

ClassScape Assessment System User Training Evaluation:
Information Brief

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Brief Overview

An evaluation of the ClassScape training has been undertaken at the request of the ClassScape staff management team and the program evaluation team. In reviewing the theory of ClassScape program, it was determined that the training component of ClassScape served as the entry point for the appropriate and effective use of the system as a classroom assessment tool and an aid in improving student performance. The management and the program evaluation team reasoned that if training that met program standards were not available to all non-student users or if the training were not deemed adequate in its content or coverage then non-student users would not possess the appropriate knowledge or rationale of the system necessary for successful and effective implementation of the system in the classroom. The evaluation of the program was initiated to determine the extent to which, if any, might be the case. It was determined that it was desirable if the goals of the ClassScape system are be attained and the system utilized or implemented appropriately and effectively. ClassScape's goals are to: 1) Focus instruction by identifying class and individual student strengths and weaknesses on *North Carolina Standard Course of Study indicators*, 2) Assist in achieving or maintaining curriculum focus by providing classroom assessments that are aligned to the indicators, and 3) Evaluate the effectiveness of day to day instructional strategies and monitor student progress through real-time feedback reports.

Research Questions

The following research questions were derived from the ClassScape program theory and developed by the program management and evaluation teams. These questions guided the evaluation design and process for implementation.

- 1) What content should be covered by the trainings and how should the trainings be divided?
- 2) Is the content of the trainings consistent across trainers?
- 3) Is the time allotment of the trainings adequate?
- 4) Are the training materials appropriate?
- 5) Are training sessions being used for more than to cover training topics?
- 6) Are there consistent interruptions that distract from adequate coverage of the training content?
- 7) Are the appropriate training materials available to all non-student users?
- 8) Is feedback from non-student users being collected and analyzed to inform future training sessions?

Methodology

The evaluation utilized participatory evaluation framework to guide in the design and analyses of the research questions and findings. To collect the data needed, the evaluation team met with program management, reviewed current training materials and documentation, and interviewed the training specialists and program management. Additional, a survey was administered to a

random group of teachers and administrators whose schools consented to participation in the program evaluation study. The program evaluators worked for the same parent organization as ClassScape; however, neither evaluator was supported by ClassScape funding. The evaluators are educational research specialists with extensive experience with educational assessment, educational research, research methodology, data analyses, and program evaluation.

Interviews and Feedback Sessions

The informal interviews and feedback sessions were conducted by the evaluators with the program management and the training specialists. The initial semi-structured interviews were designed to conduct fact-finding dialogue, and to answer and refine the original research questions related to ClassScape training. Subsequent interviews were designed around the discussion of the initial findings and further developing these findings in a participatory framework.

After each interview, the evaluation team electronically sent the training specialists and program management minutes of the meetings and primarily findings. The trainers and management met separately to address the primarily findings and to draft their interpretations and development plans. These plans were submitted electronically to the evaluators who reviewed the plans and made additional recommendations, observations, or comments.

A final interview was conducted with the training specialists, which allowed the evaluation team to ask for clarification on the development plans and to attain additional feedback regarding the recommendations, observations, and comments before completing the final evaluation report.

Survey Development

The survey instrument was developed by the evaluation team along with the program management to address the research questions pertaining to the program theory evaluation, the training evaluation, the implementation, and impact evaluation. The online survey was administered anonymously to a selected group of teachers whose principals or superintendents consented to the research project. The survey questions regarding the training evaluation in the survey instrument were limited to participation in ClassScape training sessions, perceived helpfulness of the trainings, suggested improvements, and further training opportunities desired (see Appendix A for survey questions; see Appendix B for descriptive and summary statistics and open-ended responses).

Findings

1) What content should be covered by the trainings and how should the trainings be divided?

To determine the necessary types of trainings and the content needed for the proper implementation and utilization of the ClassScape the program's logic model (see Appendix C) was used as a guide in determining the appropriate content. The evaluation team also reviewed

training documents and participated in training sessions, and met with the program management and training specialists to gather needed data. Survey responses were also analyzed.

From the logic model it was determined that there were three types of non-student users of the system (district level administrators, school test administrators, and teachers) that need training and each would benefit from the following types of training tailored to their specific needs: assessment theory, basic user training, and data use training. Furthermore, students are also users of the system that should be given optional training. Also, school and district level technology specialist should be trained on system requirements and troubleshooting.

The assessment theory training content should cover relevant theory on how to use data provided by assessments to inform instruction and to individualize instruction to the needs of students.

The content of basic user trainings should consist of how to use and access the system and how properly set up classes and schedule assessments, give assessments, and view data provided by the reports at the student/classroom, school and district level for teachers, school administrators, and district administrators, respectively.

Trainings on the use of the data provided by the reports should provide content to the non-student users on how to incorporate ClassScape into schools and classrooms and how to use the data provided to make desired changes in student performance and instruction.

To adequately train all non-student users on these aspects of the system, it was concluded that these three trainings should be to all offered and graduated by the three types of non-student users: teachers, school test administrators, and district level administrators.

Currently, there are only three training modules offered: basic user training, test administrator training, and data analysis training. Teachers receive the basic user training (mean helpfulness rating on a scale of 1 to 5 is 3.15, median of 3). Schools administrators and district administrators receive the test administrator training, which is an extension of the basic user training for administrators (mean helpfulness rating of 3.55, median of 4). The data analysis training is offered optionally (mean helpfulness rating of 3.56, median of 4).

During the interviews and feedback sessions, it was determined that the current trainings are not adequately covering the content needed for the effective implementation and utilization of the system at the classroom, school and district level. Non-student users come to the training session without sufficient knowledge of the rationale for using a classroom assessment system, why they were being asked to use the system, and why they have been asked to participate in the training session. It was determined that the training sessions do not cover the rationale and best practices of using a classroom assessment system even though it is believed that the rationale and best practices information should be given to all non-student users. Further evidence for this can be found in the empirical literature on classroom assessment practices.

It was determined that the current basic user training places too much emphasis on setting up groups and the logistics related to the mechanical use of the system but does not adequately cover the generation and use of the reports in analyzing student data, which the program theory framework determines to be a critical component to better facilitate access, utilization of the assessment data and the program to achieve its posited goals. This component is critical for the ability of teachers to inform instruction and improve student performance and in the implementation and utilization of the program. However, it was determined that this information is offered in the data analysis training but very few teachers participate in this optional training. Out of 350 teachers and administrators surveyed only 14% have participated in this optional training.

It was also determined that currently there is no training for student users. Student users are an integral aspect of ClassScape's program theory. Training, even if offered optionally, should be available for student users on how to use the system and interpret the real-time feedback on their performance.

2) Is the content of the trainings consistent across trainers?

Content was found to be fairly consistent across trainers. However, it appears that there are slight variations related to emphasis placed on topics. During the feedback sessions, the trainers indicated that though they all cover and place equivalent importance on the various content, they do not emphasize the content found on the training outline equally. There are other situational factors that distract from the training session beyond the control of the trainer, which creates variations in the amount of content covered between training sessions.

3) Is the time allotment of the trainings adequate?

It was determined during the interviews and feedback sessions that trainers are consistently given approximately ninety minutes by schools administrators to present the information that should require a minimum of two hours for adequate coverage. Rarely is there ample time allotted by administrators to adequately cover the established content. The current basic user training outline is difficult to deliver effectively in ninety minutes. The time allotted does not facilitate interactive training among trainers and teacher participants. Open-ended responses to the survey questions further confirm this finding as well as evaluator observation of the presentation of the basic user training.

4) Are the training materials appropriate?

Electronic training manuals are available on the ClassScape website for the teachers, school test administrators and district level administrators. Each manual covers with basic user training content only: how to setup classes, create, schedule, and administer assessments, and how to view reports. It does not have material on assessment theory, incorporation in the classroom, and

how to use the data provided by the reports, which are essential topics as determined by the ClassScape logic model.

Non-student users are **not** being provided with a basic reference sheet with links and other references when looking for the information they need once the training session has been completed. They are, however, shown where to go on the website. No printed documents are provided to trainees. Qualitative analyses of the open-ended survey responses on ways to improve the current training yield three calls for a reference handout to be provided at the training. Furthermore, outlines for the trainings are **not** being provided to the trainees.

There is **not** a database used solely for user training and practice. Once the training sessions have been completed, there is no way for non-student users who are learning to use the system to practice without using the “live” system. Furthermore, the actual training sessions are conducted using the “live” system. This is problematic for the following reasons: pollution of true assessment data for subsequent data analysis, item analysis, research, and reports. When using the live system to train teachers whose schools were not properly set-up prior to the session valuable time is being lost during the trainings for set-up of teacher and schools accounts. Furthermore, using actual students and classes when training teachers increases the processing demands and engagement which can reduce the amount of time available to cover the established content for training.

5) Are the appropriate training materials available to all users?

No, a review of the ClassScape website revealed that the only training materials available to users are the teacher, school test administrator, and district level administrator’s basic user manual. No other training materials are available which cover content on assessment theory, incorporation in the classroom, and how to use the data provided by the reports.

6) Are training sessions being used for more than to cover training topics?

From information provided from the survey response and feedback sessions, training sessions are being interrupted by administrators due to administrative reasons along with computer set-up problems, computer access and connectivity failures and incomplete set-up of teacher and school accounts prior to the scheduled training sessions reduce the amount of time to cover the established content.

7) Are there consistent interruptions that distract from adequate coverage of the training content?

As found in the previous research question data provided from survey response and feedback sessions, training sessions are being interrupted by administrators due to administrative reasons along with computer set-up problems, computer access and connectivity failures and incomplete

set-up of teacher and school accounts prior to the scheduled training sessions reduce the amount of time to cover the established content.

8) *Is feedback from users being collected and analyzed to inform future training sessions?*

No, training evaluation forms are not being administered and the data is not being collected and analyzed routinely. The only user feedback attained so far is from the survey.

Recommendations

- 1) A prerequisite training preparation list should be created and the prerequisites met before trainings occur (see Appendix D for an example). Time for training as a resource should be discussed as a component of the pre-requisite set up with site coordinator.
- 2) The site technical/technology specialist should be encouraged to participate in at least one site training session at the school.
- 3) Develop training modules to cover all necessary content as proscribed by the ClassScape logic model. These trainings should include program theory, current assessment theory and best practices, current content covered in the basic user classes, how to incorporate ClassScape into the classroom, and how to use the data provided by the reports. Each of these trainings should be created and expanded upon for all non-student users of the system: teachers, schools administrators, and district administrators.
- 4) The suggested training modules are 1) program theory and current assessment theory and best practices, 2) current content covered in the basic user classes with more emphasis on viewing the reports, 3) how to incorporate the system into the classroom and how to use the data provided by the reports. Each of the divisions would be prepared and curtailed into separate trainings for teachers, school administrators, and district administrators. School test administrators should receive teacher training with the addition of needed information. District level administrations should receive teacher and school administrator training with the addition of needed content.
- 5) The assessment theory trainings' content should cover relevant theory on how to use data provided by assessments to inform instruction and to individualize instruction to the individual needs of students.
- 6) The content of basic user trainings should consist of how to use and access the system and how properly set up classes and schedule assessments, give assessments, and view data provided by the reports at the student/classroom, school and district level for teachers, school administrators, and district administrators, respectively. The trainings should also cover the use of the data provided by the reports and should incorporate content on how to incorporate

ClassScape into schools and classrooms and how to use the data provided to make desired changes in student performance and instruction

- 7) To counteract the needed amount of time and content to properly train teachers on the use of the system training sessions should be reduced to two ninety minutes sessions.
- 8) Prior to each teacher training, school level administrator training must be completed. In these trainings, or at least prior to any teacher trainings, teacher user accounts should be set-up and class rosters should be entered into the ClassScape system. Theory and best practices sessions should also be administered prior to trainings on the use of the system. However, due to time constraints theory and best practices sessions should be available through alternate means other than on-site trainings and again should be a prerequisite before trainings are conducted.
- 9) A training database should be created. It should include sample items for each grade, subject, objective, and goal to be used to create customized assessments. Sample pre-packaged assessments should also be available. There should also be sample students, classes, and subclasses. Sample classroom, school and district reports should also be available. This database should be accessed using a standard dummy login. This training database should be used by all non-student users during training and available on a DVD. This will reduce time required during trainings to set up actual classes and minimize contamination of the live database. Furthermore, it will aid the trainers in guiding the non-student users through the trainings. The training database should be used during the training sessions as well as available to users for practice after trainings have occurred. This should also minimize discrepancies in content delivery, inconsistency amongst the training specialists, and disruptions due to equipment and application failure.
- 10) Develop a training module available online for students. The content of this training module should include how to use the system, take assessments, view incorrect and correct answers, and well as how to use this information to improve their performance.
- 11) Written training materials should be developed for each type of user and each type of training to cover all areas of the content. These materials should be available for download from the site. The current teacher training manual should be expanded to include assessment theory, incorporation in the classroom, and how to use the data provided by the reports.
- 12) A one-page, two-sided handout should be created to go along with each type of training. One side of the handout should contain a basic outline of the content covered in the training. The reverse side should contain links and helpful resources available to the non-student users to be used as reference after the training.

- 13) Alternate forms of training should be made available for each type and level of training. These alternate forms of training would serve as a back-up, further practice, or remediation for situations where trainings could not be conducted on site and in person or trainings were abbreviated. Alternate form of training could include online modules, CD/DVD modules, and webinar GoTo Sessions, especially for the advanced content.
- 14) Evaluation forms should be created specifically for each type of training and administered to all trainees at the end of all trainings. The last five minutes of the training should be dedicated to completion the online evaluation form. To conserve resources, this can be made available through the ClassScape website. The resulting data from the evaluations should be analyzed at least quarterly to inform the training specialists and other program staff of needed changes of or modifications to current content, presentation, or materials.
- 15) An efficiency analysis should be conducted to determine the current cost-effectiveness ratio of trainings and should be based on the user and the program prospective.
- 16) The system application should be re-evaluated for ease of use and ease of flow for training and teacher access.
- 17) The training session and outlines need to be redesigned to make the language more teacher/user friendly and consistent with the electronic training manual.
- 18) Professional development should be provided to the training specialists in assessment theory, data analysis, and data-driven decision making, and adult learning theory.
- 19) A part-time training administrator position should be developed to coordinate training content development, training material development, scheduling, and produce summary reports from the user training evaluation forms and communicate results to program management.
- 20) An additional training specialist position should be developed which will be dedicated to the training of the school and district level ClassScape test administrators. This person will be responsible for working directly with technology facilitators, data managers, and test administrators as well as actual for bulk-up load, creating teacher accounts, and class rosters management. Furthermore, this person will be responsible to collection and handling to technology data from districts or schools and will serve as a liaison with the help-desk. It is recommended that this person be technology literate and understands school and district data management systems.

Future Research Directions

During the evaluation of the training component of the ClassScape system, it appears to the evaluators that the current state of the system would benefit from additional changes to make it user-friendly and to better meet the needs of its primary non-student users. It is recommended that after changes are implemented based on the recommendations above that a comprehensive evaluation of the system be designed at the beginning of the 2009-10 school year and completed by the end of the 2009-10 school year. This comprehensive evaluation should consist of a needs assessment, an overlay of program theory emphasizing current empirical literature and best practices, a review of internal processes and program implementation strategies related to the system application, an assessment of program outcomes and impact on instruction and student performance in participating classrooms across North Carolina, and a cost analysis of the different components of the system.

Appendix A. Survey Questions Pertaining to the Training Evaluation

1) If you have participated in training sessions offered by ClassScape on the use of the system, please indicate all of the sessions in which you have participated. For the sessions that you have taken please indicate how helpful you thought the session was for you.

_____ I have not participated in any training sessions

_____ Basic User Training on how to use the ClassScape system

1 2 3 4 5
Not helpful at all Very helpful

_____ Data Training on how to interpret the data provided by ClassScape

1 2 3 4 5
Not helpful at all Very helpful

_____ Test Administrator Training on how to manage the ClassScape system

1 2 3 4 5
Not helpful at all Very helpful

2) Please let us know what other training opportunities you would like to see in the future.

Please let us know how you believe we can improve the training that is currently offered for the ClassScape System.

Appendix B. Analysis of Survey Questions pertaining to ClassScope Training

Basic User Training				
Number of survey respondents who indicated participation in Basic User Training				
	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
No Training	48	13.7	48	13.7
Have Received Training	302	86.3	350	100.0
Helpfulness ratings for Basic User Training				
	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
NA	47	13.4	47	13.4
Not helpful at all - 1	19	5.4	66	18.9
2	61	17.4	127	36.3
3	108	30.9	235	67.1
4	85	24.3	320	91.4
Very Helpful - 5	30	8.6	350	100.0
Mean/Median Helpfulness rating for Basic User Training				
	<u>N</u>	<u>Mean</u>	<u>Median</u>	
	303	3.2	3	
Data and Reports Training				
Number of survey respondents who indicated participation in Data and Reports Training				
	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
No Training	301	86.0	301	86.0
Have Received Training	49	14.0	350	100.0
Helpfulness ratings for Data and Reports Training				
	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
NA	301	86.0	301	86.0
Not helpful at all - 1	1	0.3	302	86.3
2	4	1.1	306	87.4
3	18	5.1	324	92.6
4	19	5.4	343	98.0
Very Helpful - 5	7	2.0	350	100.0
Mean/Median Helpfulness rating for Data and Reports Training				
	<u>N</u>	<u>Mean</u>	<u>Median</u>	
	49	3.6	4	

Test Administrator Training

Number of survey respondents who indicated participation in Test Administrator Training

	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
No Training	307	87.7	307	87.7
Have Received Training	43	12.3	350	100.0

Helpfulness ratings for Test Administrator Training

	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
NA	307	87.7	307	87.7
Not helpful at all - 1	0	0.0	307	87.7
2	6	1.7	313	89.4
3	13	3.7	326	93.1
4	18	5.1	344	98.3
Very Helpful - 5	6	1.7	350	100.0

Mean/Median Helpfulness rating for Test Administrator Training

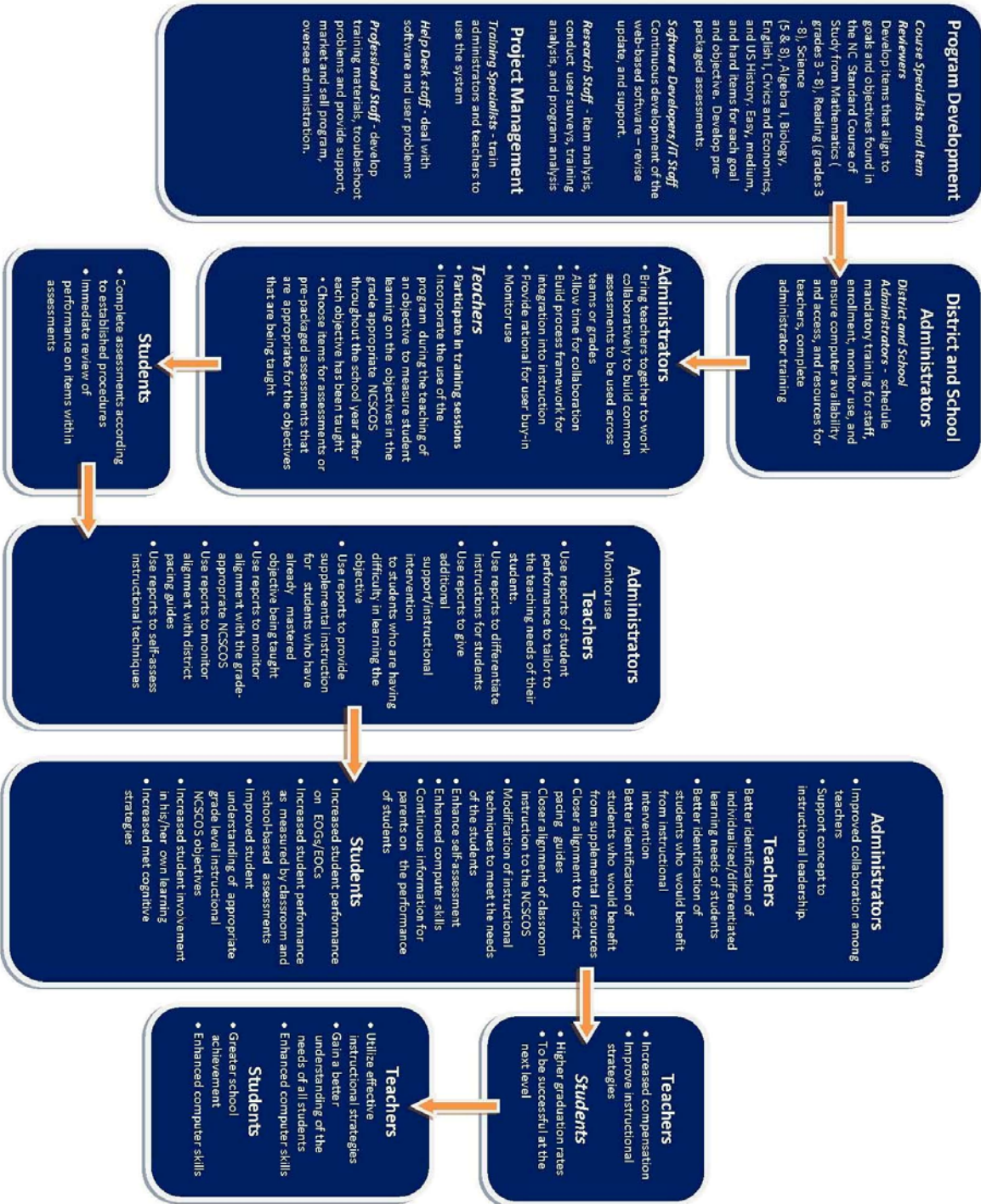
<u>N</u>	<u>Mean</u>	<u>Median</u>
43	3.6	4

No ClassScape Training

Number of survey respondents who indicated they had not received ClassScape training

	<u>Frequency</u>	<u>Percent</u>	<u>Cumulative Frequency</u>	<u>Cumulative Percent</u>
Have Received Training	319	91.1	319	91.1
No Training	31	8.9	350	100.0

Appendix C. ClassScope’s Logic Model/Theory Flow Chart



Appendix D. Training Prerequisite Checklist Example

- Pre-visit checklist Form (simplify form)
- Name of LEA/School
- Address of School
- Name of Principal, telephone, & email
- Instructional Contact Person, telephone, & email
- Technology Contact person, telephone, & email
- Technology Setup completed
- Number of Participants
- Number of Computers Available for Training Session
- Printed Resource Sheet with Links and Helpdesk Information Available
- Schedule Date and Time for Training
- Fees Determined Yes() No()