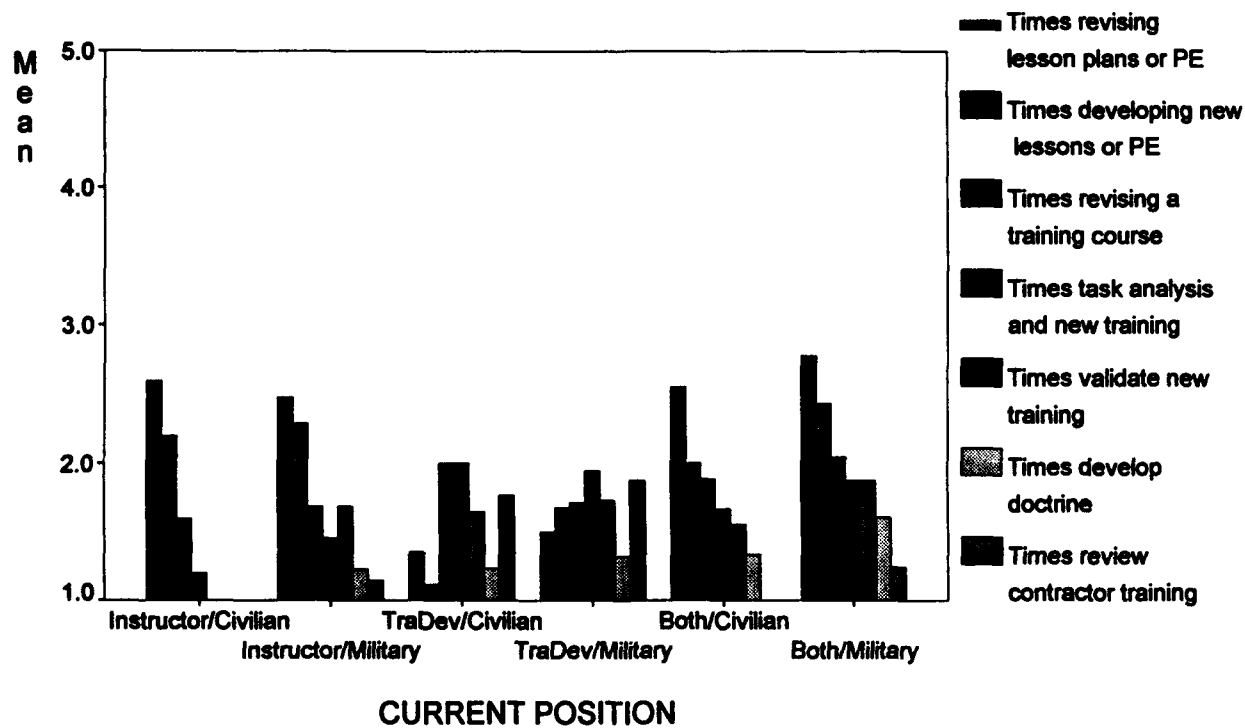
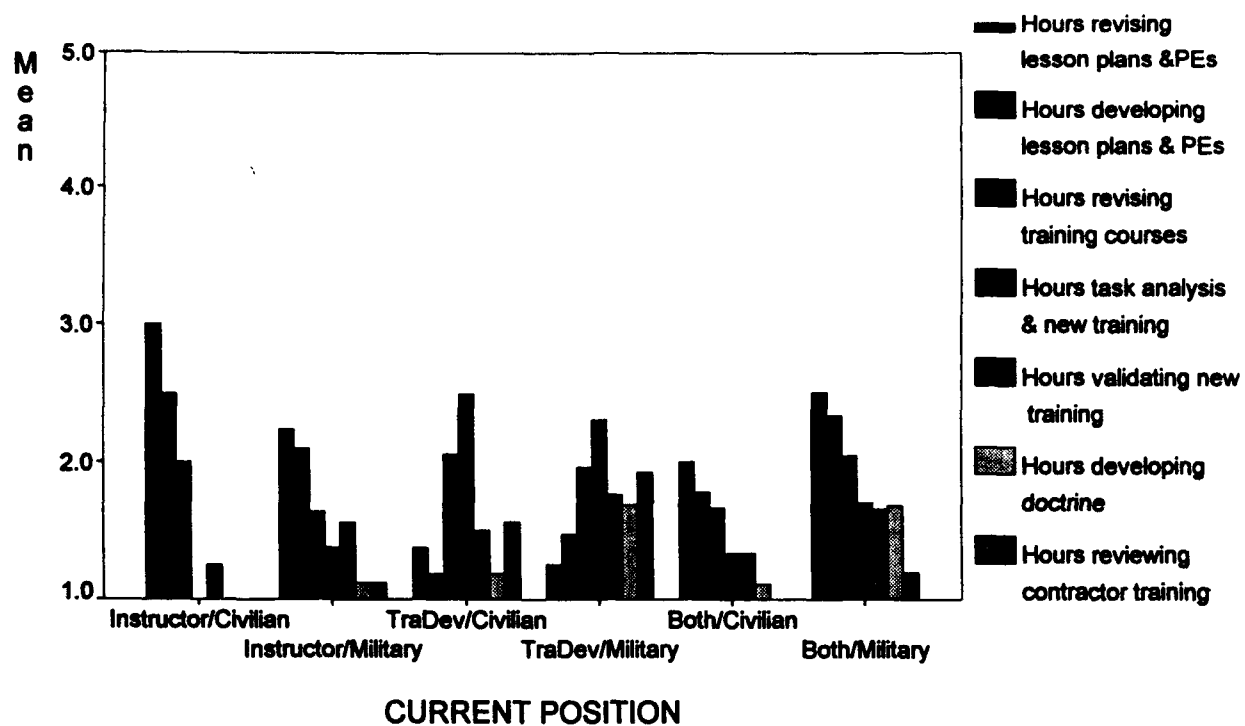
GORDON 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

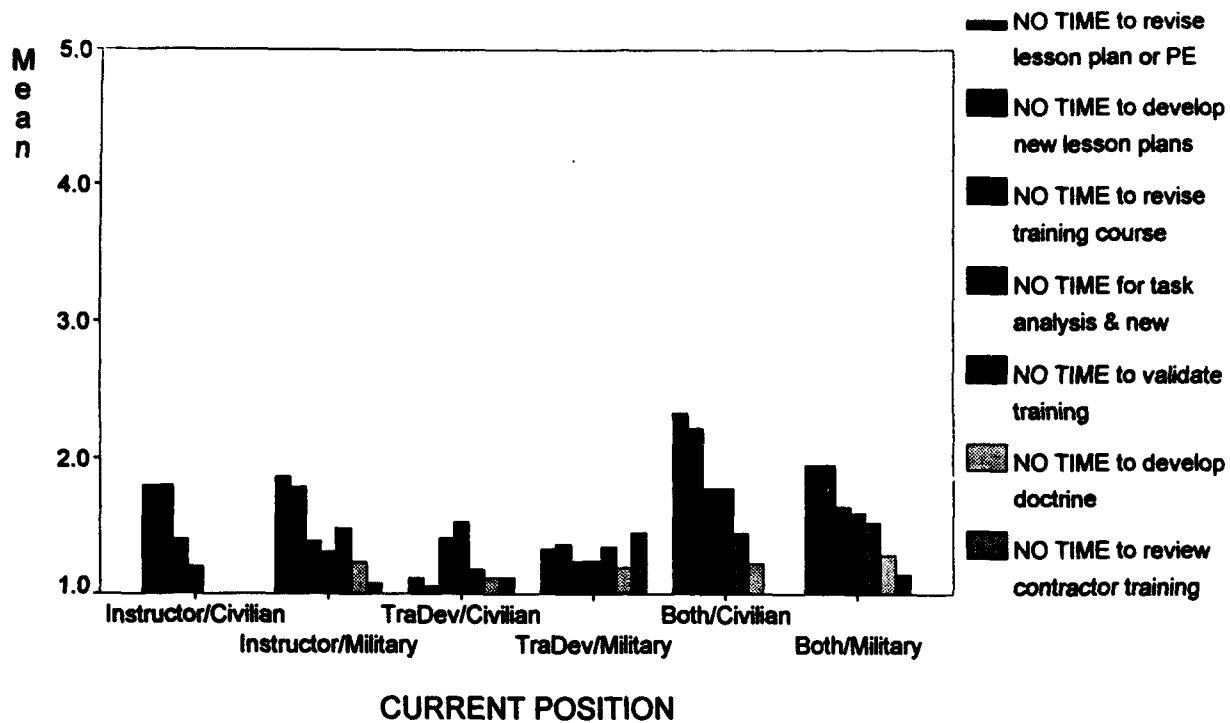
Appendix J
Fort Huachuca

FT. HUACHUCA

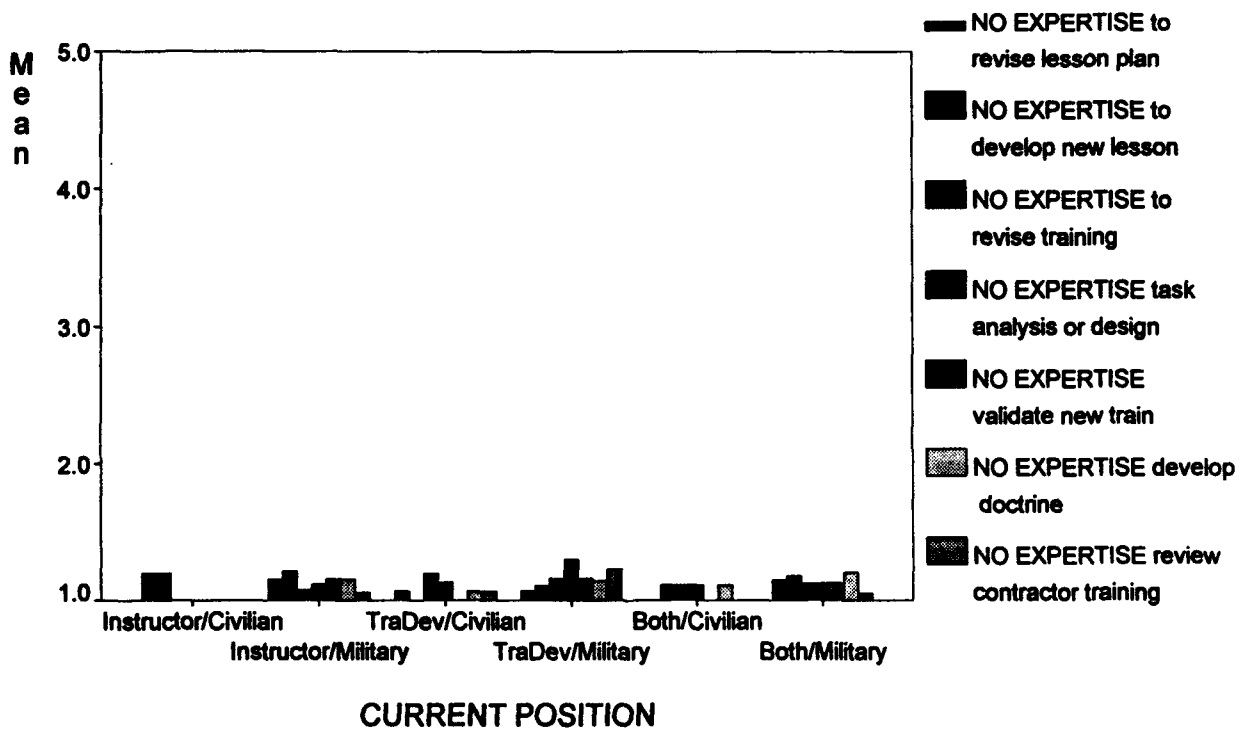
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	5	2.6	2.6	2.6
Instructor/Military	2.00	53	27.9	28.0	30.7
TraDev/Civilian	3.00	19	10.0	10.1	40.7
TraDev/Military	4.00	61	32.1	32.3	73.0
Both/Civilian	5.00	9	4.7	4.8	77.8
Both/Military	6.00	42	22.1	22.2	100.0
.		1	.5	Missing	
		-----	-----	-----	
	Total	190	100.0	100.0	
Valid cases	189	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



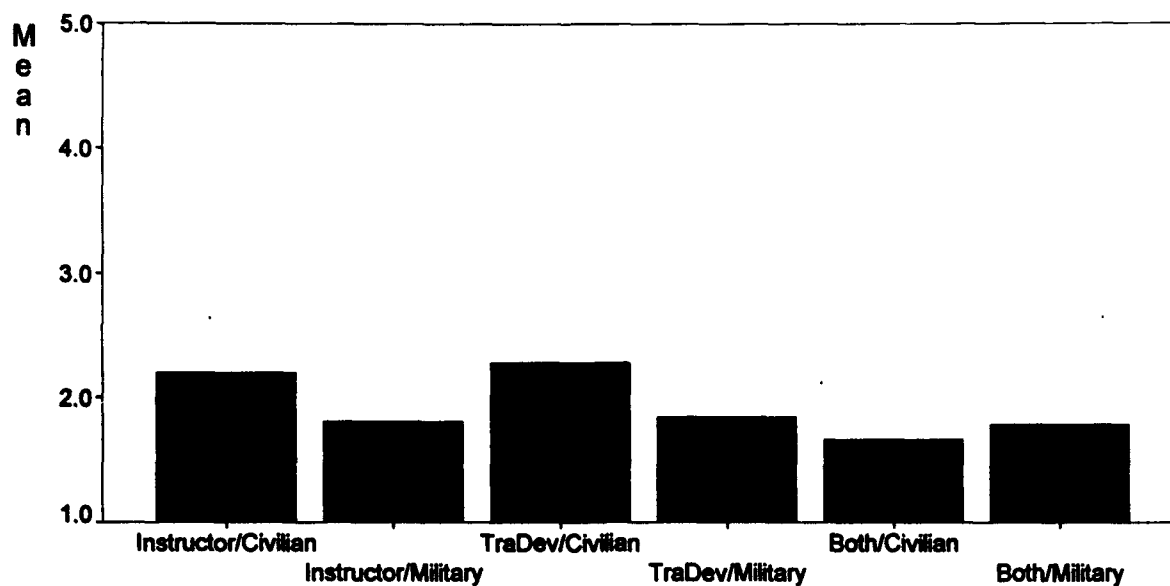


HUACHUCA 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



HUACHUCA 1=0 Times 2=1-5 Times 3=6-10 Times

MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

HUACHUCA 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

HUACHUCA 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

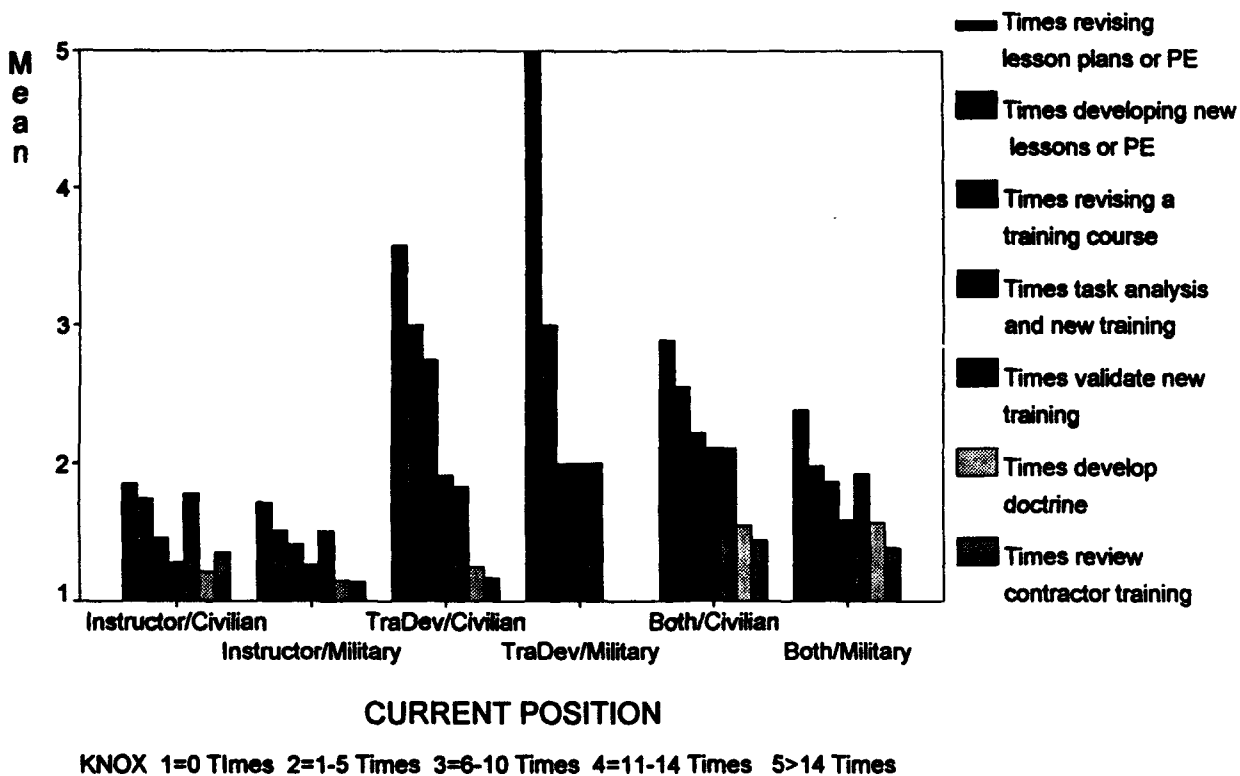
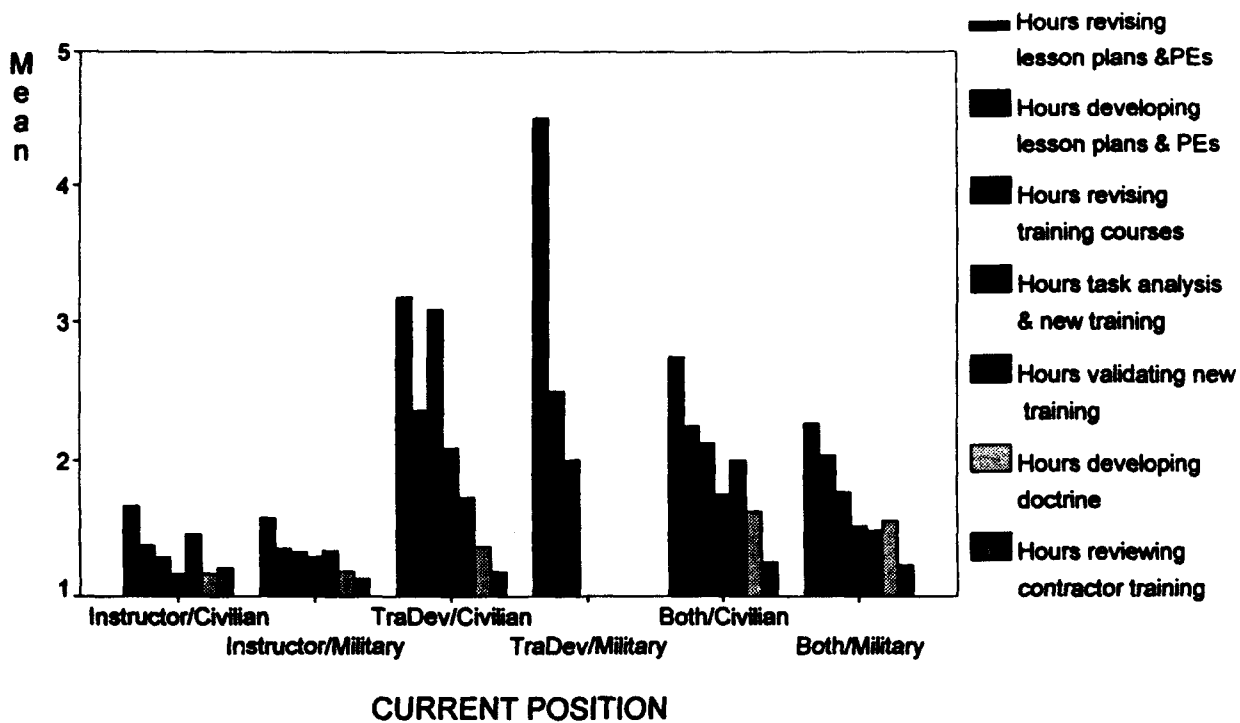
Appendix K

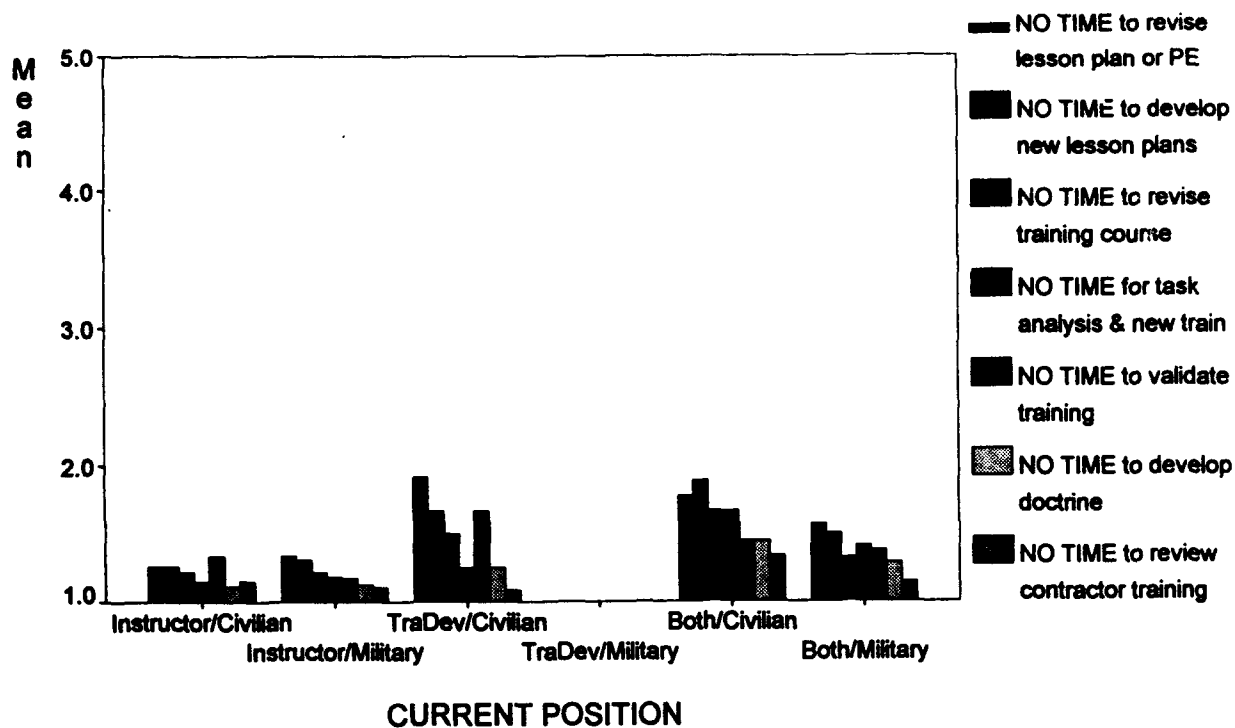
Fort Knox

FT. KNOX

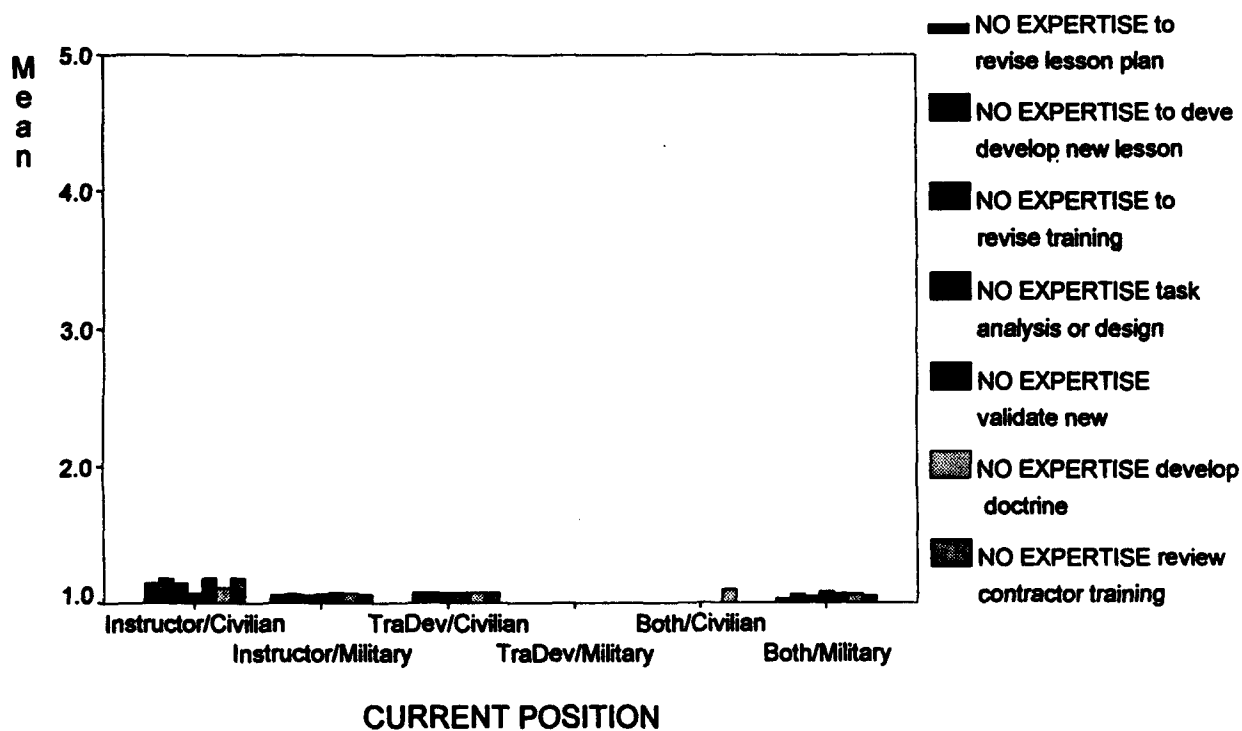
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	32	10.8	10.9	10.9
Instructor/Military	2.00	177	59.6	60.4	71.3
TraDev/Civilian	3.00	14	4.7	4.8	76.1
TraDev/Military	4.00	2	.7	.7	76.8
Both/Civilian	5.00	10	3.4	3.4	80.2
Both/Military	6.00	58	19.5	19.8	100.0
.		4	1.3	Missing	
	Total	297	100.0	100.0	
Valid cases	293	Missing cases	4		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of zero hours or zero times reported by the subgroup for that training development activity.



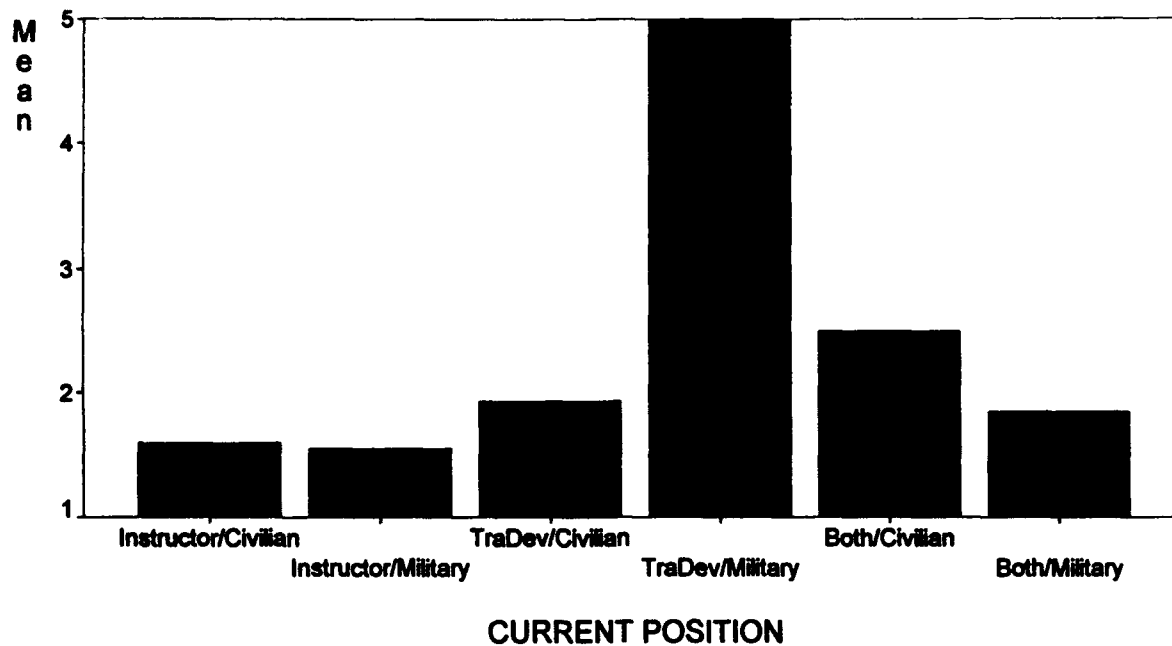


KNOX 1=0 Times 2=1-5 Times 3=6-10 Times



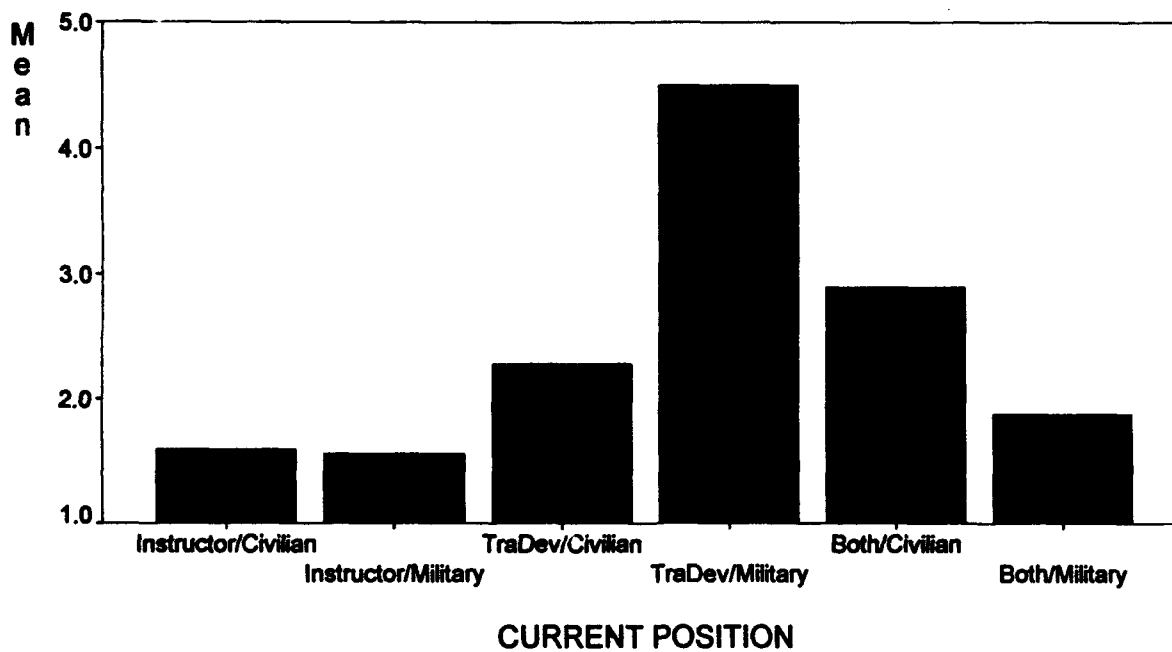
KNOX 1=0 Times 2=1-5 Times 3=6-10 Times

MANHOURS 1 HOUR PAPER-BASED



KNOX 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



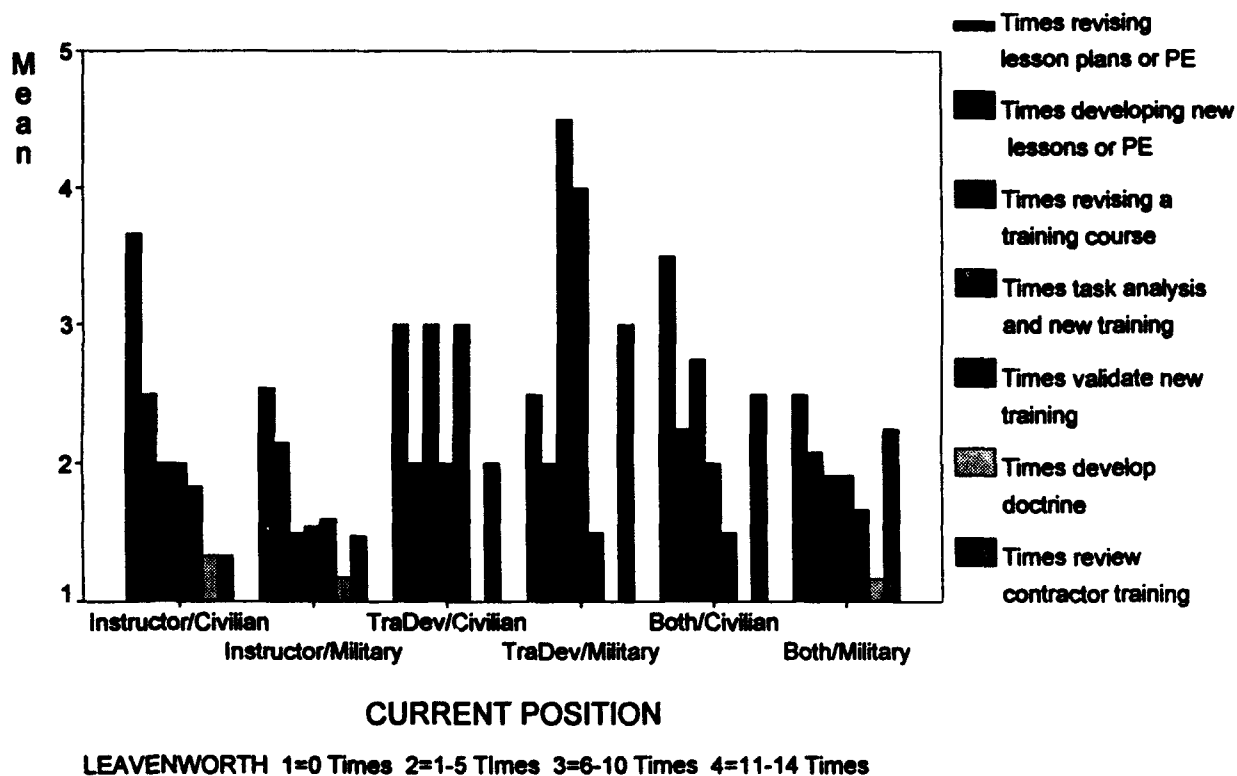
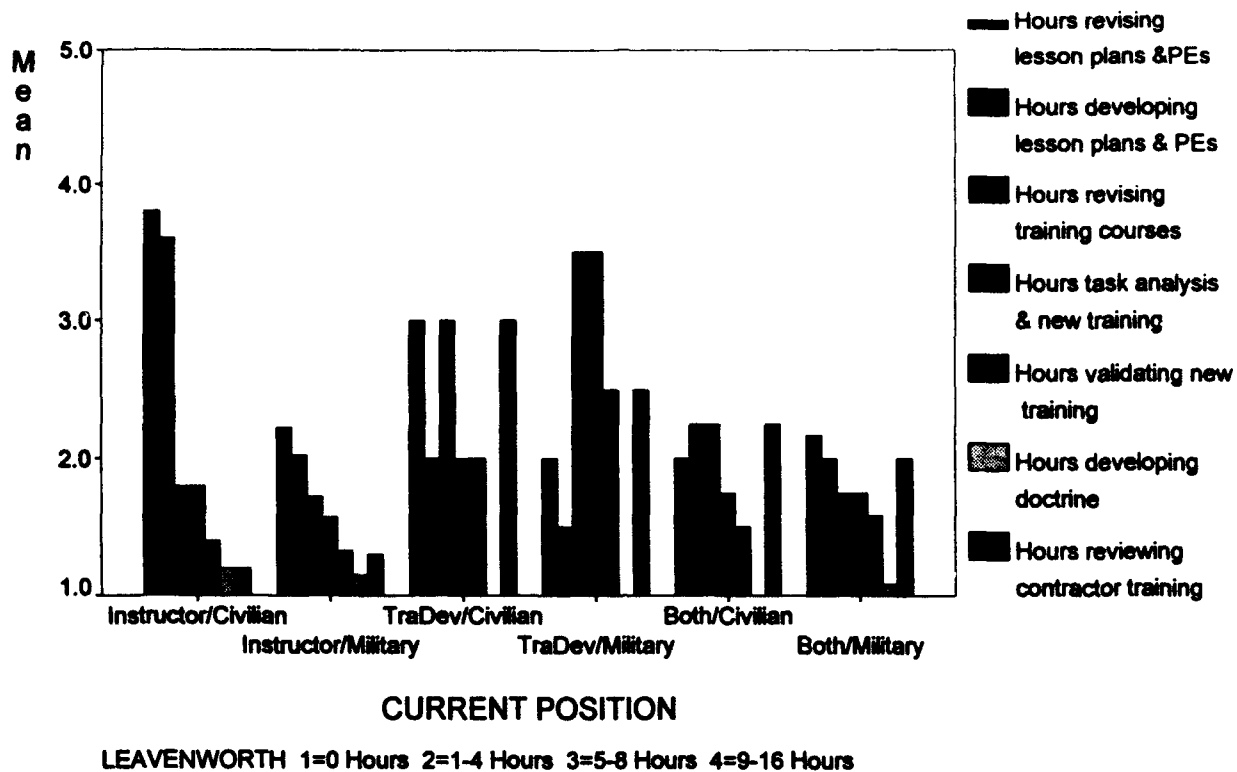
KNOX 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

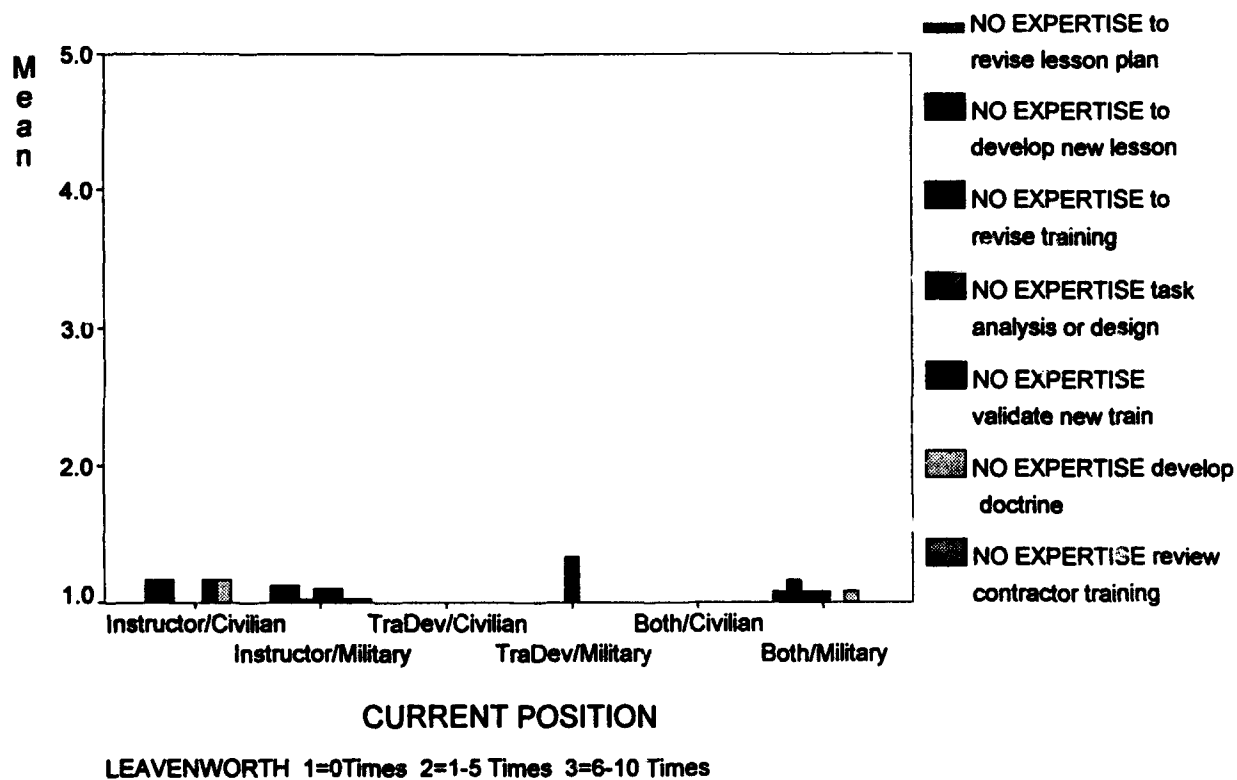
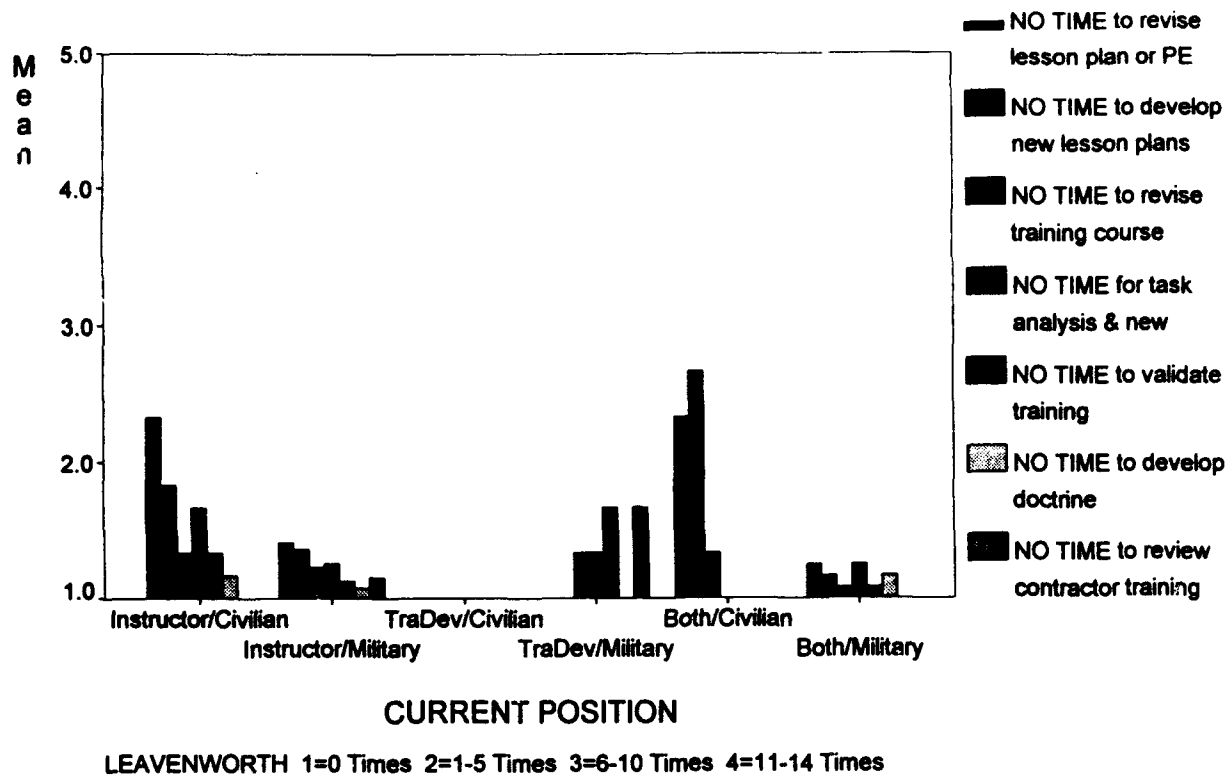
Appendix L
Fort Leavenworth

FT. LEAVENWORTH

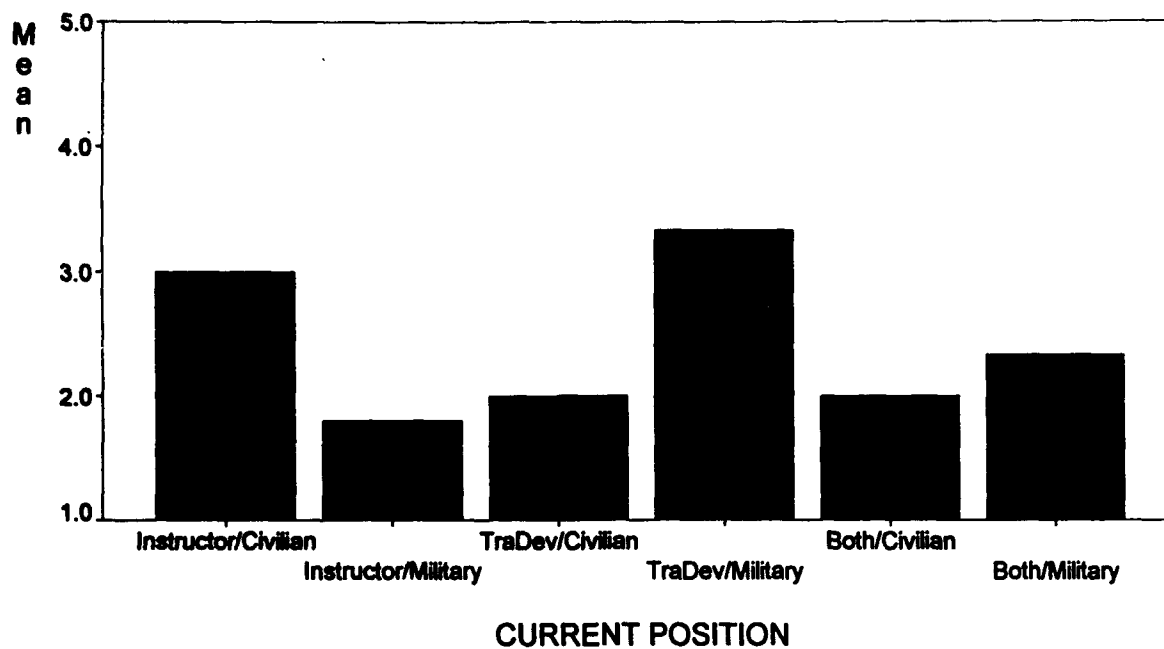
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	7	10.1	10.3	10.3
Instructor/Military	2.00	41	59.4	60.3	70.6
TraDev/Civilian	3.00	1	1.4	1.5	72.1
TraDev/Military	4.00	3	4.3	4.4	76.5
Both/Civilian	5.00	4	5.8	5.9	82.4
Both/Military	6.00	12	17.4	17.6	100.0
.		1	1.4	Missing	
		-----	-----	-----	
Total		69	100.0	100.0	
Valid cases	68	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



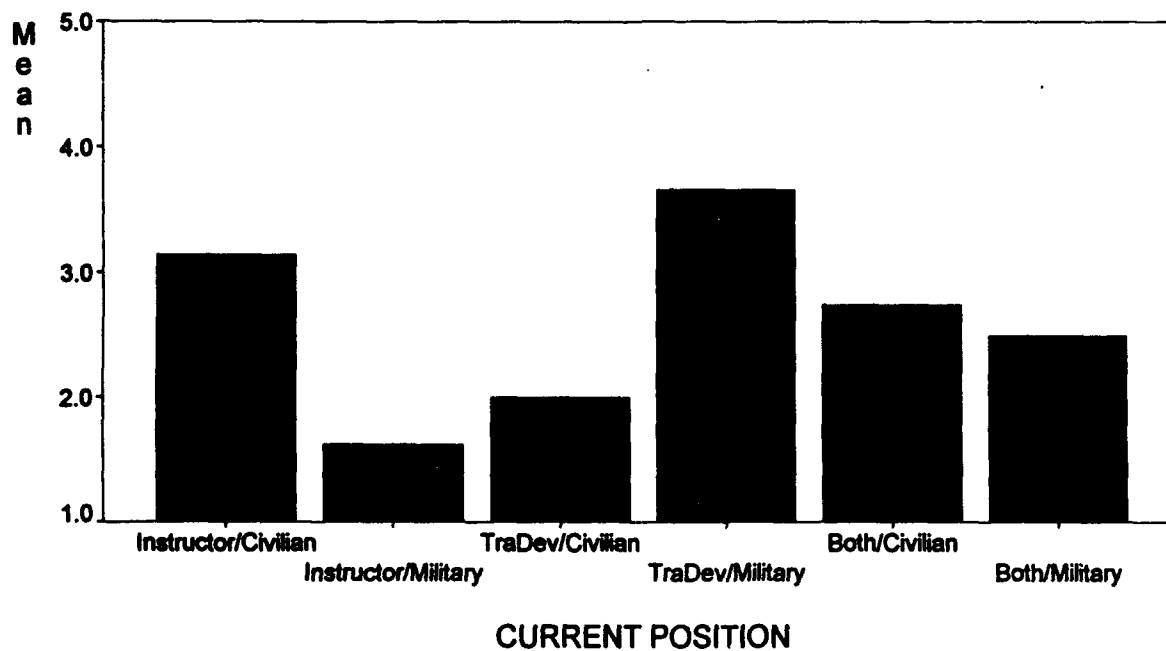


MANHOURS 1 HOUR PAPER-BASED



LEAVENWORTH 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



LEAVENWORTH 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

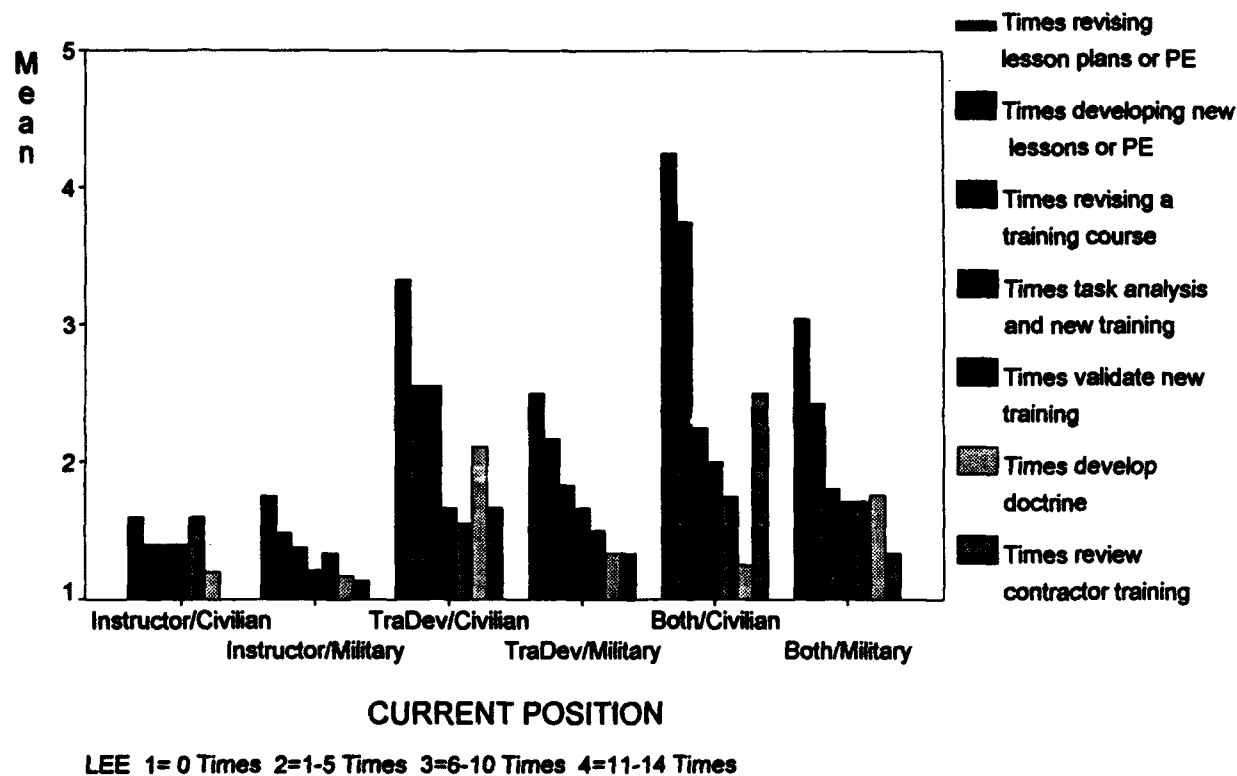
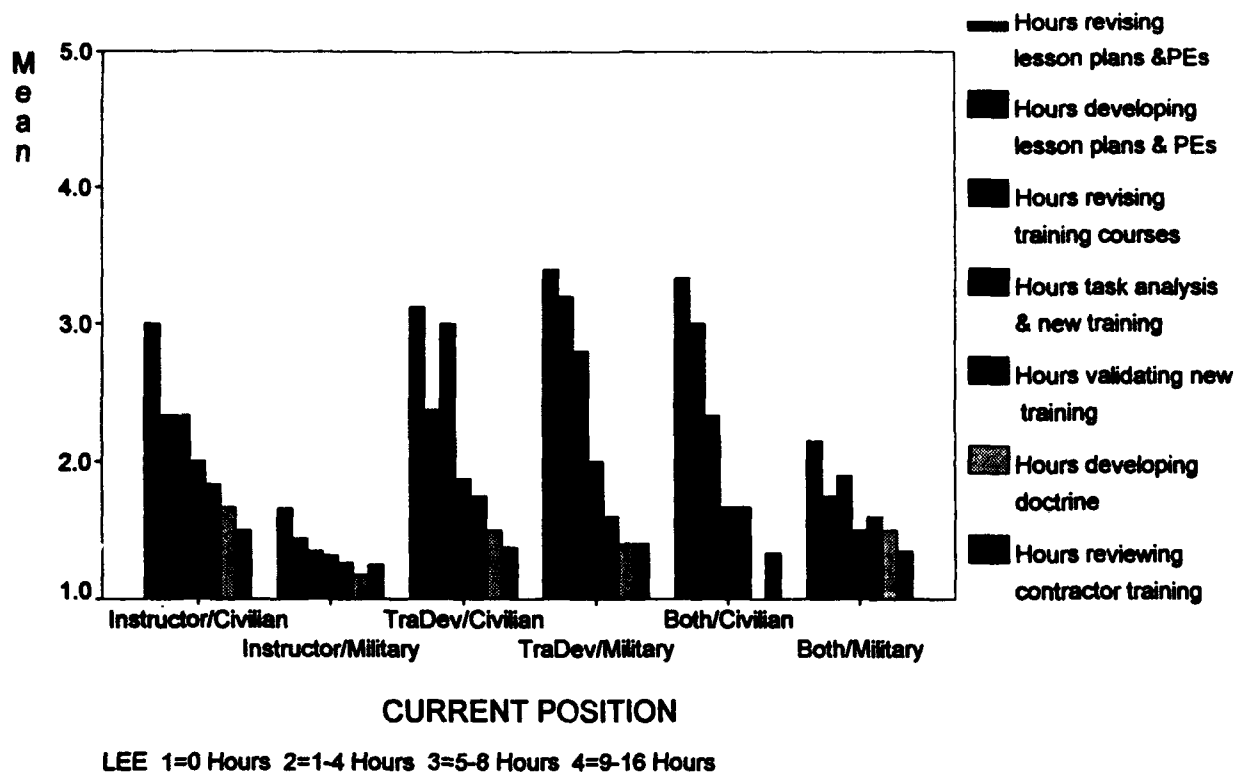
Appendix M

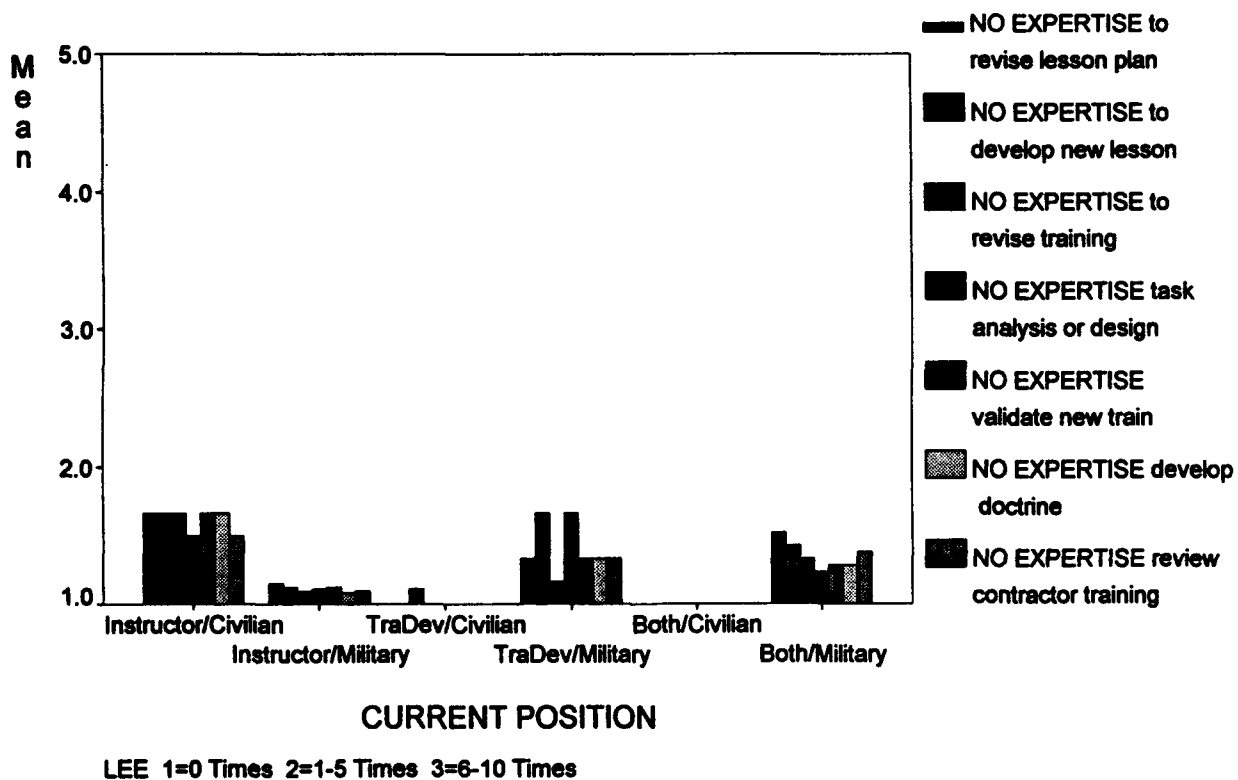
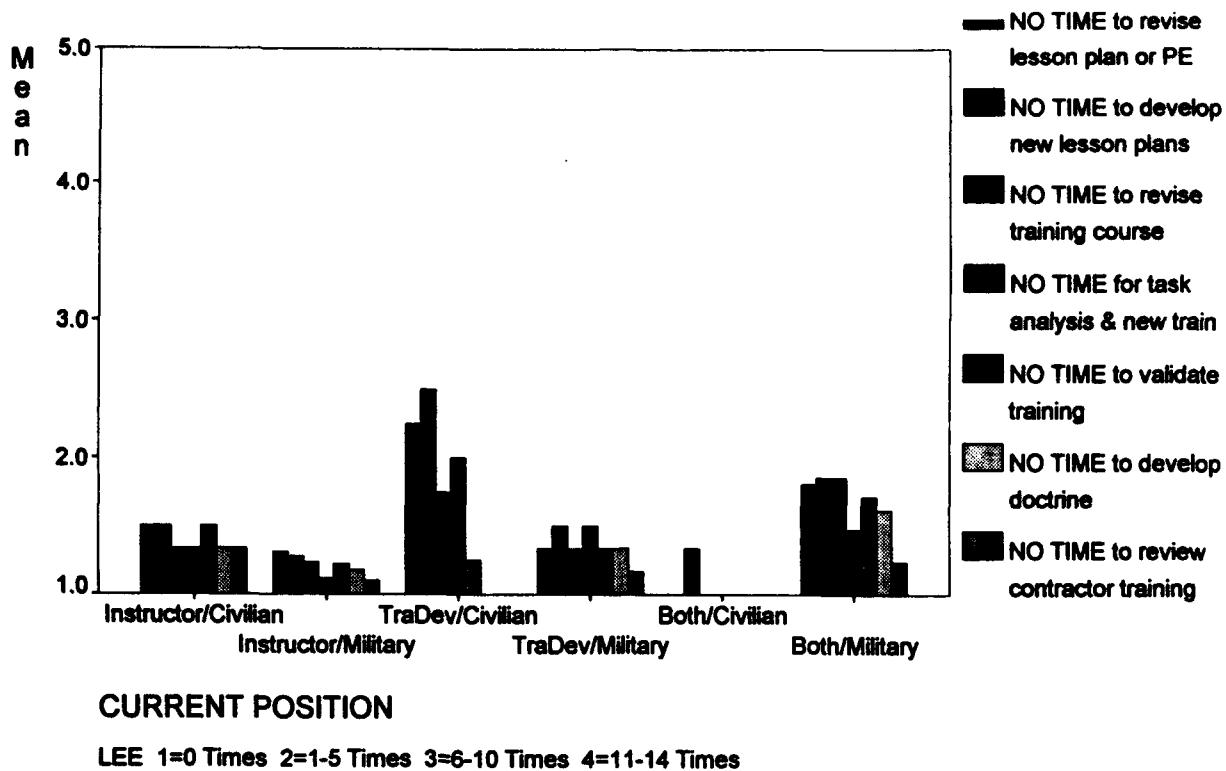
Fort Lee

FT. LEE

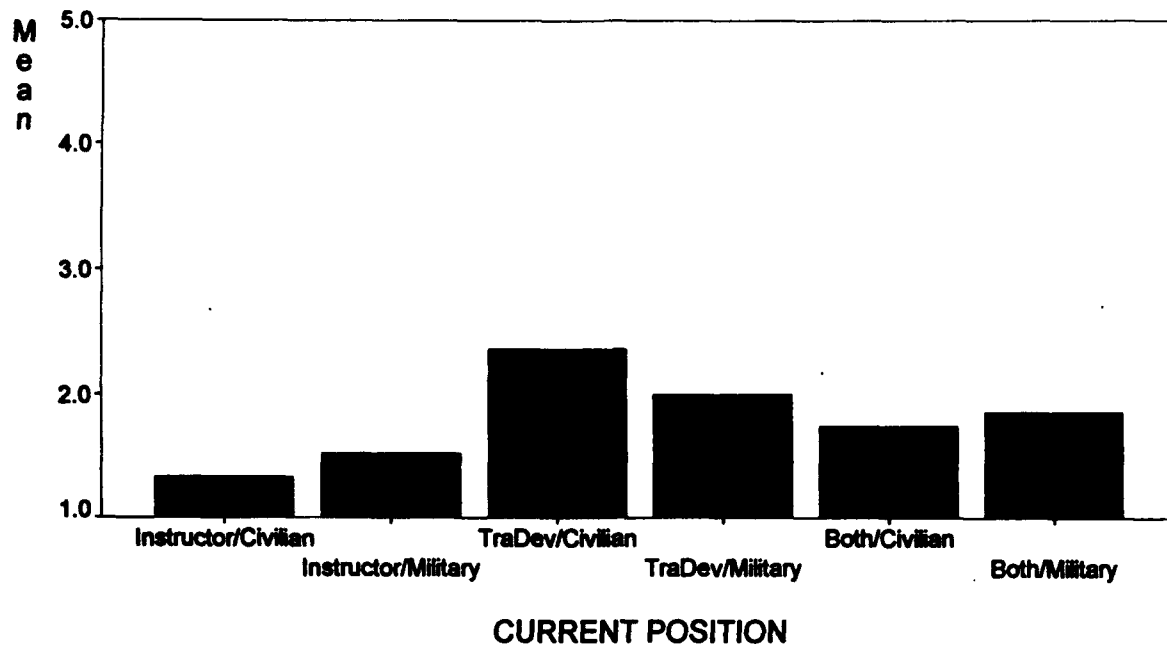
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	7	5.6	5.6	5.6
Instructor/Military	2.00	76	60.3	60.3	65.9
TraDev/Civilian	3.00	11	8.7	8.7	74.6
TraDev/Military	4.00	6	4.8	4.8	79.4
Both/Civilian	5.00	4	3.2	3.2	82.5
Both/Military	6.00	22	17.5	17.5	100.0
		-----	-----	-----	
	Total	126	100.0	100.0	
Valid cases	126	Missing cases	0		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



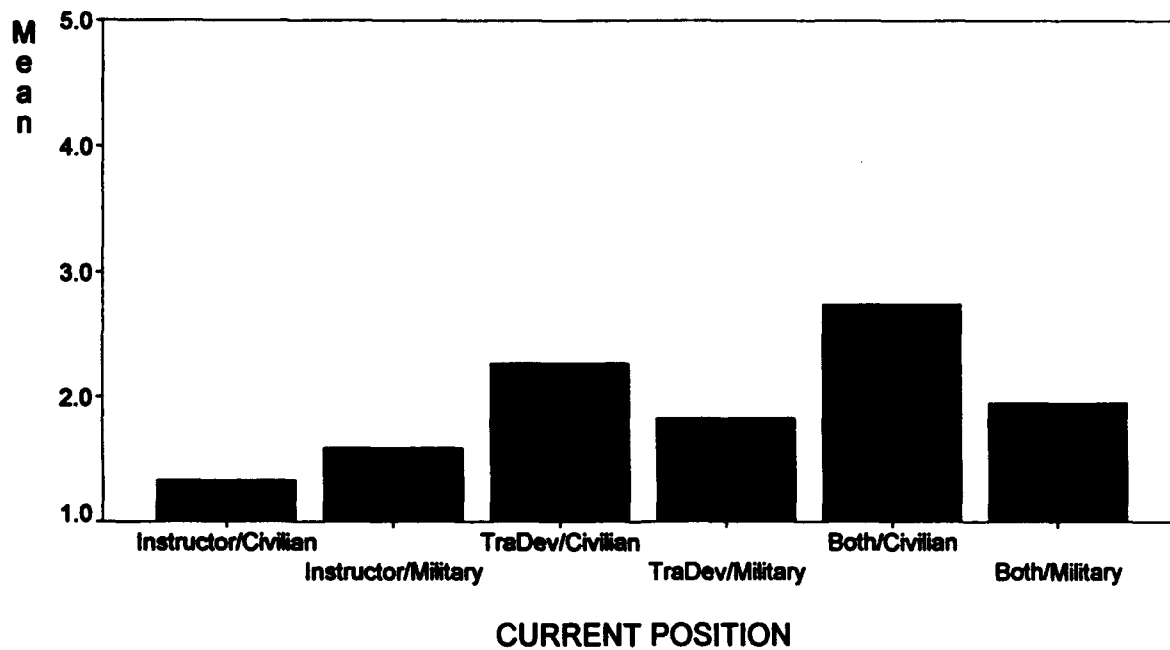


MANHOURS 1 HOUR PAPER-BASED



LEE 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



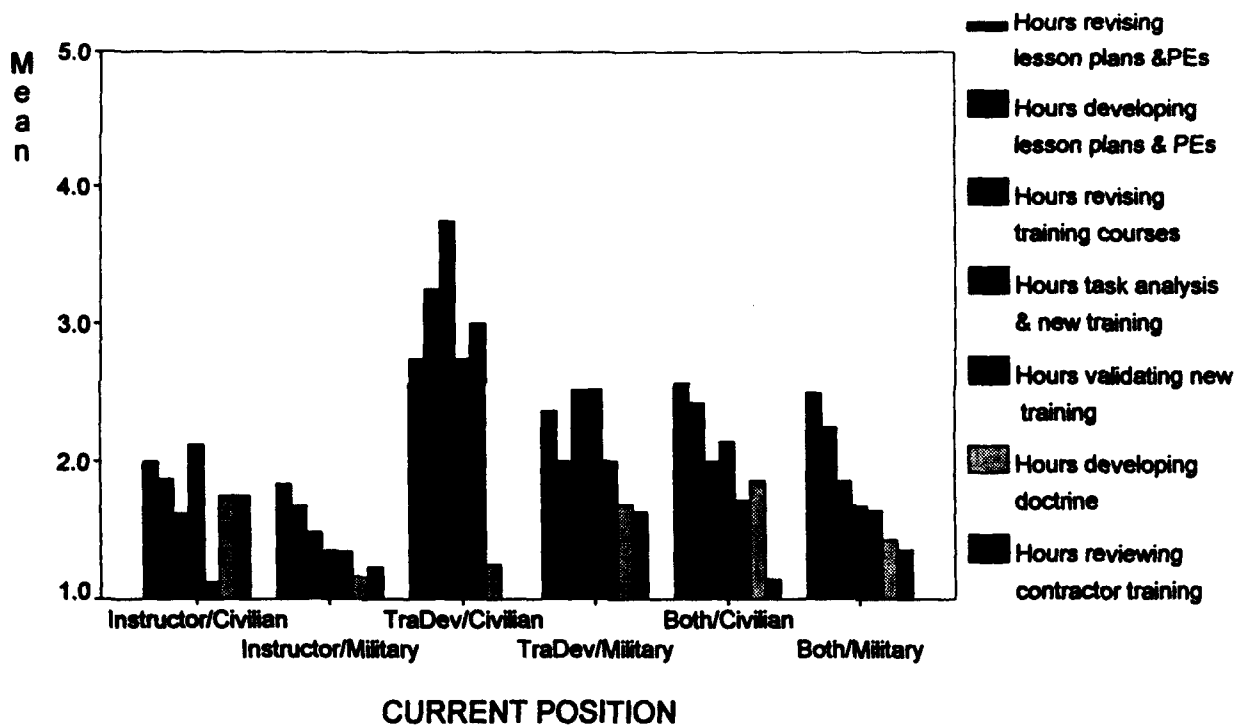
LEE 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

Appendix N
Fort Leonard Wood

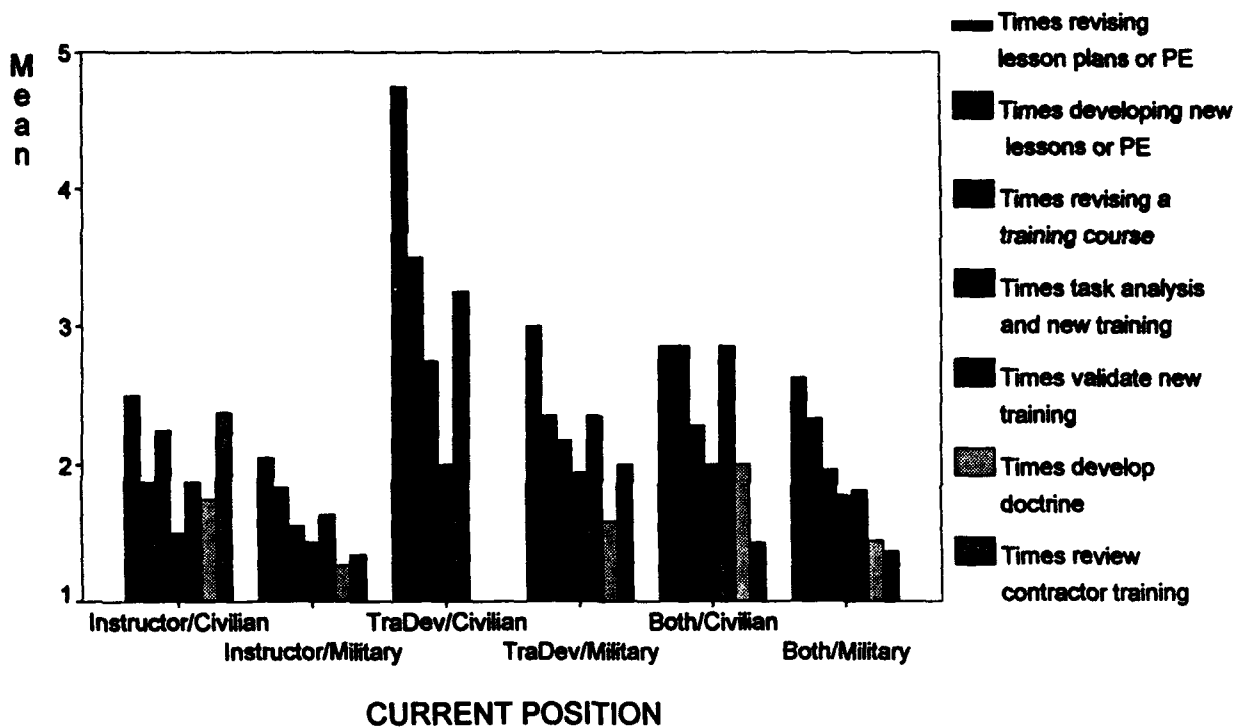
FT. LEONARD WOOD

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	9	4.8	4.9	4.9
Instructor/Military	2.00	113	60.8	61.1	65.9
TraDev/Civilian	3.00	6	3.2	3.2	69.2
TraDev/Military	4.00	19	10.2	10.3	79.5
Both/Civilian	5.00	8	4.3	4.3	83.8
Both/Military	6.00	30	16.1	16.2	100.0
.	.	1	.5	Missing	
	Total	186	100.0	100.0	
Valid cases	185	Missing cases	1		

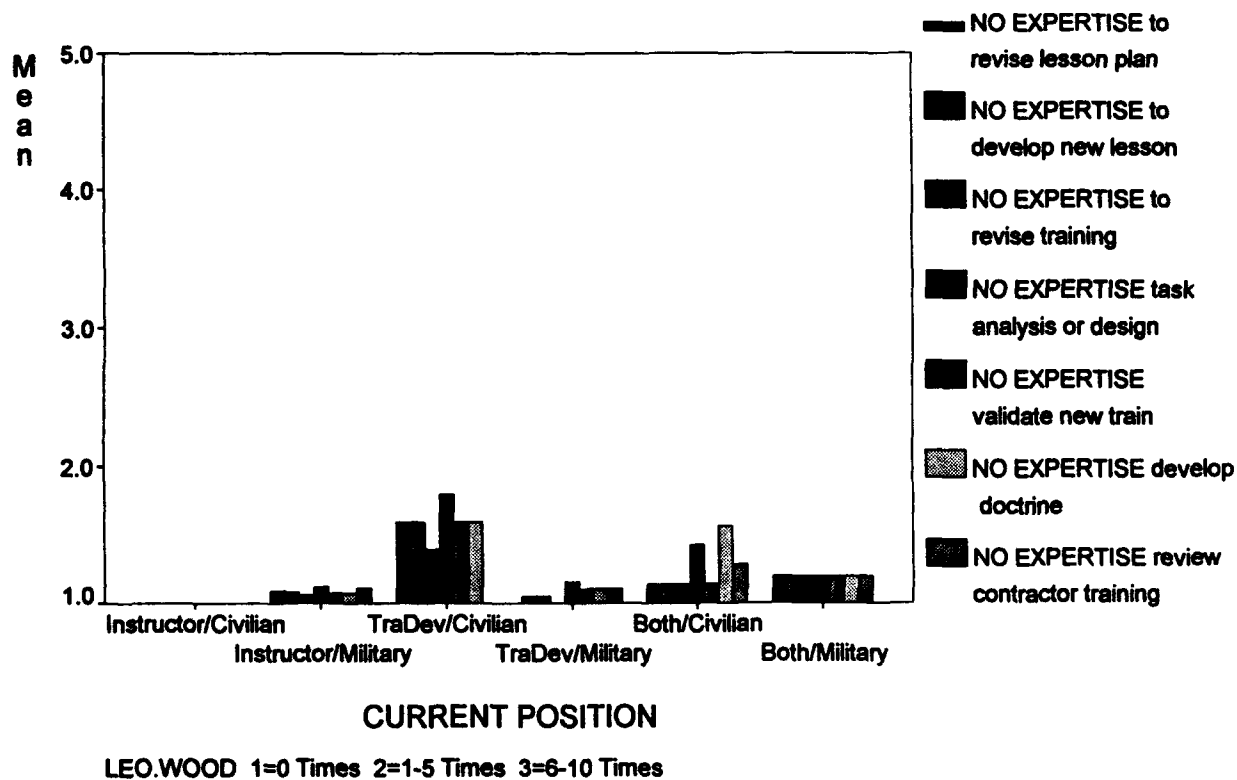
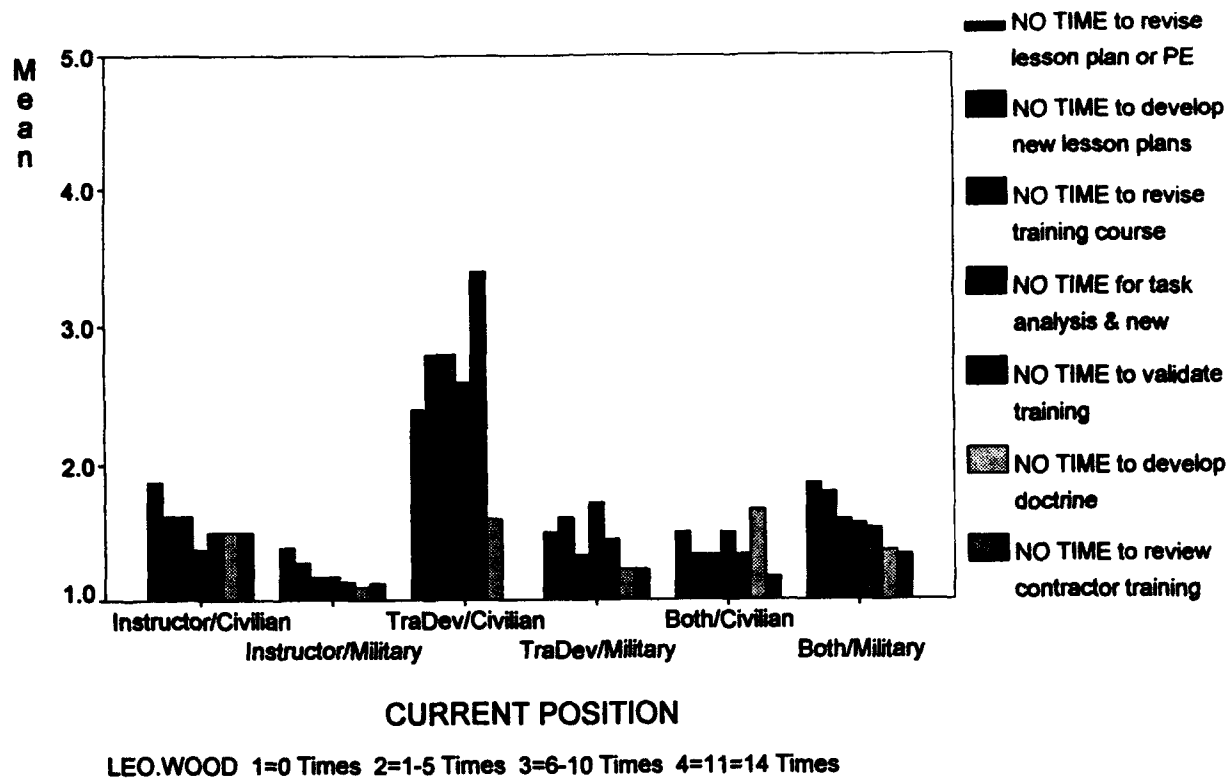
Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



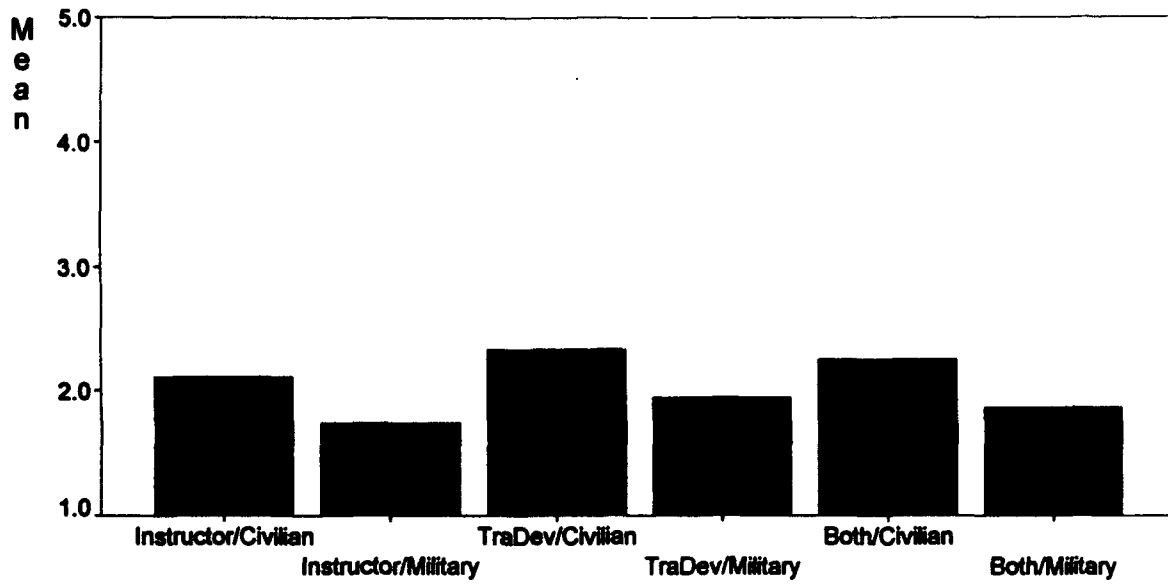
LEO.WOOD 1=0 Hours 2=1-4 Hours 3=5-8 Hours 4=9-16 Hours



LEO.WOOD 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times 5>14



MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

LEO.WOOD 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

LEO.WOOD 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

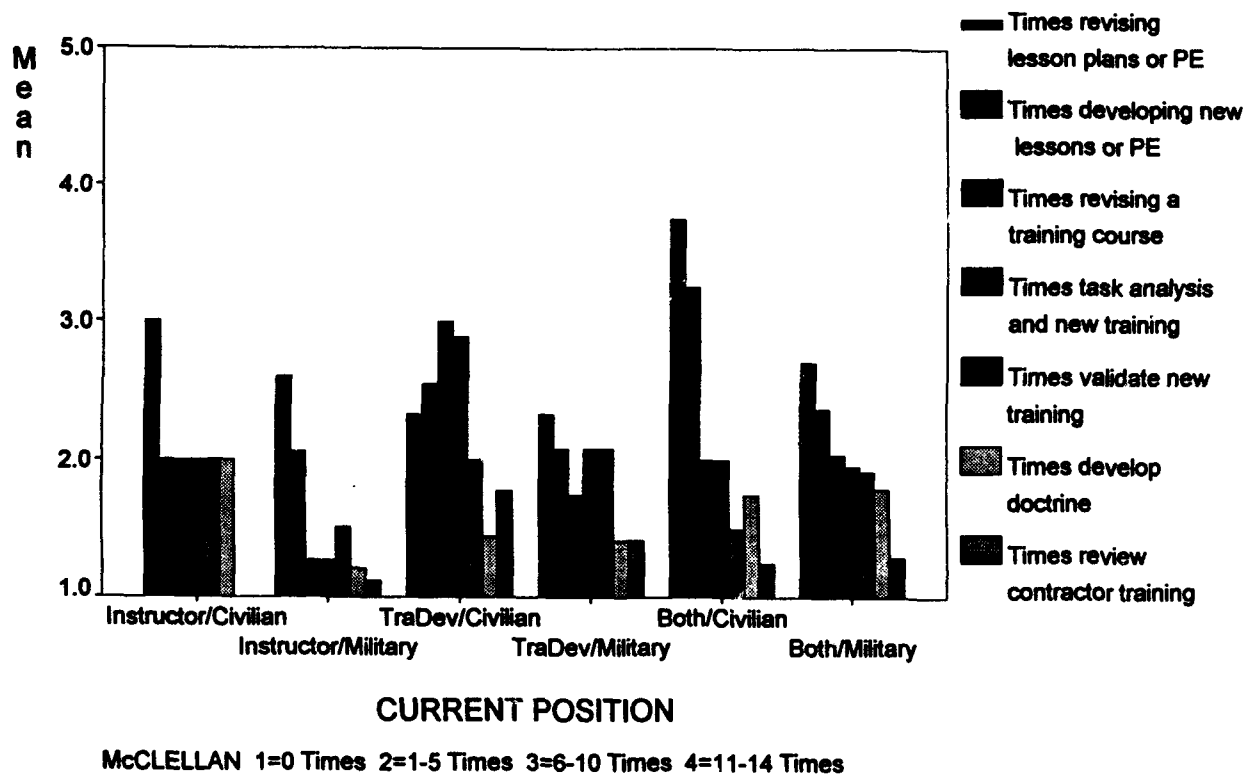
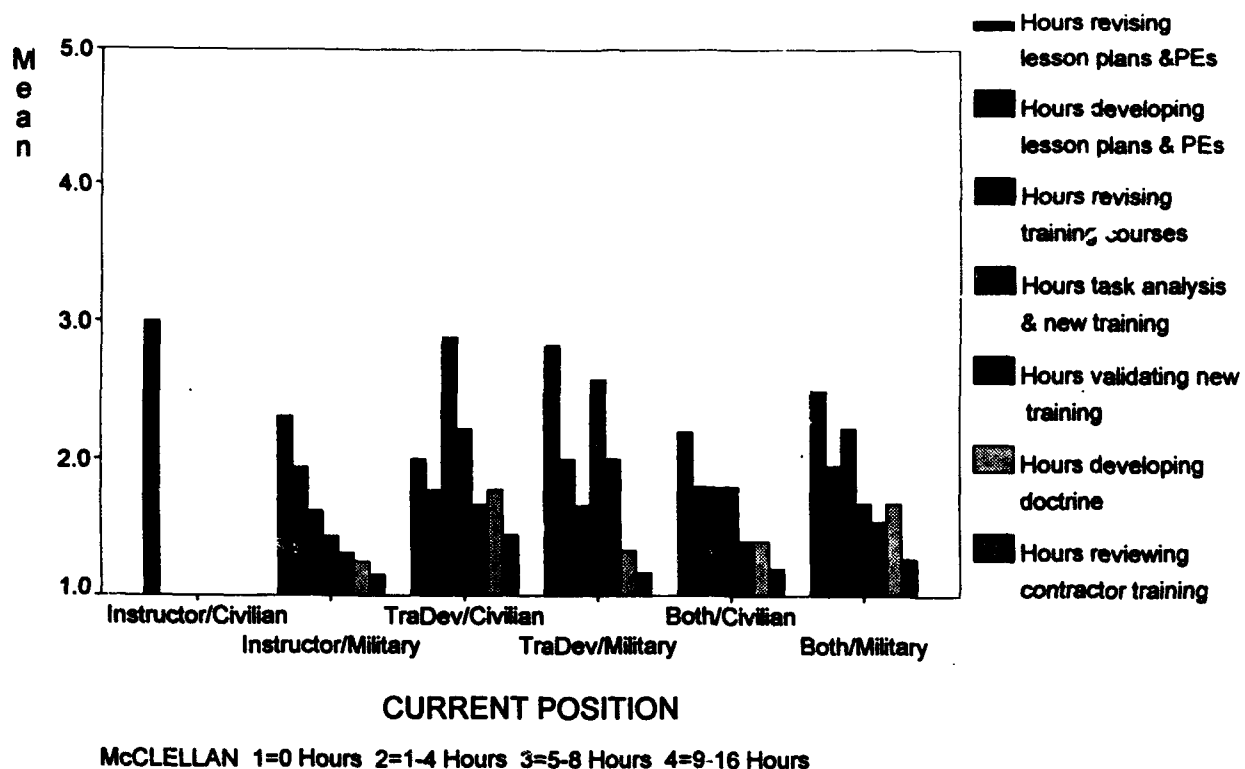
Appendix O
Fort McClellan

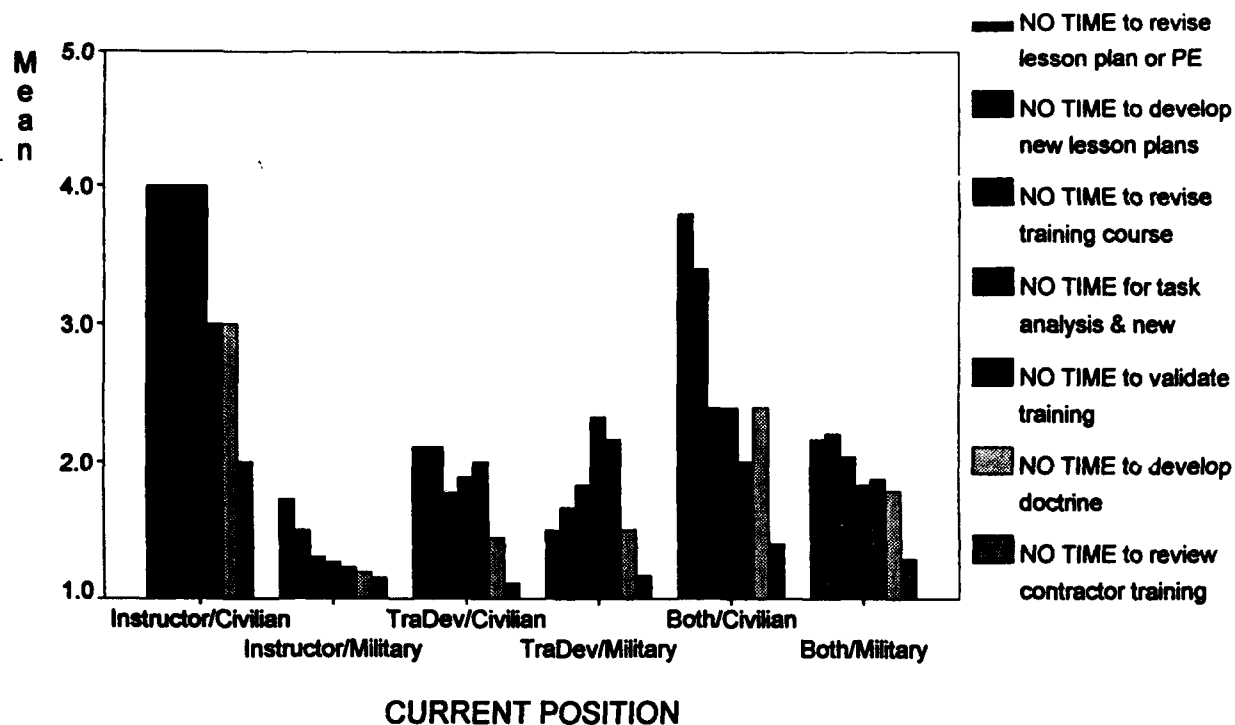
FT. McCLELLAN

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	2	1.6	1.6	1.6
Instructor/Military	2.00	63	50.4	50.4	52.0
TraDev/Civilian	3.00	9	7.2	7.2	59.2
TraDev/Military	4.00	13	10.4	10.4	69.6
Both/Civilian	5.00	7	5.6	5.6	75.2
Both/Military	6.00	31	24.8	24.8	100.0
		-----	-----	-----	
Total		125	100.0	100.0	

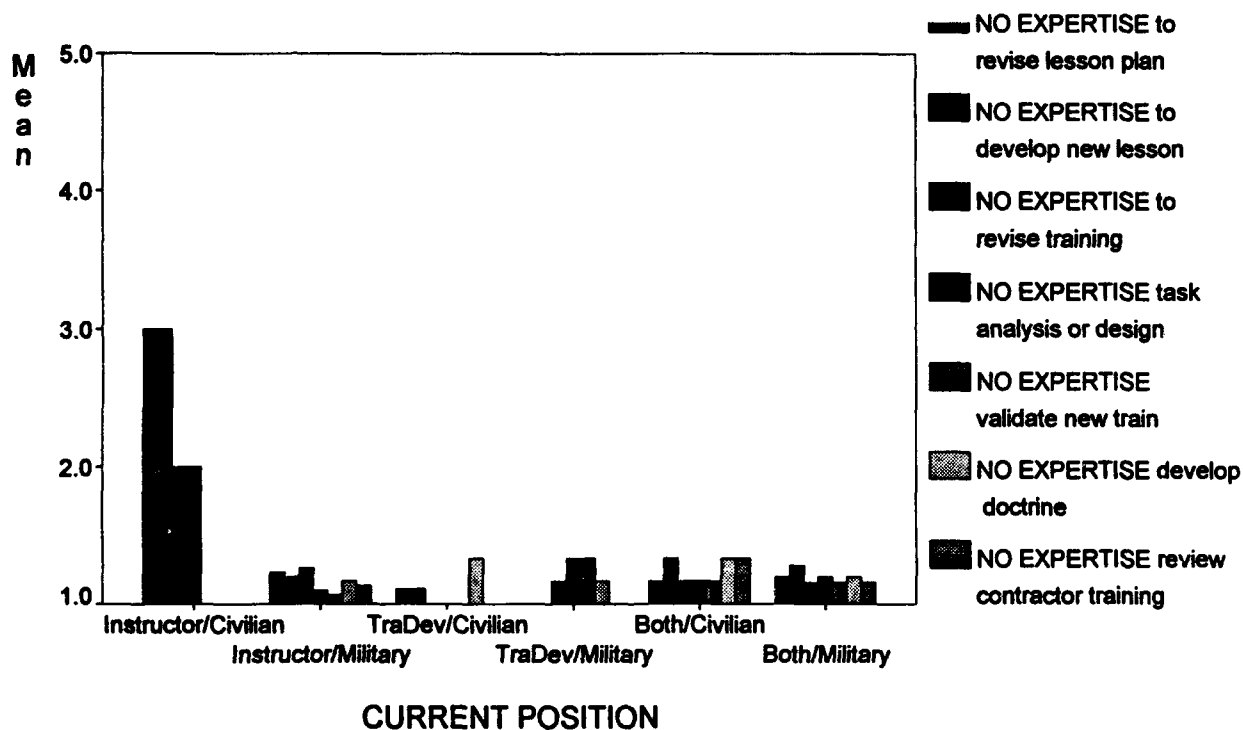
Valid cases 125 Missing cases 0

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



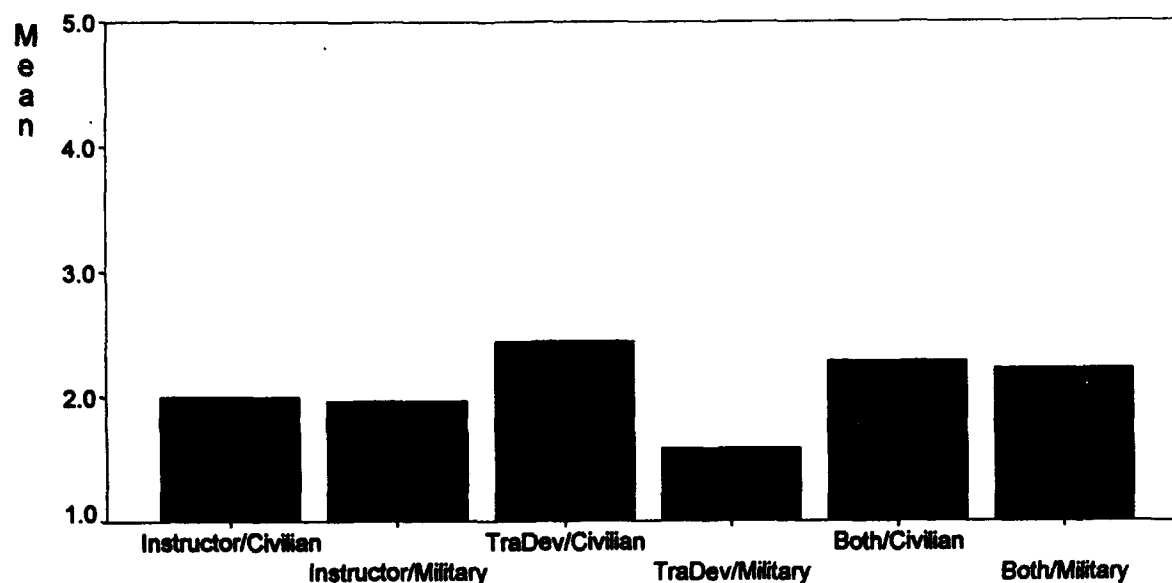


McCLELLAN 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



McCLELLAN 1=0 Times 2=1-5 Times 3=6-10 Times

MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

McCLELLAN 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

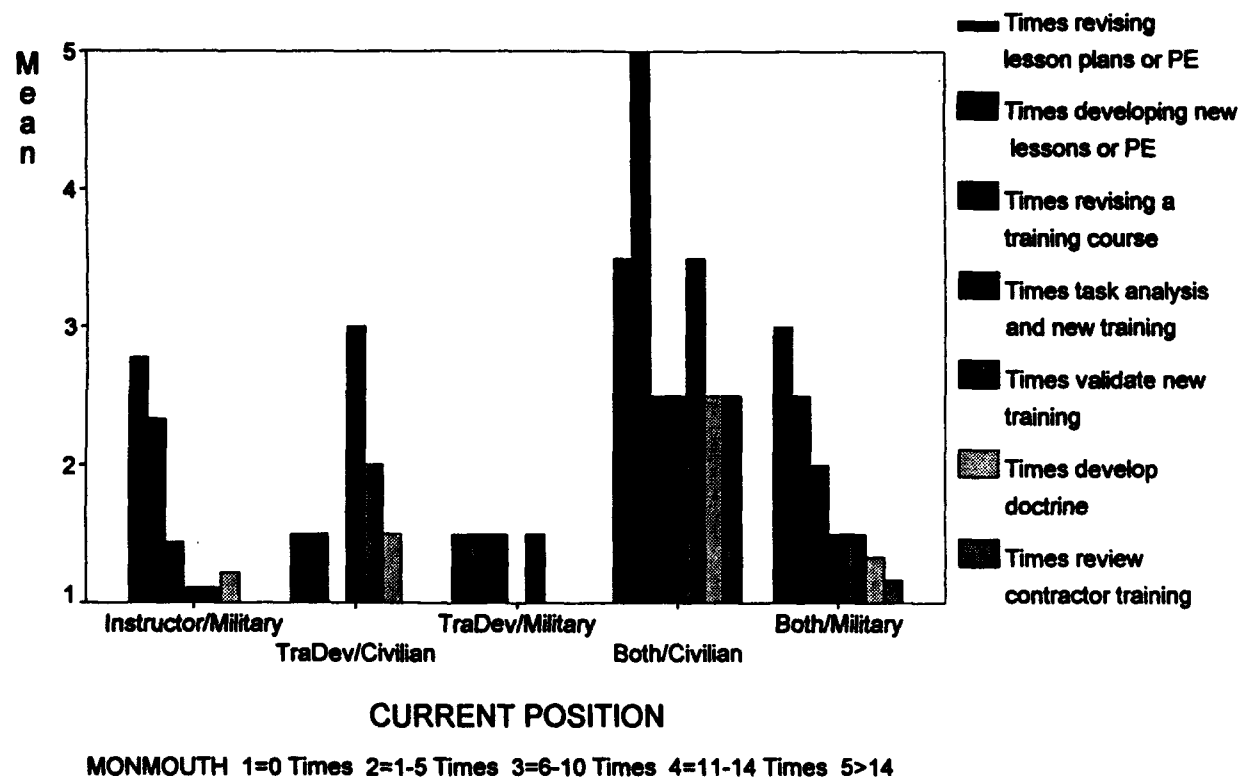
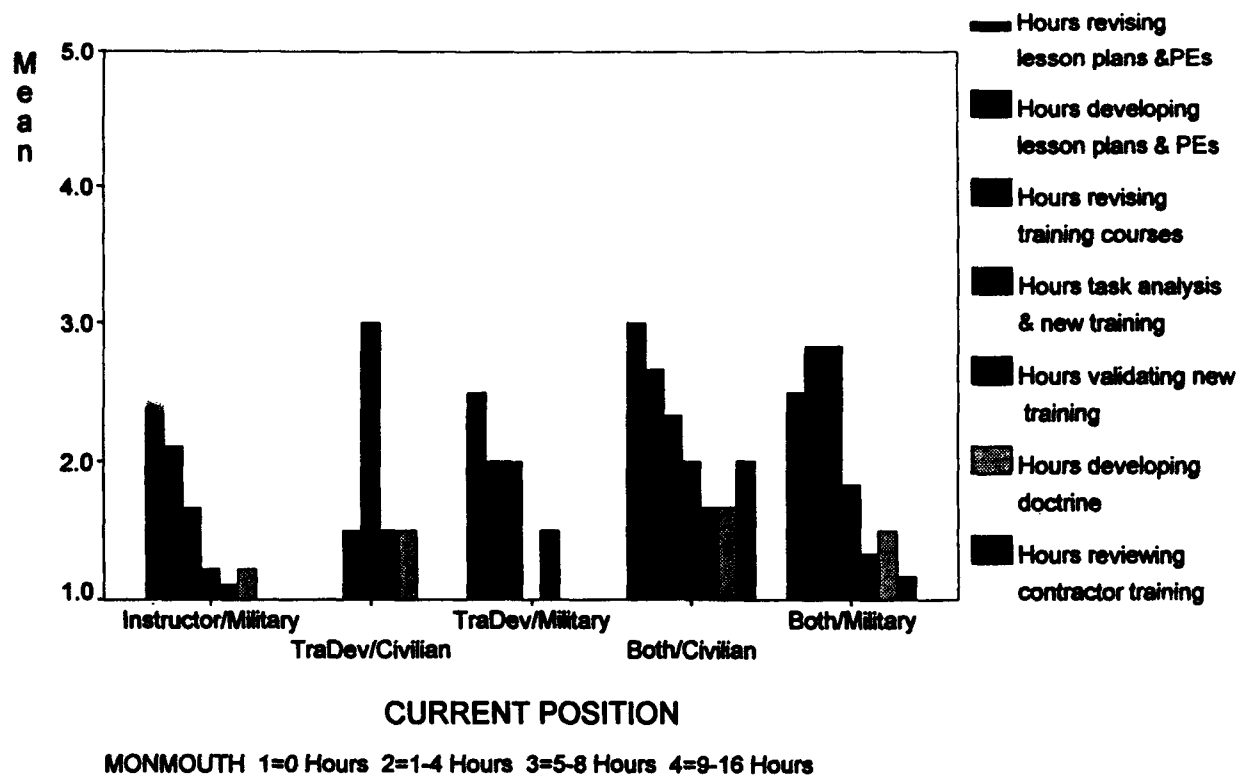
McCLELLAN 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

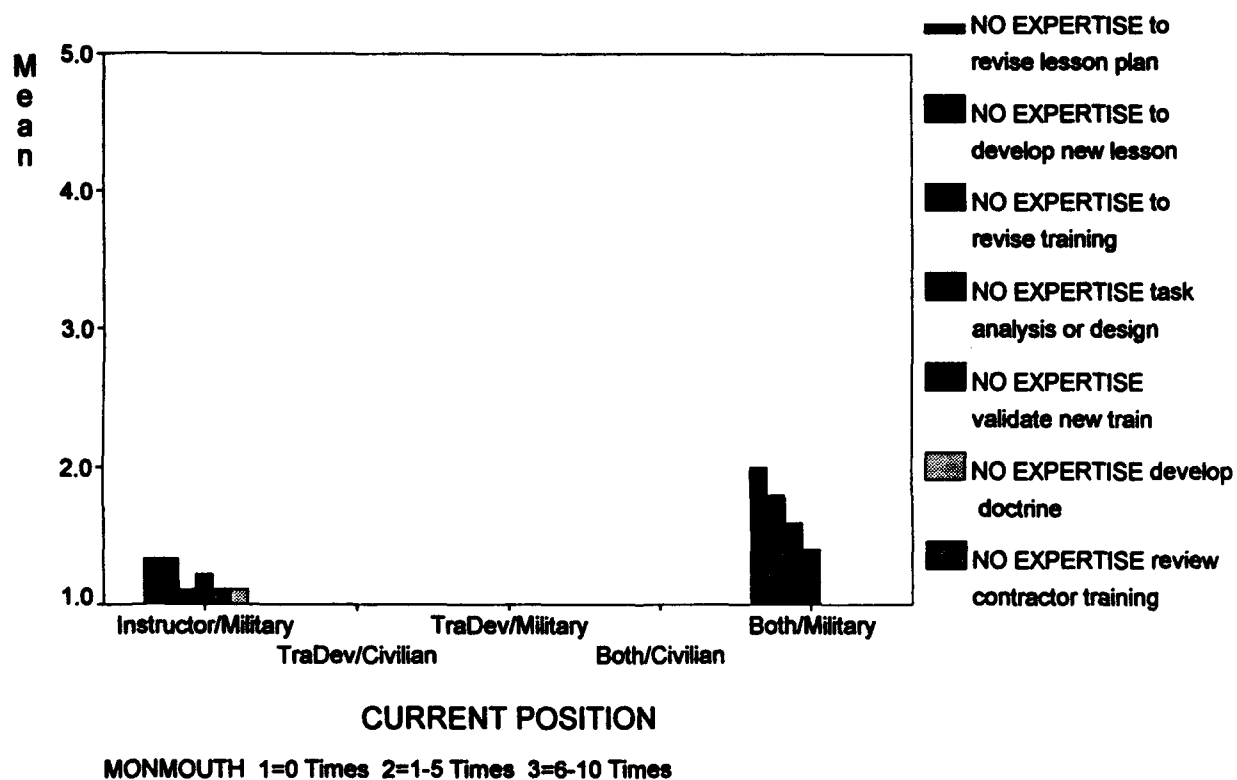
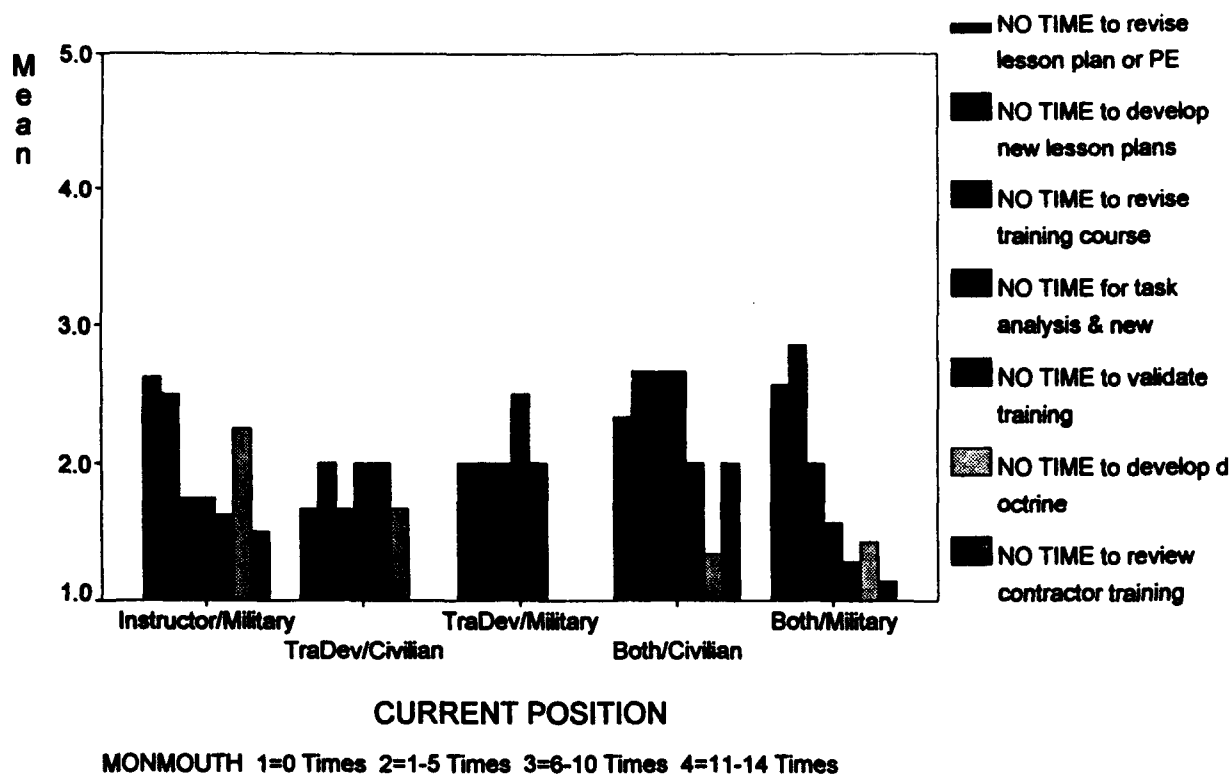
Appendix P
Fort Monmouth

FT. MONMOUTH

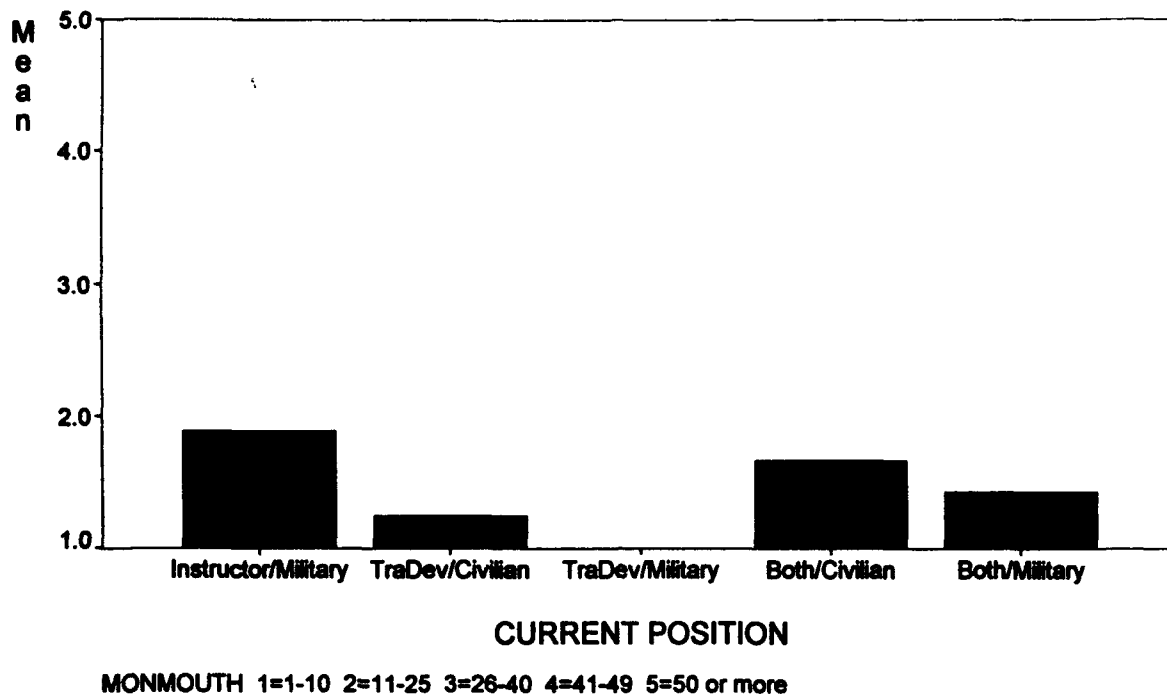
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Military	2.00	9	34.6	36.0	36.0
TraDev/Civilian	3.00	4	15.4	16.0	52.0
TraDev/Military	4.00	2	7.7	8.0	60.0
Both/Civilian	5.00	3	11.5	12.0	72.0
Both/Military	6.00	7	26.9	28.0	100.0
.		1	3.8	Missing	
		-----	-----	-----	
Total		26	100.0	100.0	
Valid cases	25	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.

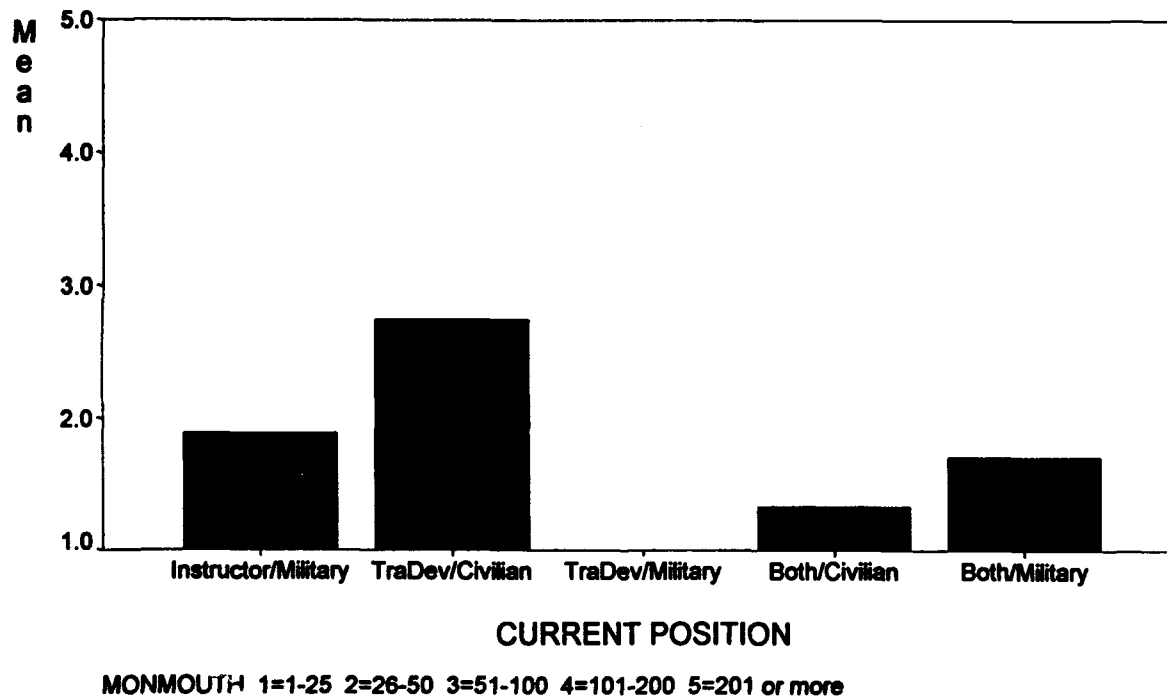




MANHOURS 1 HOUR PAPER-BASED



MANHOURS 1 HOUR MULTIMEDIA

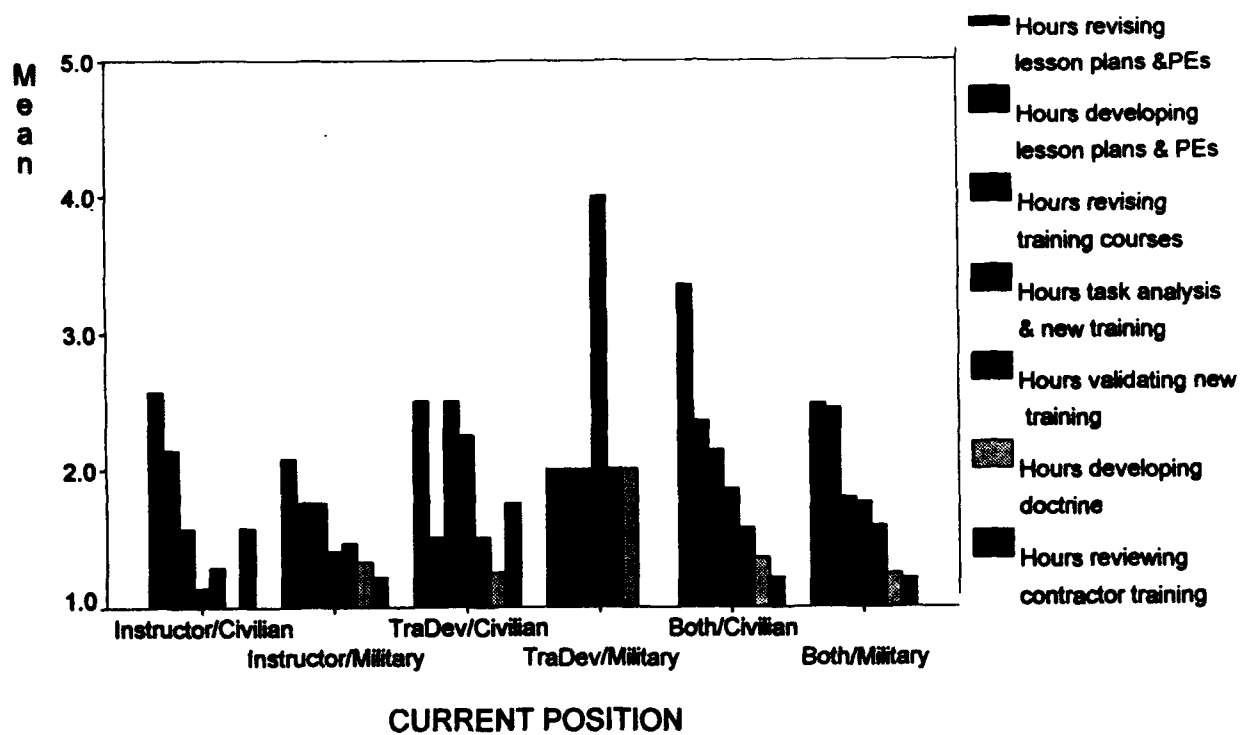


Appendix Q
Redstone Arsenal

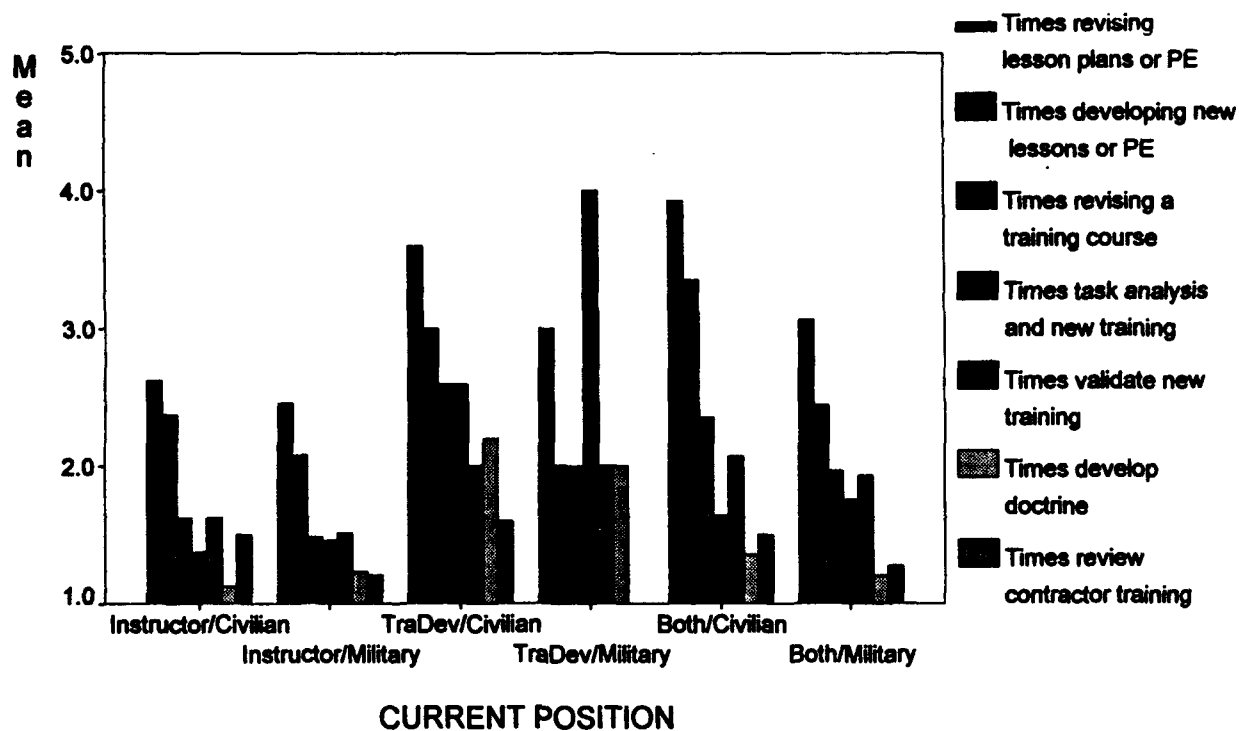
REDSTONE ARSENAL

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	9	8.4	8.6	8.6
Instructor/Military	2.00	41	38.3	39.0	47.6
TraDev/Civilian	3.00	7	6.5	6.7	54.3
TraDev/Military	4.00	1	.9	1.0	55.2
Both/Civilian	5.00	15	14.0	14.3	69.5
Both/Military	6.00	32	29.9	30.5	100.0
.		2	1.9	Missing	
		-----	-----	-----	
Total		107	100.0	100.0	
Valid cases	105	Missing cases	2		

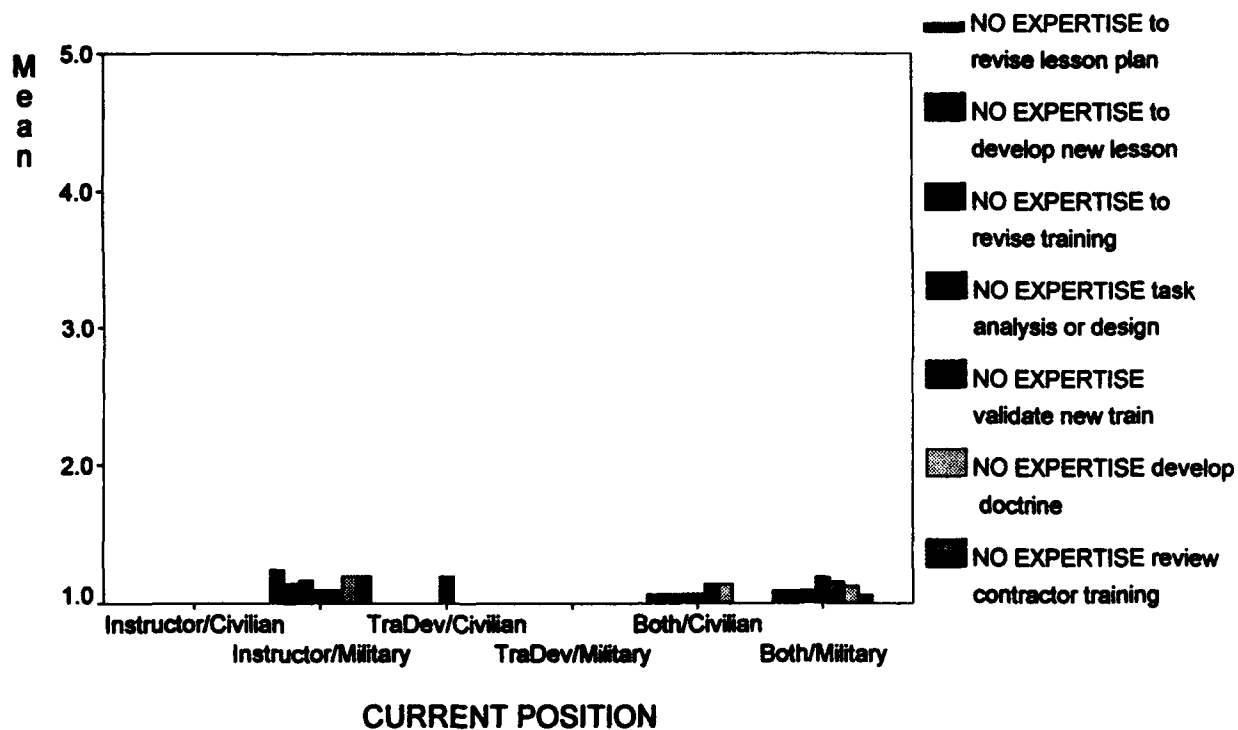
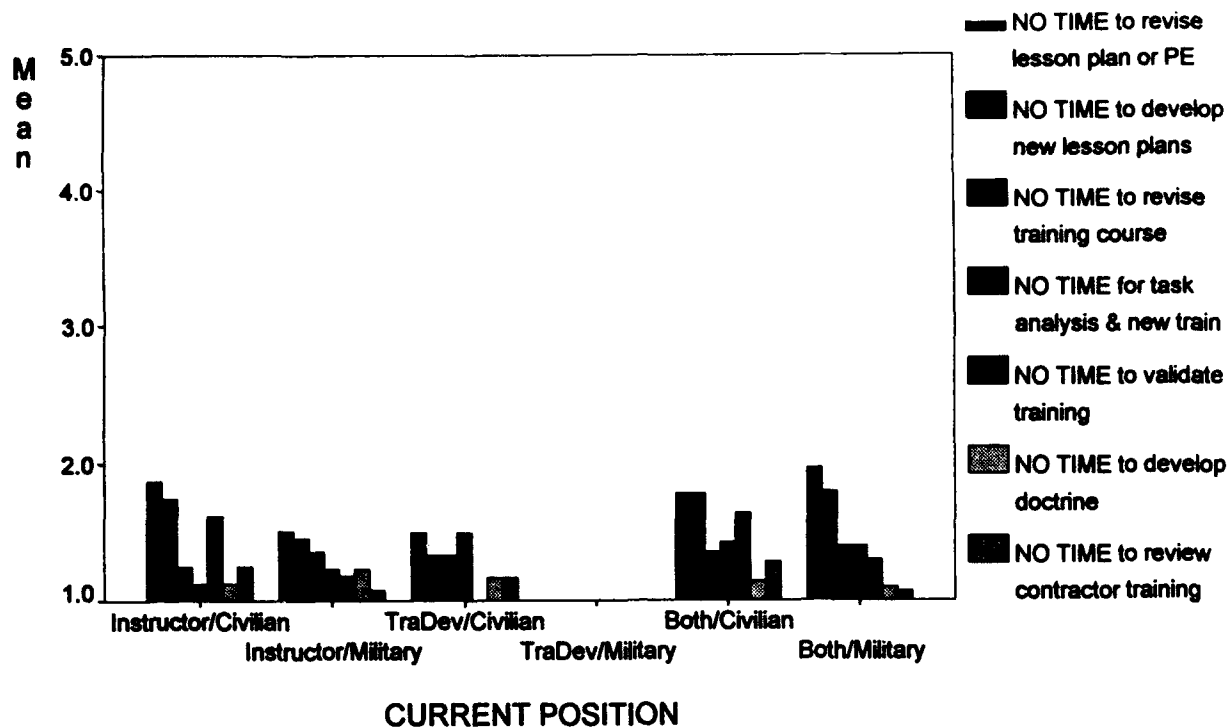
Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



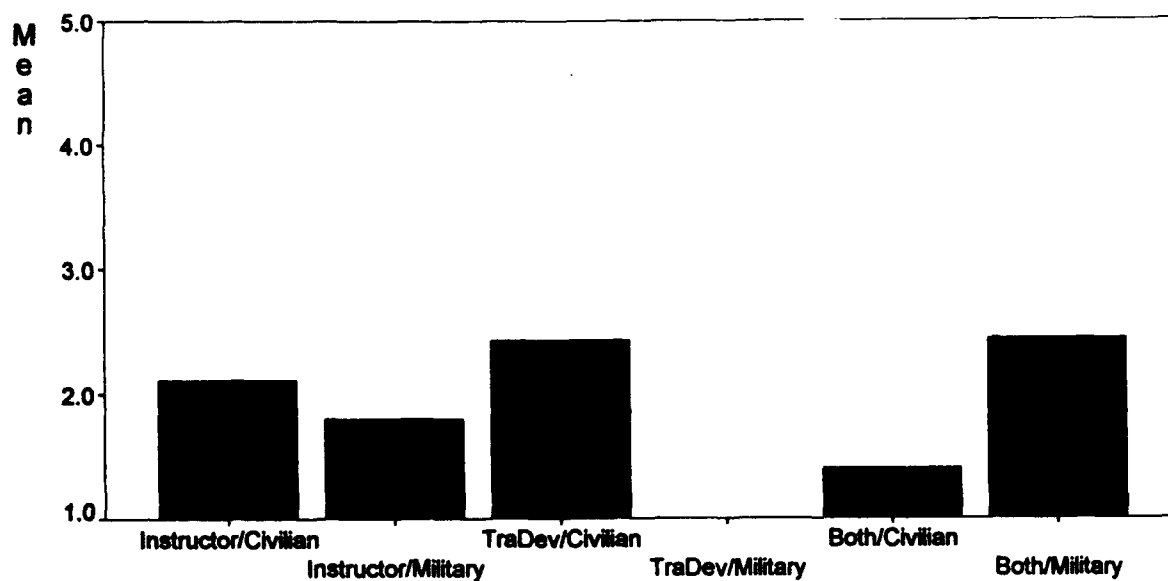
REDSTONE 1=0 Hours 2=1-4 Hours 3=5-8 Hours 4=9-16 Hours



REDSTONE 1=0 Times 2=1-5 Times 3=6-10 Times 4=11-14 Times



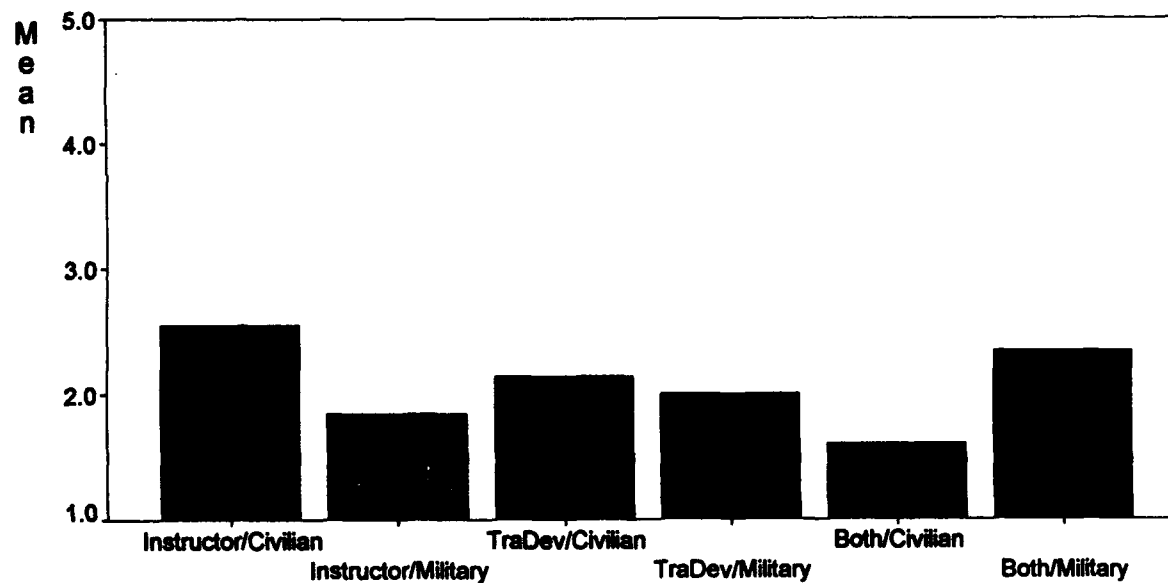
MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

REDSTONE 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

REDSTONE 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

Appendix R

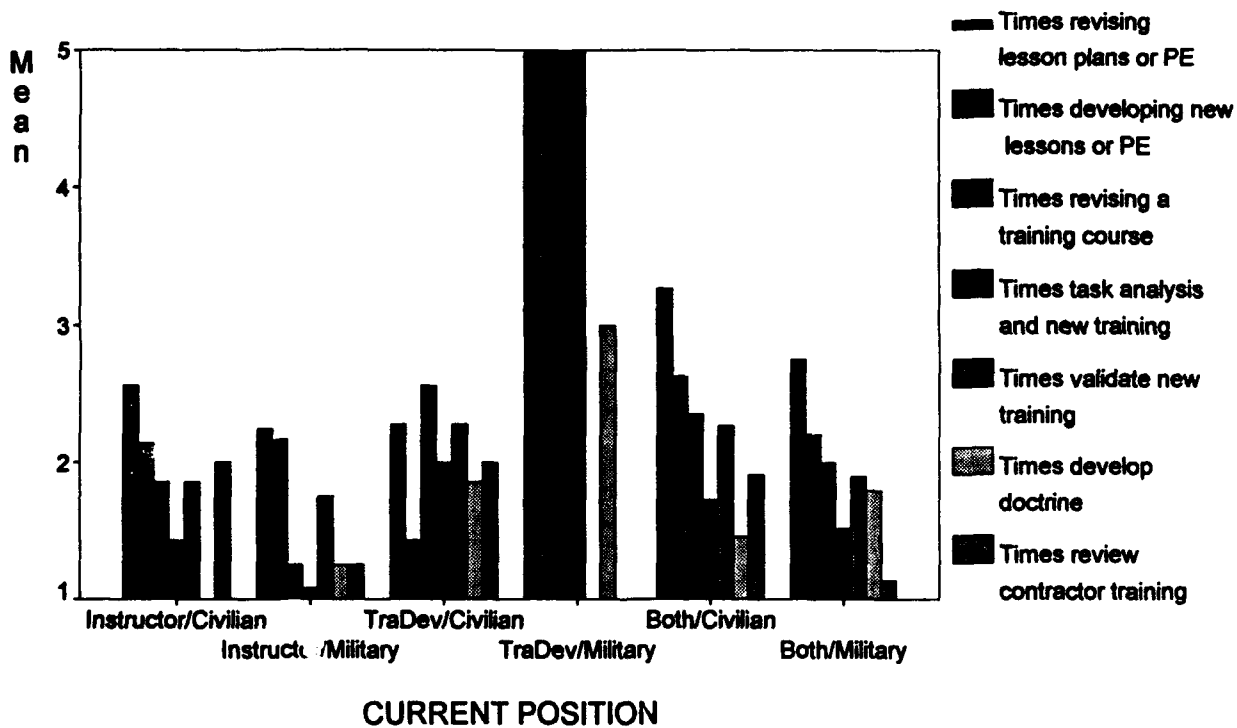
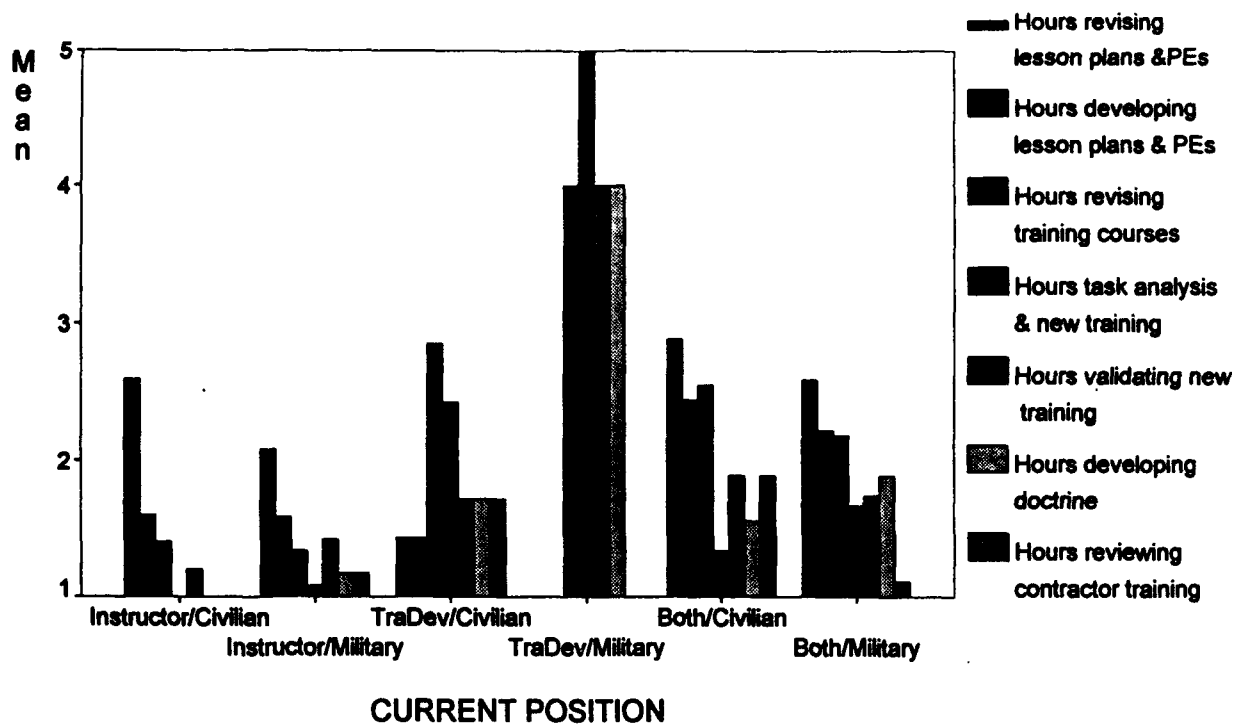
Fort Rucker

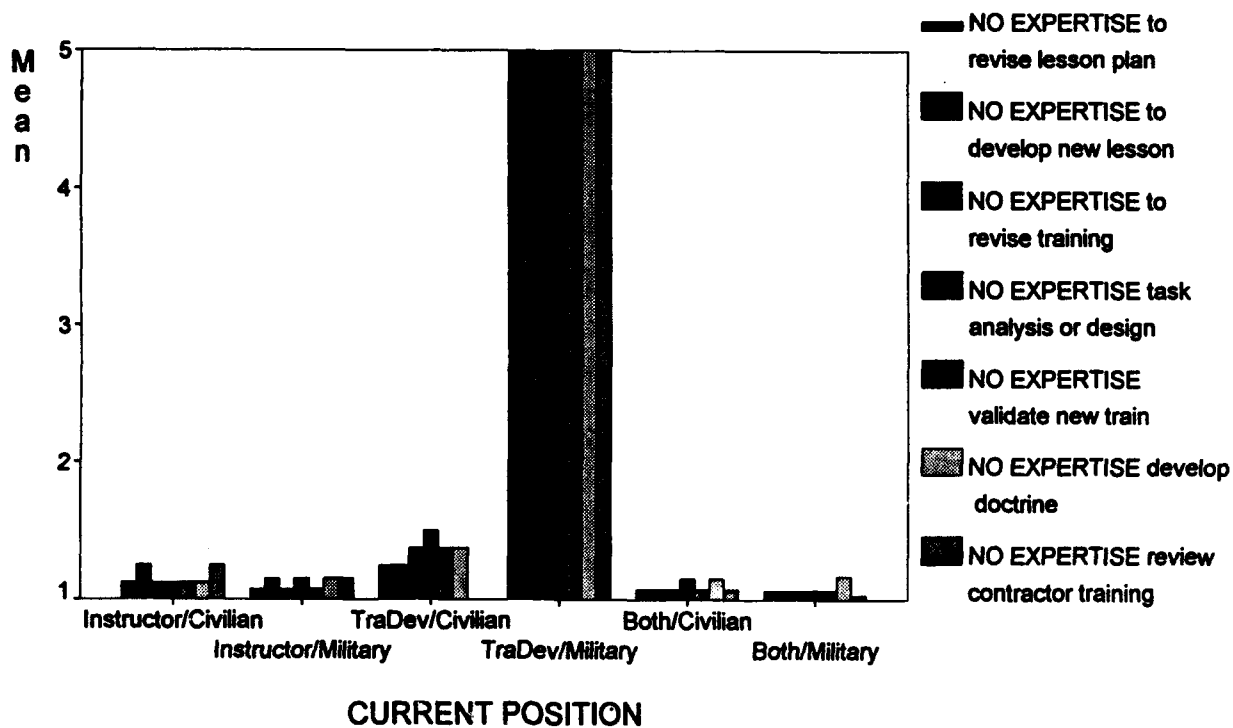
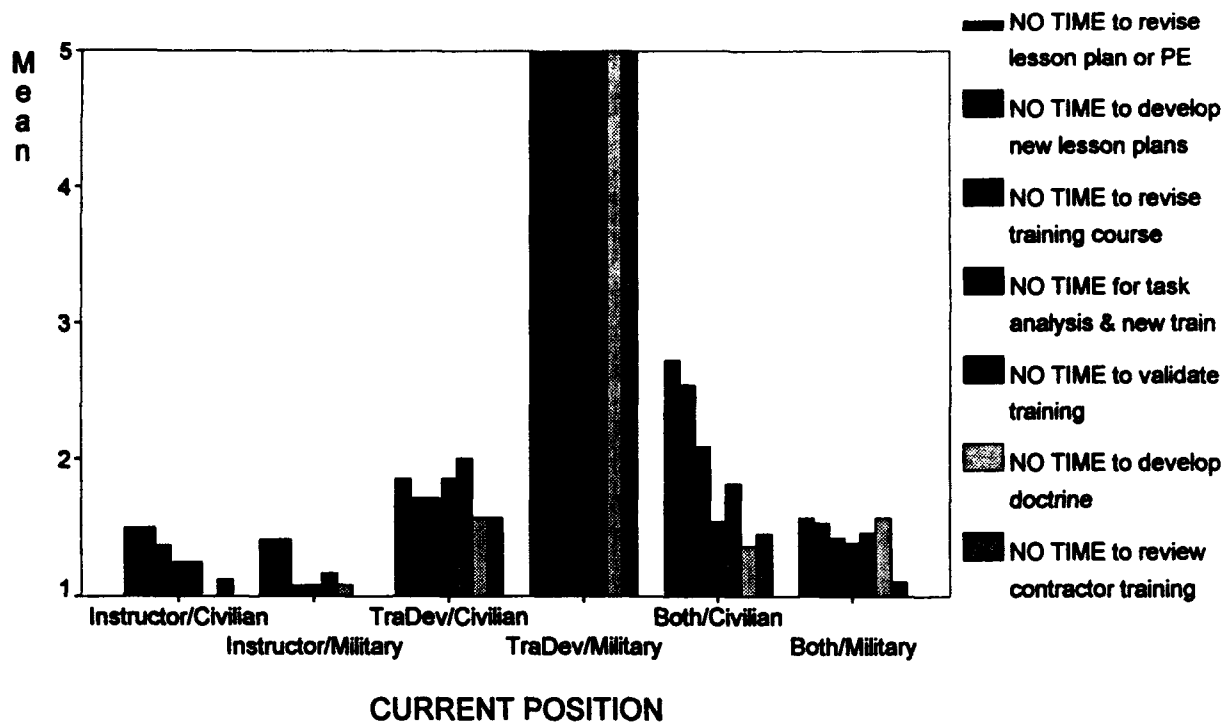
FT. RUCKER

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	8	10.5	10.5	10.5
Instructor/Military	2.00	14	18.4	18.4	28.9
TraDev/Civilian	3.00	11	14.5	14.5	43.4
TraDev/Military	4.00	1	1.3	1.3	44.7
Both/Civilian	5.00	13	17.1	17.1	61.8
Both/Military	6.00	29	38.2	38.2	100.0
		-----	-----	-----	
Total		76	100.0	100.0	

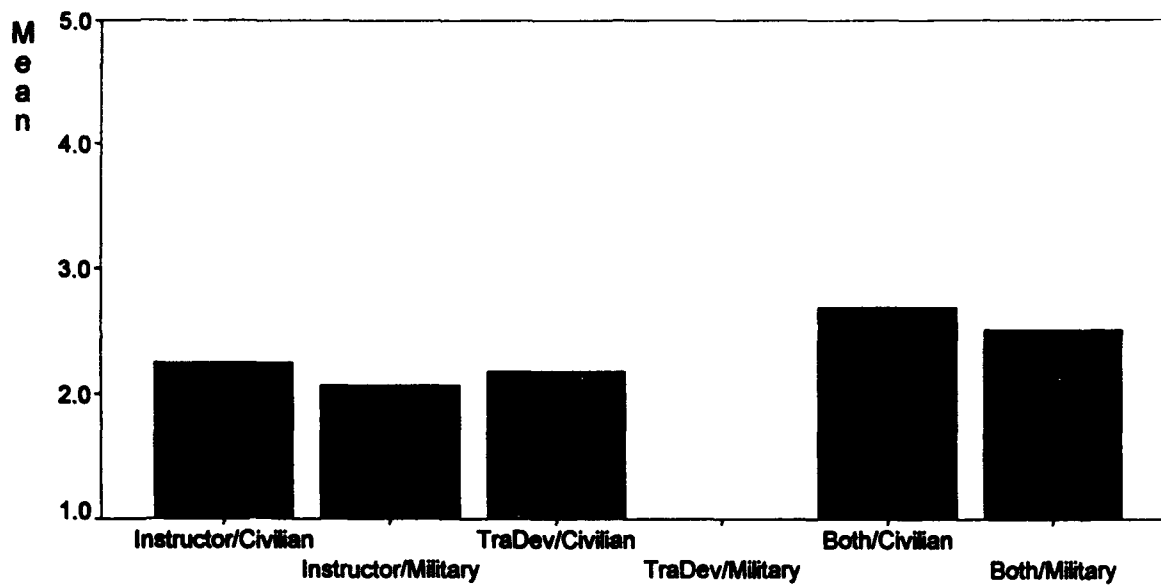
Valid cases 76 Missing cases 0

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.





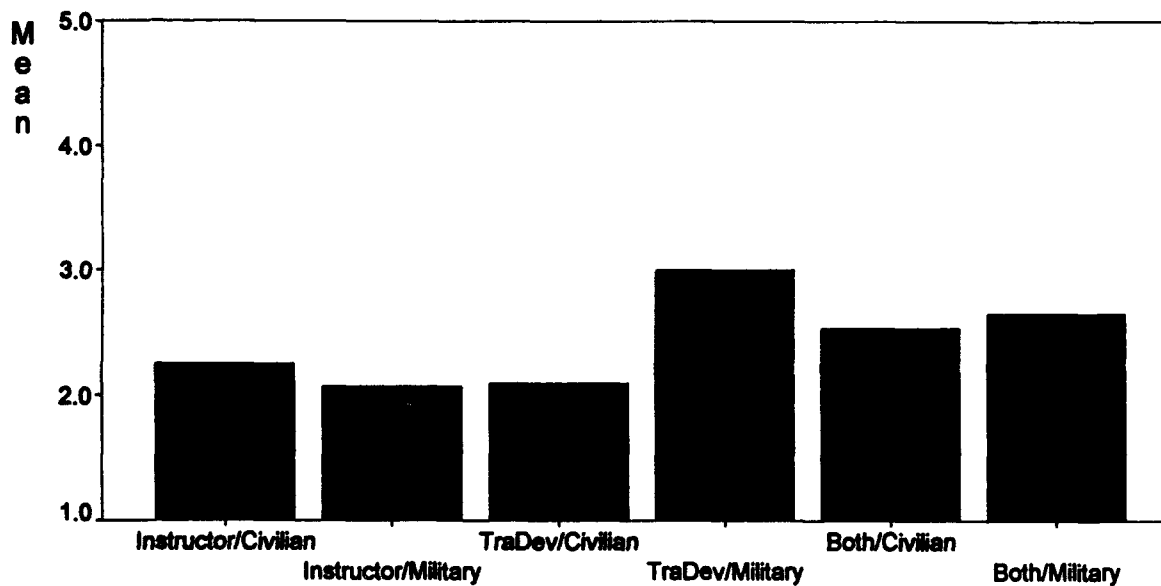
MANHOURS 1 HOUR PAPER-BASED



CURRENT POSITION

RUCKER 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



CURRENT POSITION

RUCKER 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

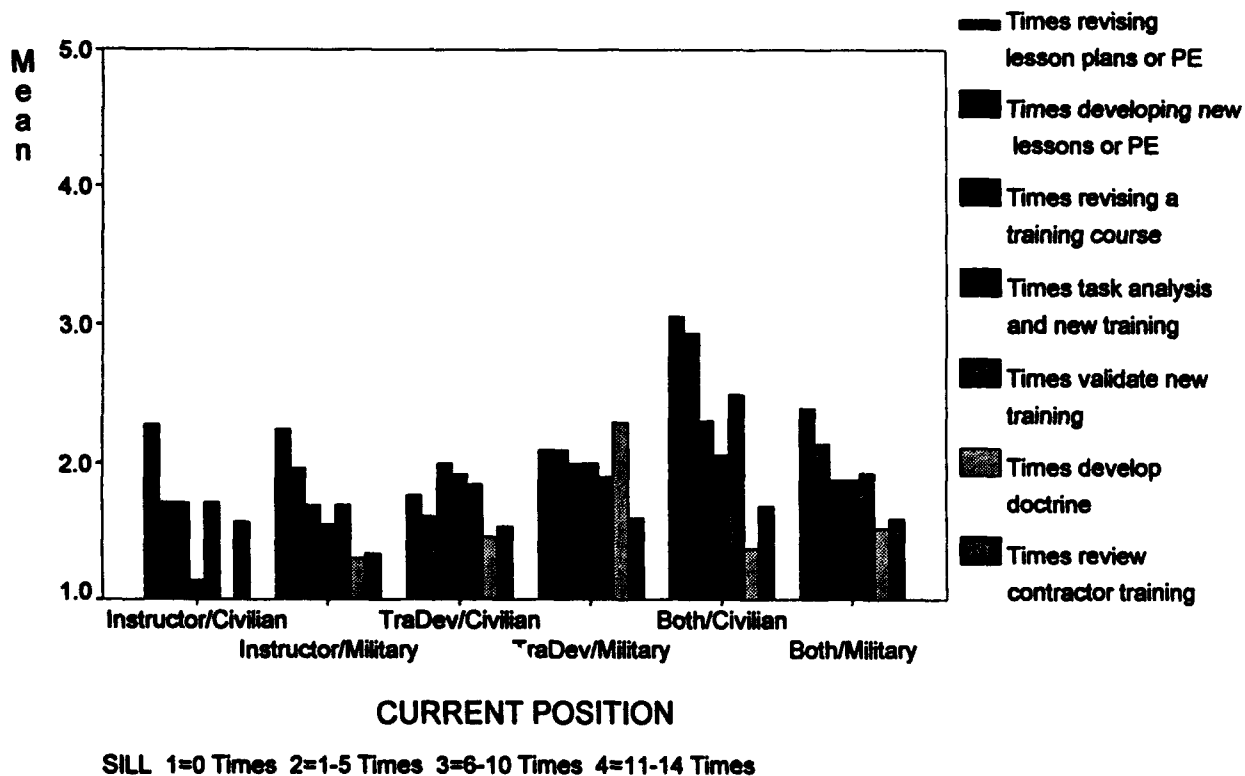
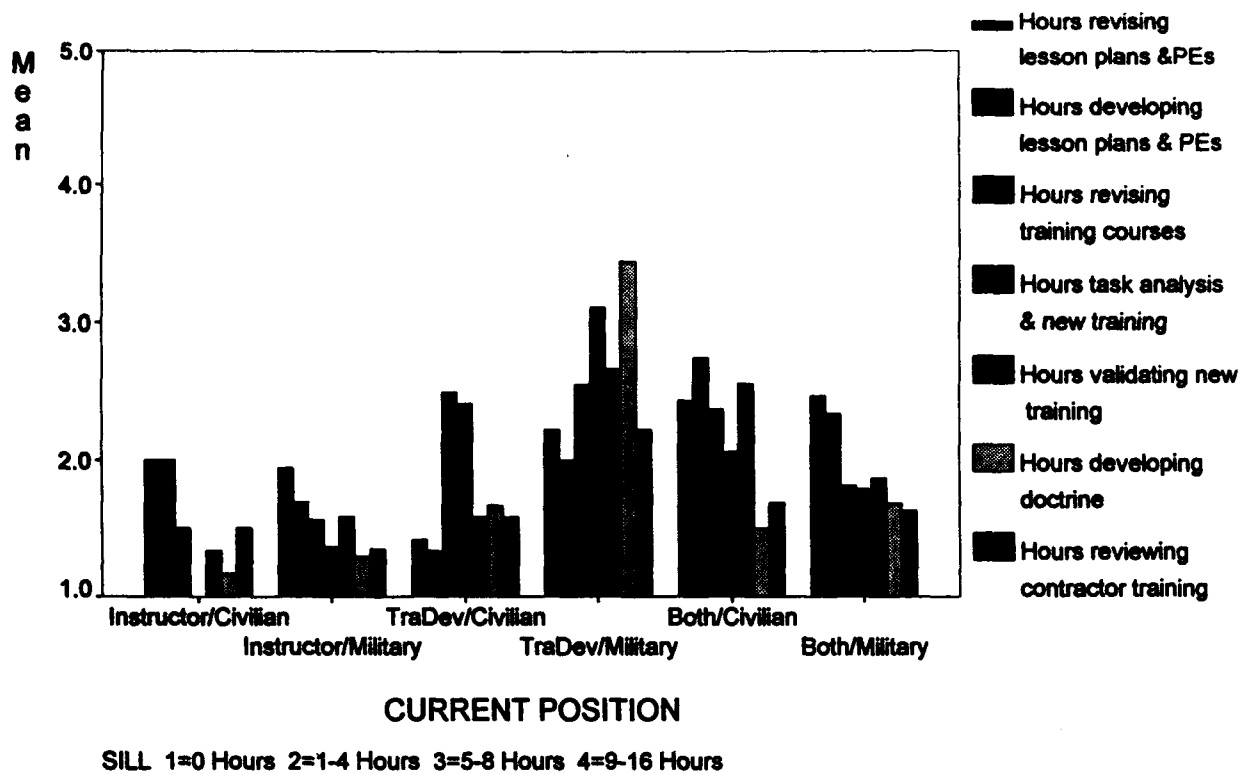
Appendix S

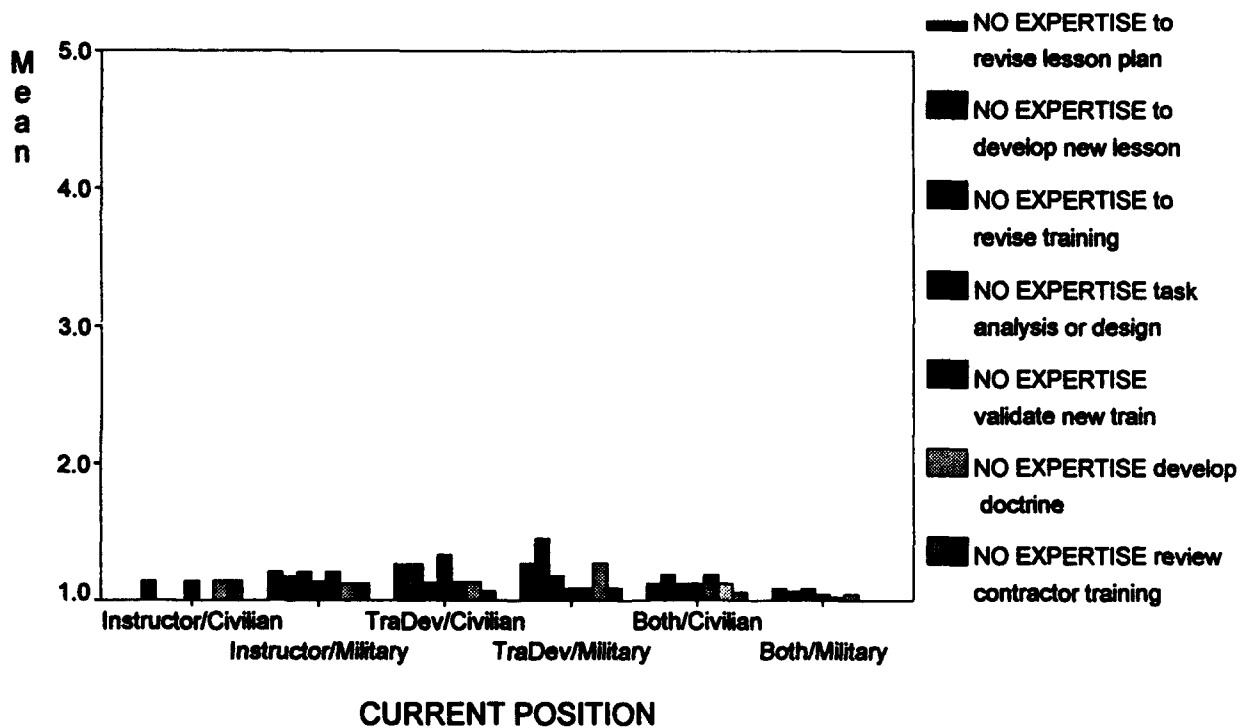
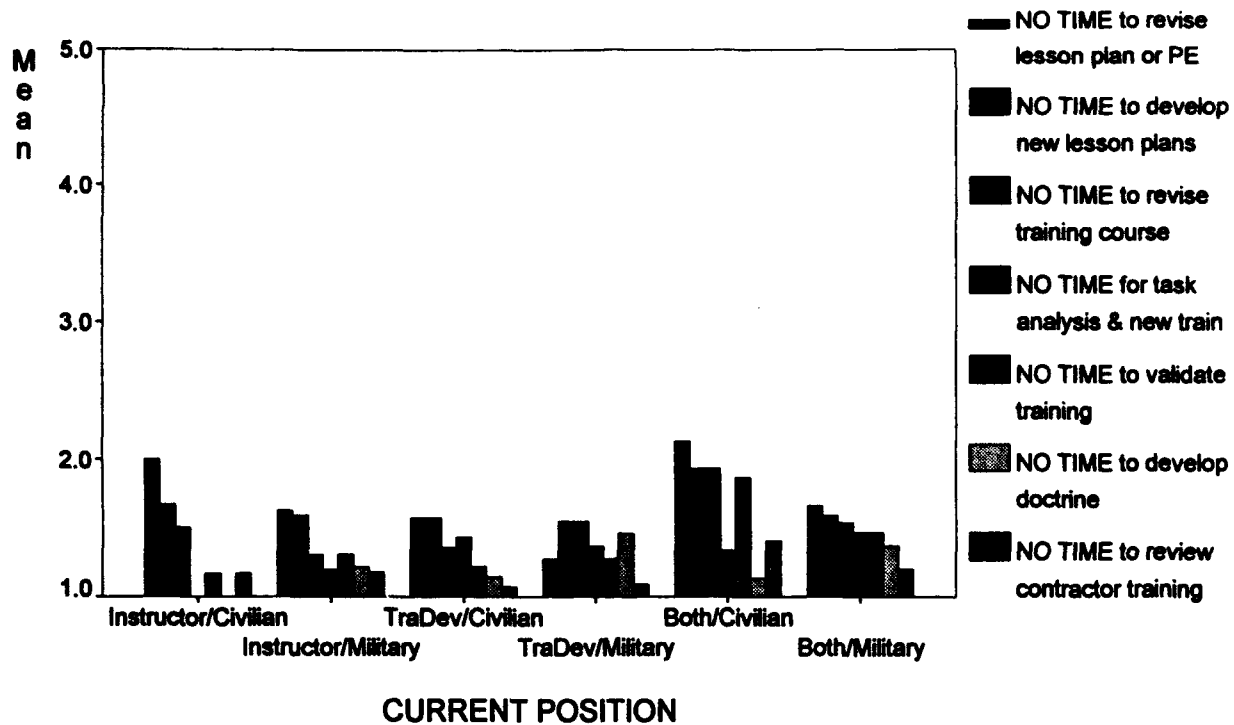
Fort Sill

FORT SILL

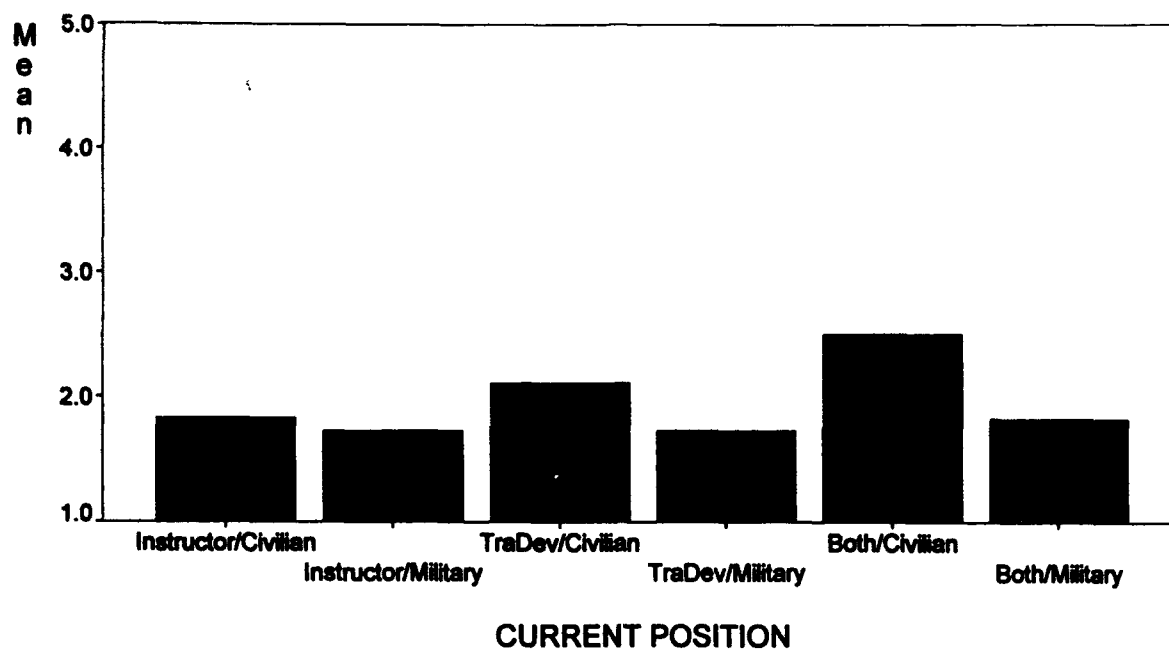
Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Instructor/Civilian	1.00	7	4.4	4.4	4.4
Instructor/Military	2.00	60	37.5	37.7	42.1
TraDev/Civilian	3.00	19	11.9	11.9	54.1
TraDev/Military	4.00	11	6.9	6.9	61.0
Both/Civilian	5.00	16	10.0	10.1	71.1
Both/Military	6.00	46	28.8	28.9	100.0
.		1	.6	Missing	
		-----	-----	-----	
Total		160	100.0	100.0	
Valid cases	159	Missing cases	1		

Note. Bars omitted on graphs appearing on the following pages indicate a mean of 0 hours or 0 times reported by the subgroup for that training development activity.



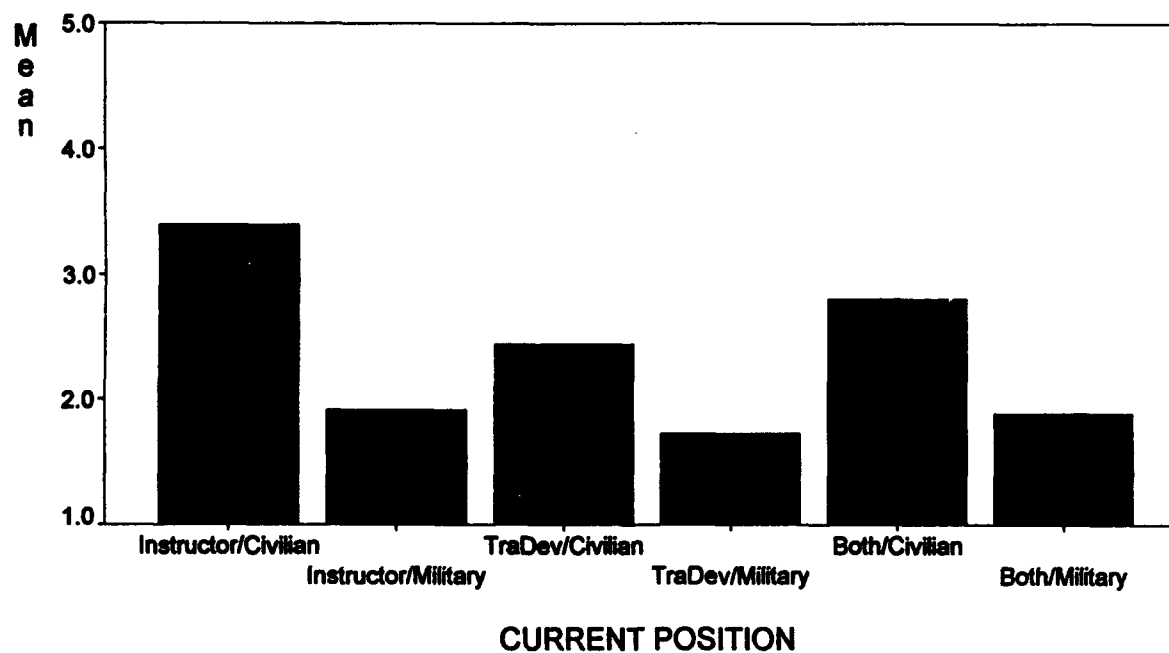


MANHOURS 1 HOUR PAPER-BASED



SILL 1=1-10 2=11-25 3=26-40 4=41-49 5=50 or more

MANHOURS 1 HOUR MULTIMEDIA



SILL 1=1-25 2=26-50 3=51-100 4=101-200 5=201 or more

Distribution List

U.S. Army Training and Doctrine Command, Fort Monroe, VA (15)
U.S. Army Ordnance Center and School, Aberdeen Proving Grounds, MD (2)
U.S. Army Infantry School, Directorate of Operations and Training Evaluation, Staff, and
Education Division, Staff and Faculty Development Branch, Fort Benning, GA (2)
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U.S. Army John F. Kennedy Special Warfare Center and School, Fort Bragg, NC (2)
8th Transportation Brigade, Staff and Faculty Development Division, Fort Eustis, VA (2)
U.S. Army Signal Center, Fort Gordon, GA (2)
U.S. Army Intelligence Center, Fort Huachuca, AZ (2)
U.S. Army Armor School, Fort Knox, KY (2)
U.S. Army Command and General Staff College, Fort Leavenworth, KS (2)
U.S. Army Combined Arms Support Command, Fort Lee, VA (2)
U.S. Army Engineer School, Fort Leonard Wood, MO (2)
U.S. Army Chemical School, Fort McClellan, AL (2)
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