



Needs Assessment Report
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Central Nevada Educational Technology Consortium Needs Assessment Report

I. Introduction

The Central Nevada Educational Technology Consortium (C-NET-C) is a partnership between six Nevada school districts, the Nevada Department of Education, and the University of Nevada at Reno's College of Education. C-NET-C's mission is to provide educational technology professional development to educators in six Nevada school districts – Esmeralda, Lincoln, Lyon, Mineral, Nye, and Pershing County School Districts. From its October 2002 inception, C-NET-C's main objective has been to meet the educational technology needs of the educators, students, parents, and communities it serves. An assessment of C-NET-C educators' educational technology professional development needs was implemented to precisely determine C-NET-C educators' educational technology strengths, limitations, and desires. This report will detail the educational technology professional development needs of C-NET-C educators by answering the following questions:

- ❑ In which specific educational technology skills do C-NET-C educators exhibit expertise?
- ❑ In which specific educational technology skills do C-NET-C educators lack expertise?
- ❑ How do C-NET-C educators' technology skills differ from those of all Nevada educators who took ON*TRAC?
- ❑ In which specific educational technology skills do C-NET-C educators desire professional development training?
- ❑ What do C-NET-C educators believe to be the greatest barriers to technology integration in their classrooms?
- ❑ How can C-NET-C best serve educators in Esmeralda, Lincoln, Lyon, Mineral, Nye, and Pershing County School Districts?

The purpose of this report is to provide sufficient and crucial information to the C-NET-C Governance Board so that it may make informed decisions about the types of professional development opportunities C-NET-C will provide its educational community.

II. Overview of the Assessment Plan and Procedures

A. Plan and Procedure

The C-NET-C Needs Assessment consists of three parts. First, all educators in each of the six school districts were asked by their district superintendents to complete the Online Nevada Technology Resource for the Assessment of Competencies (ON*TRAC) survey. ON*TRAC is an online assessment tool created by educational technology experts at the Nevada Department of Education and Clark County School District. It is used to evaluate Nevada educators' educational technology integration and computer skills. ON*TRAC was designed to guide Nevada's school district professional development activities and therefore, was the ideal tool for collecting large sums of quantitative data for this needs assessment.

Second, qualitative and quantitative data were collected through personal interviews with 22 educators in 5 of the 6 counties. Administrators from each district chose 2 principals, 2 elementary teachers, 2 secondary teachers, and 1 technology coordinator to participate in personal interviews. Of the 4 teachers, every effort was made to select 2 with relatively high technology skills and 2 with relatively low technology skills. Interviews were conducted face-to-face and via telephone.

Third, 12 C-NET-C district trainers – educators who are responsible for training other educators in their districts – were surveyed during a training session on December 7, 2002. Quantitative and qualitative results were derived from this survey.

B. Limitations of the Study

This study is limited in two ways. First, it includes data from only five of six C-NET-C school districts. Data from Mineral County School District (MCSD) were not included because none were collected. Effort was made to include MCSC in this assessment, but the small number of MCSD participants did not render statistically relevant numbers to be included in this study.

Second, ON*TRAC raw data were not available in a format usable by the assessor. This is the first time ON*TRAC has been used for research purposes and these difficulties are being worked out for future research. However, for this report, only descriptive statistics were available for ON*TRAC data. As a result, comparisons made in this report from ON*TRAC data do not have statistical backing, only the descriptive statistics (e.g. means, medians, standard deviations, etc.) do.

III. Needs Assessment Results

A. ON*TRAC

Results yielded by ON*TRAC are indicated in Table 1. Not all questions were answered by all educators who took ON*TRAC. C-NET-C educators answered a mean of 606 ON*TRAC questions. The minimum number was 541 for question 10 and the maximum was 633 for questions 14, 15, 21, 33, and 38. The mean number of answers to each question by all Nevada educators who completed ON*TRAC is 4,444. There

are a total of 1,290 educators in Esmeralda, Lincoln, Lyon, Mineral, Nye, and Pershing School District and the sample used to derive results in this assessment represents 46.98% of the total population (Figure 1). It should also be noted that only 2 educators from Mineral County School District completed ON*TRAC and hence, yielded insufficient data to be considered in much of this analysis.

Educators selected answers that were rated on a scale of 0 to 4. Scores of 4 reflect a high level of proficiency in the subject area indicated by the question while scores of 0 indicate a low level of proficiency. Table 1 lists ON*TRAC questions in the order as they are listed on the survey, the mean scores for educators in C-NET-C districts, the mean scores for all Nevada educators who have taken ON*TRAC, and the differences between these mean scores. Tables listing complete questions and detailing results for individual districts and questions can be found in Appendix A.

Designers of ON*TRAC separated the questions into 2 main groups: those that assess educators' educational technology integration and teaching methods, and those that assess educators' computer skills. Table 2 ranks highest and lowest C-NET-C educators' mean scores for ON*TRAC educational technology integration and teaching methods questions. Table 3 ranks highest and lowest C-NET-C educators' mean scores on ON*TRAC Computer Skills Questions. Table 4 ranks the highest and lowest mean ON*TRAC score differences between C-NET-C and all Nevada educators who took ON*TRAC for educational technology integration and teaching methods. Table 5 ranks the highest and lowest mean ON*TRAC score differences between C-NET-C and all Nevada educators who took ON*TRAC for computer skills. Table 6 presents items that are both the lowest and highest ranked items among C-NET-C educator means and also represent the greatest and least differences between C-NET-C means and the means of all Nevada educators who took ON*TRAC.

Figure 1

Percentages of All C-NET-C Educators Who Did and Did Not Take the ON*TRAC Survey

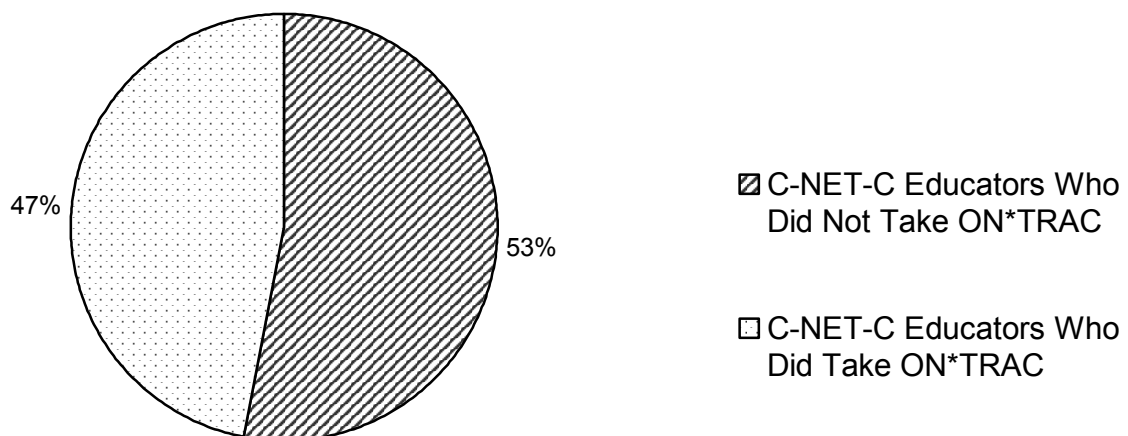


Table 1
 Mean ON*TRAC Scores for C-NET-C Educators and the Entire Population of Nevada Educators Who Have Taken ON*TRAC and Differences Between These Mean Scores*

Question	C-NET-C Educators' Mean	Nevada Educators' Mean	Difference Between C-NET-C and NV Educators' Means
<u>Educational Technology Integration & Teaching Methods</u>			
1. Introductory Technology Methods	3.55	3.44	.11
2. Assistive Technology Methods	3.57	3.07	.50
3. Software Integration Methods	2.99	3.07	-.08
4. Expectation Levels for Student Use of Technology	3.02	3.14	-.12
5. Classroom Computer Use	3.18	3.17	.01
6. Classroom Computer Instructional Integration	2.55	2.55	.00
7. Classroom Technology Integration	2.69	2.86	-.17
8. Selection of Professional Development Activities	3.69	3.71	-.02
9. Assessment of Effective Technology Use	3.43	3.51	-.08
10. Universal Design	3.65	3.68	-.03
11. Opinion About the Changing Nature of Technology	3.55	3.59	-.04
12. Use of Sophisticated Equipment	3.57	3.51	.06
13. Technology Collaboration with Other Educators	2.77	2.97	-.20
<u>Computer Skills</u>			
14. Pointing Devices (Mousing) and Menus	3.91	3.92	-.10
15 Windows and Icons	3.84	3.85	-.10
16. File Management	3.76	3.79	-.03
17. Saving	3.65	3.68	-.03
18. Printing	3.87	3.82	.05
19. Operations	3.34	3.35	-.01
20. Software	3.22	3.22	.00
21. Word Processing	3.23	3.39	-.16
22. Graphics Management	2.69	3.03	-.34
23. Graphics Production	2.10	2.41	-.31
24. Multimedia Presentation	2.15	2.48	-.33
25. Video Clips	.99	1.29	-.30
26. Audio Clips	.77	.96	-.19
27. Creating Spreadsheets	2.46	2.56	-.10
28. Managing Spreadsheets	1.61	1.69	-.08
29. Creating Databases	1.49	1.63	-.14
30. Utilizing Databases	1.29	1.49	-.20
31. Appropriate Use	3.67	3.67	.00
32. Online Communications	3.59	3.61	-.02
33. E-mail	3.81	3.79	.02
34. E-mail Applications	3.00	3.12	-.12
35. Web Publishing	.66	.95	-.29
36. Advanced Web Publishing	.71	.84	-.13
37. Browser	3.46	3.35	.11
38. Web Searching	3.45	3.34	.11
39. Collecting and Citing Sources	2.94	2.90	.04

*Rated on a scale of 0-4 where 0 represents low proficiency and 4 represents high proficiency

Table 2
Highest and Lowest C-NET-C Educator **Mean Scores** on ON*TRAC **Educational Technology Integration and Teaching Methods Questions**

Mean Score Rank	Question	C-NET-C Educators' Mean
1	8. Selection of Professional Development Activities	3.69
2	10. Universal Design	3.65
3	2. Assistive Technology Methods	3.57
3	12. Use of Sophisticated Equipment	3.57
-1	13. Technology Collaboration with Other Educators	2.77
-2	7. Classroom Technology Integration	2.69
-3	6. Classroom Computer Instructional Integration	2.55

Table 3
Highest and Lowest Ranked C-NET-C Educator **Mean Scores** on ON*TRAC **Computer Skills Questions**

Mean Score Rank	Question	C-NET-C Educators' Mean
1	14. Pointing Devices (Mousing) and Menus	3.91
2	18. Printing	3.87
3	15 Windows and Icons	3.84
4	33. E-mail	3.81
5	16. File Management	3.76
-1	35. Web Publishing	.66
-2	36. Advanced Web Publishing	.71
-3	26. Audio Clips	.77
-4	25. Video Clips	.99
-5	30. Utilizing Databases	1.29

Table 4
Highest and Lowest **Mean Score Differences** between C-NET-C Educators and Nevada Educators as Reported by ON*TRAC Scores for **Educational Technology Integration and Teaching Method Questions**

Mean Score Difference Rank	Question	C-NET-C Educators' Mean	Nevada Educators' Mean	Difference Between C-NET-C and NV Educators' Means
1	2. Assistive Technology Methods	3.57	3.07	.50
2	1. Introductory Technology Methods	3.55	3.44	.11
3	12. Use of Sophisticated Equipment	3.57	3.51	.06
-1	13. Technology Collaboration with Other Educators	2.77	2.97	-.20
-2	7. Classroom Technology Integration	2.69	2.86	-.17
-3	4. Expectation levels for student use of technology	3.02	3.14	-.12

Table 5
Highest and Lowest **Mean Score Differences** between C-NET-C Educators and Nevada Educators as Reported by ON*TRAC Scores for **Computer Skills Questions**

Mean Score Difference Rank	Question	C-NET-C Educators' Mean	Nevada Educators' Mean	Difference Between C-NET-C and NV Educators' Means
1	37. Browser	3.46	3.35	.11
1	38. Web Searching	3.45	3.34	.11
3	18. Printing	3.87	3.82	.05
4	39. Collecting and Citing Sources	2.94	2.90	.04
-1	22. Graphics Management	2.69	3.03	-.34
-2	24. Multimedia Presentation	2.15	2.48	-.33
-3	23. Graphics Production	2.10	2.41	-.31
-4	25. Video Clips	.99	1.29	-.30

Table 6
Methods and Skills that Appeared on Both **Mean Score** and **Mean Score Difference Tables** (Tables 2 –4)

Question	Table 2 Rank	Table 3 Rank	Table 4 Rank	Table 5 Rank
2. Assistive Technology Methods	3		1	
7. Classroom Technology Integration	-2		-2	
12. Use of Sophisticated Equipment	3		3	
13. Technology Collaboration with Other Educators	-1		-1	
18. Printing		2		2
25. Video Clips		-4		-4

B. Personal Interviews

Twenty-two personal interviews were conducted with educators in Esmeralda, Lincoln, Lyon, Nye, and Pershing County School Districts that produced quantitative and qualitative results. Quantitative results investigated both the background information about educators and the degree to which they would like to receive professional development in various technology skills. Qualitative data were collected to determine interviewees' attitudes about educational technology. Interviews were conducted via telephone and face-to-face. Although effort was made to carry out interviews with educators in Mineral County School District, interviews were not administered in this district. A copy of the interview questions may be found in Appendix D.

Initially, an e-mail message was sent to the superintendents and technology coordinators of each school district asking for names and contact information of a total of 7 educators from each district. Ultimately, either the superintendent or someone assigned by the superintendent from each district chose 2 principals, 2 elementary teachers, 2 secondary teachers, and 1 technology coordinator to participate in the personal interviews. Of the 4 teachers, effort was made to select 2 with relatively high technology skills and 2 with relatively low technology skills. The original goal of 7

interviews for each district was not met in any of the 6 counties; however, the goal was closely met in most districts.

a. Quantitative Background Information About the Interviewees and Their Schools

Interviewees were asked several questions about their professional backgrounds to gain an understanding of the sample chosen to participate in these interviews. Table 7 lists interviewees' districts and number of interviews conducted. Table 8 lists the positions of the educators interviewed, their mean years of experience, and their mean self-reported level of understanding about computer technology rated on a scale of 1 to 10 with 1 being novice and 10 being expert.

Interviewees were asked to identify, to the best of their knowledge, the number of computers in their schools and classrooms. Table 9 lists mean number of computers in interviewees' schools and classrooms. Interviewees also reported the type of Internet connectivity, if any, at their school. Table 10 reports these findings.

Table 7
Number of Personal Interviews Conducted by District

District	Number of Personal Interviews
Esmeralda	6
Lincoln	4
Lyon	5
Nye	6
Mineral	0
Pershing	1
Total	22

Table 8
Interviewees' Mean Years of Experience and Mean Self-Reported Level of Understanding About Technology

Position	N	Mean Years Experience in Field of Education	Standard Deviation	Mean Self-Reported Level of Understanding About Computer Technology*	Standard Deviation
Teachers	13	14.31	10.23	6.00	1.84
Principals	7	27.86	4.88	5.50	1.52
Assistant Principals	1	14.00	0	8.00	0
Technology Coordinators	1	3.00	0	10.00	0
Total	22	18.09	10.90	6.16	1.92

*Reported on a scale of 1 to 10 with 1 being novice and 10 being expert.

Table 9
Interviewees' Self-Reported Number of Computers in Their Schools and Classrooms

Computer in:	N	Minimum	Maximum	Mean	Standard Deviation
School	14	16	131	65.82	39.49
Classroom	14	1	25	9.50	6.91

Table 10
Type of Internet Connection in Interviewees' Schools

Type of Connection	N	Percent
No Connection	1	4.5
Dial-up Modem	4	18.2
School Network	17	77.3

b. Quantitative Results on Educators' Desire to Receive Professional Development in Specific Technology Skills

During the interview, each educator was read a list of technology skills and asked to indicate on a scale of 1 to 4, with 1 being undesirable and 4 being extremely desirable, the degree to which they would like to receive training in the listed skills. Table 11 notes the results generated by these questions. Table 12 ranks interviewees' highest and lowest mean scores presented in Table 11.

Table 11
Interviewees' Mean Scores Answering the Question, "On a scale of 1 to 4 with 1 being undesirable and 4 being extremely desirable, indicate the degree to which you would like to receive training in the following skills."

Skill	N	Mean	Standard Deviation
1. Basic computer operation skills	22	2.00	1.27
2. Word processing (Word, WordPerfect, etc.)	22	1.95	1.17
3. Database (Access, FileMaker, etc.)	22	2.95	1.00
4. Spreadsheet (Excel, Lotus, etc.)	22	2.82	1.14
5. Statistical packages (SAS, SPSS, JMP, etc.)	21	2.19	1.17
6. Internet browsers (Netscape or Explorer)	22	2.50	1.37
7. Web-page development	22	2.91	.97
8. E-mail	22	2.32	1.25
9. Scanning and digital camera applications	22	3.09	.97
10. Digital image creation and editing	22	2.91	1.15
11. Audio and video editing	22	2.77	1.11
12. Student assessment (electronic portfolios, etc.)	21	3.52	.75
13. Presentations (PowerPoint, Corel, etc.)	22	3.00	1.11
14. Technology-based learning simulations	21	3.43	.98
15. Instructional software related to your discipline	22	3.45	.80
16. Technology to search for resources	21	3.29	.96
17. Course delivery software (WebCT, etc.)	19	2.42	1.22
18. Computer troubleshooting	22	3.14	1.21

Table 12
Most and Least Desirable Professional Development Opportunities As Rated by the Interviewees

Mean Score Rank	Question	Mean	Standard Deviation
1	12. Student assessment (electronic portfolios, etc.)	3.52	.75
2	15. Instructional software related to your discipline.	3.45	.80
3	14. Technology-based learning simulations	3.43	.98
-1	2. Word processing (Word, WordPerfect, etc.)	1.95	1.17
-2	1. Basic computer operation skills	2.00	1.27
-3	5. Statistical packages (SAS, SPSS, JMP, etc.)	2.19	1.17

c. Qualitative Results Derived from Personal Interviews

Several interview questions solicited qualitative responses. Figure 2 highlights the main points that were drawn from interviewees' qualitative responses. For a complete listing of qualitative responses, please see Appendix B.

Figure 2

The following items highlight the main points drawn from interviewees' qualitative responses.

- Many educators view a lack of training as the main barrier to technology integration in their districts and are very excited about the opportunities C-NET-C will offer them.
- Many educators fear that they lack the necessary technology equipment (hardware and software) to properly implement technology integration.
- Many educators are concerned that C-NET-C will offer training on equipment that is more sophisticated than the equipment they have at their schools, rendering this time consuming training ineffectual.
- When asked on what instructional software they would like to be trained, many educators were not aware of what software is available and would like to learn more about the types of instructional software related to their disciplines.
- Many educators lack a clear understanding about technology integration.
- Most educators are willing to travel approximately 100 miles to attend educational technology training sessions as long incentives are provided, like stipends or university credit.
- Educators who are knowledgeable about technology express dissonance about what is available and what is known about educational technology in their districts. Many would like more continuity in the educational technology policies in their districts.

Figure 2 Continued

- Educators are frustrated with the elimination of state funding for technology equipment. They believe that as remote and rural communities, they rely more heavily on government funding than their urban counterparts who may appeal to a larger bank of local, private sector donors for additional support when government funding is cut.
- Previously, many educators have had unpleasant experiences with technology training. They want C-NET-C training sessions to occur in computer labs and want to have hands-on instruction in the presence of an expert instructor who is knowledgeable about good educational technology pedagogical practices.
- Educators believe they lack the time to adequately learn technology and integration skills.
- Although computer troubleshooting did not rank among the top 3 most desirable professional development topics, many educators expressed an intense desire to learn troubleshooting techniques. The relatively mid-range mean score for troubleshooting on this survey may be a result of two prevalent and polarized responses: 1) “We have technology professionals in our school/district to fix technology problems and I do not need to learn these skills,” and 2) “Our technology coordinator is so busy that I would like to learn some troubleshooting techniques to avoid waiting long periods of time for assistance.”

C. District Trainer Surveys

C-NET-C district trainers, 11 teachers and 1 regional development trainer, completed surveys at their first training session that elicited quantitative and qualitative responses. An example of the survey may be found in Appendix E.

a. Quantitative District Trainer Results

Table 13 presents C-NET-C district trainers’ mean years of experience in the education field and their mean self-reported level of understanding about technology on a scale of 1 to 10 with 1 being novice and 10 being expert. Trainers’ areas of instruction are listed in Table 14. Figure 3 illustrates the results of a self-reported survey on the proportion of PC and Macintosh computers in trainers’ districts.

Trainers were asked to evaluate their schedules and report what days and times are most convenient to hold C-NET-C train-the-trainer training sessions. Table 15 presents the number of trainers who are available to meet at specified days and times.

Trainers were asked to rank certain incentives for getting educators to attend professional development activities. Results are presented in Table 16.

Trainers were given the same list of skills as interviewees (see Table 11) and asked to indicate the degree to which they believe educators in their districts need to receive

training in these skills. Results are presented in Table 17. Table 18 ranks the three highest and lowest mean scores reported in Table 17.

Table 13
C-NET-C District Trainers' Mean Years of Experience and Mean Self-Reported Level of Understanding About Technology

Position	N	Mean Years Experience	Standard Deviation	Mean Self-Reported Level of Understanding About Computer Technology*	Standard Deviation
C-NET-C District Trainers	12	12.42	8.71	4.17	3.21

*Reported on a scale of 1 to 10 with 1 being novice and 10 being expert.

Table 14
C-NET-C District Trainers' Areas of Instruction

Area of Instruction	N
Elementary Teachers	5
Social Studies	1
Vocational Education	1
Technology	1
Math	3
Total	11

Figure 3
Self-Reported Computer Platform Proportions in C-NET-C District Trainers' School Districts

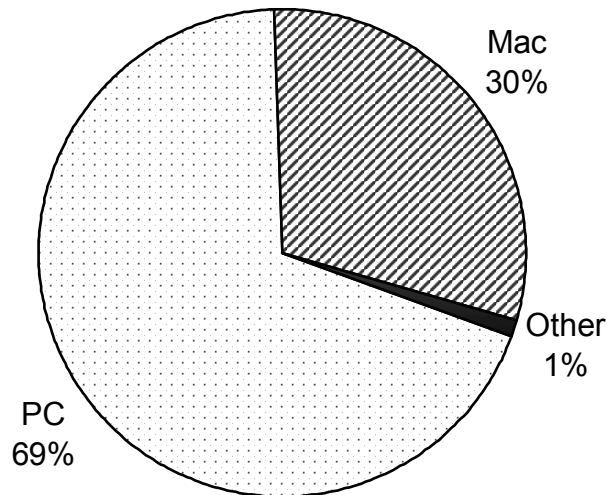


Table 15
Number of Trainers Who are Available to Meet at Specified Days and Times

Day	Morning	Afternoon	Evening
Monday	8	7	4
Tuesday	6	5	4
Wednesday	9	8	5
Thursday	8	7	4
Friday	7	6	5
Saturday	7	6	5
Sunday	6	5	5

Table 16
Number of Trainers Who Ranked Each Professional Development Incentive First Through Fourth

Incentive	Number Who Ranked This First	Number Who Ranked This Second	Number Who Ranked This Third	Number Who Ranked This Fourth
University Credit	7	4	0	1
CEU Credit	1	3	7	1
Stipend	3	4	4	1
Substitute Pay	0	0	2	9

Table 17
District Trainers' Mean Scores Answering the Question, "On a scale of 1-4 with 1 being undesirable and 4 being extremely desirable, indicate the degree to which educators in your district need to receive training in the following skills."

Skill	N	Mean	Standard Deviation
1. Basic computer operation skills	12	2.58	1.00
2. Word processing (Word, WordPerfect, etc.)	12	2.42	1.00
3. Database (Access, FileMaker, etc.)	12	2.67	.89
4. Spreadsheet (Excel, Lotus, etc.)	12	2.83	.83
5. Statistical packages (SAS, SPSS, JMP, etc.)	12	2.55	1.13
6. Internet browsers (Netscape or Explorer)	12	2.42	.90
7. Web-page development	12	3.17	.94
8. E-mail	12	2.58	1.00
9. Scanning and digital camera applications	12	3.25	.62
10. Digital image creation and editing	12	3.17	1.03
11. Audio and video editing	12	3.17	1.11
12. Student assessment (electronic portfolios, etc.)	12	3.42	.67
13. Presentations (PowerPoint, Corel, etc.)	12	3.50	.90
14. Technology-based learning simulations	12	3.75	.45
15. Instructional software related to your discipline	12	3.36	.92
16. Technology to search for resources	12	3.33	.78
17. Course delivery software (WebCT, etc.)	12	3.27	1.10
18. Computer troubleshooting	12	3.50	.80

Table 18
Most and Least Desirable Professional Development Opportunities As Rated by the District Trainers

Mean Score Rank	Question	Mean	Standard Deviation
1	14. Technology-based learning simulations	3.75	.45
2	13. Presentations (PowerPoint, Corel, etc.)	3.50	.90
2	18. Computer troubleshooting	3.50	.80
-1	5. Statistical packages (SAS, SPSS, JMP, etc.)	2.55	1.13
-2	2. Word processing (Word, WordPerfect, etc.)	2.42	1.00
-2	6. Internet browsers (Netscape or Explorer)	2.42	.90

b. Qualitative District Trainers' Responses

Qualitative responses were evoked from trainers. An overview of the main issues raised in these responses is presented in Figure 4. Full responses are provided in Appendix C.

Figure 4

Overview of Qualitative Responses to Trainers' Survey

- Trainers are excited about the opportunities C-NET-C will offer them.
- Trainers express a number of computer hardware and software concerns including dissatisfaction with the one-computer classroom, lack of Internet connectivity, and lack of new hardware and software in their schools and districts.
- Trainers think that the most urgent staff development needs for novice technology users are to train novices in integration techniques, basic computer skills, and troubleshooting techniques.
- Trainers think that the most urgent staff development needs for intermediate technology users are the need for training in specific course-related software, general integration techniques, and one-computer classroom integration techniques.
- Trainers think that the most urgent staff development needs for advanced technology users are the need for training in integration techniques, and the availability of university credit to these educators.
- Many trainers think that initial C-NET-C district training efforts should target novice technology users because this group comprises the majority of their districts and they also have the most to gain from technology training.

IV. Analysis and Conclusion

Results derived from this needs assessment suggest many professional development needs for C-NET-C educators. The following items summarize these findings by answering the study's research questions.

- **In which specific educational technology skills do C-NET-C educators exhibit expertise?**
 - Educators exhibit considerable knowledge and competence in assistive technologies and universal design techniques.
 - Educators exhibit considerable knowledge and competence in using a mouse, menus and icons, printers, e-mail, Web browsers, and can manage files in a Windows or Mac environment.
 - Educators are competent in conducting Internet searches.

- **In which specific educational technology skills do C-NET-C educators lack expertise?**
 - Educators are not familiar with the concept of technology integration.
 - Educators are not familiar with managing spreadsheets
 - Educators are not familiar with creating and utilizing databases for educational purposes.
 - Educators are not familiar with Web publishing skills.
 - Educators are not familiar with audio and video editing skills.

- **How do C-NET-C educators' technology skills differ from those of all Nevada educators who took ON*TRAC?**
 - The greatest difference between C-NET-C educators and the average Nevada educator as reported by ON*TRAC is C-NET-C educators' strong understanding of assistive technologies.
 - C-NET-C educators' introductory technology methods are more advanced than the average Nevada educator as reported by ON*TRAC.
 - C-NET-C educators' Web browsing and searching skills are more advanced than the average Nevada educator as reported by ON*TRAC.
 - C-NET-C educators' technology integration skills are lower than those of the average Nevada educator as reported by ON*TRAC.

- C-NET-C educators' tend to collaborate with other educators on technology related activities less than the average Nevada educator as reported by ON*TRAC.
 - C-NET-C educators' student technology use expectation levels are lower than the average Nevada educator as reported by ON*TRAC.
 - C-NET-C educators' multimedia production skills are lower than the average Nevada educator as reported by ON*TRAC.
- **In which specific educational technology skills do C-NET-C educators desire professional development training?**
- Educators desire training in technology related student assessment like electronic portfolios.
 - Educators want to learn more about instructional software that is available in their discipline and how to effectively implement this software.
 - Educators want to learn more about technology-based learning simulations.
 - Educators want to know how to effectively integrate technology in a one-computer classroom.
 - Many educators want to learn basic computer troubleshooting techniques.
 - Educators want to learn more about presentation software like PowerPoint.
- **What do C-NET-C educators believe to be the greatest barriers to technology integration in their classrooms?**
- Many educators believe a lack of training in educational technology skills and methods is the main barrier to technology integration.
 - The lack of adequate technology equipment is believed to be a barrier to technology integration by educators.
 - Educators believe the lack of government funding for technology equipment to be the greatest barrier to technology integration.
 - Educators' believe their negative previous experiences with technology training are a barrier to technology integration.
 - Educators would like more continuity in district educational technology policies – meaning that they would like to see district policies reflect realistic goals and more value placed on educational technology.

- Educators' overall lack of knowledge about technology integration and available educational technologies is believed by educators to be a barrier to technology integration.
- **What are educators' beliefs about how C-NET-C can best serve educators in Esmeralda, Lincoln, Lyon, Mineral, Nye, and Pershing County School Districts?**
 - While C-NET-C's mission is to provide professional development training to educators, educators in its six districts have professed an extreme need for updated technology equipment. C-NET-C may wish to assist educators in finding funding for technology equipment.
 - C-NET-C can be the collective educational technology voice for educators' who believe they are often not heard due to their districts' remoteness and small enrollment.
 - C-NET-C can insure positive training experiences to its educators by providing educators with meaningful, pedagogically sensitive, and time-efficient training.
 - C-NET-C can continue to listen to the needs of educators in its six districts.
- **Additional Observations**
 - ON*TRAC, personal interview, and trainer questionnaire results indicate that educators are extremely interested in attending professional development workshops
 - Wednesday morning is the most popular time to meet with district trainers, closely followed by Monday mornings and Wednesday afternoons.
 - District trainers believe that the opportunity to earn university credit is the most enticing incentive for getting educators to attend their training sessions.
 - District trainers indicated that the majority of C-NET-C educators have access to computers running on the PC platform; however, 30% use the Macintosh platform and trainers need to take this into consideration.
 - ON*TRAC question # 12 appeared in several tables with a high mean; thereby, indicating that its indicated skill is a strength for C-NET-C educators. Close examination of question # 12 (pg. 24) shows that the highest rated answer (Technology tools that I seek out are not readily available) may differ from its intended meaning to C-NET-C educators. The intended response may be trying to grasp the number of expert technology users whose technology skills are so advanced that their districts do not possess the necessary equipment to facilitate their high-level needs. Taking into consideration responses to other parts of this assessment, ON*TRAC question #12 may express C-NET-C educators' need for updated equipment.

APPENDICES

Appendix A

Means for Each ON*TRAC Question Reported by Each C-NET-C District, All C-NET-C Districts, and All Nevada Educators Who Took ON*TRAC

**Means for Each ON*TRAC Question Reported by Each C-NET-C District,
All C-NET-C Districts, and All Nevada Educators Who Took ON*TRAC**

Table 1

Question #1: I introduce my students to technology and its use in business, industry and society by:

- Lecturing and discussion and possibly showing a videotape if available **1**
- Instructing students to do research at the library, through the Internet **2**
- Bringing in an expert or taking a field trip **3**
- Utilizing role playing and problem-based learning **4**
- I have not yet introduce my students to technology and its uses **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.42	1.240
Lincoln	66	3.42	.946
Lyon	243	3.65	.730
Mineral	2	0*	0*
Nye	205	3.44	1.040
Pershing	24	3.83	.381
All C-NET-C School Districts**	550	3.55	.891
Nevada Educators	4278	3.52	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District was not included

*** This information was not available

Table 2

Question #2: If a student who displays profound difficulties with hand/eye coordination were to become a member of my class I would:

- Utilize the same teaching strategies as I do with other students **1**
- Consult with school personnel for teaching strategies **2**
- Consult with parents and/or community resources (doctors, therapists, etc.) **3**
- Research adaptive assistive devices and techniques to be employed. **4**
- I have not encountered a situation like this yet. **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.25	1.215
Lincoln	69	3.48	.833
Lyon	255	3.68	.594
Mineral	2	0*	0*
Nye	213	3.46	.934
Pershing	24	3.79	.415
All C-NET-C School Districts**	573	3.57	.783
Nevada Educators	4442	3.54	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 3

Question #3: When I develop a lesson that integrates a piece of software:

- I use software I received in the mail (promotional, demo, etc.) **1**
- I utilize software already installed at school **2**
- I choose software that was recommended at a professional development activity **3**
- I use multiple software applications that I researched and that support the curriculum **4**
- I have not yet integrate software in my lessons **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.92	1.24
Lincoln	70	3.24	1.01
Lyon	253	3.13	1.05
Mineral	2	0*	0*
Nye	210	2.66	1.32
Pershing	25	3.60	.71
All C-NET-C School Districts**	570	2.99	1.17
Nevada Educators	4414	3.07	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 4

Question #4: When designing lessons or units:

- Technology is offered as a separate and/or optional program, often as a reward for completing assignments **1**
- Technology is teacher- directed and is viewed as optional to achieve curriculum goals **2**
- Technology is used by students to participate in learning activities with their teachers. **3**
- Students become explorers, producers of knowledge, communicators and self-directed learners **4**
- I have not yet used technology **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.75	1.22
Lincoln	69	3.20	1.16
Lyon	247	3.16	1.11
Mineral	2	0*	0*
Nye	212	2.76	1.33
Pershing	25	3.48	.71
All C-NET-C School Districts**	565	3.02	1.21
Nevada Educators	4365	3.14	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 5

Question #5: Computer use in my classroom is:

- For teacher use only(record keeping and lesson materials) **1**
- For teacher and student use (teacher record keeping and student drill and practice) **2**
- For student use (teacher-directed lessons) **3**
- For student use (self-directed and collaborative projects) **4**
- Not yet occurring **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.25	1.22
Lincoln	69	3.29	1.00
Lyon	252	3.15	1.09
Mineral	2	0*	0*
Nye	214	3.10	1.13
Pershing	25	3.68	.56
All C-NET-C School Districts**	572	3.18	1.08
Nevada Educators	4435	3.17	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 6

Question #6: During my instructional day:

- Students are allowed to use computers at designated times initiated by the teacher **1**
- Students are instructed to use technology tools for specific projects and are assigned time by the teacher **2**
- Students are assigned work station times and the stations are available for use during students' free time **3**
- Students are allowed unlimited access to technology and are self directed **4**
- Students are not allowed computer use **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	2.45	1.036
Lincoln	68	2.82	1.007
Lyon	247	2.57	1.053
Mineral	2	0*	0*
Nye	207	2.39	1.172
Pershing	25	2.92	.909
All C-NET-C School Districts**	558	2.55	1.095
Nevada Educators	4317	2.55	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 7

Question #7: I understand and utilize the following types of technology:

- The computer in my classroom **1**
- The computer network at my school (including server, printers, scanners, etc.) **2**
- Electronic devices (i.e. graphing calculator, language translator, scientific probeware, midi keyboard, etc.) **3**
- Technology tools (i.e. digital camera, projection device, scanner, etc.) **4**
- I do not utilize technology yet **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.75	1.215
Lincoln	71	2.79	1.286
Lyon	256	2.77	1.236
Mineral	2	0*	0*
Nye	214	2.50	1.314
Pershing	24	3.25	1.073
All C-NET-C School Districts**	577	2.69	1.273
Nevada Educators	4468	2.86	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 8

Question #8: The following best describes how I select professional development opportunities in the field of technology:

- Recommendations from my principal **1**
- Recommendations from a friend or colleague **2**
- Individual assessment of need and seeking programs that are related **4**
- I am involved in professional organizations through which I attend conferences and activities related to technology. **3**
- I am not aware of any programs **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.75	.62
Lincoln	71	3.72	.61
Lyon	255	3.75	.66
Mineral	2	0*	0*
Nye	215	3.59	.85
Pershing	25	3.76	.52
All C-NET-C School Districts**	578	3.69	.73
Nevada Educators	4471	3.71	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 9

Question #9: How do you assess the effectiveness of technology use in instructional units:

- I observe my students **1**
- I record the improvement of my students' grades **3**
- I compare my classroom activities with that of colleagues **2**
- I design and utilize rubrics **4**
- I do not consider the effectiveness of technology **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	3.55	.934
Lincoln	71	3.35	1.057
Lyon	238	3.58	.842
Mineral	2	0*	0*
Nye	204	3.24	1.138
Pershing	25	3.76	.663
All C-NET-C School Districts**	549	3.43	.997
Nevada Educators	4269	3.51	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District was not included

*** This information was not available

Table 10

Question #10: When preparing instructional units, I consider the potential for diverse populations by

- Making no accommodations for students who have limited access to technology outside of my classroom **1**
- Allowing alternative methods for completing assignments (i.e. handwritten) **2**
- Suggesting utilization of community resources (school lab, public library, etc.) **3**
- Making the classroom computer available and offering my assistance (during recess, after school, etc.) **4**
- I make no consideration for diverse populations when preparing instructional units **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	3.73	.65
Lincoln	69	3.59	1.02
Lyon	240	3.73	.63
Mineral	2	0*	0*
Nye	197	3.53	.88
Pershing	24	3.92	.841
All C-NET-C School Districts**	541	3.65	.79
Nevada Educators	4189	3.68	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 11

Question #11: The following best describes my opinions about the changing nature of technology:

- I have already learned everything I need to know about technology **1**
- I feel the rapid changes in technology make it difficult to keep up **2**
- I rely on professional staff to educate me in technology literacy **3**
- I understand that technology is a rapidly changing field and I continually educate myself and my students and utilize its numerous possibilities **4**
- I have not yet developed opinions about the changing nature of technology **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.58	.793
Lincoln	72	3.53	.888
Lyon	255	3.63	.757
Mineral	2	0*	0*
Nye	213	3.46	.882
Pershing	25	3.48	1.046
All C-NET-C School Districts**	577	3.55	.836
Nevada Educators	4437	3.59	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 12

Question #12: In the course of my job I communicate concepts, conduct research, and solve problems using:

- A computer with basic software (i.e. word processing, gradebook) **1**
- A computer with additional software (i.e. presentation, web browser, spreadsheet, database, etc.) **2**
- A variety of available educational software and hardware (i.e. camera, scanner, etc.) **3**
- Technology tools that I seek out are not readily available **4**
- No computers or technology **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.75	.87
Lincoln	70	3.69	.88
Lyon	253	3.68	.91
Mineral	2	0*	0*
Nye	212	3.35	1.35
Pershing	24	3.83	.57
All C-NET-C School Districts**	571	3.57	1.09
Nevada Educators	4408	3.51	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 13

Question #13: The following most closely resembles how I plan the use of technology within my school environment:

- I work independently **1**
- I discuss educational issues and practices with my administrator **2**
- I collaborate and share a few ideas with some teachers **3**
- I participate in collaborative projects and team activities with teachers and administrators **4**
- I do not plan for technology **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.83	1.34
Lincoln	72	2.79	1.37
Lyon	250	2.94	1.24
Mineral	2	0*	0*
Nye	214	2.53	1.46
Pershing	24	2.96	1.23
All C-NET-C School Districts**	572	2.77	1.36
Nevada Educators	4443	2.97	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 14

Question #14: Pointing Devices (Mousing)/Menus

- I know how to click and drag objects on the computer using the mouse **1**
- I can recognize when it is appropriate to use a single or double click of the mouse **2**
- I can launch and quit programs **3**
- I can scroll through the contents of a window and change how I view it (i.e. by list, by icon, by date, by size, etc.) **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.92	.29
Lincoln	80	3.92	.38
Lyon	269	3.92	.34
Mineral	2	0*	0*
Nye	237	3.86	.57
Pershing	35	4.00	.00
All C-NET-C School Districts**	633	3.91	.44
Nevada Educators	4713	3.92	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 15

Question #15:Windows/Icons

- I can customize and adjust the desktop appearance **3**
- I can locate and identify icons on my computer **1**
- I can open/close a folder or window; within that I can maximize/minimize, hide/show **2**
- I can switch between different open windows **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.92	.289
Lincoln	79	3.90	.441
Lyon	269	3.88	.445
Mineral	2	0*	0*
Nye	238	3.76	.744
Pershing	35	4.00	.000
All C-NET-C School Districts**	633	3.84	.567
Nevada Educators	4696	3.85	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 16

Question #16:File Management

- I can find and open a file from the appropriate location (i.e. floppy, hard drive, CD-ROM, network) **1**
- I can delete a document, file, or folder **2**
- I can rename and organize documents or files within folders **3**
- I can copy files for back-up purposes **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	3.91	.30
Lincoln	79	3.82	.59
Lyon	268	3.78	.56
Mineral	2	0*	0*
Nye	236	3.68	.82
Pershing	35	3.94	.24
All C-NET-C School Districts**	629	3.76	.66
Nevada Educators	4683	3.79	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 17

Question #17: Saving

- I can name and save a file to the appropriate location (i.e. floppy, hard drive, network) **1**
- I can alter a file location or format (i.e. "save as") **2**
- I can create a folder/directory on my computer or network when saving a document **3**
- I can navigate the folder/directory structure on my computer or network **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.58	.90
Lincoln	78	3.73	.66
Lyon	269	3.70	.60
Mineral	2	0*	0*
Nye	234	3.56	.86
Pershing	34	3.76	.50
All C-NET-C School Districts**	627	3.65	.72
Nevada Educators	4679	3.68	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 18

Question #18: Printing

- I can print a document **1**
- I can select a printer **3**
- I can format and orient my documents for printing (i.e. portrait, landscape, number of pages) **2**
- I can perform related tasks (i.e. load paper, change cartridge, and connect power sources) **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	4.00	.000
Lincoln	79	3.87	.540
Lyon	269	3.90	.410
Mineral	2	0*	0*
Nye	234	3.82	.697
Pershing	34	4.00	.000
All C-NET-C School Districts**	627	3.87	.540
Nevada Educators	4685	3.82	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 19

Questions #19:Operations

- I know how to power-up and shutdown the computer appropriately **1**
- I can identify problems with power connections **2**
- I can identify problems with connections to the peripherals (keyboard, mouse, printer, scanner, etc.) **3**
- I know some of the symptoms of hardware problems and can use correct terminology to communicate those problems to the appropriate support personnel **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.67	.49
Lincoln	80	3.41	.92
Lyon	269	3.38	1.01
Mineral	2	0*	0*
Nye	237	3.26	1.13
Pershing	34	3.35	1.15
All C-NET-C School Districts**	632	3.34	1.05
Nevada Educators	4689	3.35	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 20

Question #20: Software

- I understand some program and system errors **4**
- I can manage and utilize the functions of a software program **1**
- I can install a software program **2**
- I understand and adhere to software-licensing issues **3**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.50	.67
Lincoln	80	3.26	1.12
Lyon	267	3.26	1.12
Mineral	2	0*	0*
Nye	237	3.13	1.24
Pershing	35	3.34	1.08
All C-NET-C School Districts**	631	3.22	1.16
Nevada Educators	4684	3.22	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 21

Question #21: Word Processing

- I can format a document (i.e. margins, columns, tabs, line spacing, font, and text alignment) **1**
- I can perform inserts (i.e. page numbers, breaks, headers/footers, bullets, numbering, tables, and text boxes) **3**
- I can utilize other features (i.e. spell checker, thesaurus, and adjust viewing percentage) **2**
- I can create a template **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.33	1.07
Lincoln	80	3.21	1.21
Lyon	269	3.39	.98
Mineral	2	0*	0*
Nye	237	3.05	1.32
Pershing	35	3.23	1.24
All C-NET-C School Districts**	633	3.23	1.17
Nevada Educators	4712	3.39	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 22

Question #22: Graphics Management

- I can insert graphics **1**
- I can manipulate graphics (i.e. size, rotation, and duplication) **2**
- I can manage graphics (i.e. layering, text wrapping) **3**
- I can utilize basic drawing tools **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	3.09	1.58
Lincoln	80	2.80	1.72
Lyon	269	2.86	1.69
Mineral	2	0*	0*
Nye	235	2.43	1.87
Pershing	35	2.80	1.71
All C-NET-C School Districts**	630	2.69	1.77
Nevada Educators	4677	3.03	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 23

Question #23: Graphics Production

- I can use application tools to create my own graphic(s) **4**
- I can utilize a digital camera or scanner to create a graphic **1**
- I can edit a graphic **2**
- I can export a graphic in the appropriate format (i.e. jpg, gif) **3**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.17	1.95
Lincoln	78	2.27	1.78
Lyon	268	2.32	1.76
Mineral	2	0*	0*
Nye	235	1.76	1.77
Pershing	35	2.23	1.82
All C-NET-C School Districts**	628	2.10	1.79
Nevada Educators	4641	2.41	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 24

Question #24:Multimedia Presentation

- I can open an existing presentation and run a slide show in presentation mode **1**
- I can create a new presentation, create new slides, view, and manipulate slide order **2**
- I can format text objects (i.e. bullets, colors, line spacing, alignment and fonts of a slide) **3**
- I can add graphics and other multimedia elements (i.e. QuickTime videos, audio clips, clipart) **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.08	2.02
Lincoln	80	2.55	1.79
Lyon	268	2.36	1.82
Mineral	2	0*	0*
Nye	234	1.80	1.84
Pershing	34	2.06	1.98
All C-NET-C School Districts**	628	2.15	1.85
Nevada Educators	4644	2.48	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 25

Question #25: Video Clips

- I can create or acquire video images (i.e. using a camcorder) **1**
- I can transfer video images to a computer **2**
- I can edit video clips **3**
- I can add sound, graphics or text to video images **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	.58	1.24
Lincoln	79	1.35	1.85
Lyon	264	1.17	1.76
Mineral	2	0*	0*
Nye	232	.65	1.41
Pershing	34	1.29	1.90
All C-NET-C School Districts**	621	.99	1.67
Nevada Educators	4588	1.29	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 26

Question #26: Audio Clips

- I can find or create audio sound (i.e. recording voice) **1**
- I can transfer recorded audio to a computer **2**
- I can combine audio with video images **3**
- I can edit audio and synchronize it with specific video images **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	.33	.65
Lincoln	78	1.00	1.66
Lyon	263	.93	1.51
Mineral	2	0*	0*
Nye	230	.48	1.17
Pershing	34	1.24	1.79
All C-NET-C School Districts**	617	.77	1.44
Nevada Educators	4583	.96	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 27

Question #27: Creating Spreadsheets

- I can clear, delete, edit, and format contents of a cell **1**
- I can design cells that contain values, labels, or formulas **2**
- I can cut, copy, and paste cell contents; move a range of cells; insert a cell, row, column **3**
- I can create charts and insert page breaks **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.33	1.92
Lincoln	80	2.40	1.78
Lyon	267	2.63	1.78
Mineral	2	0*	0*
Nye	237	2.24	1.82
Pershing	35	2.91	1.60
All C-NET-C School Districts**	631	2.46	1.80
Nevada Educators	4701	2.56	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 28

Question #28: Managing Spreadsheets

- I can enter, sort, and filter data **1**
- I can reconfigure options and preferences **3**
- I can create lookup tables and show/hide formulas **2**
- I can export spreadsheets to different file formats **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	.83	1.12
Lincoln	80	1.63	1.77
Lyon	265	1.82	1.80
Mineral	2	0*	0*
Nye	233	1.37	1.71
Pershing	33	1.88	1.90
All C-NET-C School Districts**	623	1.61	1.77
Nevada Educators	4650	1.69	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 29

Question #29: Creating Databases

- I can define field structure, create, and delete records **1**
- I can format text attributes **2**
- I can create reports and printing layouts **3**
- I can create auto-entry or calculation fields **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	.75	1.36
Lincoln	79	1.58	1.77
Lyon	269	1.58	1.78
Mineral	2	0*	0*
Nye	234	1.32	1.68
Pershing	34	1.91	1.91
All C-NET-C School Districts**	628	1.49	1.75
Nevada Educators	4652	1.63	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 30

Question #30: Utilizing Databases

- I can find, sort, and query records **1**
- I can import/export records and generate multiple reports **3**
- I can merge data with a word processing document **2**
- I can create a template and use data from database tables for a variety of publishing purposes **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	.55	1.29
Lincoln	80	1.33	1.75
Lyon	264	1.50	1.81
Mineral	2	0*	0*
Nye	233	1.03	1.61
Pershing	35	1.51	1.81
All C-NET-C School Districts**	623	1.29	1.73
Nevada Educators	4620	1.49	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 31

Question #31: Appropriate Use

- I am aware that the Internet contains some resources that are inappropriate for the K-12 environment and I monitor my students' use of the Internet **3**
- I educate my students prior to Internet use on safety rules and etiquette and have signed an AUP (Acceptable Use Policy) before using classroom technology (if applicable) **4**
- I understand the filtering of inappropriate web sites **1**
- All of my electronic publishing and that of my students follow district guidelines **2**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.25	1.22
Lincoln	80	3.72	.48
Lyon	262	3.69	.50
Mineral	2	0*	0*
Nye	235	3.66	.81
Pershing	34	3.68	.77
All C-NET-C School Districts**	623	3.67	.67
Nevada Educators	4649	3.67	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 32

Question #32: Online Communications

- I understand the specific uses and differences of Intranet and the Internet **3**
- I can utilize the Internet for communications **4**
- I can expand communications through bulletin boards and chat rooms **2**
- I am familiar with and utilize newsgroups and/or listservs **1**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	3.00	1.27
Lincoln	78	3.55	.96
Lyon	261	3.75	.47
Mineral	2	0*	0*
Nye	235	3.43	1.07
Pershing	34	3.65	.77
All C-NET-C School Districts**	619	3.59	.85
Nevada Educators	4636	3.61	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 33

Question #33: E-mail

- I have an email account, know my own email address, and am familiar with basic email etiquette **2**
- I understand how an email address book works **3**
- I can send, receive, reply, and forward email **1**
- I can save and open email attachments **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.17	1.59
Lincoln	80	3.51	1.16
Lyon	269	3.96	.24
Mineral	2	0*	0*
Nye	237	3.74	.92
Pershing	35	4.00	.00
All C-NET-C School Districts**	633	3.81	.76
Nevada Educators	4686	3.79	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 34

Question #34: E-mail Application

- I read my email regularly and respond in a timely manner **3**
- I belong to one or more education-related listservs, mail groups, or bulletin boards **1**
- I have a filing system for storing mail electronically **4**
- I provide my email address to students, parents, and colleagues **2**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	2.58	1.62
Lincoln	74	2.59	1.50
Lyon	267	3.31	.65
Mineral	2	0*	0*
Nye	227	2.75	1.38
Pershing	34	3.26	1.16
All C-NET-C School Districts**	614	3.00	1.17
Nevada Educators	4576	3.12	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 35

Question #35: Web Publishing

- I know how to create consistent navigation features for a web site **1**
- I use a storyboard to map out how users will navigate web pages I create **3**
- I can set-up and maintain a web site including an appropriate directory structure **4**
- I can transfer files to a web server **2**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	1.00	1.60
Lincoln	77	.64	1.27
Lyon	264	.73	1.47
Mineral	2	0*	0*
Nye	227	.51	1.27
Pershing	34	1.06	1.79
All C-NET-C School Districts**	614	.66	1.40
Nevada Educators	4556	.95	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 36

Question #36: Advanced Web Publishing

- I know how to optimize graphics for web display **3**
- I understand HTML tags **1**
- I can create web pages including graphics, links, and use HTML tags in text-editor or HTML editor software **2**
- I have some understanding of other web-programming methods (i.e. JavaScript, Perl, CGI or Java) **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	1.08	1.678
Lincoln	77	.65	1.30
Lyon	261	.82	1.53
Mineral	2	0*	0*
Nye	226	.53	1.30
Pershing	35	.94	1.70
All C-NET-C School Districts**	611	.71	1.44
Nevada Educators	4575	.84	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 37

Question #37: Browsers

- I understand most information on the Internet cannot be considered secure **1**
- I can utilize the navigational functions of web browsers (i.e. hyperlinks, back, forward, and home) to navigate a web site quickly **2**
- I can add and organize Internet addresses under the "Bookmarks/Favorites" menu **4**
- I can customize a web browser (i.e. home page and plug-ins) **3**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.33	1.16
Lincoln	80	3.34	1.24
Lyon	269	3.62	.97
Mineral	2	0*	0*
Nye	236	3.27	1.37
Pershing	35	3.77	.94
All C-NET-C School Districts**	632	3.46	1.18
Nevada Educators	4703	3.35	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 38

Question #38: Search

- I can locate and use at least one web search engine or directory **1**
- I understand the differences between a search engine and an Internet directory **2**
- I can utilize the find/search tool **3**
- I can narrow the search using advanced searches (Boolean queries: AND / OR / + / - / = / " ") **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	12	3.25	1.14
Lincoln	80	3.29	1.22
Lyon	269	3.60	.98
Mineral	2	0*	0*
Nye	237	3.30	1.31
Pershing	35	3.80	.83
All C-NET-C School Districts**	633	3.45	1.15
Nevada Educators	4702	3.34	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Table 39

Question #39: Collecting and Citing Sources

- I can print all or portions of a web page **1**
- I understand how to collect portions of web pages for inclusion in presentations or other documents **2**
- I know how to cite electronic resources **3**
- I understand and adhere to appropriate copyright laws regarding Internet research **4**
- I have not yet learned any of these skills **0**

District	District Users		
	N	Mean	SD
Esmeralda	11	2.18	1.83
Lincoln	80	2.68	1.66
Lyon	266	3.12	1.47
Mineral	2	0*	0*
Nye	233	2.80	1.63
Pershing	35	3.31	1.37
All C-NET-C School Districts**	625	2.94	1.57
Nevada Educators	4640	2.90	***

*Not enough data were collected from Mineral County to report results

**Data for Mineral County School District were not included

*** This information was not available

Appendix B

Needs Assessment Interview Qualitative Responses

Needs Assessment Interview Qualitative Responses

2. How often and for how long do you use computer technology in your instruction?
 - Everyday for weather station. 2 times a week for 30 minutes.
 - Once a week for 30 minutes. Students are also required to use computers for homework.
 - 3-4 hours a day
 - Twice a week for 30 minutes.
 - Everyday for at least 10 minutes but they use other types of technology everyday.
 - Students use technology in classes everyday in every class.
 - One hour per day.
 - On and off all day.
 - Approximately 30 minutes a day.
 - 3 days a week for 45 minutes
 - Everyday for 30 minutes
 - Everyday in half the classes I teach for 30 minutes
 - 15 minutes a day
 - Half an hour per day
 - Never
 - Not often. Once every couple of weeks for about 10 minutes
 - One hour per week
 - Everyday for 30 minutes
 - Everyday for 1 hour and 15 minutes
 - That depends on the level of the students because I teach special education students, some who are visually impaired and they have a hard time with computers
 - Every student meets in the lab for 45 minutes a day for a 9-week period. Outside of the tech class, students interact with technology for about 1 hour a week
 - Not much integration. I see a lot of drill and kill being used.

3. What types of technology (computer or otherwise) do you use in your instruction?
 - Computer, VCR, overhead projector
 - VCR, computer, overhead projector, CD's DVD's
 - Aver-keys: projects PC screen onto a TV screen, PC, overhead projector, slide projector that hooks into a computer, digital camera, scanner, printer, video camera, VCR, TV
 - VCR, TV, computer, projection device, overhead projector, film strip projector, digital camera, digital video camera, copier/scanner/printer/fax
 - Computer, CAD, woodworking, autos, scanners, robots

- Paperless grading and attendance, connection through Interact, Cisco certification available in school, computerized embroidery, in-house production of

yearbook, school letterhead, business cards, community newspaper, statistics entered on PDA's

- PowerPoint, computers, overhead projectors, VCR, slide projector
- Overhead projector, audio recorder, video camera, computers, TV, VCR, CD player
- Computer, overhead projector, slide projector, TV, VCR
- Computer, calculator, overhead, cash register, cooking appliances
- Overhead, dream writers, Internet
- Computers, laser discs, DVD, VCR, overhead, LCD projector
- Computers, digital cameras, scanner, LCD portable lab computer, dream writers
- Overhead, computer
- Overhead, TV, VCR
- VCR, DVD, overhead, G3
- Computer, printer, overhead, TV, VCR
- Computer, TV, VCR
- SMARTboard, computers, digital camera, scanner, overhead
- CCTV for enlarging print, enabling software, typing software, academic assistance software, self-paced instructional software
- Digital cameras, video camera, overhead, computers, LCD
- Compressed video, computers, Cisco Lab

4. If you use computers in your classroom, what kinds of software do you use?

- Accelerated reading and math, Compton Encyclopedia
- Word-processing, Web browsers
- Class Works: software that includes graphic editing, hyper studio, typing spreadsheet, and geography applications, Apple Work, iMovie, MS Word, Word Perfect, PowerPoint, Classroom Planner, Internet Explorer, Accelerated Reader & Math software
- Windows 98, Windows XP, OS 9 & 10, MS Office, Corel Office Suite, Reading Rabbit, Reading Rooster
- McDraft Auto CAD, robotics programs, PowerPoint, Excel, Word, iMovie
- PowerPoint, Word, Excel, landscaping software, Photoshop, Adobe suite, adaptive technology that scans books and reads it to students, no text books for math – just use computer software and on-line materials
- CCC, PowerPoint, Word Processing
- Typing Software, CCC, literacy software, ABC Building, Sesame Street, Apple Works 5, roll playing games: Lyon King, I am Mean, Creepy Cave, Babe
- CCC: a reading and math software package, typing software
- Accelerated Reader, Star Test, Mario Teaches Typing, MS Office
- Drill and practice software, Reading Counts (like Accelerated Reader), Jump Start, Writing software, Thinking Maps
- Power Point, MS Office, Internet browsers
- MS Office, some old games
- CCC, Accelerated Reader, instructional typing programs
- None

- Internet browsers, Accelerated Reader
 - Word processing, computer grading software, instructional software specific to subject areas, spread sheets, browsers
 - Power Point, CCC, Word, Excel, Accelerated Reader
 - Phonics programs, Oregon Trail
 - Reader Rabbit, Assistive software, Jump Start, Type to Learn, MS Word
 - Middle Grades, Curriculum packages, Computer Literacy, MS Office, Typing Tutor, WordPerfect, Excel
 - Accelerated Reader, Reading Renaissance Software, Plato, Nova Net
7. What do you see as the greatest barrier to technology integration in your classroom?
- Not enough space, need bigger rooms, worn out/old computers
 - Number of computers. We need more.
 - Not enough time to learn and teach new skills. Getting money to buy equipment.
 - Technophobia. Not enough time to learn and teach new skills.
 - Not enough money is provided to our school district to finance new computers. We're a small, poor district that slips between the cracks because we don't have many minorities or extremely poor people but we also don't have many large businesses or other resources to turn to for funding options.
 - Keeping current technology available – funding it and also just staying ahead on what is available.
 - Lack of Internet connections and not enough computers.
 - Lack of equipment and software. Not knowing the right software: finding software that's lined up with state standards. Not having the information to know what is needed. Being a poor school.
 - No Internet access. Being old and not growing up with this stuff.
 - Not enough time to learn and implement new skills.
 - Not enough training, time to train and opportunity to train and implement new skills
 - Nothing. We get support from the district office, support staff, plenty of equipment, and money and training.
 - Lack of training in how to use and integrate technology.
 - Not enough funding for hardware and software.
 - My lack of knowledge about integration. Lack of quality hardware and software. Although I have 5 computers in my classroom, 2 are Apple IIEs and only one is relatively new.
 - Access to the computers. I have 3 computers in my classroom. If I want to do a project with my class, I have to sign-up for the computer lab. However, all tech classes are taught in the computer labs so the tech classes generally book up the computer lab. We need to have one computer classroom where tech classes can be taught and one computer lab where the rest of the teachers can take their students for projects.
 - Not enough money for equipment. Every student should have a computer and in my school there is approximately 1 computer for every 3 students.
 - Money to buy hardware and hire technical support staff. Also, it's hard to find qualified individuals to hire as support staff.

- Lack of time to learn and implement new technology skills and not enough training to even know what is available and how to implement it.
- Lack of knowledge and training for teachers. Lack of clear policy of what to do with computers in schools. The way it is right now is the new computers go to the high school. Then their computers get passed on to the middle schools and then the middle school computers get passed on to the elementary schools. Our school computer lab runs on Pentium I with 166 MHz.
- Not enough money for tech support staff, equipment, training, and maintenance.
- Administration doesn't know the value of technology or how to use it. This leads to poor planning and a lack of district-wide continuity.

8. What day of the week is best for you to attend a professional development workshop?

- Monday – Thursday. Not on weekends.
- Midweek. It's hard to find subs on any day. Wednesday is the best day. It's very hard to get subs on game days, Thursdays and Fridays.
- Any day except weekends.
- Any day but Sunday. We don't have a problem finding subs. Lincoln
- Monday and Tuesday.
- Monday and Friday.
- Friday when it's a short day.
- Any day.
- Weekends are better than weekdays. Summer is best.
- Any school day, especially on short days. Weekends are hard. It's easier to get people to attend when credit or stipends are offered.
- Any day is fine but weekends are best because I hate to miss class.
- Fridays.
- Friday and Saturday. It's hard to find subs. It needs to be important for me to leave my class for a day.
- Tuesday, Wednesday, Thursday. Midweek is best.
- Wednesdays are generally in-service days and those are best. Teachers prefer Mondays and Fridays because it's harder to get anything done on those days.
- Saturdays or any in-service day.
- Midweek. Not Monday or Friday.
- Monday or Friday.
- Without incentives: midweek. With pay, credit any day but Friday.
- Midweek

10. Are there any other comments you would like to add?

- We need more funding for equipment. If the state wants us to implement it (and they do because it's in the standards) then they need to fund it. And don't offer us professional development on technology that doesn't exist in our schools.
- We need more money for computers
- We need more time to learn and implement technology integration.

- We need to know more about what instructional software is available. Software is expensive and it's a waste to buy something and then learn that it's useless after we already opened the box and can't return it. Also, we need more money for hardware and software.
- We would like to implement some on-line courses for our advanced students; however, our experience with on-line courses has left us desiring better delivery of such courses. Teachers are often unavailable and difficult to reach. We've had more success with video conferencing. Also, if the state can't fund the equipment, then don't waste our time training us on it.
- I'd like to learn more about the effective uses of the Internet for classroom instruction. We need more help learning how to use software rather than hardware.
- We need more training and this is great. We need to focus on getting this into the hands of the kids. IMovie is great and we'd like to know more about that.
- I'd like to know of a book with Internet projects related to my discipline. I need current training in MacManager on server.
- Don't waste my time on something that is of little relevance in my classroom. I enjoy teaching and being in my classroom. Also, if the state isn't going to fund the equipment necessary to implement the training, it's just a big waste of my time.
- I need more information on what kinds of software are available in my discipline. Then I need instruction on how to use that software in the presence of instructor. Sometimes I go to tech training and they do a quick demo of what it can do, hand out CD and then we're supposed to figure out how to use it on our own time. I often get frustrated with this approach because I get stuck and nobody is around to help me get past my brick wall.
- I really need to learn more file management skills. Also, these trainings must be in a lab. It's hard to learn tech skill simply by listening and then going back to a classroom and trying to replicate the lesson without anyone there to talk you through the roadblocks.
- We have tons of professional development opportunities in our district but not enough money for equipment.
- We need new equipment. Most of our computers are 486's and Apple IIE's. If I had 10 new computers, everything would be different.
- We need site licenses for software. We also need a facility available for teachers to come and teach in addition to the lab where the tech teacher teaches. We need to know more about the types of instructional software that is available. We need more instruction on how to integrate technology. We need software that compliments the curriculum.
- We need to find resources to provide every school with someone who can fix technical problems.

- Administration doesn't know enough about technology to ask and answer questions. If we're going to train teachers, we should also train administration because then need to understand the value of educational technology. As it currently stands, technology is picked up by word of mouth or committee recommendations. The people who serve on tech committees generally do so because they didn't volunteer for any other committee and are not necessarily the people who are most knowledgeable about technology. This leads to poor planning and a lack of continuity or goals.

Appendix C

C-NET-C District Trainer Needs Assessment Questions

C-NET-C District Trainer Needs Assessment Questions

3. What do you see as the greatest barrier and/or support to technology integration in your district?
 - Distance
 - Barriers: Lack of available hardware (i.e. 1 computer classrooms), reluctance to change, technophobia, lack of time, teachers feel overloaded already. Support: support of administration, easier buy-in by faculty
 - Barriers include availability to technology. Indifference to learning technology.
 - Money
 - One-computer classrooms: How to manage 20-25 kids on 1 computer with Internet access. The variety of Principal support regarding technology and the allotment of funds for technology.
 - Training and time and personal commitment by administration
 - Distance between schools and turn over in personnel.
 - Distance and money and willingness to attend the trainings.
 - Teacher interest.
 - Teachers have taught in more or less the same way for over 200 years. The integration of technology into teaching and learning asks teachers to change their comfortable ways.
 - Ninety percent of computers are not on line and all computers that are on-line are operating on the same line.
 - Internet connection availability is not yet in place. Every student will not have access to a computer at all.

4. For novice, intermediate, and expert technology integrators in you district, what are their most urgent staff development needs?
 - **Novice:**
 - Increase comfort zone involving technology, pressure to meet standards and testing
 - Comfort level, basic application use
 - Equipment and training for occasional use
 - Learn computer skills and district networking
 - Basic usage and troubleshooting, software introduction
 - Remove the fear factor and hence use the most user friendly machine (Mac)
 - Old teacher who knows almost nothing and use in classes, grade system
 - How to use the computer
 - Integration of technology into learning so as to maximize learning opportunities for all students. Technology opens up tremendous possibilities for “non-traditional” students – if this technology is used creatively and appropriately.
 - How to integrate technology
 - Most people in the district have limited knowledge of Internet use and tech usage in the classroom.

- **Intermediate:**

- Limitation of accessing technology (1 computer classroom for 30 kids, 1 computer lab for 700 kids). Training in uses of technology.
- How to use it in the classroom effectively
- Equipment and training for moderate use, possibly access in the classroom
- Networking
- Updating of newest advances and how to implement new hardware, software and resources
- Direct application of technology to their teaching area
- Needs of equipment
- Software compatibility – what programs are most applicable to their subject area and needs of students
- Integration of technology into learning so as to maximize learning opportunities for all students. Technology opens up tremendous possibilities for “non-traditional” students – if this technology is used creatively and appropriately.

- **Expert:**

- Time
- Additional experience to use in classroom
- Equipment availability and access in their classroom for daily use
- New development
- Updating of newest advances and how to implement new hardware, software and resources plus some training on how to take it to the next level for students and teachers
- Direct application of technology to their teaching area
- Advance training, they should take university classes for specific needs.
- Integration of technology into learning so as to maximize learning opportunities for all students. Technology opens up tremendous possibilities for “non-traditional” students – if this technology is used creatively and appropriately.
- New cutting edge developments

5. As a C-NET-C district trainer, towards whom do you think you should target most of your training efforts (novice, intermediate, or expert technology users) and **WHY?**

- The +/-10% of faculty that WANT to learn, because they are ready and eager to learn (I'd make it available to all as I'd like to “grow” this group to include more members).
- Novice – They are not comfortable with technology and so do not use it in the classroom and will not seek opportunities to use it because of lack of confidence in their ability to use it in class.
- Novice and intermediate may be able to learn from me.
- All users because everyone will benefit from training whether they need to extend their usage or build upon what they know.
- Novice – This is the majority at the elementary level. They are open minded and willing to learn if we can provide a way for it to work with the resources available.

- Intermediate – Largest number, few novices.
 - Novice and intermediate
 - Novice to try to get more people using technology
 - Intermediate – they have an interest but probably don't have all the pieces in place such as hardware and software programs.
 - Novice – the greatest potential for growth and impact on student learning
 - Novice – This is where most of our staff is. I must meet them where they are.
 - All – I think everyone will benefit and become experts if they attempt to use what they have learned.
12. How can C-NET-C most help your district?
- Keep doing what you're doing.
 - Training and opportunity to train others
 - Not sure
 - Become up to date with technology
 - Training and implementation with resources available. Maybe we can come up with ways to implement with a variety of technology resources.
 - Teaching
 - Trainings
 - Make technology valid for our teachers
 - Provide learning opportunities/topics for staff of our schools
 - Providing information
 - Teach me how to get my school online and up to date on technology, including trouble shooting all hardware and software.
13. Are there any other comments you would like to add?
- I'm incredibly thankful for this opportunity.
 - I am thrilled to be part. Thank you!
 - I have a Masters Degree in technology. I am currently training teachers on my prep and have many, many ideas for C-NET-C. This is a subject I am very consumed by and have mastered many technology questions in my science/math class. I use technology 100% of my teaching day.

Appendix D

C-NET-C Needs Assessment Interview Questions

C-NET-C Needs Assessment Interview Questions

This interview is being conducted as part of a needs assessment for the Central Nevada Educational Technology Consortium (C-NET-C). C-NET-C is a recently formed partnership between the Nevada Department of Education, the University of Nevada, Reno and six central Nevada school districts that will offer educational technology staff development to educators in Pershing, Lyon, Mineral, Esmeralda, Nye, and Lincoln School Districts. C-NET-C was formed with funds obtained from a competitive grant offered by the NV DOE. You were selected to participate in this interview by administrators in your district. Your participation is not mandatory; however, it is greatly appreciated. If you wish refrain from answering a question, simply tell me that you do not want to answer the question. Information obtained from your interview will be used in an advisory report that will make recommendations on the types of professional development activities that will be offered to educators in your district. Your identity will not be revealed in this report, nor will your identity be revealed in connection to your answers to anyone other than the C-NET-C evaluation team. If you have any questions, please feel free to ask them now or at any other time during this interview.

=====

Name:

Position:

District:

Years of teaching/administrative experience:

Teaching subject(s):

Number of computers in your classroom/school:

Total number of students you teach during the week:

1. How do you describe your level of understanding about computer technology on a scale of 1 to 10 with 1 being novice and 10 being expert? _____
2. How often and for how long do you use computer technology in your instruction?
3. What types of technology (computer or otherwise) do you use in your instruction?
4. If you use computers in your classroom, what kinds of software do you use?
5. Do you have Internet connectivity in your classroom/school? If so, how are you connected (dial up modem, broadband, school network, satellite, etc.)

6. On a scale of 1-4 with 1 being undesirable and 4 being extremely desirable, indicate the degree to which you would like to receive training in the following skills?

1. Basic computer operation skills	1	2	3	4
2. Word processing (Word, WordPerfect, etc.)	1	2	3	4
3. Database (Access, FileMaker, etc.)	1	2	3	4
4. Spreadsheet (Excel, Lotus, etc.)	1	2	3	4
5. Statistical packages (SAS, SPSS, JMP, etc.)	1	2	3	4
6. Internet browsers (Netscape or Explorer)	1	2	3	4
7. Web-page development	1	2	3	4
8. Email	1	2	3	4
9. Scanning and digital camera applications	1	2	3	4
10. Digital image creation and editing	1	2	3	4
11. Audio and video editing	1	2	3	4
12. Student assessment (electronic portfolios, etc.)	1	2	3	4
13. Presentations (PowerPoint, Corel, etc.)	1	2	3	4
14. Technology-based learning simulations	1	2	3	4
15. Instructional software related to your discipline	1	2	3	4
discipline _____ software _____				
16. Technology to search for resources	1	2	3	4
17. Course delivery software (WebCT, etc.)	1	2	3	4
18. Computer troubleshooting	1	2	3	4
19. Other (please indicate): _____				

7. What do you see as the greatest barrier to technology integration in your classroom/school?

8. How far would you be willing to travel to participate in technology training?

9. What day of the week is best for you to attend a professional development workshop?

10. Are there any other comments you would like to add?

Appendix E

C-NET-C District Trainer Survey Questions

C-NET-C District Trainer Survey Questions

This survey is being conducted as part of a needs assessment for C-NET-C. Your participation is not mandatory; however, it is greatly appreciated. Feel free to not answer any questions you do not feel comfortable answering. Information obtained from this survey will be used in an advisory report that will make recommendations on the types of professional development activities that will be offered to educators in your district. Your identity will not be revealed in this report, nor will your identity be revealed in connection to your answers to anyone other than the C-NET-C evaluation team lead by Kim Vidoni. If you have any questions or concerns, please feel free to contact Kim at kvidoni@unr.edu or at 775.971.9353.

Job title and area of expertise _____

District _____

Years of experience in the field of education _____

On a scale of 1 to 10 with 1 being novice and 10 being expert, how do you rate the average educator's level of technology integration in your district? _____

To the best of your knowledge, what is the computer platform distribution in your district?

_____ % MacIntosh _____ % PC _____ % Other

If other, please list: _____

3. What do you see as the greatest barrier and/or support to technology integration in your district?

4. For novice, intermediate, and expert technology integrators in your district, what are their most urgent staff development needs?

Novice:

Intermediate:

Expert:

5. As a C-NET-C district trainer, towards whom do you think you should target most of your training efforts (novice, intermediate, or expert technology users) and **WHY**?

6. Please rank in order from 1 (most desirable) to 4 (least desirable) the desirability of the following incentives for educators in your district to attend professional development workshops.

University Credit _____ CEU's _____ Stipend _____ Sub pay _____ Other _____
Indicate _____

7. What day of the week and time is best for **you** to attend training workshops? (Circle all that apply.)

Monday	Morning	Afternoon	Evening
Tuesday	Morning	Afternoon	Evening
Wednesday	Morning	Afternoon	Evening
Thursday	Morning	Afternoon	Evening
Friday	Morning	Afternoon	Evening
Saturday	Morning	Afternoon	Evening
Sunday	Morning	Afternoon	Evening

8. On a scale of 1-4 with 1 being undesirable and 4 being extremely desirable, indicate the degree to which educators in your district **need** to receive training in the following skills?

	Undesirable			Extremely Desirable
1. Basic computer operation skills	1	2	3	4
2. Word processing (Word, WordPerfect, etc.)	1	2	3	4
3. Database (Access, FileMaker, etc.)	1	2	3	4
4. Spreadsheet (Excel, Lotus, etc.)	1	2	3	4
5. Statistical packages (SAS, SPSS, JMP, etc.)	1	2	3	4
6. Internet browsers (Netscape or Explorer)	1	2	3	4
7. Web-page development	1	2	3	4
8. E-mail	1	2	3	4
9. Scanning and digital camera applications	1	2	3	4
10. Digital image creation and editing	1	2	3	4
11. Audio and video editing	1	2	3	4
12. Student assessment (electronic portfolios, etc.)	1	2	3	4
13. Presentations (PowerPoint, Corel, etc.)	1	2	3	4
14. Technology-based learning simulations	1	2	3	4
15. Instructional software related to your discipline software _____	1	2	3	4
16. Technology to search for resources	1	2	3	4
17. Course delivery software (WebCT, Blackboard, etc.)	1	2	3	4
18. Computer troubleshooting	1	2	3	4
19. Other (please indicate): _____				

9. How can C-NET-C most help you and your district?

10. Are there any other comments you would like to add?