Defense Acquisition University

Graduate and Supervisor Survey Report

Volume I
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BOOZ·ALLEN & HAMILTON

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1.0 Executive Summary

Defense Acquisition University's (DAU) mission is to develop a highly qualified workforce capable of performing current and future acquisition functions. DAU provides education and training to members of the Defense community. DAU and Booz·Allen and Hamilton (Booz·Allen) developed the Graduate and Supervisor Surveys to be administered three months after a graduate completes a course as a means to evaluate the usefulness and the impact of DAU training.

Booz·Allen was tasked with administering these surveys to graduates who completed courses in April/May of 1998 and their work supervisors. In total, 1,199 graduates and 263 supervisors completed the survey. The goals for this effort were to:

- Assess the usefulness of DAU training
- Assess the impact of DAU training
- Compare results with the 1996 survey administration
- Determine recommendations for improving DAU training

Usefulness of DAU Training Findings

Finding One: Graduates overwhelmingly see DAU training as useful.

- 95% of graduates agree that DAU training is useful

Finding Two: Graduates view DAU training as challenging and relevant.

- 75% of graduates state their course covered subjects relevant to their current assignment
- 85% of graduates acknowledge that their course covered material that will be of assistance in future positions
- 75% of graduates state that course content was challenging

Finding Three: While the majority of graduates and supervisors consider themselves satisfied customers of DAU training, supervisor satisfaction ratings are less than graduates. However, supervisors who had either attended a course, or discussed the course with their graduates, were more likely to send another employee to training.

- 97% of graduates would take another course
- 93% of graduates would recommend the course they took to a colleague
- Only 60% of supervisors would send another employee to DAU
  - This gap is somewhat natural and to be expected. A supervisor is less likely to recognize all the connections between employee performance and training, and doesn't want to lose employee time
  - However, the more familiar the supervisor was with DAU training and the coursework of the graduate, the more likely the supervisor was to send another employee to training

Finding Four: Graduates view peer interaction, group situations, and case studies as more effective training methods than others.

Finding Five: Top quality instructors are a fundamental component of establishing positive perceptions of DAU training by graduates.

Impact of DAU Training Findings

As the following findings attest, DAU training makes a significant impact on graduates and the organizations they work for. These findings are impressive given that they are the result of evaluating the impact from a single course, not an entire program or curriculum.

Finding Six: Graduates use specific knowledge learned in DAU training at their jobs within the first three months after training.

- 89% use course materials
- 68% use processes learned
- 68% use reference books

Finding Seven: Graduates believe they are performing better at their jobs as a result of DAU training.

- 70% are more confident as a result of training
- 57% state that their supervisor has more confidence in them
- 88% believe that their organizations benefited from DAU training
- 34% have experienced increased responsibilities since attending their DAU course, and 49% of these graduates cite the course as the primary reason for their increased responsibilities
  - This percentage is meaningful considering "attaining increased responsibilities" is not a main reason cited for enrolling in training

Finding Eight: Supervisors indicate that their employees and organizations benefit from DAU training, but are less certain about specific improvements in job knowledge, performance and confidence.

- 90% believe their organization benefited from DAU training
- 92% state that their employee benefited
- 85% thought their employee's decision making skills improved

Supervisors are less certain about the following specific improvements:

- 55% note improvements in their employee's job knowledge
- 49% report improved job performance
- 50% report increased job confidence
- 45% report that their employee's were provided more responsibility since attending their DAU course, and 56% cite the course as the primary reason for the increased responsibilities

Opportunities

An overall analysis of the graduate and supervisor survey results provides a clear picture that both groups see DAU training as useful and having a major impact. Presented below are opportunities that, if addressed, are likely to increase graduate and supervisor satisfaction even more. It is important to note that the support for these opportunities is based on a relatively small amount of open-ended comments. Nevertheless, they provide ways for DAU to make continual improvements to the quality of its programs.

Finding Nine: Graduates and supervisors express some difficulty coordinating with DAU's schedule of courses.

- 27% of graduates and 64% of supervisors report at least one obstacle in arranging for DAU training
- Major obstacles include problems with workloads in their organizations and problems in the availability and scheduling of DAU courses

Finding Ten: Graduates note that course length was not always commensurate with the course material covered.

- Various open-ended comments focused on course length being too long or too short for the amount of material presented

Finding Eleven: Graduates state that more could be done to ensure that students are matched up with appropriate courses.

- Various open-ended comments focused on course material being too sophisticated or too easy for the student

Recommendations

Recommendation One: Emphasize those training methods identified as particularly helpful

- Focus course content to include more peer interaction and case studies
- Provide a question at the end of each course evaluation that asks graduates to evaluate the tools used during instruction
- Develop materials as job aids so students can easily access them at their work-site

Recommendation Two: Maintain emphasis on top quality instruction

- Ensure sufficient infrastructure is in place to hire and retain top instructors with real-world experience who are skilled classroom facilitators
- Continually review the professional development of faculty to ensure they maintain currency

Recommendation Three: Examine further the disparity of opinion about course length

- Examine if there are specific patterns to the concerns about certain courses being too long or too short
- Developing more on-line, self-paced instruction should help in this regard

Recommendation Four: Develop an overall strategy for ensuring good matches between students and enrolled courses

- Consider creating pre-tests to determine student's level
- Ensure students meet prerequisites

Recommendation Five: Continue to implement more on-site and on-line courses to allow more flexibility in scheduling

- Maintain instructor/student interaction – build on mentor relationship
- Encourage forums on-line to maintain student interaction

Recommendation Six: Ensure that facilities at user locations meet the needs of students

- Address concerns such as: "The hot environment was not conducive to learning" and "The Days Inn is not the place to hold these seminars"
- Ensure greater quality control for on-site classes
- On-line courses should ease this concern

2.0 Background

DAU Mission and Business

Defense Acquisition University's (DAU) mission is to develop a highly qualified workforce capable of performing current and future acquisition functions. DAU provides education and training to members of the Defense community. Specifically, DAU focuses on providing the acquisition workforce with up-to-date knowledge and skills that can be used in everyday work.

DAU and Booz·Allen developed the Graduate and Supervisor Surveys to be administered three months after a graduate completes a course as a means to evaluate the usefulness and the impact of DAU training. The surveys are part of an ongoing evaluation of DAU programs to ensure that continuous improvement is achieved, that courses are of the highest quality, and that DAU training is contributing to achieving a high performance workforce. DAU sees the training-job link as critical and develops training programs as a "prelude" of what the workforce can expect to face on the job.

Purpose of This Report

Booz·Allen was tasked with administering the Graduate and Supervisor Surveys to graduates who completed courses in April/May of 1998 and their work supervisors. The surveys are a follow-up to similar surveys conducted in 1996. The current surveys were revised to provide a better understanding of the usefulness and impact of DAU training. The goals for this effort are to:

- Assess the usefulness of DAU training
- Assess the impact of DAU training
- Compare results with the 1996 survey administration
- Determine recommendations for improving DAU training

This report is presented in two volumes. The result of the analyses of the entire sample of graduates and supervisors is presented in Volume I. In Volume II, analyses of different groups of graduates are reported. Analyses were conducted for graduates in different career areas, graduates at different course levels, and graduates working for different services. Complete results for these sub-groups are presented in Volume II, along with an analysis of major differences between sub-groups.

3.0 Methodology

Survey Development

The survey items were developed in consultation with DAU leadership. The Graduate Survey consisted of 20 primary questions, five of which had a follow-up question. Of the 25 total questions, 18 were closed-ended questions and 7 were open-ended. The Supervisor Survey consisted of 17 primary questions, six of which had a follow-up question. Of the 23 total questions, 14 were closed-ended questions and 9 were open-ended. Where it was logical, parallel questions were asked of both the graduates and the supervisors so that comparisons of responses could be made. (The surveys and the complete results can be found in Appendices A & B).

Sampling Design

A stratified random sample was selected beginning with April 1998 graduates and continuing until 4,000 graduates were selected. The sample was designed to be proportional to the overall population of graduates with respect to career field, but to include a large proportion of graduates from specific courses selected by DAU. It was also determined that the sample data would be representative of the FY 97 population to ensure stability of sampling proportions, as complete FY 98 population data were not yet available.

In July and August of 1998, all graduates in the sample were informed of the purpose of the survey and provided with instructions on how to complete the survey. Half of the graduates were asked to complete the survey by logging on to an internet site and half were asked to use the Gallup telephone voice system. At the end of the survey, all graduates were asked to identify their supervisors, to whom the Supervisor Survey was administered.

Analysis Standards

When interpreting survey results, it is often useful to examine results with respect to a standard or threshold. When results meet or exceed this standard, it provides a context for determining strengths and, when results fall below this standard, it highlights opportunities for improvement.

Given no prior survey baseline or benchmarks, we used a standard for determining whether a finding should be viewed as positive or as an opportunity. The following thresholds for considering a finding as positive were used: (A lower threshold was chosen for impact findings since high-impact would not necessarily be expected from students attending only one class)

- 75% or greater "positive" responses for usefulness questions
- 50% or greater "positive" responses for impact questions

4.0 Survey Findings

The findings are discussed in the following 6 sections:

- *Demographic Composition*
- *Usefulness of DAU Training*
- *Impact of DAU Training*
- *Opportunities*
- *Comparison with 1996 Survey Results*
- *Usefulness – Impact Linkage*

Demographic Composition

Using the sampling design described, 4,000 graduates were contacted and asked to complete the survey. Of this total, 1,199 completed the survey for a response rate of 30%. The response rate was the same for both Internet and telephone administrations. Of the 619 supervisors identified by graduates, 263 completed surveys for a response rate of 42%. Response rates for Supervisor Surveys administered over the telephone (50%) were greater than Internet administration (36%). These response rates are typical for this type of data collection methodology.

As the following tables display, the sample we obtained was somewhat over-represented by the Technical Management sub-group and slightly under-represented by the Contracting Management sub-group. Additionally, the sample was somewhat over-represented by 200 level students and slightly under-represented by 100 level students. It is important to note that, with both of these discrepancies, the two sub-groups that are over-represented are less positive (an average of 5% per question) in their responses than the sub-groups that are under-represented. Consequently, our presentation of overall findings in this report are conservative. In other words, if the obtained sample was more representative of the population with respect to career area and course level, the results presented in this report would have been even more positive. (Due to the fact that nearly 30% of the data determining the sample's service affiliation was missing, we could not determine how representative the sample is to the population with regards to service affiliation. Complete sub-group breakouts of the survey data can be found in Volume II of this report.)

Tables 1, 2, and 3: Sample Representativeness

Career Area		
	Percentage in Population	Percentage in Sample
Technical Management	15%	32%
Contracting Management	47%	30%
Acquisition Management	28%	32%
Business Management	2%	1%
Program Management	8%	4%

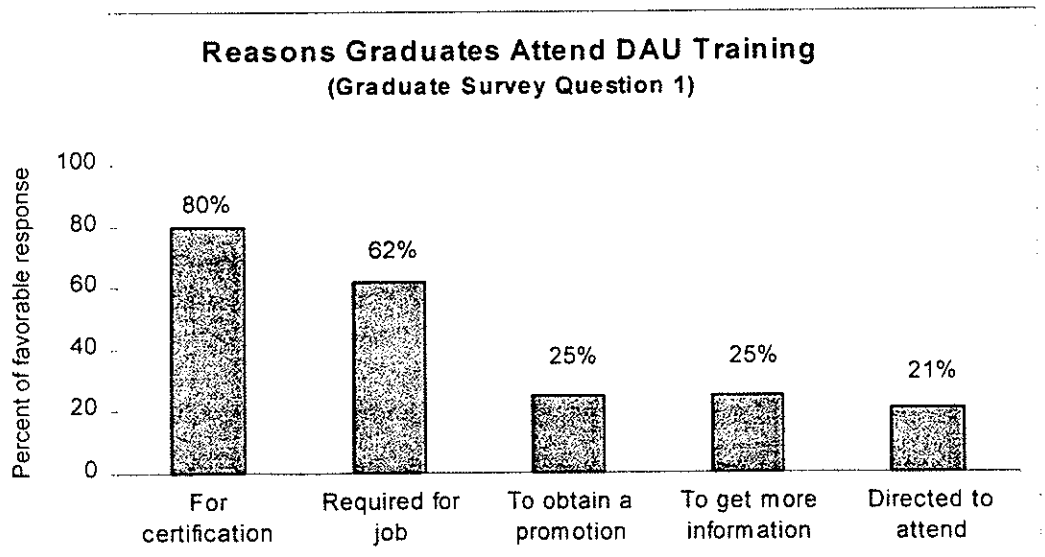
Course Level		
	Percentage in Population	Percentage in Sample
100	37%	26%
200	39%	51%
300	24%	23%

Service Affiliation		
	Percentage in Population	Percentage in Sample
Army	23%	22%
Navy	28%	29%
Air Force	30%	13%
DoD	17%	6%
Other/Missing	2%	30%

Reasons for Attending DAU Training

At the beginning of the survey, graduates were asked to identify the reasons why they attended DAU training. Graduates identify multiple reasons for taking courses. The most frequent reasons are that the training is required for certification (80 percent) or because it is required for their jobs (62 percent). Chart 1 displays the top five reasons why graduates take DAU training. These results speak to the motivation of people to attend DAU training to meet immediate and specific requirements as opposed to attending for more long-term, general, or "directed to" purposes.

Chart 1



Supervisors' Familiarity with DAU and Graduate

In an effort to determine supervisors' ability to accurately assess the impact of DAU training on graduates, the first four questions on the supervisor survey probed supervisors' knowledge of DAU and their relationships with employees who completed training. As the following survey results indicate, supervisors are, overall, well-positioned to evaluate the usefulness and impact of DAU training.

- 77% of supervisors have attended DAU training
- 91% supervised employee before (and after) the employee attended training
- 71% have supervised the respective graduate for more than a year
- 78% have discussed the DAU training with their employee

Usefulness of DAU Training

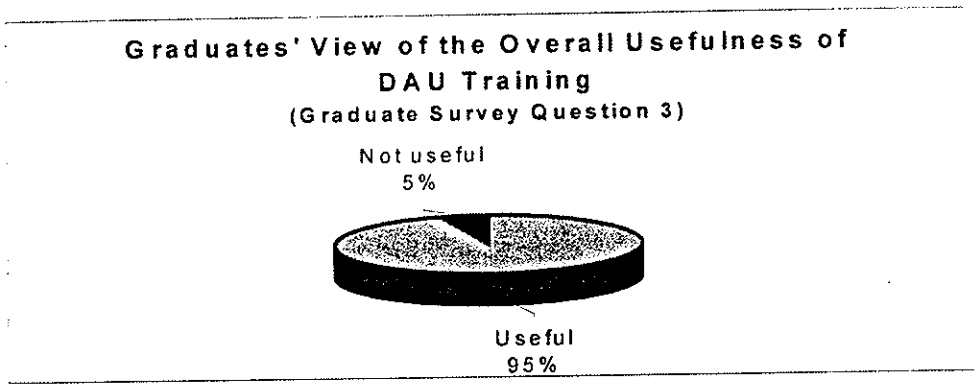
The following components were considered determinants of the usefulness of training:

- *Graduates' rating of overall usefulness and desire to take another course*
- *Graduates' and supervisors' desire to refer other employees to DAU training*
- *Course content, structure, teaching methods, and instructor quality*

Finding One: Graduates overwhelmingly see DAU training as useful.

The first non-demographic question on the survey asked graduates to provide their overall view on whether the course they took was useful. As chart 2 below depicts, more than nine out of ten (95%) graduates agree that DAU training is useful.

Chart 2



To obtain a better understanding of what contributes to graduates' ratings of usefulness, we examined their open-ended comments to usefulness questions. The general themes that emerged are that courses provide a good introduction to acquisition, an opportunity to learn how other organizations are handling similar issues, and an opportunity to see acquisition in the bigger picture. Table 4 provides a few of those comments that capture the major themes of what the graduates said.

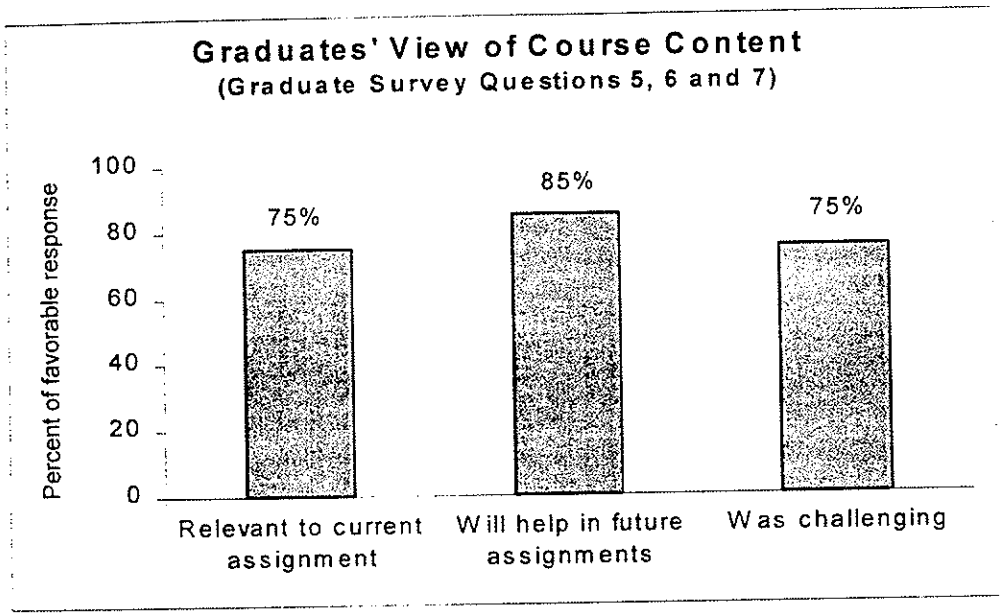
Table 4

Representative Comments Regarding Overall Usefulness
"Great overview… a good class to get introduced to all the acquisition disciplines."
"For someone just getting into the field, I feel it was an invaluable introduction."
"I learned how other services do things and have some great ideas for my office."
"It provided greater knowledge and understanding. The more we can see and understand the cradle to grave of contracting, the more intelligently we can complete our job."

Finding Two: Graduates view the content of DAU training as challenging and relevant.

Graduates were asked a series of questions concerning the course content of their DAU course. These questions were aimed at assessing the usefulness of DAU training. As Chart 3 below depicts, more than seven of ten graduates indicate that course content is challenging (75%) and relevant to current (75%) and future (85%) assignments. These findings demonstrate that students view DAU courses as having immediate and longer-term benefits.

Chart 3



Graduates also had an opportunity to provide open-ended comments on their impressions of course content. Table 5 below depicts representative remarks that capture the overall tone of these comments.

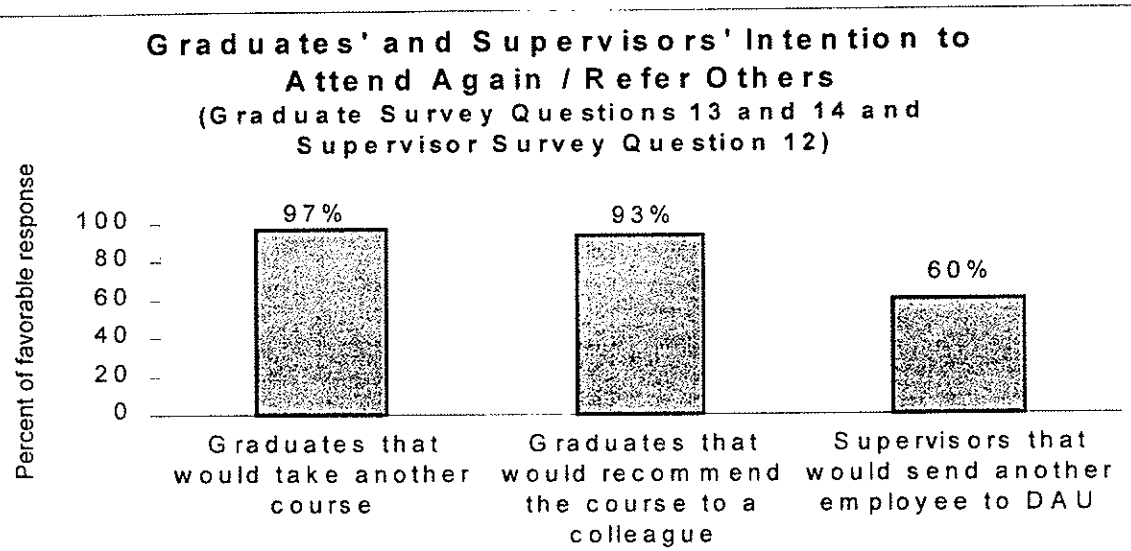
Table 5

Representative Comments Regarding Usefulness of Course Content
"This was one of the best courses I have taken in my career. It was challenging and informative."
"It is a very meaningful and useful course to take if you are in contracting."
"Excellent course for logisticians and senior acquisition personnel."

Finding Three: While the majority of graduates and supervisors consider themselves satisfied customers of DAU training, supervisor satisfaction ratings are less than graduates. However, supervisors who had either attended a course, or discussed the course with their graduates, were more likely to send another employee to training.

A major indicator of the usefulness of training is whether graduates would attend another course at DAU, and whether graduates and supervisors would refer other colleagues and subordinates to DAU training. As Chart 4 below displays, most graduates declare they would take another DAU course (97%) and would recommend the course to a colleague (93%).

Chart 4



As the above chart shows, six out of ten (60%) supervisors indicate they would send another employee to training. This gap between graduates and supervisors is somewhat natural and to be expected. A supervisor is less likely to recognize all the connections between employee training and performance on the job. Nonetheless, the difference warrants further attention. While this survey did not investigate specific reasons why some supervisors would not refer other employees to DAU training, it is a question worth asking on future surveys. Speculating, potential reasons might include difficulty in scheduling classes or the importance of having the employee in the office.

Interestingly, of all the supervisors who indicated that they would definitely send another employee to training:

- 86% had previously attended a DAU course
- 87% had discussed the course with their employee

This finding highlights the value of ensuring that supervisors are familiar with the DAU training their subordinates receive. (See Appendix C for the complete statistics supporting this finding).

Finding Four: Graduates view peer interaction, group situations, and case studies as more effective training methods than others.

Graduates were asked to identify the components of training that they believed were the most useful (Graduate Survey Question #16). Open-ended responses indicate that peer interaction, group situations, and case studies are seen as extremely beneficial by graduates. As the quotes in Table 6 suggest, graduates find these techniques particularly helpful because they help translate concepts into practical experience.

Table 6

Comments Regarding The Most Helpful Components of Training
"Hearing other people's experiences and perspectives was beneficial."
"(Case studies) were role played by the classmates (and) it brought them to life and helped understand them better."
"The information is useful to the job, but some of the best information came from classmates."

Finding Five: Top quality instructors are a fundamental component of establishing positive perceptions of DAU training by graduates.

Perhaps the most fundamental component of ensuring that training is useful is to provide top-quality instructors. Knowledgeable instructors are cited as the second most helpful component of training by graduates, just behind the ability to engage in peer interaction. Table 7 contains several open-ended comments (Graduate Survey Question # 16) that highlight the importance of top quality instructors.

Table 7

Comments Regarding the Importance of Top Quality Instructors
"My instructor was particularly adept at explaining concepts in several different ways. This helped those students who did not get it the first time."
"The instructor shared his personal experience in contingency contracting situations."
"(It was very helpful to have) Real world examples that were cited by instructors who have experience with what they are teaching."

Impact of DAU Training

The following components were considered determinants of the impact of training:

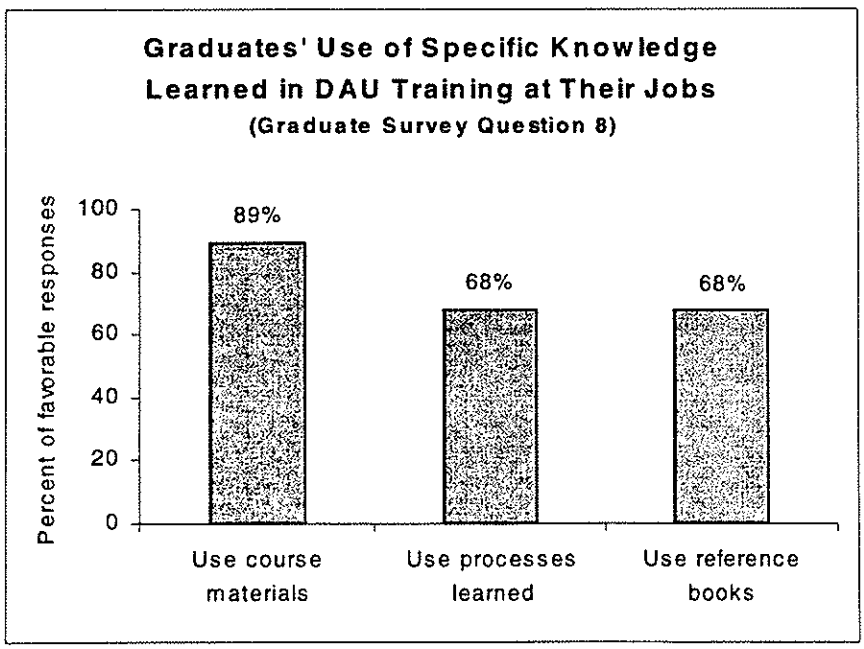
- *Graduates' use of course materials or knowledge at the workplace*
- *Graduates' increased work responsibilities as a result of training*
- *Graduates' increased confidence*
- *Supervisors' increased confidence in the graduates*
- *Supervisors' reports of improved performance by graduates*
- *Supervisors' providing graduates with increased responsibility*

As the following findings attest, DAU training makes a significant impact on graduates and the organizations they work for. These findings are impressive given that they are the result of evaluating the impact from a single course, not an entire program or curriculum.

Finding Six: Graduates use specific knowledge learned in DAU training at their jobs within the first three months after training.

The fact that graduates are able to use the knowledge they learned in DAU training within their first three months back on the job is a major indicator that training is "just-in-time" and has a significant impact. As Chart 5 portrays, graduates frequently refer to their DAU course materials and lessons learned to assist them with their job duties.

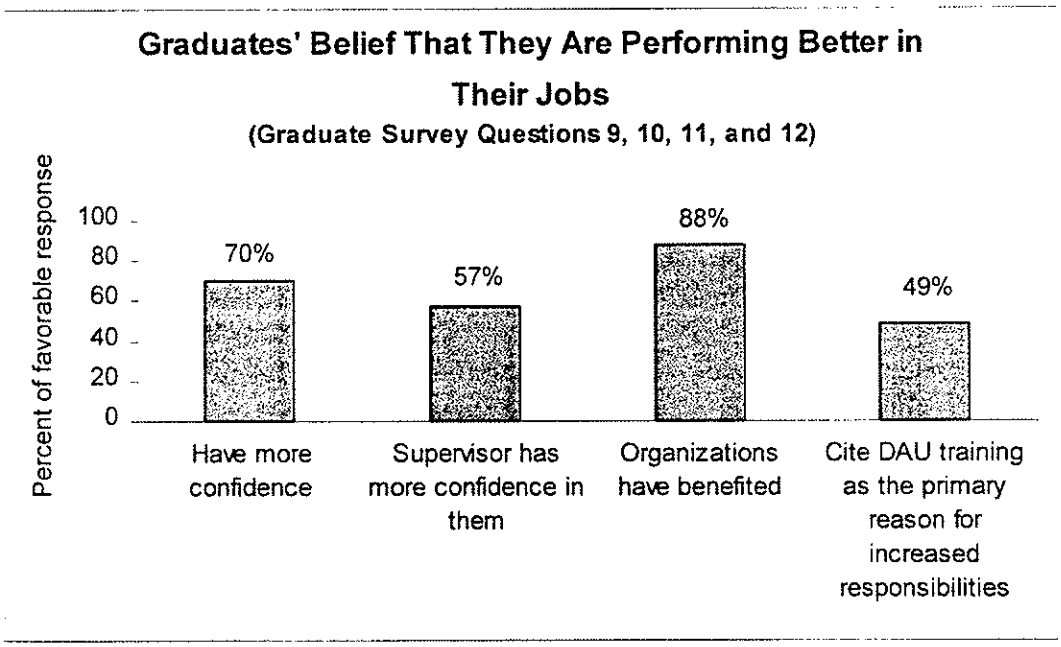
Chart 5



Finding Seven: Graduates believe they are performing better at their jobs as a result of DAU training.

Graduates confirm that attending DAU training improves their performance and has an overall positive impact on their organization. As Chart 6 displays, nearly three-quarters of graduates (70%) attribute DAU training to an increase in their confidence level, over half of graduates (57%) acknowledge that training has led to an increase in their supervisor's confidence in them, and almost nine out of ten (88%) state that their organizations have benefitted. Furthermore, nearly half (49%) of respondents who received additional responsibilities since attending DAU training, cite their attendance at DAU training as the primary reason for being provided with more responsibility. This percentage is even more meaningful considering "attaining increased responsibilities" is not one of the main reasons cited for enrolling in DAU training. (The percentage of graduates who say they were given increased responsibilities is 34%. This number is important given that it is the result of only one training course, but it did not meet our threshold of 50% for a "positive" finding.)

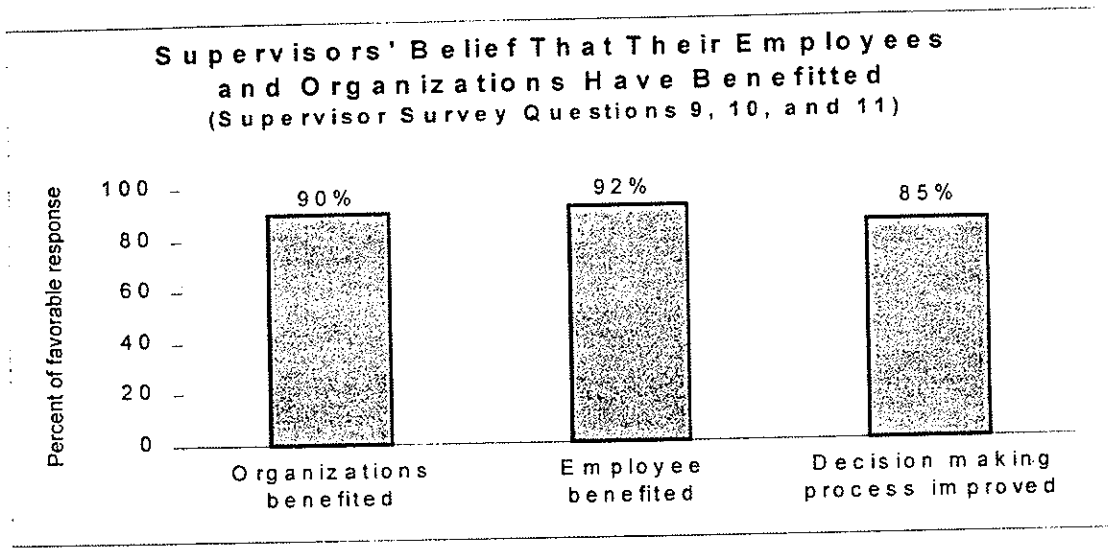
Chart 6



Finding Eight: Supervisors indicate that their employees and organizations are benefiting from DAU training, but they are less certain about specific improvements in job knowledge, performance and confidence.

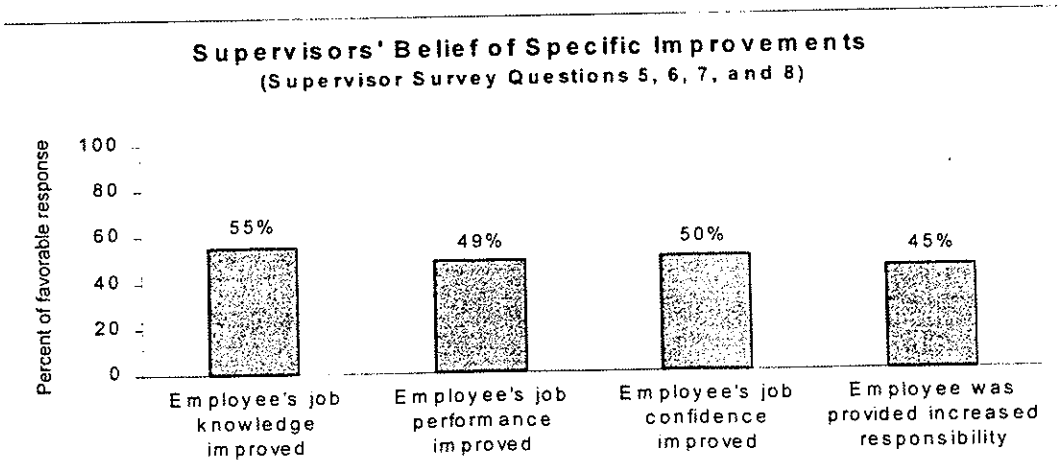
Supervisors were also asked questions about the impact of DAU training on their employees' knowledge, decision making skills, confidence, and job performance. As evidenced in Chart 7, nine out of ten supervisors acknowledge the overall benefits of DAU training to employees (92%) and the organization (90%). Furthermore, more than eight out of ten (85%) supervisors state that they have witnessed an improvement in the organization's decision making process.

Chart 7



As seen in Chart 8 below, supervisors are less certain about specific improvements. About half of supervisors indicate improvement in their employee's job knowledge (55%), confidence (49%), and performance (50%). Nonetheless, of the 45% of supervisors who mention that their employees were provided more responsibility since attending their DAU course, over half of them (56%) cite the course as the primary reason for the increased responsibilities.

Chart 8



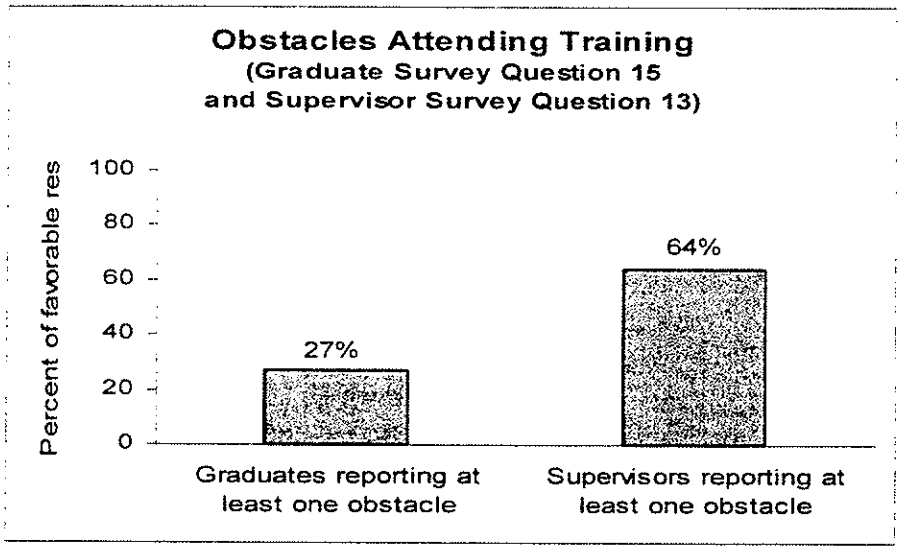
Opportunities

An overall analysis of the graduate and supervisor survey results provides a clear picture that both groups see DAU training as useful and having a major impact. Presented below are opportunities that, if addressed, are likely to increase graduate and supervisor satisfaction even more. It is important to note that the support for these opportunities is based on a relatively small amount of open-ended comments. Nevertheless, they provide ways for DAU to make continual improvements to the quality of its programs.

Finding Nine: Graduates and supervisors express some difficulty coordinating with DAU's schedule of courses.

As Chart 9 displays, more than one out of four graduates (27%) say they had difficulty in arranging to attend the DAU course they took. With supervisors needing to arrange training for multiple employees, it is not surprising that the majority (64%) of supervisors express similar difficulties.

Chart 9



The primary obstacles graduates and supervisors face include problems with workloads in their organizations, lack of backup personnel, and problems in the availability and scheduling of DAU courses. These issues are especially salient in the "down-sized" workforce where time is limited and cross-training is crucial.

Finding Ten: Graduates note that course length was not always commensurate with the course material covered.

Analyses of replies to open-ended questions reveal some concern that the length of courses is not always suitable for the amount of course material. Although most of the comments focus on the course being too long, several graduates note that their course was too short to be able to absorb the amount of information. Actual comments that are representative of all the comments made can be found in Table 8 below.

Table 8

Representative Comments Regarding Course Length
"Course was too long."
" Three weeks were not needed for the material presented. Several days could be eliminated by utilizing an eight hour day."
"Lengthen the course or reduce the amount of material in the course."

Finding Eleven: Graduates state that more could be done to ensure that students are matched up with appropriate courses.

A final theme in some of the open-ended comments is a mismatch between the courses' intended audience and those individuals who actually attend. As Table 9 displays, mismatches include courses being over the head of some students and not adding new knowledge for others. These concerns are especially important in light of the fact that the most frequent reason given by graduates for not recommending their courses to a colleague is that the course was not relevant to his or her job.

Table 9

Comments Matching Students With the Appropriate Course
"The courses are way above my head. I am a GS-XX manager, a manager who orders parts. I do not have any funding responsibility."
"Course is excellent, however, it is geared to someone who is more junior and has not had the acquisition experience of a GS-XX who had the opportunity to lead major programs throughout all phases."
"The ACQ201 course is structured for major new systems acquisition. I support spare parts procurement. I work later in the lifecycle."

Comparison with 1996 Survey

Although there were very few survey items that were identical between the 1996 and 1998 surveys, the following are similarities that can be identified.

- Graduates in both studies attend DAU training for the same reasons, primarily to meet certification or job requirements
- A large majority of graduates in both studies agree that training was useful
- Graduates and supervisors in both studies noticed positive changes in their employees' knowledge and decision-making skills
- The majority of supervisors in both studies reported obstacles to arranging for training for their employees, including heavy workloads, scheduling conflicts, lack of backup personnel, and availability of courses

Usefulness-Impact Linkage

Comparing the opinions of graduates who felt their course was useful provides an opportunity to verify the linkage between the usefulness and impact of DAU courses. Table 10 illustrates how graduates who viewed their DAU course as useful are more likely to respond positively to impact questions.

Table 10

Among graduates who reported that their course was useful:	Yes	No
9. Have you noticed an increase in confidence as a result of this training?	73%	27%
10. Does your supervisor seem more confident in you since the course?	59%	41%
11. Do you feel your organization benefited from you attending the course?	91%	9%

Table 11 demonstrates that useful courses are also more impactful from the supervisors' perspective.

Table 11

Among supervisors of graduates who reported that their course was useful:	Yes	No	DNK
5. Have you noticed any positive change in your employee's job performance?	50%	30%	20%
6. Does your employee seem to be more knowledgeable since attending the course?	55%	21%	24%
7. Does your employee seem to be more confident since attending the course?	51%	26%	23%
9. Do you believe DAU courses improved the decision making process?	87%	13%	n/a
10. Overall, do you believe your employee benefited from attending the DAU course?	94%	6%	n/a
11. Do you believe the organization benefited from your employee's attendance?	92%	8%	n/a

* *DNK = Do Not Know*

These findings emphasize the importance of ensuring that training is useful. Graduates learn more from these courses and are able to apply this learning back on their jobs. As a result, they are able to make better decisions and improve their work performance (See Appendices D & E).

Summary of Findings

As the findings in this report reflect, DAU is succeeding in providing graduates training that they need and can use on their jobs. Course content is seen as challenging and relevant, and graduates are immediately able to utilize their course materials and lessons learned to have a high-impact on their organizations. Not surprisingly, the majority of graduates and supervisors would recommend courses to their colleagues and subordinates, respectively.

5.0 Recommendations

The following recommendations focus on the findings where graduates identified specific components that are key factors in the usefulness and impact of a course. Additionally, some of the findings address the opportunities cited earlier in the report. Again, it is important to note that the support for these opportunities is based on a relatively small amount of data provided by open-ended comments.

- **Recommendation One: Emphasize those training methods identified as particularly helpful**
  - Focus course content to include more peer interaction and case studies
  - Provide a question at the end of each course evaluation that asks graduates to evaluate the tools used during instruction

- **Recommendation Two: Maintain emphasis on top quality instruction**
  - Ensure sufficient infrastructure is in place to hire and retain top instructors with real-world experience who are skilled classroom facilitators
  - Continually review the professional development of faculty to ensure currency

- **Recommendation Three: Examine further the disparity of opinion about course length**
  - Examine if there are specific patterns to the concerns about certain courses being too long or too short
  - Determine reasons for patterns/differences of opinion
  - The use of more on-line, self-paced instruction should help in this regard

- **Recommendation Four: Develop an overall strategy for ensuring good matches between students and enrolled courses**
  - Consider creating pre-tests to determine student's level
  - Ensure students attend prerequisite courses consistently

- **Recommendation Five: Continue to implement more on-site and on-line courses to allow more flexibility in scheduling**
  - Maintain instructor/student interaction – build on mentor relationship
  - Encourage forums on-line to maintain student interaction

- **Recommendation Six: Ensure that facilities at user locations meet the needs of students**
  - Address concerns such as: "The hot environment was not conducive to learning" and "The Days Inn is not the place to hold these seminars"
  - Ensure greater quality control for on-site classes
  - On-line courses should ease this concern

Appendices A – E

Graduate ID#_____ Course Name/Section _____

Defense Acquisition University
Graduate Survey

1. Which of the following describe your reason for attending the course? (check all that apply)
   ___Certification ___Promotion ___General Information
   ___Job requirements ___Directed to attend ___Other

2. Do you feel you were adequately prepared for the course? ___Yes ___No

Course Content

3. Do you think the course you took at DAU was a useful course? ___Yes ___No

4. Was the content of the course new to you? ___Yes ___No

Please check your response to the following statements using the following scale:	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
5. The DAU course I attended covered the subjects I need to perform in my current assignment.					
6. The DAU course I attended covered the subjects I envision will help me in future positions.					
7. The DAU course I attended was challenging.					

8. Please indicate which of the following course materials or processes you have used in your job. (check all that apply)
   ___ software ___process learned in the course ___URLS
   ___ reference book ___case study

   If you use more than one of the above, which has been the most useful?
   If you do not use any of the above, what material or process would have been more useful?

Results of Attendance

9. Have you noticed an increase in confidence as a result of this training? ___Yes ___No

10. Does your supervisor seem to have more confidence in your abilities since you completed the DAU course? ___Yes ___No

11. Do you feel your organization has benefited from your attendance in the DAU course? ___Yes ___No

12. Have your responsibilities increased since attending the DAU course? ___Yes ___No
    If yes: In your opinion, did attending the course contribute to your selection for these increased responsibilities? ___Yes ___No

Graduate ID#_____ Course Name/Section _____

Miscellaneous

13. Would you attend another DAU course? ___Yes___No
    If no, please state the primary reason why not:

14. Would you recommend this course to a colleague? ___Yes ___No
    Please list your main reason why or why not:

15. Some people have difficulty arranging their schedule, finding availability or managing a workload so that they can attend DAU. Looking back, did you have difficulties arranging to attend the DAU course?
    ___Yes ___No

    If yes, From the following list, please rank the top three obstacles you encountered:

    ___Workload ___Financial
    ___Scheduling conflicts ___Lack of backup personnel
    ___Lack of availability ___Travel
    ___Your personal life ___Other: _____

16. Was there any one thing, in particular, in the course that was very helpful to you? Please specify:

17. Was there any one thing, in particular, in the course you felt was a waste of time? Please specify:

18. Please state the top three recommendations you have, if any, for improving the course?

19. Is there anything else you would like to add that we may not have covered?

20. As part of this survey, we would like to contact your immediate supervisor to discuss his or her impressions of your training experience and of DAU training in general. May we contact your immediate supervisor?
    ___Yes ___No

    If Yes, please provide the following::

    Supervisor's Name:_____
    Street Address:_____
    City, State and Zip Code:_____
    Commercial Phone Number: (_____)_____-_____

Thank you again for you time and cooperation in completing this survey!

Appendix A
Graduate Responses by Item

Item	Resp.	Overall N	Overall % Pos
1. Which of the following describe your reasons for attending the course?			
Certification	Chk	1199	80.0%
Job requirements	Chk	1199	62.0%
Promotion	Chk	1199	25.4%
Directed to attend	Chk	1199	20.5%
General information	Chk	1199	24.5%
Other	Chk	1199	4.1%
2. Do you feel you were adequately prepared for the course?	Y/N	1191	91.5%
3. Do you think the course you took at DAU was a useful course?	Y/N	1195	94.9%
4. Was the content of the course new to you?	Y/N	1192	55.4%
5. The course I attended covered subjects I need for my current assignment.	SA/SD	1190	75.5%
6. The course I attend covered subjects that will help me in future positions.	SA/SD	1195	84.9%
7. The DAU course I attended was challenging.	SA/SD	1195	75.6%
8. Please indicate which of the following you have uses in your job.			
Software	Chk	1199	19.8%
Reference book	Chk	1199	67.6%
Process learned in the course	Chk	1199	68.2%
Case study	Chk	1199	20.4%
URLS	Chk	1199	15.2%
Graduates using at least one material or process	Chk	1199	89.3%
9. Have you noticed an increase in confidence as a result of this training?	Y/N	1191	70.2%
10. Does your supervisor seem more confident in you since the course?	Y/N	1178	57.0%
11. Do you feel your organization benefited from you attending the course?	Y/N	1186	87.7%
12. Have your responsibilities increased since attending the DAU course?	Y/N	1190	34.6%
12a. If yes, did attending the course contribute to the increase?	Y/N	473	48.8%
13. Would you attend another DAU course?	Y/N	1194	96.8%
14. Would you recommend this course to a colleague?	Y/N	1188	93.2%
15. Did you have difficulties arranging to attend the DAU course?	N/Y	1190	63.6%
If yes, from the following list, please rank the top three obstacles.			
Workload (ranked first)	Rnk	421	44.2%
Scheduling conflicts (ranked first)	Rnk	421	15.7%
Lack of availability (ranked first)	Rnk	421	14.3%
Your personal life (ranked first)	Rnk	421	10.0%
Financial (ranked first)	Rnk	421	1.7%
Lack of backup personnel (ranked first)	Rnk	421	6.4%
Travel (ranked first)	Rnk	421	3.3%
Other (ranked first)	Rnk	421	4.5%
20. May we contact your immediate supervisor?	Y/N	1160	57.2%
Usefulness Index			77.3%
Impact Index			59.7%

When necessary, item wording has been modified to fit available space.

Chk Respondents could check all applicable responses.

Y/N Respondents could answer Yes or No.

SA/SD Respondents could answer Strongly Agree, Tend to Agree, Neutral, Tend to Disagree, or Strongly Disagree.

N/Y Respondents could answer Yes or No, but No was the more positive response.

Rnk Respondents would rank the top three responses. Percentages of respondents who ranked the particular category first are reported here.

Appendix B

Supervisor Survey and Results

Supervisor ID#_____ Course Name/Section_____
Graduate ID#_____

Defense Acquisition University
Supervisor Survey

1. Have you ever attended a DAU courses? ___ Yes ___ No

2. How long have you supervised the DAU attendee you are discussing in this survey?
   ___ Less than 6 months
   ___ 6-12 months
   ___ Over one year, but less than 2 years
   ___ More than 2 years, but less than 3
   ___ Three or more years

3. Has the attendee discussed what he/she learned at the DAU course with you? ___ Yes ___ No

4. Did you supervise the DAU attendee before he/she attended the course? ___ Yes ___ No

Value of the DAU Course

5. Have you noticed any positive change in your employee's job performance since he/she attended the course? ___ Yes ___ No ___Do not know
   If yes, How has it changed?

   Please provide an example:

6. Does your employee seem to be more knowledgeable in his/her current work assignment since attending the course? ___ Yes ___ No ___Do not know
   If yes, please explain by providing an example:

7. Does your employee seem to be more confident in his/her current work assignment since attending the course? ___Yes ___No ___Do not know
   If yes, please explain by providing an example:

8. Have you given the employee more responsibilities since his/her attendance in the course?
   ___ Yes ___ No
   If yes, would you attribute the increased responsibilities to new skills or knowledge he/she learned in the course? ___ Yes ___ No

9. Do you believe DAU courses improve the decision making process? ___ Yes ___ No
   If yes, please provide an example:

Supervisor ID#_____ Course Name/Section_____
Graduate ID#_____

Miscellaneous

10. Overall, do you believe your employee benefited from attending the DAU course? ___ Yes ___ No
    If no, please state your primary reason why not?

    If yes, please provide an example of how your employee benefited:

11. Do you believe the organization benefited from your employee's attendance in the course?
    ___Yes ___No

12. Would you send another employee to attend a DAU course? (please check one)
    ___ Definitely yes
    ___ Probably yes
    ___ Maybe
    ___ Probably no
    ___ Definitely no

13. Sometimes there are obstacles that make it difficult to arrange for an employee to attend DAU courses. From the following list, please rank order the top three obstacles you face when trying schedule an employee to attend training at DAU. (Use '1' for <u>most</u> difficult.)
    ___Workload ___Financial ___NA (encountered no obstacles -- skip to question 15)
    ___Scheduling conflicts ___Lack of backup personnel
    ___Lack of availability ___Travel
    ___Their personal life ___Other:_____

14. Please list up to three actions, if any, have been effective in resolving these obstacles?

15. Please provide the top three recommendations you have, if any, for improving this DAU course?

16. Please provide the top three recommendations you have, if any, for improving DAU courses in general?

17. Is there anything else you would like to add?

Thank you for your time and cooperation in completing this survey!

Appendix B
Supervisor Responses by Item

Item	Resp.	Overall N	Overall % Pos
1. Have you ever attended a DAU course?	Y/N	262	77.5%
2. How long have you supervised the DAU attendee you are discussing?			
Less than 6 months	Chk	261	8.8%
6-12 months	Chk	261	19.2%
Over one year, but less than 2 years	Chk	261	25.3%
More than 2 years, but less than 3	Chk	261	18.4%
Three or more years	Chk	261	28.4%
3. Has the attendee discussed what he/she learned at the DAU course with you?	Y/N	262	77.9%
4. Did you supervise the DAU attendee before he/she attended the course?	Y/N	261	91.2%
5. Have you noticed any positive change in your employee's job performance?	Y/N/D	261	49.4%
6. Does your employee seem to be more knowledgeable since attending the course?	Y/N/D	260	54.6%
7. Does your employee seem to be more confident since attending the course?	Y/N/D	260	49.6%
8. Have you given the employee more responsibility since attending the course?	Y/N	260	45.0%
8a. If yes, would you attribute the increased responsibility to attending the course?	Y/N	128	56.3%
9. Do you believe DAU courses improved the decision making process?	Y/N	256	85.2%
10. Overall, do you believe your employee benefited from attending the DAU course?	Y/N	259	92.3%
11. Do you believe the organization benefited from your employee's attendance?	Y/N	257	89.9%
12. Would you send another employee to a DAU course?	DY/DN	257	59.9%
13. Please rank the obstacles you face when scheduling an employee for training.			
Workload (ranked first)	Rnk	222	47.3%
Scheduling conflicts (ranked first)	Rnk	222	9.0%
Lack of availability (ranked first)	Rnk	222	14.0%
Their personal life (ranked first)	Rnk	222	3.2%
Financial (ranked first)	Rnk	222	10.4%
Lack of backup personnel (ranked first)	Rnk	222	7.2%
Travel (ranked first)	Rnk	222	2.3%
Other (ranked first)	Rnk	222	6.8%

When necessary, item wording has been modified to fit available space.

Y/N Respondents could answer Yes or No.

Chk Respondents could check all applicable responses.

Y/N/D Respondents could answer Yes, No, or Do not know

DY/DN Respondents could answer Definitely yes, Probably yes, Maybe, Probably no, or Definitely no

Rnk Respondents would rank the top three responses. Percentages of respondents who ranked the particular category first are reported he

Appendix C

Supervisor Familiarity and Referral Linkage

Appendix C
Supervisor Knowledge of DAU Courses
vs.
Likelihood of Sending Another Employee to a DAU Course

Would you send another employee to attend a DAU course? (Supv. Question #12)

Have you ever attended a DAU course?
(Supv. Question #1)

	Def Yes	Prob Yes	Maybe	Prob No	Def No	Total
No	17	16	2	9	11	55
Yes	102	18	6	18	57	201
Total	119	34	8	27	68	256

Would you send another employee to attend a DAU course? (Supv. Question #12)

Has the attendee discussed what he/she learned at the DAU course with you?
(Supv. Question #3)

	Def Yes	Prob Yes	Maybe	Prob No	Def No	Total
No	16	12	4	8	18	58
Yes	103	23	4	19	50	199
Total	119	35	8	27	68	257

Supervisors' willingness to send another employee to DAU courses was compared to their knowledge of DAU courses.

In the tables above, the shaded cells report the number of supervisors who have knowledge of DAU courses and are definitely willing to send another employee to a DAU course.

For both comparisons, chi-squared analyses determined that the number of supervisors who were knowledgeable about DAU courses and definitely willing to send another employee for training was large enough to be considered statistically significant.

This suggest that there is a real relationship between supervisor knowledge and willingness to send employees to DAU courses.

Appendices D & E

Usefulness and Impact Linkage

Appendix D
Graduates Rating Course as Useful
vs.
Impact of Course

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

Have you noticed an increase in confidence as a result of this training? (Grad. Question #9)

	No	Yes	Total
No	55	300	355
Yes	6	829	835
Total	61	1129	1190

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

Does your supervisor seem to have more confidence in your abilities since you completed the DAU course? (Grad. Question #10)

	No	Yes	Total
No	51	456	507
Yes	10	660	670
Total	61	1116	1177

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

Do you feel your organization has benefited from your attendance in the DAU course? (Grad. Question #11)

	No	Yes	Total
No	49	97	146
Yes	12	1026	1038
Total	61	1123	1184

The number of graduates who felt their course was useful was compared to the number of graduates who provided positive responses to questions assessing the impact of DAU courses.

In the tables above, the shaded cells report the number of graduates who felt their course was useful and provided positive responses to impact questions.

For all three comparisons, chi-squared analyses determined that the number of graduates who felt their course was useful and provided positive responses to impact questions was large enough to be considered statistically significant.

This suggests that there is a real relationship between the perceived usefulness of DAU courses and their impact on graduates.

Appendix E
Supervisor Ratings
of
Courses Considered Useful by Graduates

Have you noticed any positive change in your employee's job performance since he/she attended the course? (Supv. Question #5)

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

	No	Yes	Total
No	6	76	82
Yes	1	128	129
Don't know		50	50
Total	7	254	261

Does your employee seem to be more knowledgeable in his/her current work assignment since attending the course? (Supv. Question #6)

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

	No	Yes	Total
No	5	53	58
Yes	2	140	142
Don't know		60	60
Total	7	253	260

Does your employee seem to be more confident in his/her current work assignment since attending the course? (Supv. Question #7)

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

	No	Yes	Total
No	5	67	72
Yes	1	128	129
Don't know	1	58	59
Total	7	253	260

Do you believe DAU courses improve the decision making process? (Supv. Question #9)

Do you think the course you took at DAU was a useful course? (Grad. Question #3)

	No	Yes	Total
No	5	33	38
Yes	2	216	218
Total	7	249	256

Appendix E
Supervisor Ratings
of
Courses Considered Useful by Graduates

Do you think the course you took at DAU was a useful course? **(Grad. Question #3)**

Overall, do you believe your employee benefited from attending the DAU course? **(Supv. Question #10)**

	No	Yes	Total
No	6	14	20
Yes	1	238	239
Total	7	252	259

Do you think the course you took at DAU was a useful course? **(Grad. Question #3)**

Do you believe the organization benefited from your employee's attendance in the course? **(Supv. Question #11)**

	No	Yes	Total
No	6	20	26
Yes	1	230	231
Total	7	250	257

The relationship between graduates finding a course useful and supervisors providing positive ratings was also analyzed.

In this section's tables, the shaded cells report the number of cases where the graduate felt their course was useful and their supervisor provided positive ratings.

For all six comparisons, chi-squared analyses determined that the number of cases where graduates felt their course was useful and supervisors provided positive ratings was large enough to be considered statistically significant.

This suggests that there is a real relationship between graduates viewing the course as useful and supervisors providing positive ratings.