



Research Report 2020

**Development and Evaluation of a Mobile Assessment
Tool for the Master Leader Course**

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April 2018

**United States Army Research Institute
for the Behavioral and Social Sciences**

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14. ABSTRACT The U.S. Army established the Master Leader Course (MLC) for promotable Sergeants First Class. Critical to this course's effectiveness is an assessment system that addresses key competencies for performance at the operational level, while simultaneously supporting instructors to meet high assessment standards in a fast-paced context. To achieve this goal, the Army Research Institute (ARI) supported the U.S. Army Sergeants Major Academy (USASMA) in the development of a mobile application tool called MLC SPOTLITE to aid the instructors in effective and efficient student assessment. MLC SPOTLITE was designed to capture, maintain, and display ratings for performance attributes identified as key to Master Sergeant/First Sergeant competence. This report describes the development and evaluation of this tool.					
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DEVELOPMENT AND EVALUATION OF A MOBILE ASSESSMENT TOOL FOR THE MASTER LEADER COURSE

EXECUTIVE SUMMARY

Research Requirement:

The Army Leader Development Strategy recognizes the importance of assessment and feedback for leader development (U.S. Department of the Army, 2013). The U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) worked with the United States Army Sergeants Major Academy (USASMA) to develop a mobile assessment tool for the new Master Leaders Course (MLC). This tool was designed to create efficiencies in the instructor assessment process.

Procedure:

Tool requirements were identified through an extensive front-end analysis that included discussions with the Instructional Systems Specialists who developed the curriculum and assessments for the MLC, observations of pilot MLC courses, and discussions with MLC instructors. Following the front-end analysis, a mobile assessment tool was developed for the MLC using an iterative software development process that included multiple occasions for testing and feedback. Throughout this process, instructors provided feedback on the usability and utility of the tool, which drove further revisions.

Findings:

Usability survey results suggested that the mobile assessment tool was fairly easy and intuitive to use, although instructors did not always know when they made an error. Results demonstrate satisfaction with the tool and confidence in its use. The tested prototype was recognized as a welcome addition to the instructor community.

Although the mobile assessment tool was well-received, there are difficulties implementing new technology in the Army classroom. Currently, the largest hurdle appears to be obtaining approval for the use of new software on the Army system. In this case, that challenge was overcome by developing and delivering stand-alone software that does not reside on the Army network. However, additional efficiencies for instructors and course managers could be created if such technologies could be linked to the network in the future.

Utilization and Dissemination of Findings:

The mobile assessment tool is currently in use in eight MLC course locations. The lessons learned can be used in future work developing assessment tools and mobile applications.

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Development and Evaluation of a Mobile Assessment Tool for the Master Leader Course

Introduction

The Master Leader Course (MLC) was developed and implemented by the United States Army Sergeants Major Academy (USASMA) to provide Sergeants First Class Promotable with additional education to meet the job requirements of Master Sergeant/First Sergeant positions. The MLC course emphasizes leadership at the operational level and is not MOS specific. The Army recognizes the importance of assessment and feedback for leader development (U.S. Department of the Army, 2013). To aid in the assessment and development of the students attending the course, the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) partnered with USASMA to develop a mobile assessment tool tailored to the MLC.

This project extends prior work by ARI examining the utility of mobile devices for instructor use. Wampler, Wolfe, Nihill, Bickley, and Reyes (2014) examined the potential for mobile devices to be used by instructors in the Advanced Leader Course and received mixed feedback from instructors. Some instructors saw the potential utility of mobile devices while others saw the mobile devices as a burden. In fact, Wampler et al. identified instructor attitudes as a major challenge to implementing the use of mobile devices. Other challenges identified included ease of use, network connectivity, and compatibility with the Army network and Army-issued devices.

Barnieu et al. (2016) examined the implementation of technology in Army courses to meet the objectives of the Army Learning Model (U.S. Department of the Army, 2011). These researchers identified several factors that can either facilitate or limit the use and effectiveness of technology in the Army classroom. Factors that facilitate the use of technology include front-end and on-going analyses of the training needs, subject matter expert support throughout the development cycle, use of editable software, and instructor training. Factors that limit the use and effectiveness of technology included lack of stakeholder consensus, lack of front-end analysis, lack of subject matter expert support, lack of integration of the technology into the course Program of Instruction, and lack of instructor training.

Ratwani et al. (2016) successfully developed a mobile assessment tool for the Army Reconnaissance Course. Instructors rated the tool positively in terms of its utility and usability. Further tool development and evaluation was completed by Dean et al. (2018), who used an iterative approach to assessing the revised tool in order to achieve positive reception from the instructors. Several of the factors identified by Barnieu et al. (2016) contributed to the success of the ARC tools, including a thorough front-end analysis process, the involvement of subject matter experts throughout the work, and instructor training. One of the challenges with this work was ensuring that the content stayed up-to-date and relevant as changes were made within the course.

The lessons learned from previous work examining the integration of technology into the Army classroom were implemented in the current research to develop a mobile assessment tool for the MLC. The development process included an extensive front-end analysis of the needs and use case in MLC, the initial development of an assessment tool, iterative testing, feedback, and

revision of the tool. Prior to deploying the tool, the instructors were trained on how to integrate the tool into their typical workflow. Further, throughout the work, the researchers collaborated with key MLC stakeholders, including instructors and course designers. This collaboration was useful in ensuring that the tool met the needs of the end-users and also helped to obtain buy-in. This report describes the development and contents of the tool as well as the results of usability and utility evaluations.

Requirements Gathering

Tool requirements were identified through an extensive front-end analysis that included discussions with the Instructional Systems Specialists who developed the curriculum and assessments for the MLC, observation of pilot MLC courses, and discussions with MLC instructors in order to identify necessary features for the tool. Many characteristics of the course factored into design elements and the user experience.

The MLC is a 14-day course with approximately 8-9 hours of instruction/compulsory activity per day. Much of this time is consumed by lecture and group discussion. Segments of time are typically allocated for research and materials preparation, though much of that takes place outside of classroom hours. Several blocks of time are allocated to speaking and presentations, as each student is responsible for individual and group presentations. Much of the preparatory work for these speaking events and written assignments occurs outside of classroom hours.

The students are expected to participate during all aspects of the course from lecture to group assignments. The rubrics are 1009 forms with a specification for the content such as *W* for written assignments, or *L* for leadership.¹ In total, there are seven different 1009 forms (see Table 1). Each is used once per student with the exception of the 1009W SAE (short answer essay), which must be completed twice per student (there are several variations of this form, giving instructors flexibility and variety in assigning SAE topics to students). With 16 students and two instructors per classroom, this approximates 64 forms per instructor. Because of the pace and schedule of instruction, most of these forms cannot be completed until the final few days of the course. Finally, each instructor must complete a graduation form for each student. This is the permanent record that indicates success or failure in the class. The total then becomes 72 forms per instructor.

The front-end analysis provided information on the basic needs and functionality instructors would like to have in a mobile assessment tool. In addition to needing to support the rubrics described above, the mobile tool would need to support two instructors without a central repository (e.g., server or shared drive). Through the front-end analysis, the following features and functionality requirements emerged as necessary for inclusion in the mobile tool:

- Import a class roster from Excel file/ Generate a roster in the application
- Rate each student on every 1009 assessment form
- User login via Common Access Card (CAC)

¹ As of the writing of this report. The rubric is subject to change and the specific 1009 forms described in this report may or may not be used in the future.

- Students and instructors can digitally sign 1009 forms using CAC certificate
- A dynamic GPA calculator enabling instructors to select from a library of 1009 forms
- Authoring tool that allows new assessment forms to be developed and existing assessment forms to be modified as changes occur throughout the course

Table 1

Assessment Forms for the MLC

Form Title	Description
1009L Leadership	Assess students' leadership qualities
1009C Contribution to Group Work	Assess students' participation in group activities and collaborative efforts
1009S COA	Assess students' component of group briefings including content and speaking skills
1009S Assessing Speaking and Presentation	Assess students' individual speaking assignment including content and speaking and presentation skills
1009R Research Ability	Assess students' research abilities
1009W SAE	Assess students' short answer essays (SAE)
1009W Individual Research Paper	Assess students' research reports including page requirement and essential elements

Initial Tool Development

A mobile tool, called MLC SPOTLITE, was designed to support the collection of assessment data in the 1009 assessment format used by the MLC and the aggregation of the data into a gradebook, called a cumulative summary sheet (CSS). The tool was developed based on hardware, functional, and feature requirements gathered by researchers during the front end analysis. The cornerstone of the development process was frequent contact, demonstrations, and testing by course stakeholders including course managers, instructors, and curriculum designers/developers as well as course observations by the researchers. Regular contact was especially important given that assessment forms and processes changed frequently during the pilot testing of the course. Therefore, the research team needed to ensure they were working from the latest assessment forms. The tool was designed, developed, tested, and modified using an iterative process known as Agile. The Agile methodology is characterized by a project management process specifying frequent inspection; adaptation and delivery of layered functional capabilities; the use of engineering best practices that allow for rapid delivery of high-quality software; and a business approach that aligns development with customer needs and company goals. Agile software projects break a target system down into functional pieces that are developed and delivered in serial iterations, resulting in less rework needed over time due to missed requirements or untested functionality.

MLC SPOTLITE Features

The MLC SPOTLITE mobile assessment tool was built to be used on a Microsoft Windows-based operating system. The Microsoft Surface Pro 4 was specifically selected for its utility, mobility, and compatibility. Because Windows is the default operating system for the

Army, selecting a compatible machine was expected to minimize disruption and maximize the chances of integration later (e.g., obtaining approval for installation on government imaged Windows devices). Moreover, the Microsoft Surface Pro 4 provided instructors with a robust mobile device that could support instructor needs both in and out of the classroom. In addition to the tablet itself, several accessories were selected to support instructors, including a Surface Pro keyboard, CAC reader, ruggedized case, Microsoft Pen (stylus), an Ethernet and USB hub, and portable CD/DVD ROM drives. These peripherals were added to support usability and utility of the hardware. They are necessary components of the overall system, though they are used with less frequency than the Surface Pro 4 itself.

MLC SPOTLITE includes a number of features to help instructors assess and track student progress. First, as shown in Figure 1, all student names are loaded into the application. Instructors can then use the list of assessments (1009 forms) to track which assessments have been completed for a given student and to see quickly how well a student is performing.

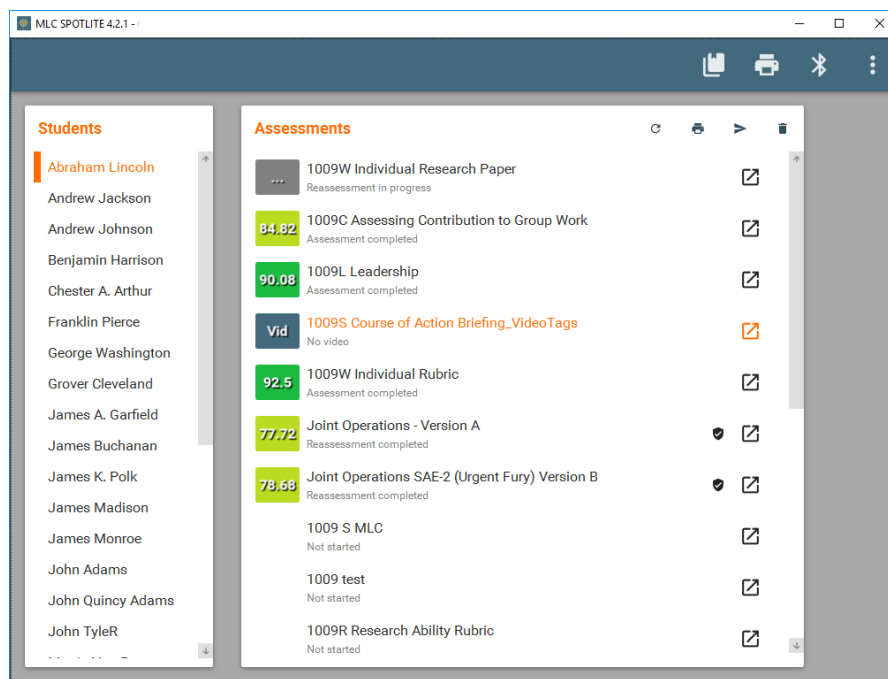


Figure 1. The application's home screen for a selected student showing several completed 1009 templates, two of which have signatures and are officially complete.

Upon clicking on a specific assessment, the 1009 rating form is displayed (Figure 2). Instructors rate students according to the displayed measures. As they do so, the student's score on that 1009 is displayed in the top right corner of the screen. Rating measures can be inputted using any of three mechanisms: (a) users can select the pointer and drag it to a desired value on the graduated scale; (b) users can tap or left mouse click anywhere on the graduated scale to jump the pointer to that value; and (c) users can select the keyboard icon located to the left of the scale and type in the desired value. Any of these three input options can be used at any time. A combination can be used if desired.

The contents table on the left of each assessment contains links to the items. By tapping or clicking on the line item in the contents, the user can jump to a desired item. This feature lets users quickly return to the latest item if they were unable to complete an assessment. The tool automatically saves progress and allows users to leave an assessment midway and return to it later.

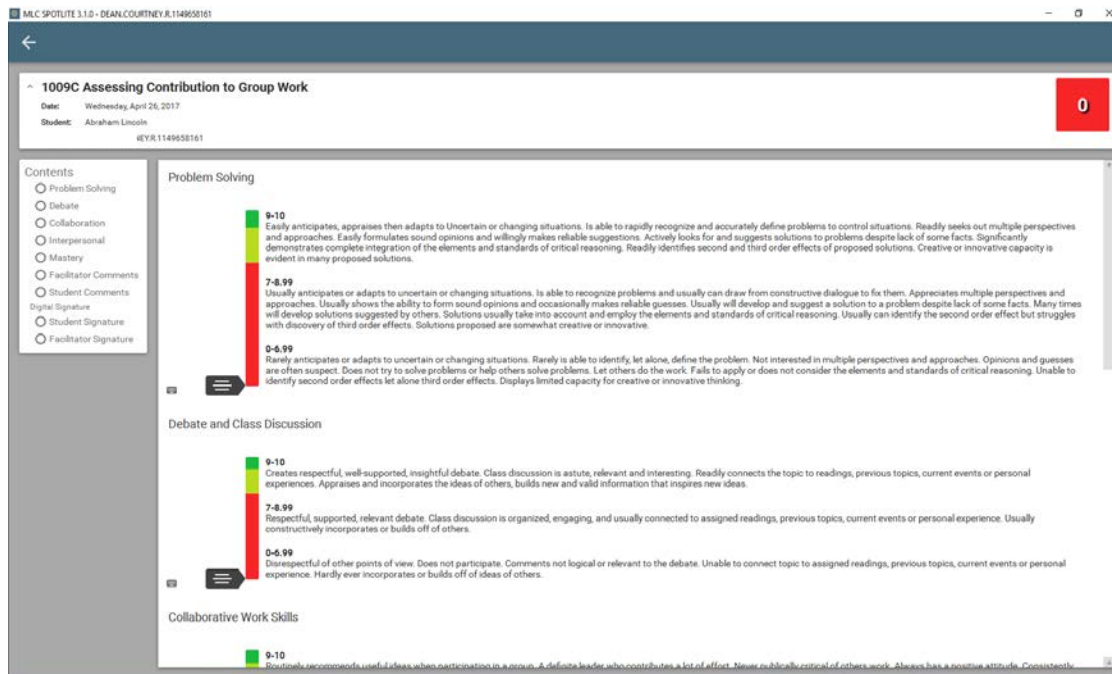


Figure 2. Example measures from a 1009C (collaboration) form. The student has not been rated yet, hence the total score (top right corner) remains 0.

At any point, instructors can also access the CSS to obtain a summary of each student's scores on completed 1009s (Figure 3). The CSS displays scores for students on each assessment in respective columns. GPA is calculated from the student's two SAE scores and the individual research paper score (1009Ws). Because there are more SAE options than used in any given course, instructors must specify which SAEs contribute to the GPA in any given iteration of the course. Therefore, the CSS contains dropdowns from which the instructors can select their desired combination of 1009W forms. The MLC offers retesting to students who failed one of the written assignments that contribute to their GPA. Students' final score for that component is an average of the first and second attempts. MLC SPOTLITE supports the retesting feature with the push of a button. The tool displays the scores for the original and second attempt and automatically computes the average which is displayed in the CSS (Figure 4).

MLC SPOTLITE 4.2.3 - d

Cumulative Summary Sheet

NAME	1009W Individual Contribution			Short Answer Essay Exam (SAE)						Demonstrated abilities for the 1059							GPA		
	1009W Individual Research Paper	REA	Final Item 1	Joint Operations SAE-2 (Urgent Fury) - Version A	REA	Final Item 2	Mission Command and Decisive Action SAE-3	REA	Final Item 3	1009S Research Project Brief	1009S COA Brief	1009S AVG Project Brief and COA Brief	1009L Leadership	1009C All Lessons	1009R Group Project Research	Course Requirement Personal Experience Paper	Item 1 Group Project	Item 2 Short Answer Essay	Item 3 Short Answer Essay
Abraham Lincoln	77.25		77.25	79.08		79.08										N			
Andrew Jackson	87.74		87.74	92.63		92.63	91.83		91.83					69.22	76.68	N			89.99
Andrew Johnson				87.73		87.73	86.59		86.59					89.45		N			
Benjamin Harrison	94.59		94.59	87.33		87.33	90.78		90.78				84.50	93.85	86.74	N			91.82
Chester A. Arthur	57.47		57.47				77.17		77.17				78.32	68.80		N			
Franklin Pierce	93.90		93.90	95.23		95.23	85.47		85.47				92.15	72.63	92.20	N			92.13
Franklin Roosevelt	94.75		94.75	89.52		89.52	85.23		85.23				90.98	90.72	90.14	N			91.06
George Washington																N			
Grover Cleveland																N			
James A. Garfield																N			
James Buchanan																N			
James K. Polk																N			
James Madison																N			
James Monroe																N			
John Adams																N			
John Quincy Adams																N			
John Tyler																N			
Martin Van Buren																N			
Millard Fillmore																N			
Rutherford B. Hayes																N			
Theodore Roosevelt																N			
Thomas Jefferson																N			
Ulysses S. Grant																N			
Warren G. Harding																N			
William H. Taft																N			
William Henry Harrison																N			
William McKinley																N			
Woodrow Wilson																N			
Zachary Taylor																N			

Figure 3. Screenshot of the CSS displaying scores for various students on different 1009 assessments.

Note: REA = Reassessment score

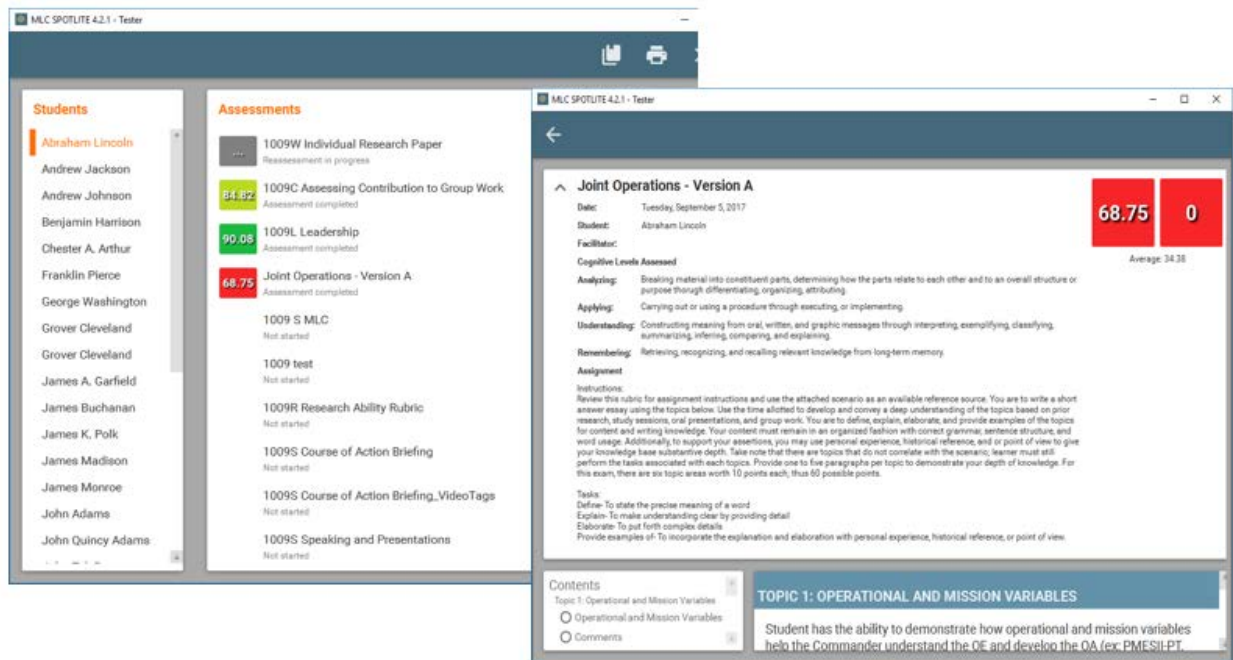


Figure 4. Two screenshots of the MLC SPOTLITE tool illustrating the retest command and the automated retesting computation displayed in the selected 1009 form.

Graded materials can be printed for hard copy filing. Instructors are given two options for printing: (a) individual forms from one student can be selected for print; or (b) bulk printing of all forms for one student can be executed. Individual form printing may be useful for counseling sessions or to distribute a form via email to others (perhaps in the chain of command). Bulk printing delivers hard copies of all content in a few button presses.

MLC SPOTLITE contains connectivity features that enable two instructors to integrate scores. Using Bluetooth connectivity, the instructors can pass assessment results from one device to another. This feature allows instructors to divide assessment responsibilities between them but merge results into a single CSS. The Bluetooth exchange can go in either direction, allowing both devices to maintain comprehensive records. It further ensures redundancy in case of a software crash or hardware failure.

Later in development, a new feature, video tagging, was added to the MLC SPOTLITE. The video tagging feature allows instructors to record a presentation or brief using the device's front or rear camera and microphone and 'tag' behaviors that the instructor might want to review with the student. Tags contain a basic rating of green, yellow, or red and facilitate feedback during an AAR or debrief. Video tags are timestamped, which allows instructors to quickly locate noteworthy events with the student and then use those tags to inform assessments and/or to facilitate the provision of feedback to the student. Marked videos can also be reviewed later and serve as a reference for instructors as they complete the relevant rubrics.

This feature was not part of the initial requirements, but was identified as a desirable assessment aid. The feature was demonstrated to the instructional design staff and instructors during development, and their feedback suggested that the feature would be a beneficial optional data collection mechanism. Details concerning use of this feature can be found in Appendix A.

Methods

Tool Testing and Evaluation

Following the initial development of the tool, it was tested at five separate MLC locations with 19 instructors. During each testing event, the same general protocol was followed. First, a member of the research team would distribute the hardware loaded with all of the software to the participating instructors. This would be followed by a short demonstration and training where a member of the research team would demonstrate the functions of the tool and show the instructors how to get started (e.g., load the class roster) and how to make and finalize assessments. This training was followed by a brief period for the instructors to explore the application and ask questions as needed. The instructors were then left with the tool, which included a user guide (see Appendix A) on the tablet. Typically, members of the research team would then return to the course about 10 days later to be present for the final portion of the course – it was during these last few days of the course that instructors typically made most of their assessments. Therefore, researchers were on hand to answer any questions about the tool and troubleshoot any issues that emerged as instructors used it. Following the culmination of the course, instructors completed usability and utility surveys and brief interviews to obtain any additional feedback on the tool.

Usability and Utility Questionnaires

To capture instructor feedback on the assessment tool, two separate usability and utility questionnaires were administered at the end of the course. The first questionnaire contained 31 statements to which instructors either responded that they agreed or disagreed with the statement. The statements, based on heuristics derived from research by Nielsen and Mack (1994) and Tognazzini (2003) that represent tool usability, were designed to elicit fine-grained assessments about specific features of the assessment tool. In addition, another 10-item questionnaire was administered to elicit general satisfaction with the tool. Participants responded on a 4-point scale (Strongly Disagree, Disagree, Agree, and Strongly Agree) to items such as *I thought the system was easy to use*; *I imagine that most people would learn to use this system very quickly*; and *I felt confident using the system*.

Results

Overall, the results of the evaluation were positive. A majority of instructors agreed with most of the items on the usability survey, indicating that SPOTLITE was fairly easy to use and that the features and functions were intuitive (see Table 1 in Appendix B for full results). The highest level of agreement surrounded items related to the interface and understanding how to navigate the tool. Specifically the following items were the most positively viewed by the instructors:

- I knew exactly where to go to capture an assessment (100% agreed)
- I knew where to go to view student and class results (100% agreed)
- Terms were used consistently throughout the tools (94.70% agreed)
- The user interface supported my work style and allowed me to capture data in the way that I think is most effective. (94.70% agreed)
- It was easy to navigate to different assessments. (94.70% agreed)
- The interface was easy to read. (94.70% agreed)
- The information shown on the display was helpful. (94.70% agreed)

For the usability scale, a lower level of agreement indicates features/functionalities that may potentially need to be revisited. During this evaluation, the lowest rated items were related to understanding when an error had been made. The following items were viewed the *least* positively by instructors (though it is worth noting that the majority of responses to these items were still positive):

- I knew when all of the outcomes and attributes had been assessed (73.70% agreed)
- When I made an error, I always knew it. (73.70% agreed)
- I hardly ever made an error when using the MLC SPOTLITE tool (63.20% agreed)
- Sometimes it was hard to remember how to use the tool (36.8% agree)

For the general satisfaction survey, all items were rated positively. Once items were reverse-coded as appropriate the mean across the 10 items was 3.59 ($SD = .47$). The highest rated item was *I felt confident using this system* ($M = 3.84$; $SD = .38$) and the lowest rated item was *I needed to learn a lot of things before I could get going with this system* (reverse coded $M = 3.31$; $SD = .95$). See Table 2 in Appendix B for the full results.

Final Deployment

Following testing with the instructors, several steps were taken to help with deployment of the tool. First, an associated authoring tool was developed. This tool allows designated personnel to make changes to the embedded assessment forms and to create new assessment forms. It became evident throughout the course of this project that the assessment forms used within MLC may change over time, thus it was important for course developers to be able to make changes to the forms so that SPOTLITE remains a useful tool. After the authoring tool was developed, it was demonstrated to course leadership as well as members of the instructional support team. One point of contact was identified as being responsible for changes using the authoring tool and training additional personnel as needed on both the authoring tool and SPOTLITE. MLC SPOTLITE is currently in use at eight MLC locations.

Discussion

The development of MLC SPOTLITE leveraged many of the facilitating factors identified by Barnieu et al. (2016) for implementing technology. First, the research team was able to perform an extensive front-end analysis as the MLC course was developed and pilot tested and was further able to perform on-going analysis as the tool and the course developed. Second, the research team had access to subject matter experts, including the course developers

and instructors throughout the development process. Third, the researchers were able to train instructors on how to use the tool. Last, the team developed an authoring tool, which will allow qualified personnel to create new rubrics and edit existing rubrics as needed.

Overall, MLC SPOTLITE was well-received and fulfilled a need. The system streamlines the traditional paper-based assessment process, allows instructors to digitally complete and sign course rubrics, and to easily toggle between students. The majority of instructors found the system easy to use and all instructors agreed or strongly agreed that they felt confident using the system.

Despite the need for such technologies to improve learning and education, there are significant challenges associated with using mobile devices in the Army setting. The most significant hurdle is obtaining a Certificate of Networkiness for the software so that it can be installed on government imaged computers. Another challenge with using mobile technology is the variable access to Wi-Fi in Army classrooms. Most classrooms where the MLC is taught do not have Wi-Fi access. Many of the challenges associated with implementing technology in an Army classroom are consistent with the issues identified by Wampler et al. (2014) including compatibility with the Army network and network connectivity. These barriers may inhibit the wide-spread adoption of easy-to-use technologies such as SPOTLITE. The Army must continue to develop mechanisms for allowing technology solutions like the one described here to be more easily implemented and deployed. Without such solutions, it will become difficult to realize the benefits that such approaches to assessment can offer.

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APPENDIX A

Master Leader Course (MLC)

SPOTLITE[®] User Guide

Version 5



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INTRODUCTION

About MLC SPOTLITE

The MLC SPOTLITE tool is an assessment and feedback system supporting MLC instructors in their assessment and tracking of students. This system is intended for use by the Master Leadership Course (MLC) for Sergeants First Class as a promotional criterion Master Sergeant. The tool provides instructors with assessment materials (1009 and 1059 forms) and a student management interface.

About the User Guide

The MLC SPOTLITE User Guide is designed to help instructors conduct observer-based assessments of performance against group and individual task requirements. This user manual covers seven core areas:

- Installation
- Application Initialization
- Importing Templates
- Managing the Gradebook and Cumulative Summary Sheet
- Managing Students
- Performance Assessments
- Exporting and Printing Data

Note: Any tablet screenshots depicted in this manual are from a Samsung ATIV Smart PC running Windows 8. The tool software is optimized for Windows 10 Pro enabled two-in-one devices, but the tool can be used on any device Windows 7 or later.

Should this text be insufficient to resolve technical or user problems, support contact information is provided below.

Courtney Dean
781-496-2455
cdean@aptima.com

INSTALLATION AND SETUP

This section covers the steps necessary to install MLC SPOTLITE on a Windows device (tablet, desktop or laptop). These instructions assume the user has administrative access to the device. The steps covered in this section are consistent for any Windows device and versions of the tool.

Prerequisites

The items listed below are required to use the MLC SPOTLITE tool. Please refer to the Support contact listed above on how to obtain the appropriate files.

- Master Leader Course.msi (installer)
- An ATARS featuring student names (.xlsx format)
- 1009 form(s) (HPML/.xml format)
- Default gradebook (.gradebook format)

System Requirements

The following lists the minimum requirements for installing MLC SPOTLITE on a Windows machine or tablet.

Table 1. System Requirements

Windows Machine
<ul style="list-style-type: none">• Windows 7 Professional /Enterprise Edition or up, 64-bit• 1GHz processor minimum• 4 GB RAM• 160GB Disk Space; 2 GB of free disk space to install• Standard keyboard• Three-button mouse (optional for non-desktops)• Bluetooth (for peer-to-peer transfer of data)
Windows Tablet
<ul style="list-style-type: none">• 1GHz processor minimum• 400MB RAM, and• 2 GB storage space minimum• Bluetooth (for peer-to-peer transfer of data)

Installation

After receiving the MLC SPOTLITE installer file, launch the tool by double clicking the installer icon.

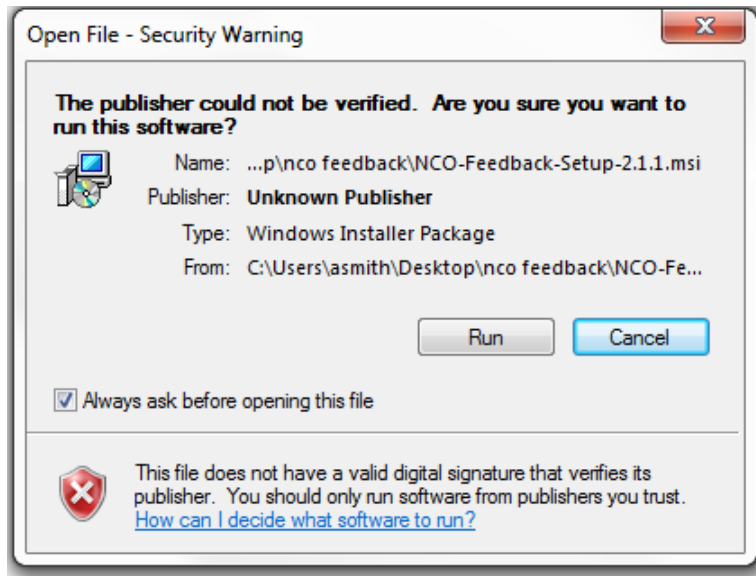


Figure 4. Opening the Installer

Select **Run** to initiate the Master Leader Course Setup Wizard.

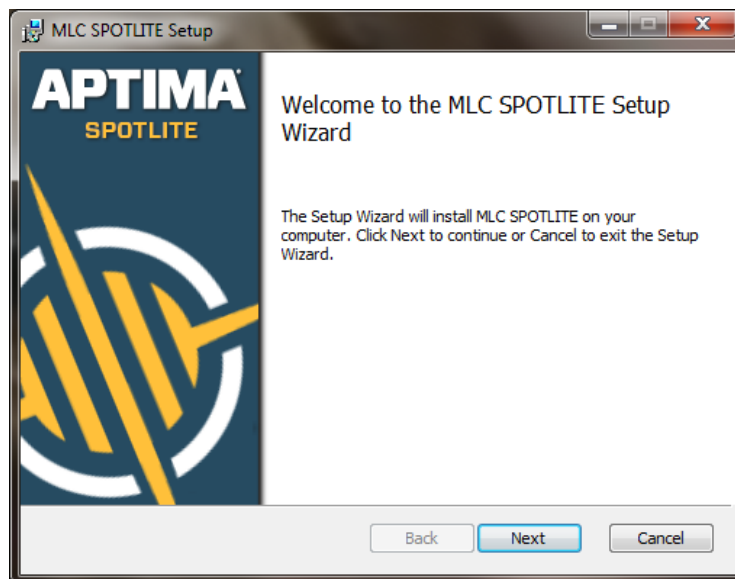


Figure 5. Setup Wizard

Select **Next**, and accept the terms in the License Agreement.



Figure 6. License Agreement

On the next screen, you will be prompted to specify the location where SPOTLITE should be installed. Click **Change** and browse to the desired location.

Note: By default, the tool will install at one of the following locations:

- *%appdata%\.Local\MlcSpotlite;*
- *%LocalAppData%\ MlcSpotlite; or*
- *%UserProfile%\AppData\Local\MlcSpotlite*

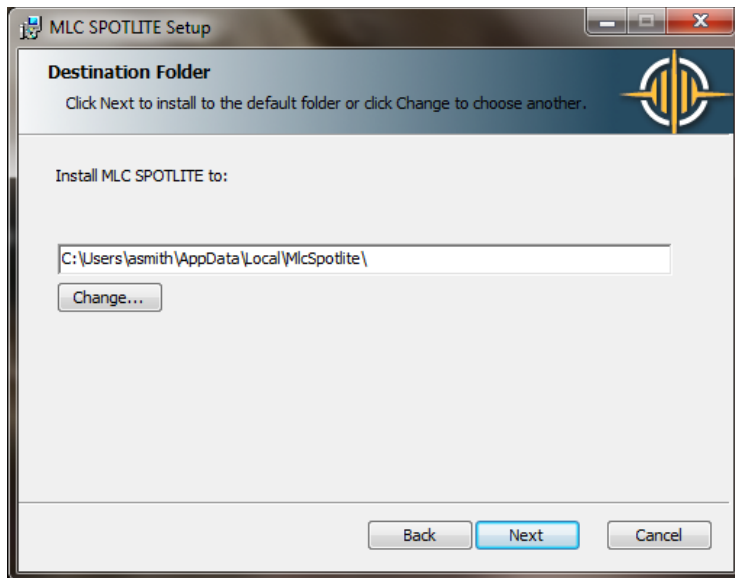


Figure 7. Location of Installation

When done, click **Next** to install Master Leader Course by clicking on **Install**.

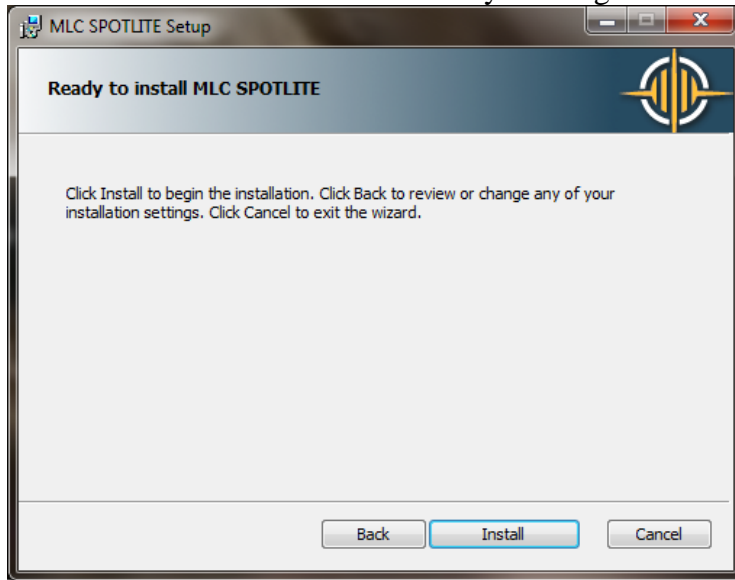


Figure 8. Installing the Tool

The installation process will begin and the status bar will display the progress of the installation.

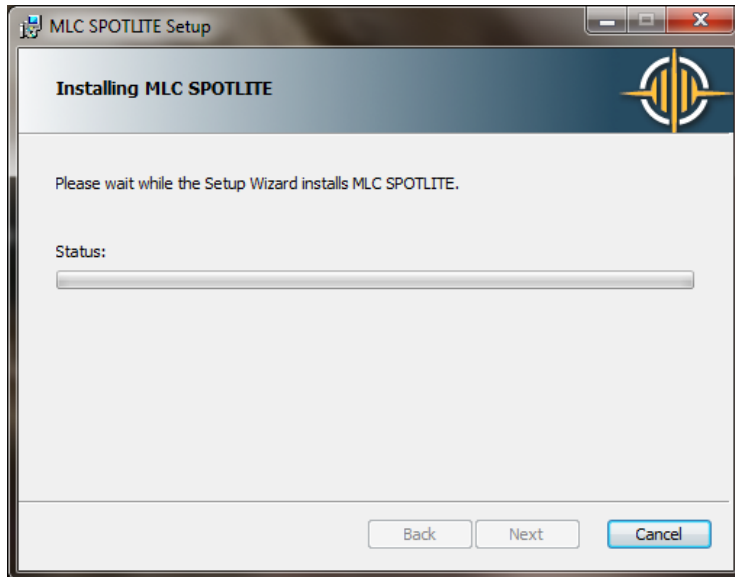


Figure 9. Installation Status

When the installation has successfully completed, the wizard will indicate this. Click **Finish** to close the wizard.

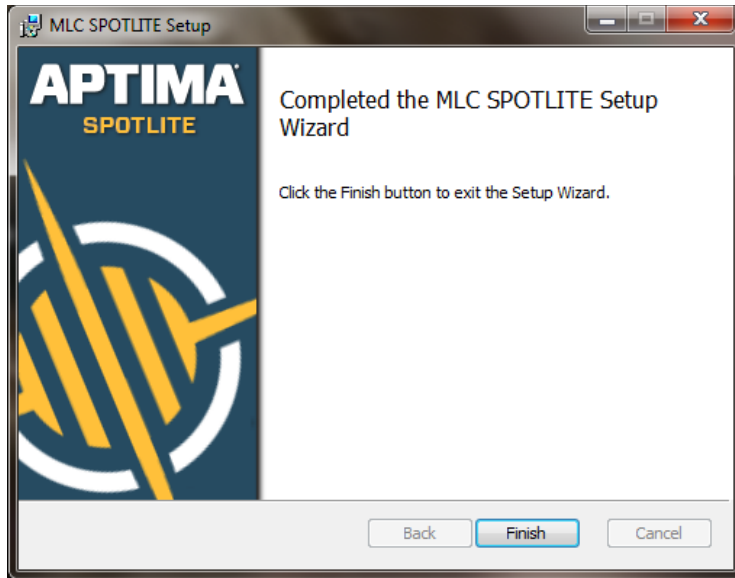


Figure 10. Completed Installation

LAUNCHING THE APPLICATION

After the installation is complete and the wizard is closed, a shortcut labeled “Master Leader Course” will be placed in the start menu. Double click on the shortcut to launch MLC SPOTLITE.

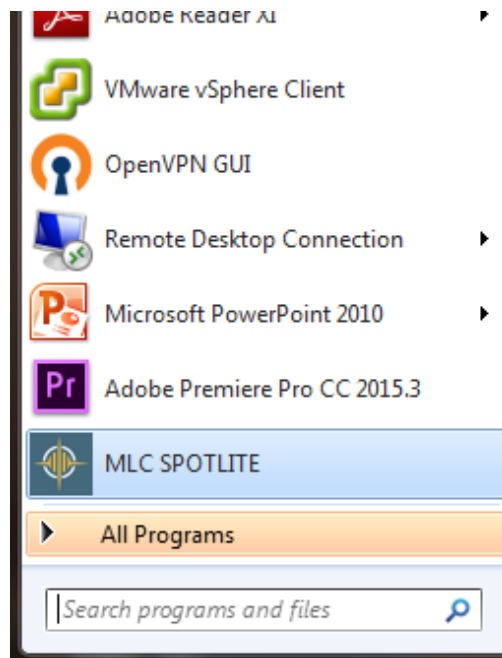


Figure 11. Accessing the Tool

In the next section, you will learn how to login.

LOGIN

Upon launching MLC SPOTLITE, you will need to log in using a Common Access Card (CAC). Insert your card and click **Next**.

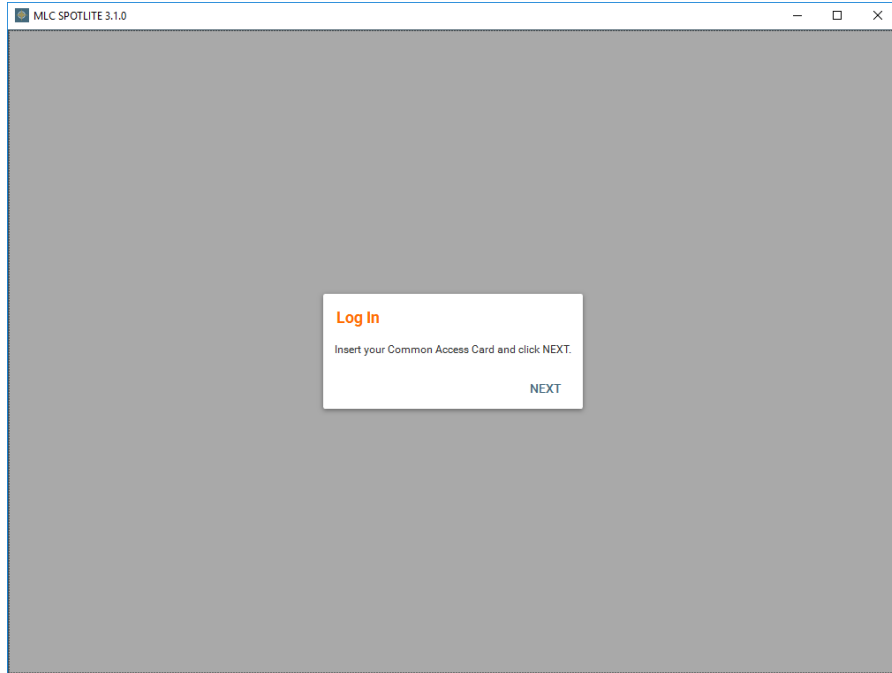


Figure 12. Login with CAC

Select your certificate and click **Log In**.

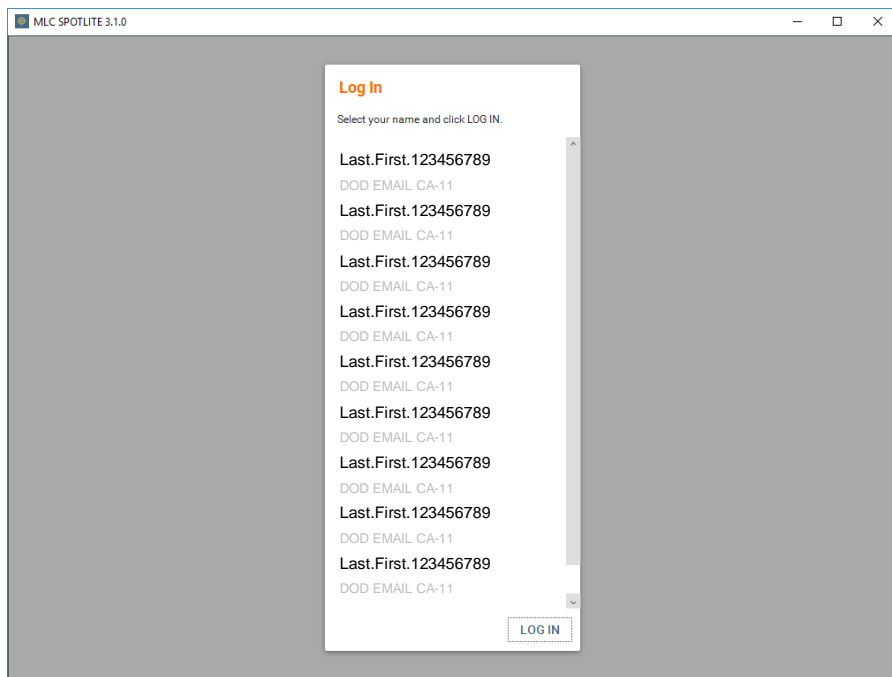


Figure 13. Select a Certificate

When MLC SPOTLITE is launched for the first time after installation, the tool will not contain any content. The following sections cover how to import survey templates, generate class rosters, set up and review the Cumulative Summary Sheet, share assessments among instructors, export and print documents.

In the next section, you will learn how to manage the application window (e.g., resizing, closing, minimizing) in your device.

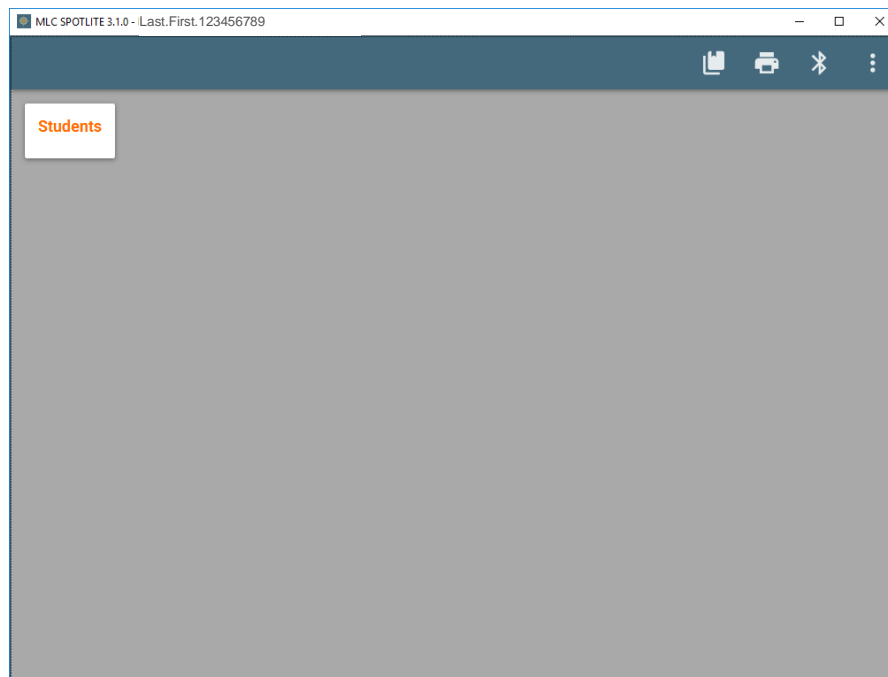


Figure 14. Landing Page

General Workflow


Below is a general workflow for how instructors use the MLC SPOTLITE tool.

1. Import a class roster from an ATARS (.xlsx format)
2. Import survey template(s) (HPML/.xml format)
3. Create and/or import Cumulative Summary Sheets (CSS) (.gradebook format)
4. Assess student performance (likert, single choice, free text formats)
5. View CSS
6. Print CSS

In the next section, you will learn how to set up the tool for classroom use.

MANAGING STUDENTS

This section describes the import student rosters procedure. The tool is designed to import student names from an ATARS in an Excel workbook in .xlsx format. The name of the ATARS file will be used as the class name in the tool so it is recommended that the workbook name be consistent with the MLC class name/numbering convention (example: "MLC_#_YY_Location"). The Master Leader Course tool will support one active class at a time; however, it can maintain multiple class records as no data are ever destroyed.

To begin, select the  menu button, and select **Manage Students**.

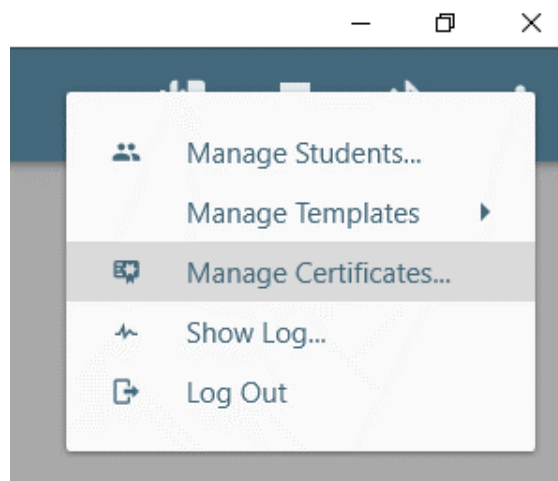
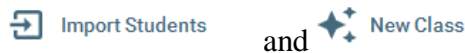


Figure 15. Managing Students

Select **Manage Students**. The application will display any class rosters currently in the tool's database under "Classes." To generate a new class roster, there are two options:



If this is the first time the application is used, it will likely have no classes in the database. It will thus be necessary to either import a class, or generate one in the tool.

To import a class, select the **Import Students** button. The tool will open Windows Explorer allowing you to navigate to a file folder containing your class roster. Select the desired class roster and hit **Open** in the explorer and the roster will be uploaded to MLC SPOTLITE. A class roster can be generated in either Windows Excel, or LibreOffice Calc. The roster can be generated on a separate machine and brought into the MLC SPOTLITE device (e.g., Microsoft Surface 4), or generated on the device itself. The roster must following a specific format: The Sheet must be named for the class (e.g., location, class, year). It is suggested that this appear as MLC 5-17 Bliss NCOA as an example. The sheet with the student's names should be formatted with three columns: Name; Pay Grade; PMOS; and Email.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
1	Name	Pay Grade	PMOS	Email																
2	George Washington	-	PARA	FIRST_LAST_MID@VAL.VL																
3	John Adams	-	PARA	FIRST_LAST_MID@VAL.VL																
4	Thomas Jefferson	-	PARA	FIRST_LAST_MID@VAL.VL																
5	James Madison	-	PARA	FIRST_LAST_MID@VAL.VL																
6	James Monroe	-	PARA	FIRST_LAST_MID@VAL.VL																
7	John Quincy Adams	-	PARA	FIRST_LAST_MID@VAL.VL																
8	Andrew Jackson	-	PARA	FIRST_LAST_MID@VAL.VL																
9	Martin Van Buren	-	PARA	FIRST_LAST_MID@VAL.VL																
10	William Henry Harrison	-	PARA	FIRST_LAST_MID@VAL.VL																
11	John Tyler	-	PARA	FIRST_LAST_MID@VAL.VL																
12	James K. Polk	-	PARA	FIRST_LAST_MID@VAL.VL																
13	Zachary Taylor	-	PARA	FIRST_LAST_MID@VAL.VL																
14	Millard Fillmore	-	PARA	FIRST_LAST_MID@VAL.VL																
15	Franklin Pierce	-	PARA	FIRST_LAST_MID@VAL.VL																
16	James Buchanan	-	PARA	FIRST_LAST_MID@VAL.VL																
17	Abraham Lincoln	-	PARA	FIRST_LAST_MID@VAL.VL																
18	Andrew Johnson	-	PARA	FIRST_LAST_MID@VAL.VL																
19	Ulysses S. Grant	-	PARA	FIRST_LAST_MID@VAL.VL																
20	Rutherford B. Hayes	-	PARA	FIRST_LAST_MID@VAL.VL																
21	James A. Garfield	-	PARA	FIRST_LAST_MID@VAL.VL																
22	Chester A. Arthur	-	PARA	FIRST_LAST_MID@VAL.VL																
23	Grover Cleveland	-	PARA	FIRST_LAST_MID@VAL.VL																
24	Benjamin Harrison	-	PARA	FIRST_LAST_MID@VAL.VL																
25	Grover Cleveland	-	PARA	FIRST_LAST_MID@VAL.VL																
26	William McKinley	-	PARA	FIRST_LAST_MID@VAL.VL																
27	Theodore Roosevelt	-	PARA	FIRST_LAST_MID@VAL.VL																
28	William H. Taft	-	PARA	FIRST_LAST_MID@VAL.VL																
29	Woodrow Wilson	-	PARA	FIRST_LAST_MID@VAL.VL																
30	Warren G. Harding	-	PARA	FIRST_LAST_MID@VAL.VL																

Figure 16. Sample Roster Imported from Excel

To generate a class roster within the SPOTLITE too, select **New Class**. The tool will prompt you to generate a name for the class. It is suggested that the name reflect the class number and location. Example: “MLC 5-17 Bliss NCOA.”

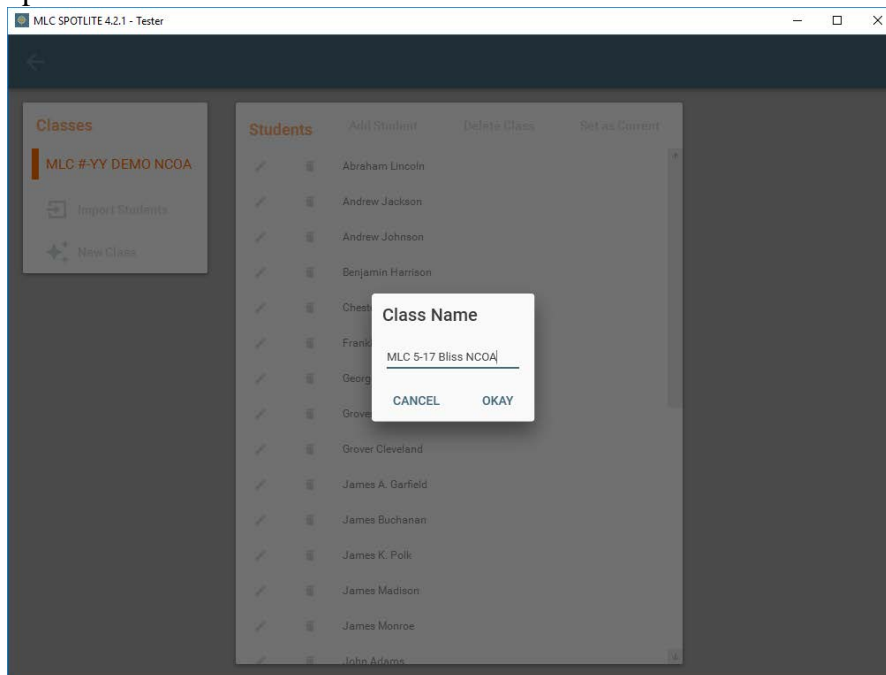


Figure 17. Generating a new class

Next, Select **Add Student**. A prompt will appear for you to provide the first student’s name. You may choose any order for names, but know that they will appear in alphabetical order according to the name in the order you provide it (e.g., Abraham Lincoln comes before Andrew Jackson if names are first then last). Repeat entry of names for all students.

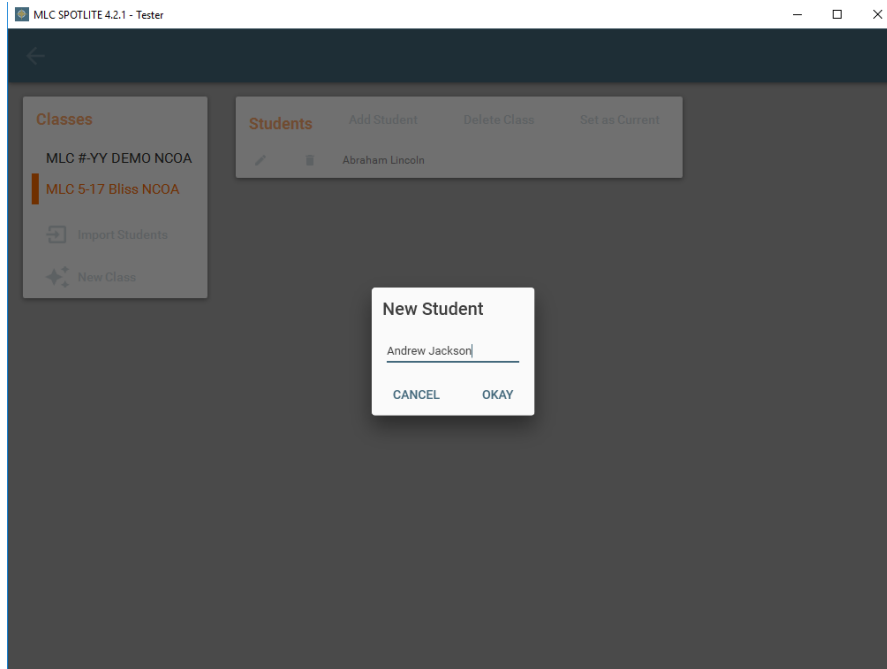


Figure 18. Adding Names to the new Class Roster

Once you have either imported a class, or generated one, you should see a class name under Classes in the menu.

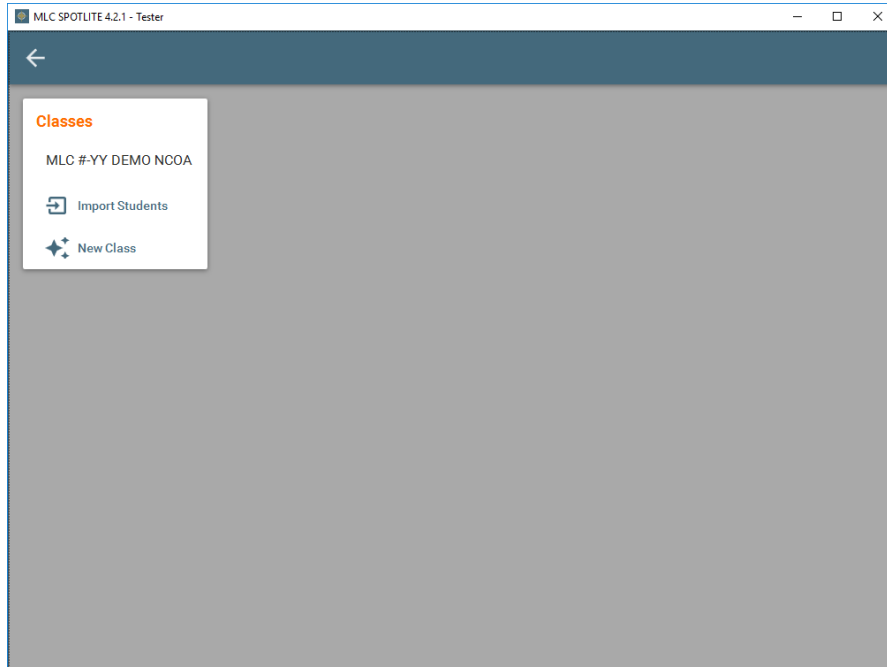


Figure 19. Student Management Interface

Selecting a class (if one is present) will display the students in that class. MLC SPOTLITE will load the class and display each student's name in alphabetical order. Classes are typically restricted to one classroom, equaling approximately 16 students.

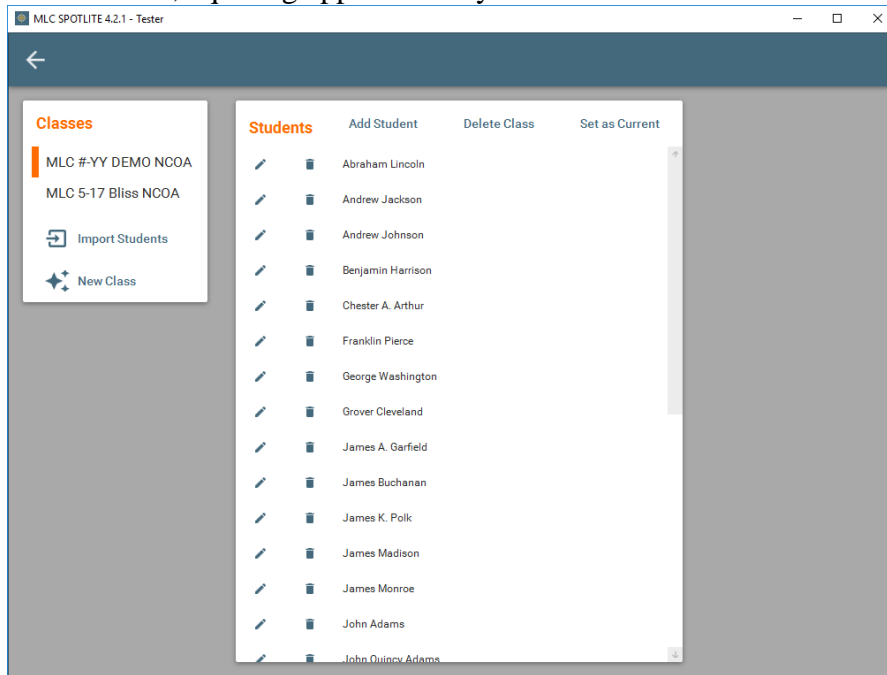


Figure 20. Class Roster

The roster offers several administrative functions if the current roster is not completely satisfactory. Add a student by selecting [Add Student](#). A blank will be provided to type in the student's name. Follow the format of the roster (e.g., Last Name First Name, or First Last).

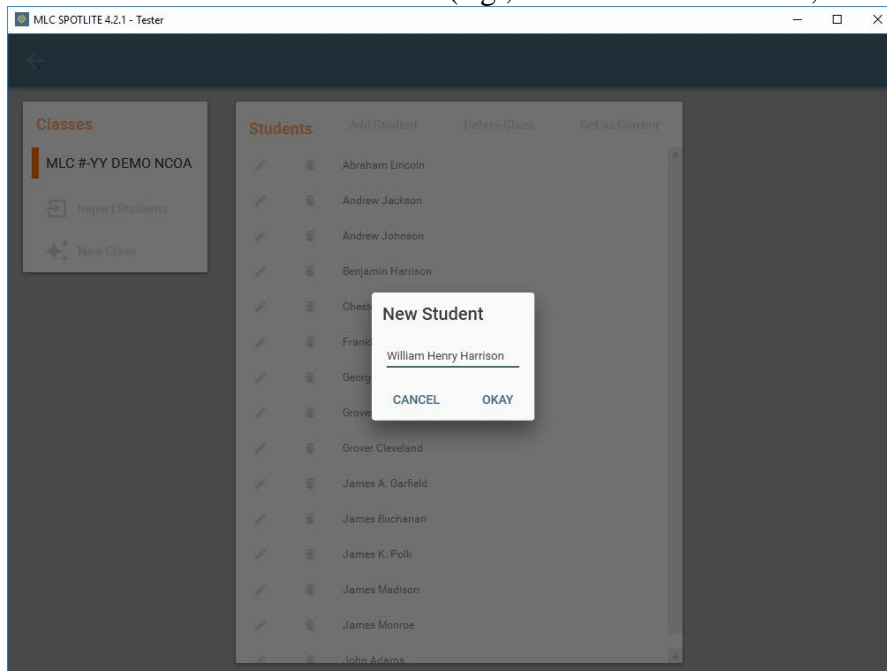




Figure 21. Add a Student Dialog Box

Next to each student's name appear a pencil and a trashcan icon.   Abraham Lincoln . The pencil icon allows you to edit a student's name in the event of a typographical error. The trashcan allows you to delete a student from the roster.

When the roster is satisfactory, select the [Set as Current](#) button. A checkmark will appear next to the selected roster title under **Classes** at the left of the application. This designates the class as the active class roster, indicated by a check mark next to the name of the class.

From here, select the class from the list under **Classes** (if not already selected).

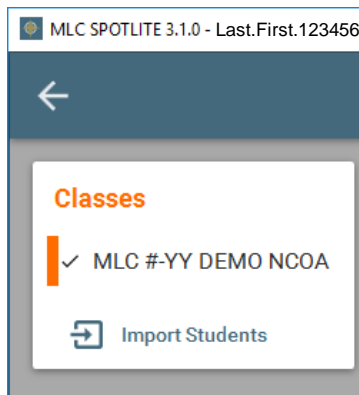


Figure 22. Setting the Class

If the entire roster needs to be removed, a [Delete Class](#) option is available. To delete the class select **Delete**. You will be prompted to confirm this action. Choose the appropriate response.

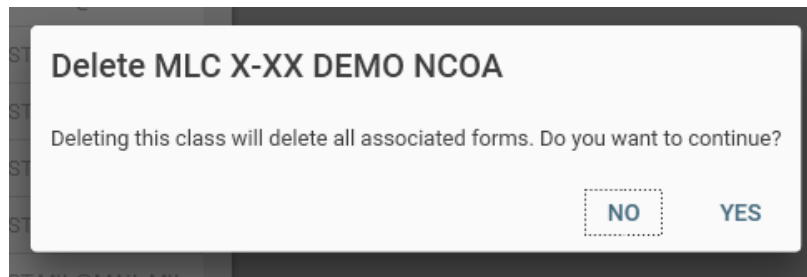



Figure 23. Deleting a Class

When you are satisfied with your class set up. Hit the  in the top left corner of the application's interface. This will return you to the home screen. Your roster should be displayed.

In the next section, you will learn how to Import the MLC rubric (e.g., 1009 and 1059 forms) to complete basic setup of the measurement tool.

IMPORT TEMPLATES

This section describes how to import the assessment rubric. The tool is currently set up for 1009 forms, but other rubrics may be supported. The tool uses a machine readable format called “Human Performance Markup Language (HPML)” which has an .xml extension. Each 1009 form must be produced in this format to be used in the SPOTLITE tool. A separate application (not described in this guide) enables instructors or instructional designers to create the rubric in this format. The installation package should contain a file folder with all of the 1009 forms already in the correct file type.

To begin, select the  menu button, and select **Import Templates**.

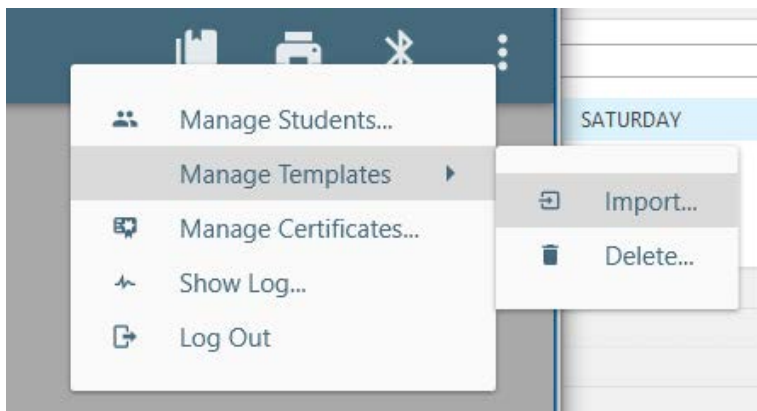


Figure 24. Managing Templates

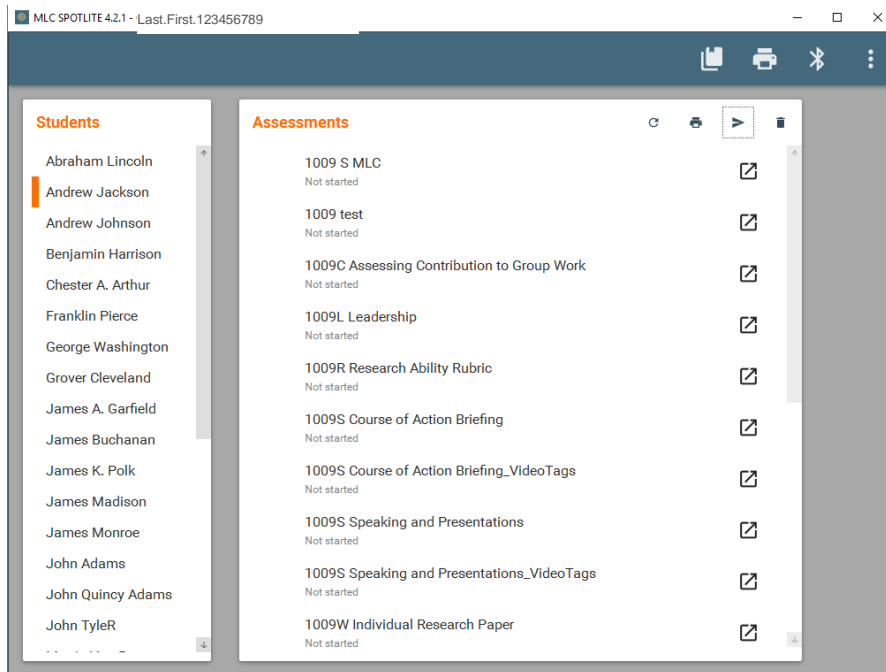


Figure 25. Available Assessments

The MLC SPOTLITE tool now contains students and a rubric. Basic setup for the tool is complete.

In the next section, you will learn how to fill out a 1009 form (Performance Assessments) for a student.

PERFORMANCE ASSESSMENTS

This section details the process of completing assessments using the MLC rubric. It will walk through selection and completion of a 1009 form for a selected student.

To launch an assessment, select a student from the class and then select one of the 1009 forms.

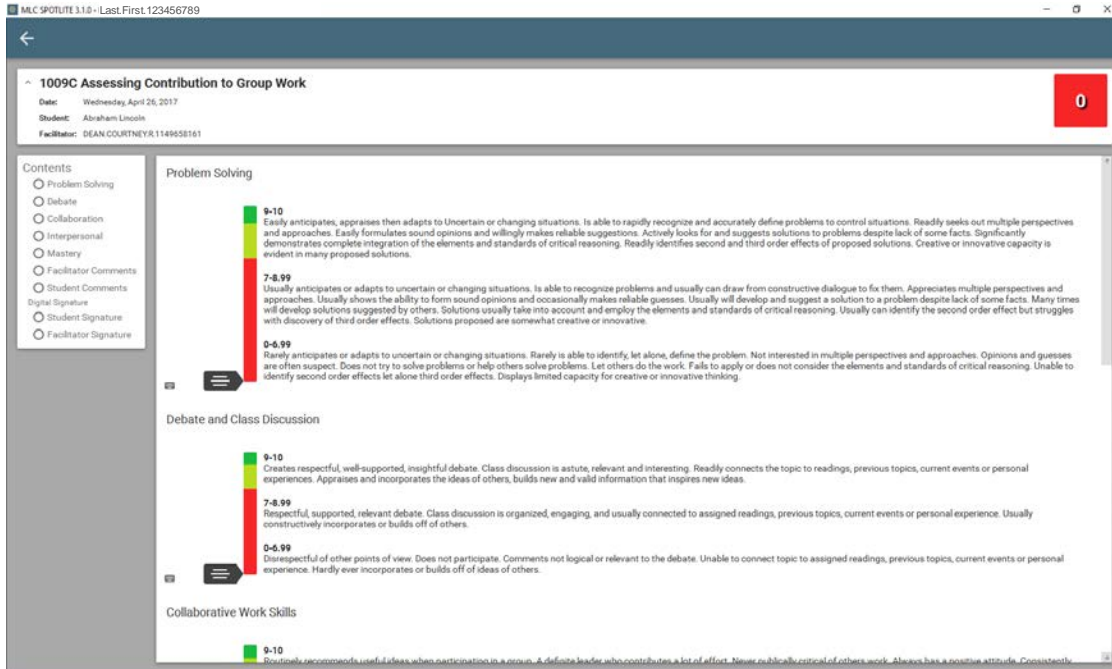


Figure 26. Looking at an Assessment

At the top of the screen are the details for the 1009 form. The cumulative score is displayed in the top, right corner of the screen. The score is a percentage and corresponds to a stoplight color rating for quick reference.



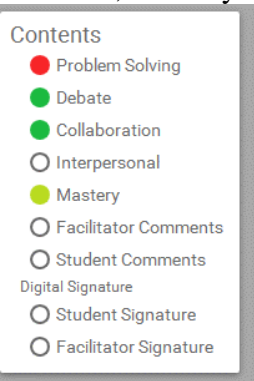

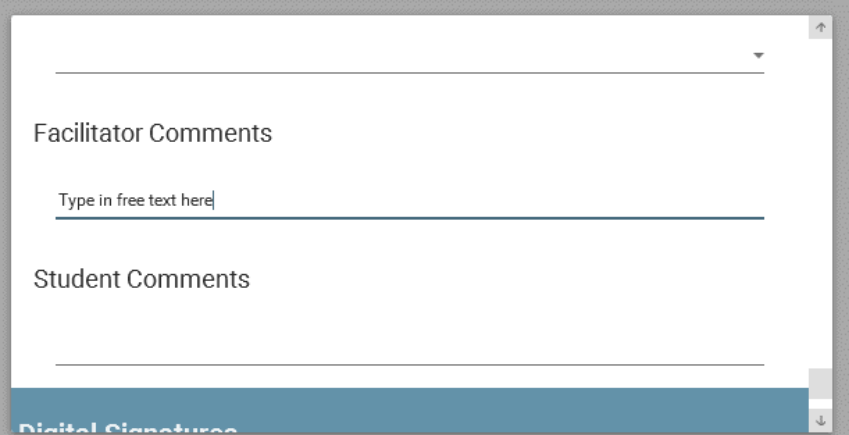
On the left appears an index of the form. Each element of the rubric (criteria, comments and signatures) is listed. Clicking on an item here will bring that section of the assessment in view. When an item has been assessed, the circle next to the item will fill in with the color rating for that item. The following color ratings apply:

- Superior
- Satisfactory
- Needs Improvement
- Unsatisfactory
- Fulfilled
- Unfulfilled

Question Types

There are several question types identified in MLC SPOTLITE as displayed in Table 2.

Table 2 Question Types

Question Type	Details
Sliding Scale	<p>These question types display a slider from the minimum to the maximum score one can receive. Click on the vertical scale to designate a score.</p> <p>Alternatively, you can click and drag the pointer  to the desired rating.</p> <p>A keyboard icon  is also provided which allows users to key a number score using the computer's keyboard.</p>
Multiple Choice	<p>This question type appears primarily on the 1059 form. Several options are available, but only one may be selected.</p> 
Drop Down Menu	<p>This question type displays a menu with several inputs, of which only 1 can be selected.</p> 
Free Text	<p>This question type will allow for open text. There is an unlimited amount of text that can be entered here.</p> 

Sign Forms

MLC SPOTLITE enables electronic signatures for both students and instructors. Using an attached smart-card reader MLC SPOTLITE can read certificates from smart cards (such as your CAC) or USB-based tokens in order to sign forms. To sign the form, insert the appropriate CAC, and then select the appropriate signature button (either Student Signature, or Facilitator Signature). The CAC certificates will appear.

If a form is not complete, you will be warned if you attempt to sign it. You can delete a certificate signature if necessary. However, it is recommended that you do not sign forms until they are completed.

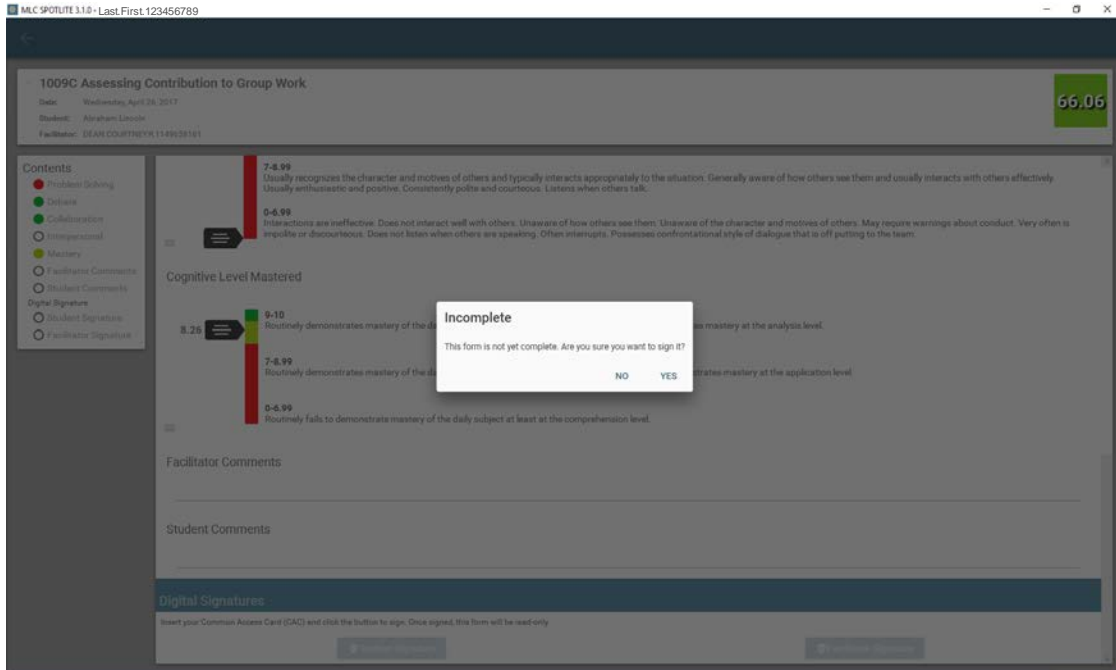


Figure 27. Incomplete Assessment Warning

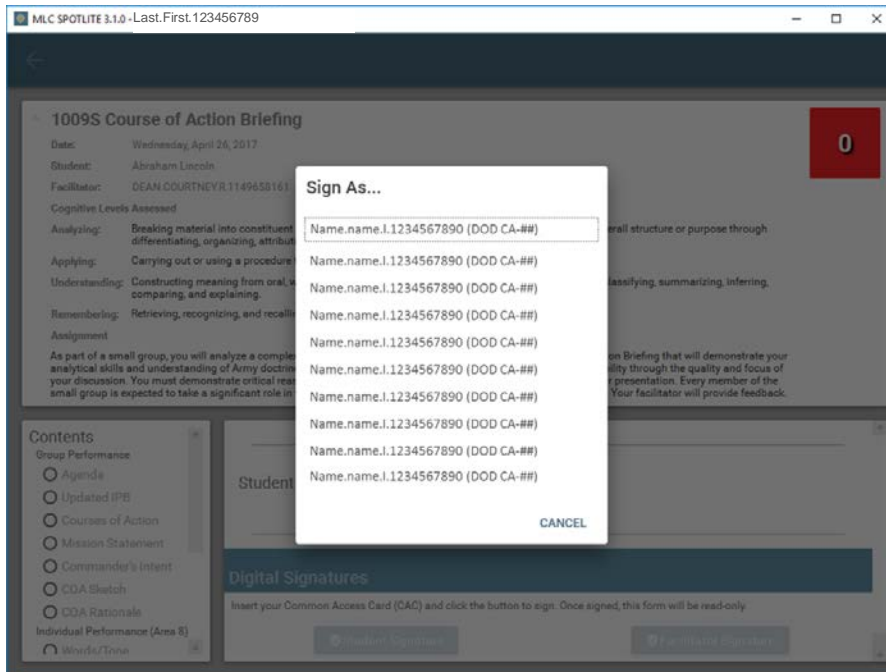


Figure 28. Signing with a CAC

Select the appropriate signature block and the digital signature will appear at the bottom of the interface. Repeat for the second signature after swapping CAC cards.

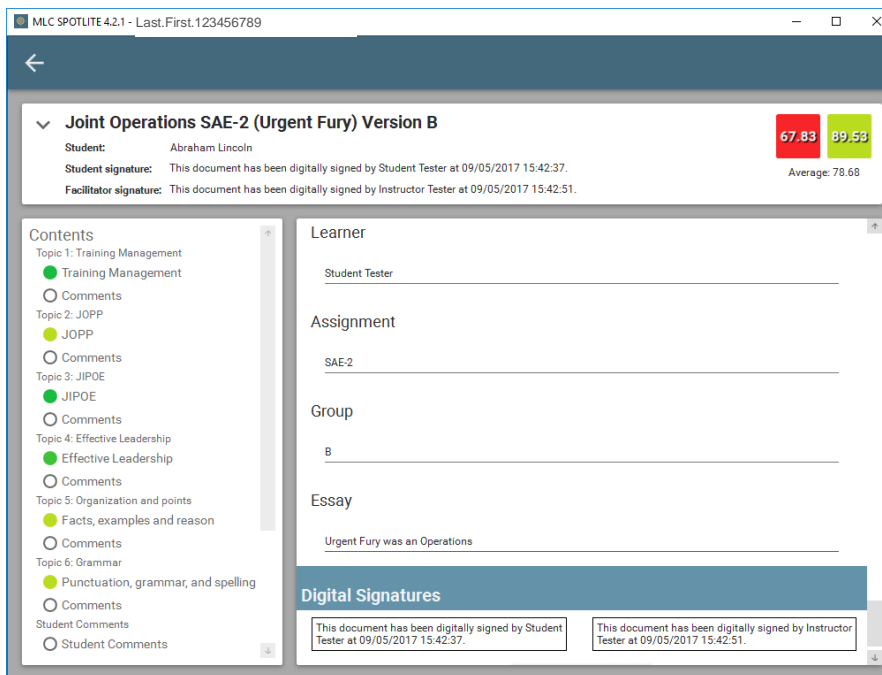


Figure 29. Signed with a CAC

A signed 1009 form will have a crest next to it for the student on the home page.

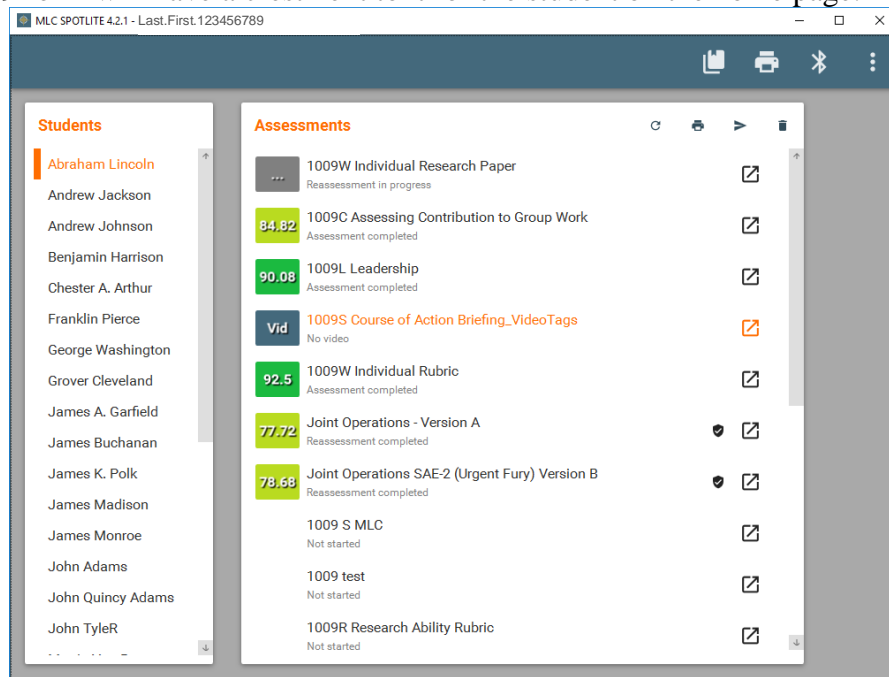


Figure 30. Assessment List with Signed Joint Operations 1009

Clearing Signatures

Once a form is signed, it cannot be modified in any way. However, occasions may arise when modifications need to be made. Under certain circumstances, signatures may need to be cleared from an assessment. MLC SPOTLITE offers this option at the bottom of the 1009 assessment.

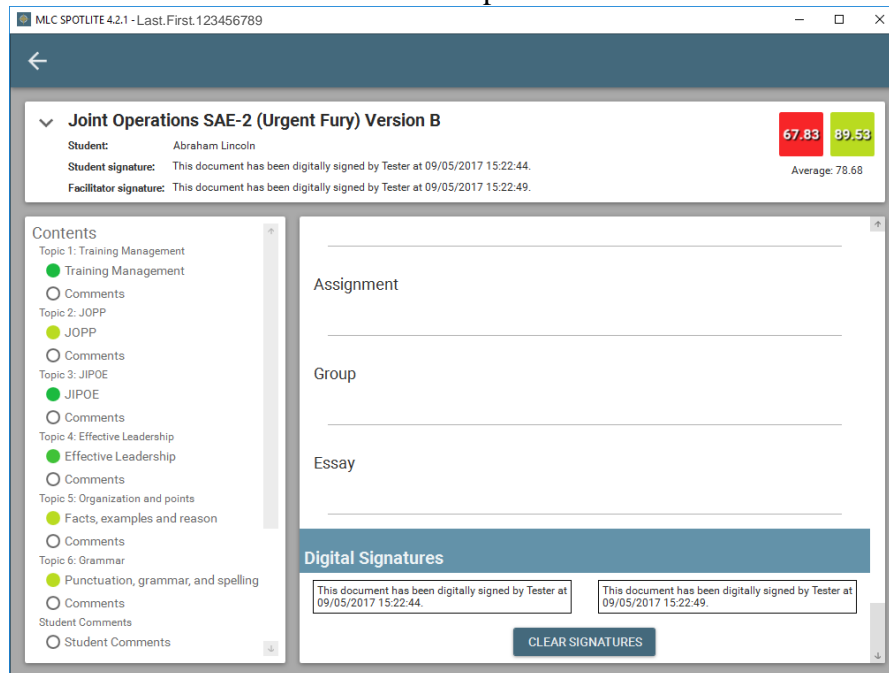


Figure 31. CLEAR SIGNATURES button

Select the **CLEAR SIGNATURES** button at the bottom of the 1009 form. Note: the **CLEAR SIGNATURES** button appears only after the form has been signed by either the instructor or the student. A confirmation prompt will appear. Click **Yes** to remove the signatures.

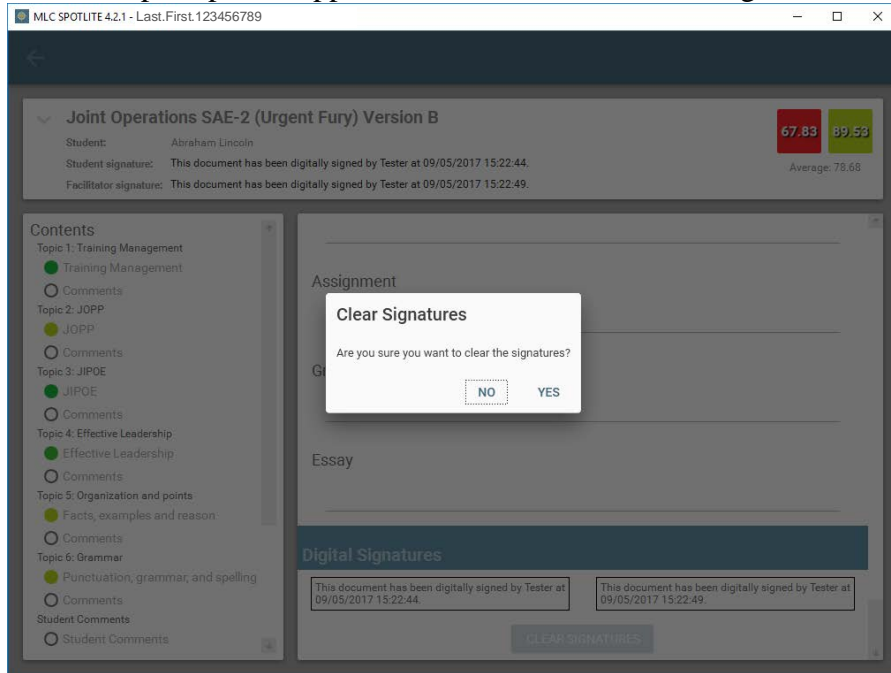


Figure 32. Clear Signatures confirmation

Video Tagging for 1009S Forms

MLC SPOTLITE offers a unique data collection option for the course presentation exercises. Using the 1009S forms with the “VideoTags” name, instructors can video presentations and make basic assessments against the rubric elements (e.g., introduction, purpose). This activity does not complete the 1009S forms. Rather it serves as a mechanism for recording the presentation and making simple ratings that can both support the completion of the rubric later and facilitate useful feedback to the student(s) following their presentation. Currently, the tagging is set up for a single student. In the future, group presentations will be supported.

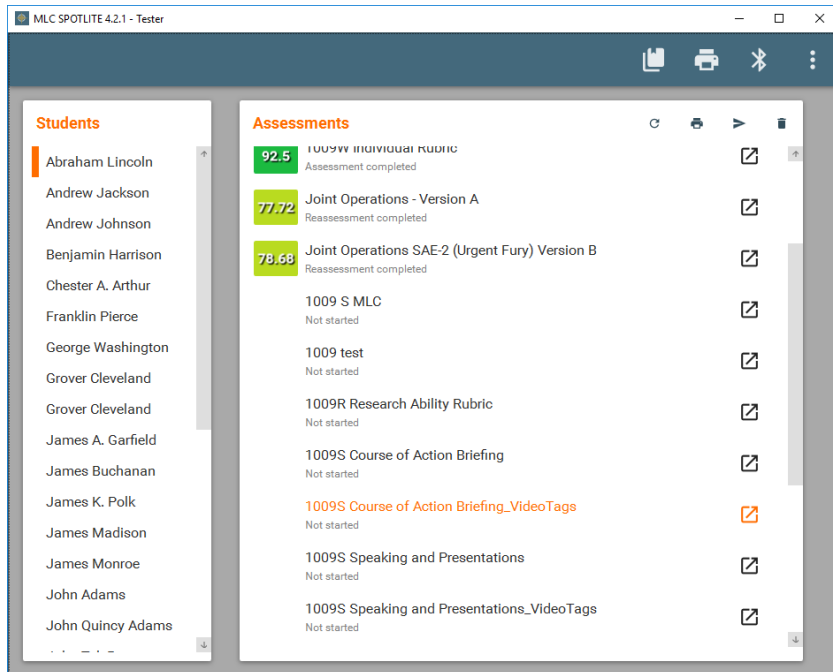



Figure 33. Selecting a 1009S_videotags

Select one of the 1009S forms with the “Video Tags” label. Once opened, the application will display what the front facing camera sees, a camera toggle  and a record button .

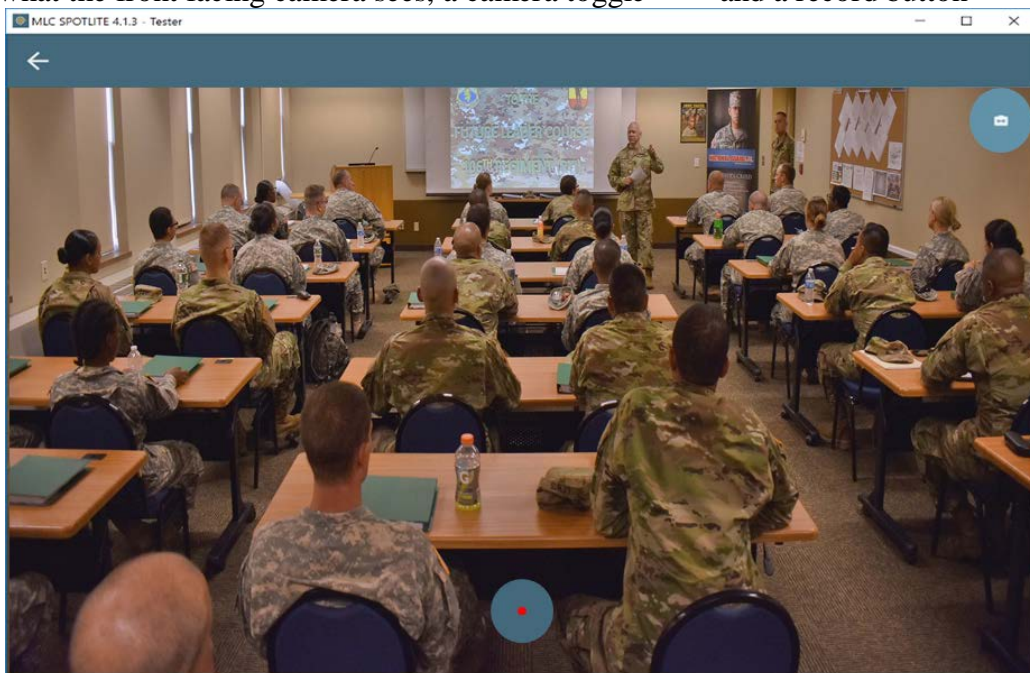


Figure 34. Video Tagging Interface with rear camera toggled

If you see yourself when you first load up a Video Tagging form, select the camera toggle control to switch to the rear-facing camera.





When the student(s) is/are ready for presentation, hit the record button . The digital video recorder will begin, capturing video and audio. The recorder icon will turn white to indicate it is recording . This button will also serve as the stop button. While the video is recording, you can rate the behavior/performance of the presenter(s). Tap the screen to initiate the rubric. You should see a list of assessment variables similar to what you will find in the 1009S of the same name. Selecting one of these will bring up a simple, 3 level (stoplight) scoring rubric.



Figure 35. Scoring rubric for the 1009S Course of Action Briefing

You may make as many ratings as you wish during the course of the presentation. This includes repeated ratings of the same rubric item (e.g., Agenda). The ratings are both time stamped and location stamped. That is, when you tap the screen and prompt the rating menu, the location where your finger or stylus touched the screen will serve as the location marker for the rating. This may be useful for particular behaviors (such as nervous twitches or pacing), or for marking the use of a visual aid (e.g., Map, sand table). Likewise, the rating will be timestamped to 5 seconds prior in the video. This allows for some delays in instructor reaction. These two features come in handy after the presentation has concluded and the video record is stopped.

To end the recording, touch the **Stop** icon at the bottom center of the screen . Once recording has ended, the application will prompt the user to advance to the review/AAR screen. The **Record/Stop** button will transform into an **Advance** button .

Hit **Play** at the bottom of the screen to start the replay of the video. The video player timeline features tick-marks representing the ratings that were made. As the video approaches a rating, a likewise colored dot will appear on the screen where the rating was made earlier. This dot acts as a prompt so that the instructor and/or student can focus on the speaker's behavior, which may be relevant. The dot should appear a few seconds prior to the behavior, giving the viewer time to react and interpret the activity and the rating.

The review screen offers the user a chance to replay the video in its entirety, or only desired segments based on the ratings that were made. The top left of the interface features a menu with all of the ratings made. Ratings are displayed in chronological order. The table displays the rating name, time of rating, and numerical score. The numerical score matches the colored

stoplight colors. This menu can be used to advance the video to desired points of discussion (speeding up the review process and avoiding having to watch unnecessary elements of the video). Tap a row to advance, or retreat the video to the desired location.

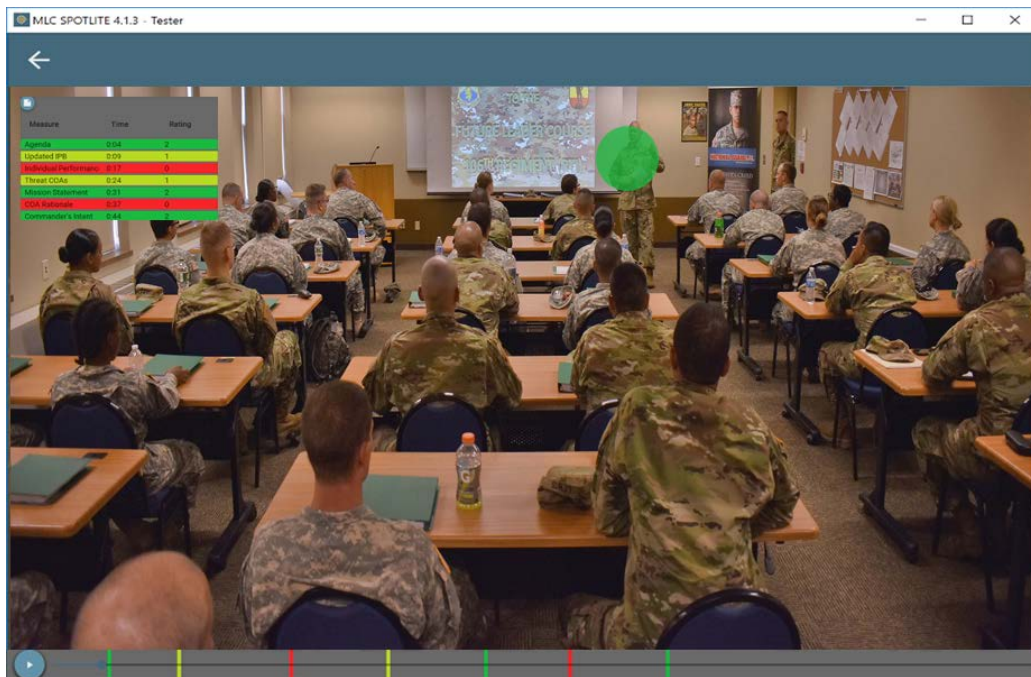


Figure 36. Video Tagging AAR Interface

Once the AAR is completed, hit the **Back** arrow to return to the MLC SPOTLITE home screen. The next section will focus on elements of assessment management such as conducting Reassessments and deleting undesired assessments.

ASSESSMENT MANAGEMENT

Once performance assessments are complete, several options will be available for management of completed elements of the rubric:

Reassess the student
 Print Assessments
 Send Assessments
 Delete Assessments

Reassess the Student

This option allows instructors to provide a reassessment to students whose first submission received a failing grade. The feature is available for ALL forms, but is expected to be used exclusively for items contributing to the GPA such as the Individual Research Paper and Short Answer Essays.

To reassess a student, select the then choose which form you wish to reassess.

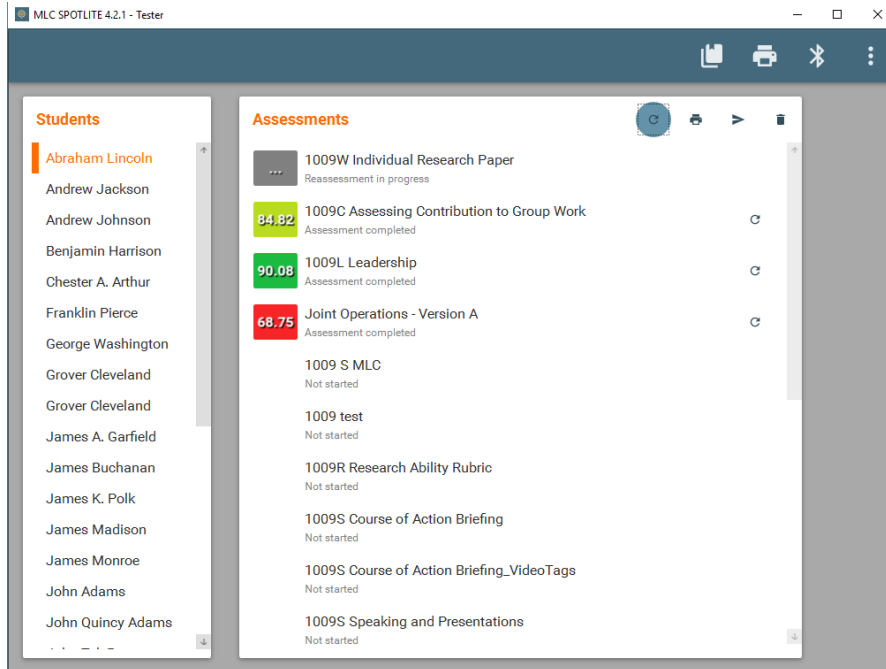


Figure 37. Selecting a 1009 Form for reassessment

The application will load the form. The reassessment rubric will be fundamentally the same as the original. However, the application will display additional information regarding the total score. Specifically, the form will display the original, failing score, the reassessment score and an average beneath the two. Note that the average will be $\frac{1}{2}$ of the original score until the reassessment is filled out. As the reassessment form is graded, the scores will update.

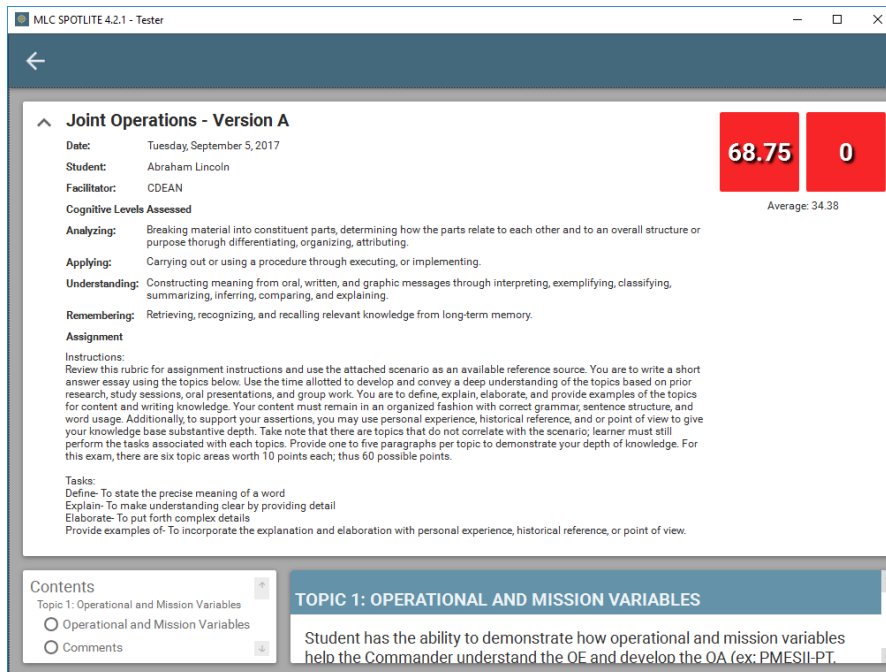


Figure 38. Reassessment Rubric example

Once the reassessment is completed, the average score will display for the student on the home screen. Under the form name, “Reassessment Completed” will appear.

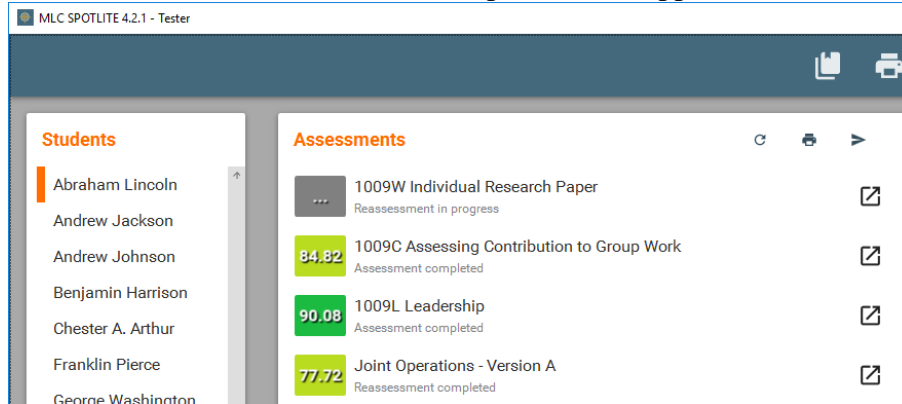


Figure 39. Form completion status displayed under the form name

Print Assessments

There are two options for print. The first, described next, allows users to print one or more assessments from a single student. A batch print option is also available (described later in this document).

Print Assessments for One Student

SPOTLITE supports printing to either .pdf, or to a connected printer. Note that connecting the device to a network printer may be required for printing. Connecting the device to a network may require Information Services (IS) support and is not covered in this section.

If the MLC SPOTLITE device is connected, select the Print Assessments option. A printer icon will appear to the right of all completed forms for the student. Tap the icon next to each form you wish to print.

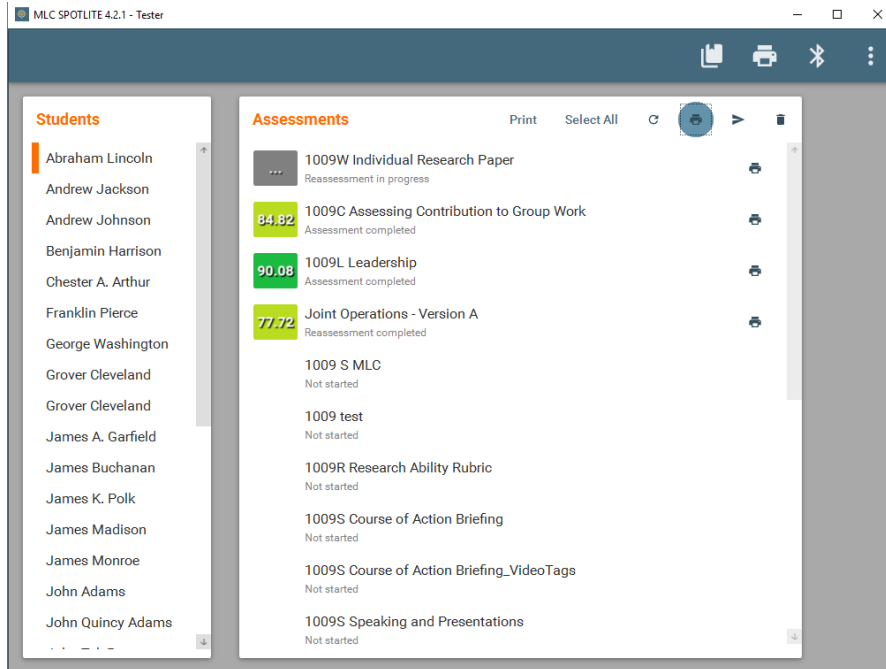


Figure 40. Printing Assessments

After selecting one or more assessments to print, tap on the NAME of one of the assessments selected. The tool will display a print view of all selected assessments.

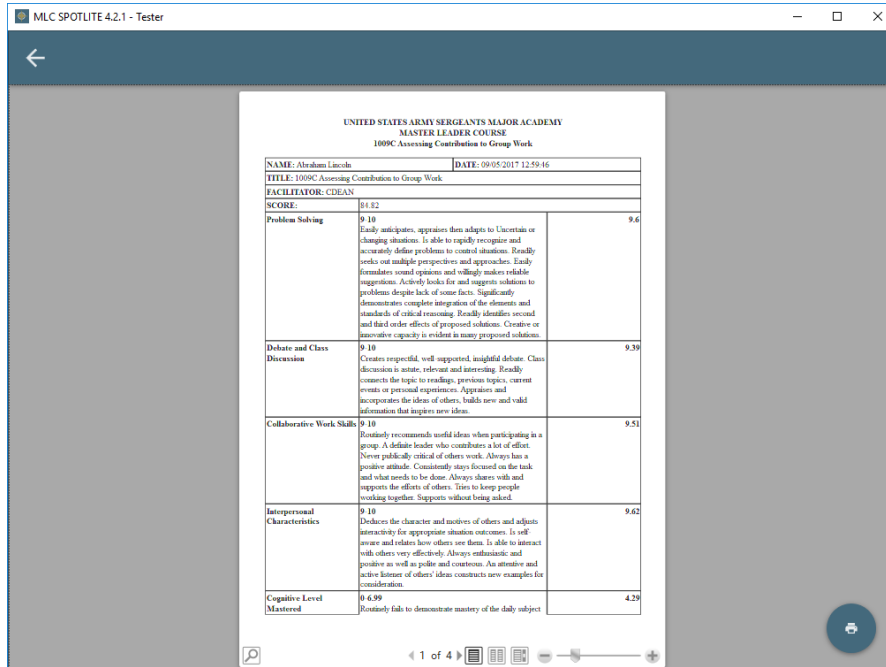


Figure 41. Viewing a Printed Assessment

Next, select the **Printer Icon** in the bottom right corner.

A print window will appear showing print options (.pdf, networked computers). Select the appropriate printer and hit “Print.”

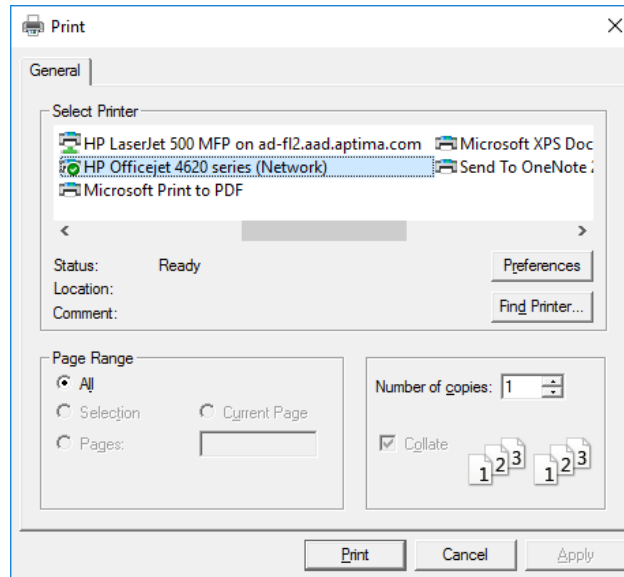



Figure 42. Selecting a Printer

Batch Print

There is a Print All Forms option in the top right of the interface. This option allows the user to print every form (completed and in-progress) for every student.

To begin, select the  button. The tool will display a print view of all completed and in-process assessments.

Next, select the **Printer Icon** in the bottom right corner.

A print window will appear showing print options (.pdf, networked computers). Select the appropriate printer and hit “Print.”

Sharing Assessments (Bluetooth)

MLC SPOTLITE possesses a data transfer feature using Bluetooth. It enables users to share completed and in-progress assessments (1009, 1059 forms). Use this feature to share situational awareness, to maintain complete records on one machine, or for mutual support when collectively assessing students.

Before you begin, make sure your Bluetooth is turned on. Go the **Search Windows** and type “Bluetooth.” Follow the links in Windows to turn on your Bluetooth. Next, search for available devices to connect. Your device as well as your co-instructor’s should be named “MLC#” making them easy to find. Find your co-instructor’s device and make sure your devices are “paired.” If they are not paired, select **Pair** and follow the instructions on both devices.

Send Forms

To begin, select a student to share. Select the  icon in the upper right of the interface.

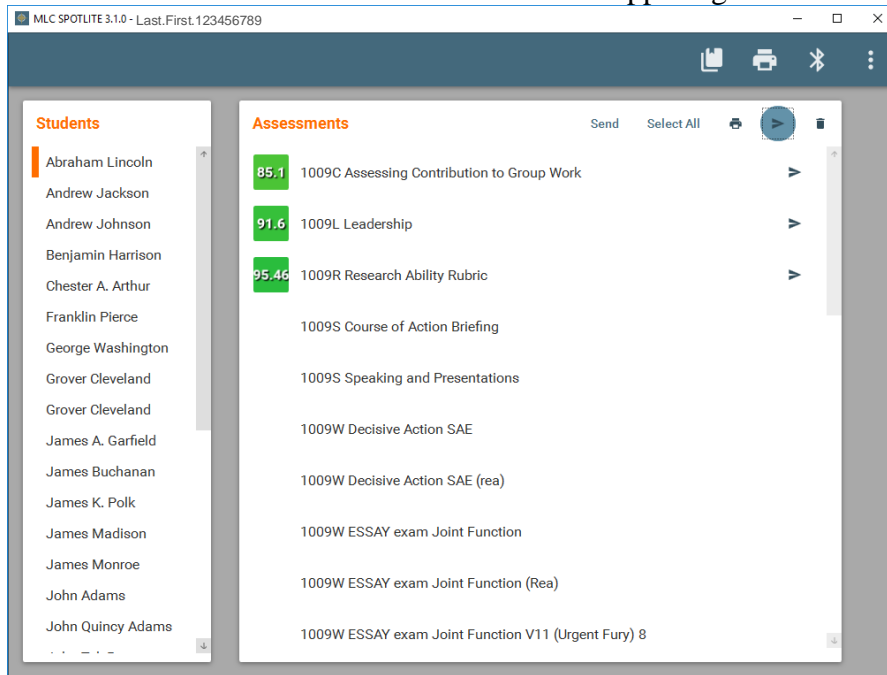


Figure 43. Selecting Send Forms

A similar icon will appear to the right of each completed and in-progress form. Next, select each form you wish to share by tapping on those individual icons. Select as few or as many as desired. A **Select All** option is also available.

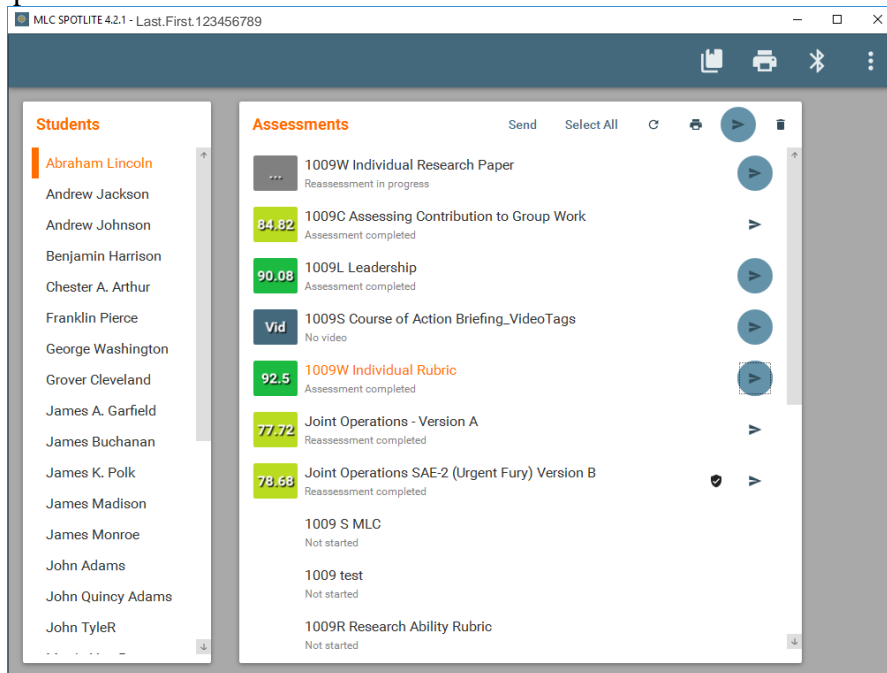


Figure 44. Selecting forms to send

Meanwhile, make sure the other instructor's device has been set up to receive. (Keep reading for Receive instructions). Next, hit **Send**. A new window will appear indicating the tool is searching for another Bluetooth device.

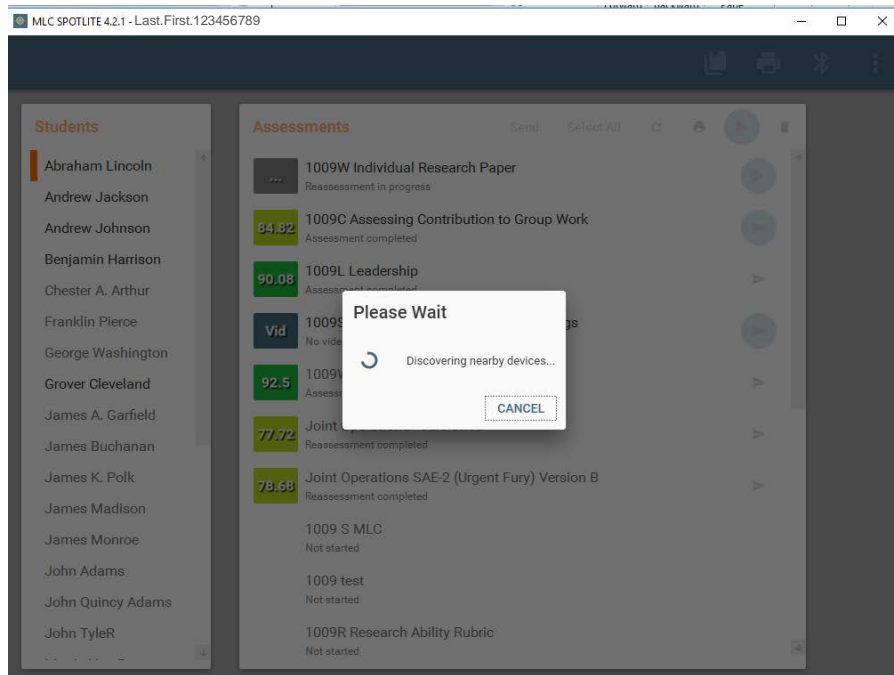


Figure 45. Discovering nearby devices status indicator

When another SPOTLITE enabled device is discovered, it will be listed in the window. Select it and the tool will pair with that other device.

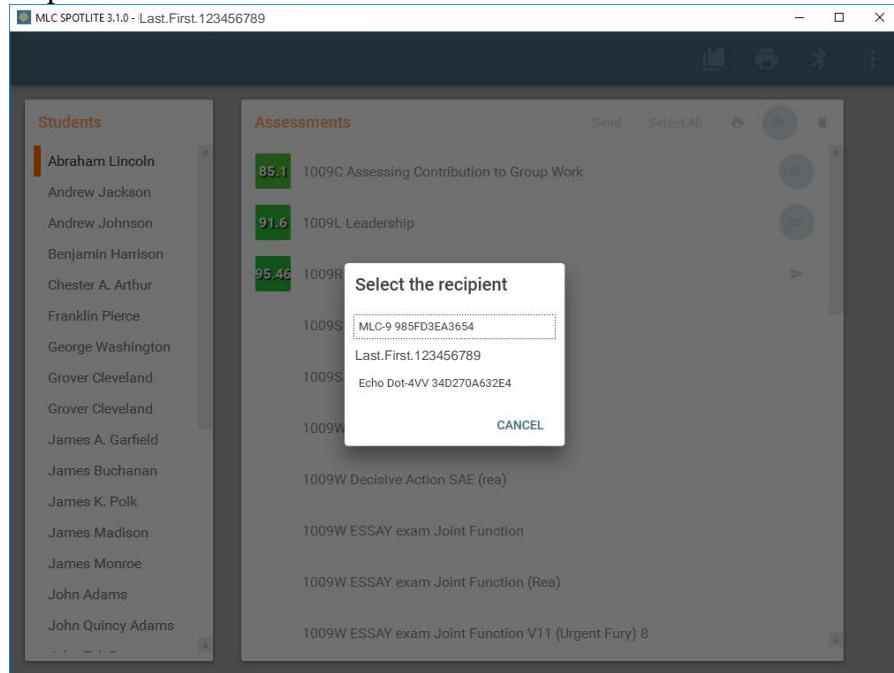


Figure 46. Select the recipient for forms transfer

Meanwhile, the receiving device must be set up to receive.


The two paired devices should complete the one-way exchange. Open up the selected student file and you will see the assessments in the receiving device.

This feature does not allow for bulk sharing yet. That feature will be available in a future build.

Receive Forms

To receive assessments, two SPOTLITE devices need to be present, both with Bluetooth enabled.



To begin, select the  button. The tool will automatically start looking for a sender. The status will be indicated by a pop-up window.

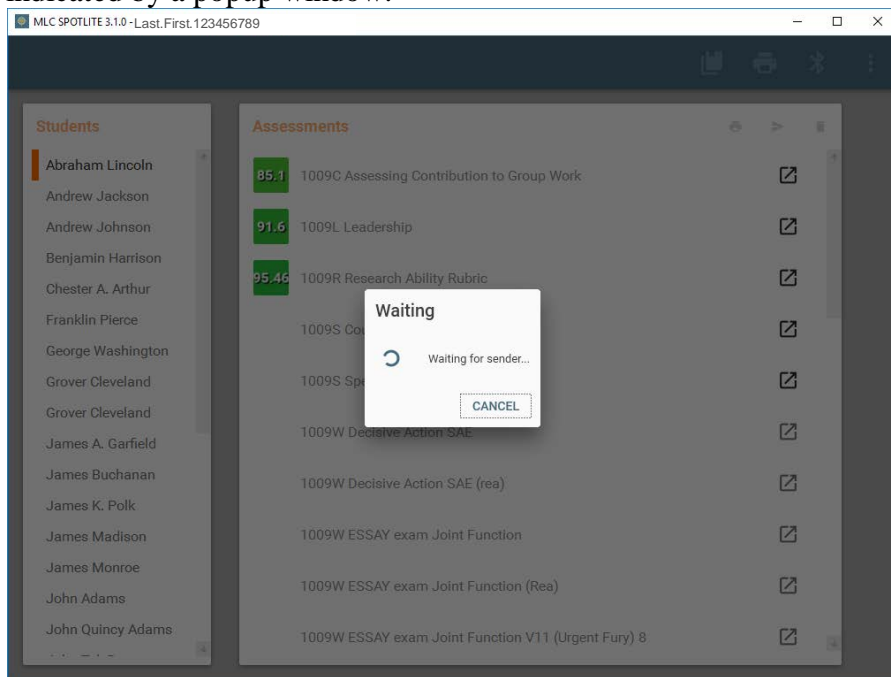



Figure 47. The receiving device is ready for transmission

Once discovered, the sender will push the data to the receiver. Open the selected student file on the receiving device and view the imported forms.

Delete Assessments

You can delete one or more assessments for an individual student. This function permits the deletion of a single, multiple or all completed or in-process assessments for a single student only. Assessment deletion is risky. Therefore, this tool does not offer a batch deletion for multiple students.

To begin, select the  icon at the upper right of the interface.

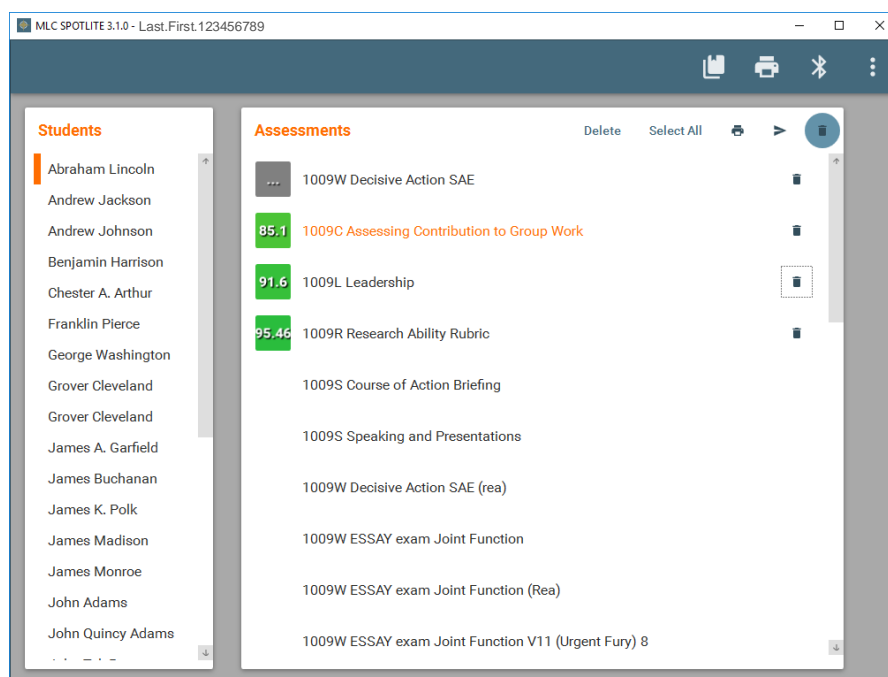


Figure 48. Deleting Assessments

Next, select the assessment to be deleted. Click on the text for a single assessment. As the mouse hovers over a form, the title will change to **Orange**.

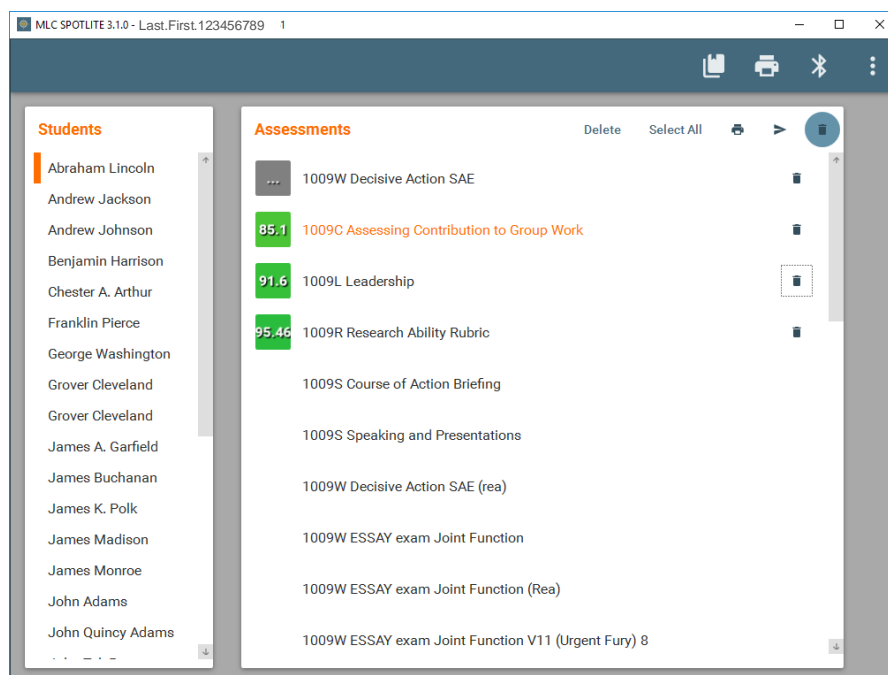


Figure 49. Selecting assessments to delete

Note that **ONLY** completed, or in progress assessments can be deleted. Deleting an assessment does not remove the 1009 form from the Tool. This will delete the student's assessment only. A blank form for the student will appear for the student and a new assessment can begin.

You can quickly delete all assessments. The **Select All** button to the left of the trashcan icon selects all completed and in-progress assessments.

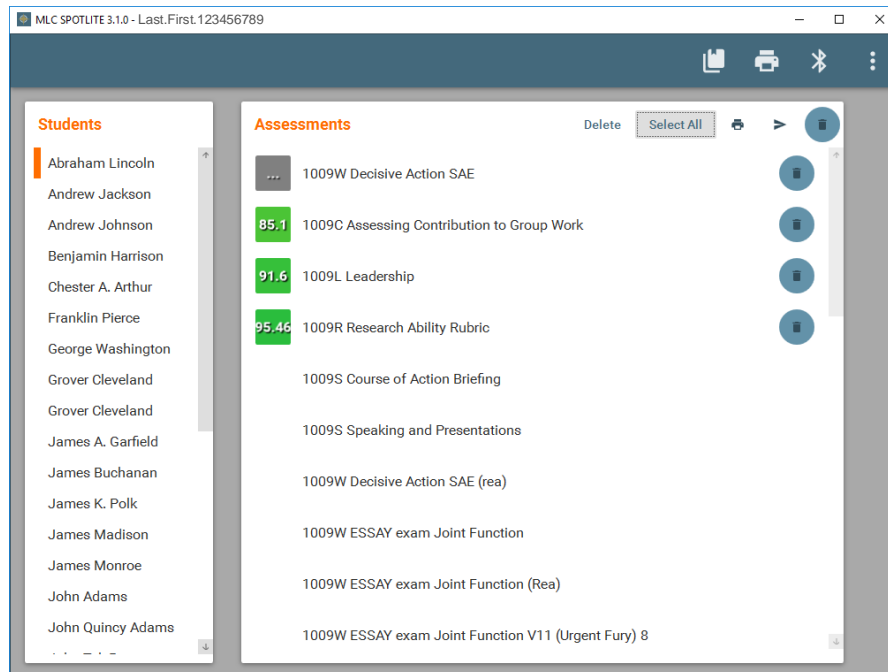


Figure 50. Select All option for deleting Assessments

Next, hit the **Delete** button. A confirmation window will appear. Select **Yes** to confirm deletion or **No** to cancel.

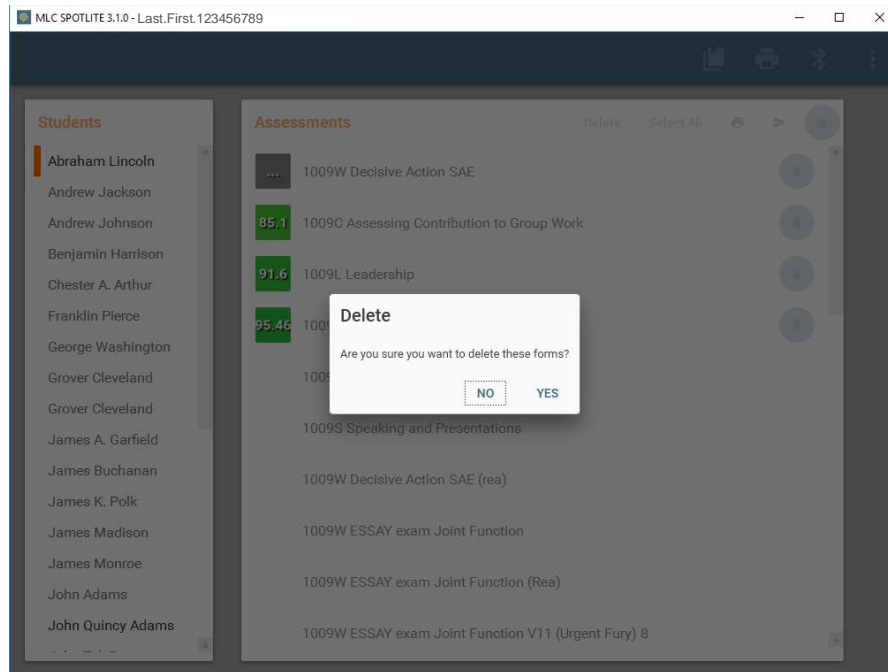



Figure 51. Confirm Deletion

To exit from the delete option, de-select the icon so that it is no longer highlighted.

In the next section, you will learn how to review and manage the results of your assessments in the Cumulative Summary Sheet and the Gradebook.

CUMULATIVE SUMMARY SHEET

The Cumulative Summary Sheet (CSS) is a representation of the CSS generally managed in Excel. However, it does not require any manual entry of results. The CSS will automatically populate with results from the assessments you complete in SPOTLITE. If Assessments are being completed on multiple devices, they can be integrated using the Send and Receive Forms functions (described elsewhere).

To begin, select the  button. The CSS is a table displaying student records in rows and each of the imported 1009 forms in columns. Scores for each student appear in the corresponding cells. The CSS can be customized for the course rubric. Specifically, the user can select which 1009W form to count as the Individual Rubric and SAE forms.

MLC SPOTLITE 4.2.1 - Tester

Cumulative Summary Sheet

NAME	1009W Individual Contribution			Short Answer Essay Exam (SAE)					Demonstrated abilities for the 1099						GPA	FACILITATOR				
	1009W Individual Research Paper	REA	Final Item 1	Joint Operations SAE-2 (Urgent Fury) (R)	REA	Final Item 2	Joint Operations SAE-2 (Urgent Fury) (D)	REA	Final Item 3	1009S Research Project Brief	1009E COA Brief	1009S AVG Project Brief and COA Brief	1009L Leadership	1009C All Lessons			1009R Group Project Research	Course Requirement Personal Experience Paper	Item 1 Group Project 1009W	Item 2 Short Answer Essay 1009W
Abraham Lincoln	83.40		63.40	67.93	69.53	76.66							90.08	84.82		N				CDEAN
Andrew Jackson																N				
Andrew Johnson																N				
Benjamin Harrison																N				
Chester A. Arthur																N				
Franklin Pierce																N				
George Washington																N				
Grover Cleveland																N				
Grover Cleveland																N				
James A. Garfield																N				
James Buchanan																N				
James K. Polk																N				
James Madison																N				
James Monroe																N				
John Adams																N				
John Quincy Adams																N				
John Tyler																N				
Martin Van Buren																N				
Millard Fillmore																N				
Rutherford B. Hayes																N				

Figure 52. Cumulative Summary Sheet

The displayed results also serve as a link to the assessment. Click on the result for a student and a form, and that assessment will load.

Printing the CSS



You can print a CSS for records keeping. To begin, select the button. The CSS will appear in a print preview screen.

MLC SPOTLITE 3.1.0 - Last.First.123456789

April May


Student	1009C	1009L	1009R	Weighted GPA
George Washington				
John Adams				
Thomas Jefferson				
James Madison				
James Monroe				
John Quincy Adams				
Andrew Jackson	91.82	92.67		
Martin Van Buren				
William Henry Harrison				
John Tyler				
James K. Polk				
Zachary Taylor				
Millard Fillmore				
Franklin Pierce	93.66			
James Buchanan				
Abraham Lincoln	85.10	91.60	85.46	76.54
Andrew Johnson				
Ulysses S. Grant				
Rutherford B. Hayes				
James A. Garfield				
Chester A. Arthur			92.72	
Grover Cleveland				
Benjamin Harrison				
Grover Cleveland				
William McKinley				
Theodore Roosevelt				
William H. Taft				
Woodrow Wilson				
Warren G. Harding				

Figure 53. CSS Print Preview.

Next, select the **Printer Icon** in the bottom right corner.

A print window will appear showing print options (.pdf, networked computers). Select the appropriate printer and hit “Print.”

Exporting the CSS

You can export the CSS to a .csv file. The .csv file is compatible with Microsoft Excel and other spreadsheet applications. To begin, select the  button. Windows Explorer will launch, prompting you to choose a location to save the .csv export. Choose a location and hit **Save**.

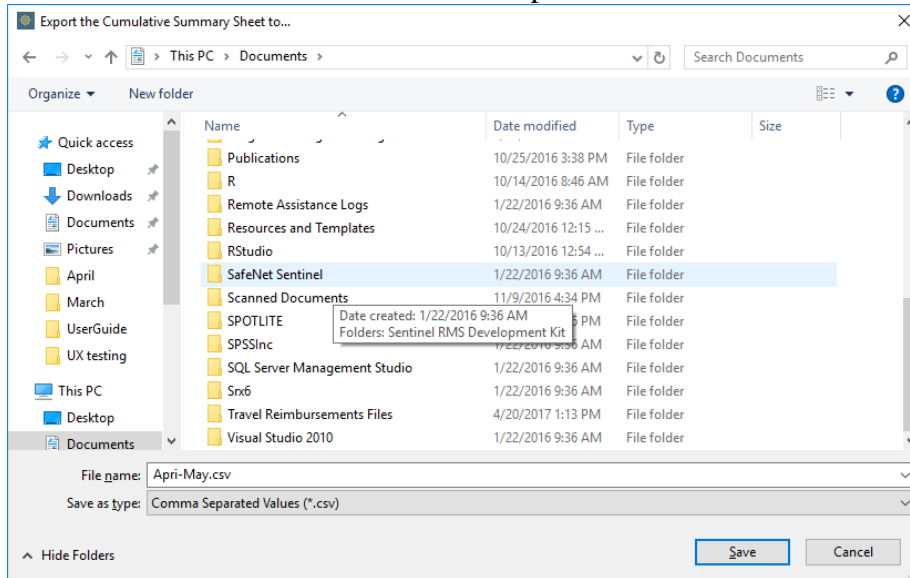


Figure 54. Saving the CSS

Removing Student Content

To remove student content from a past course, you must delete the root folders for the MLC SPOTLITE application. First, open up a Windows Explorer Window. Next, navigate to Local Disk (C:). Open the Users folder.

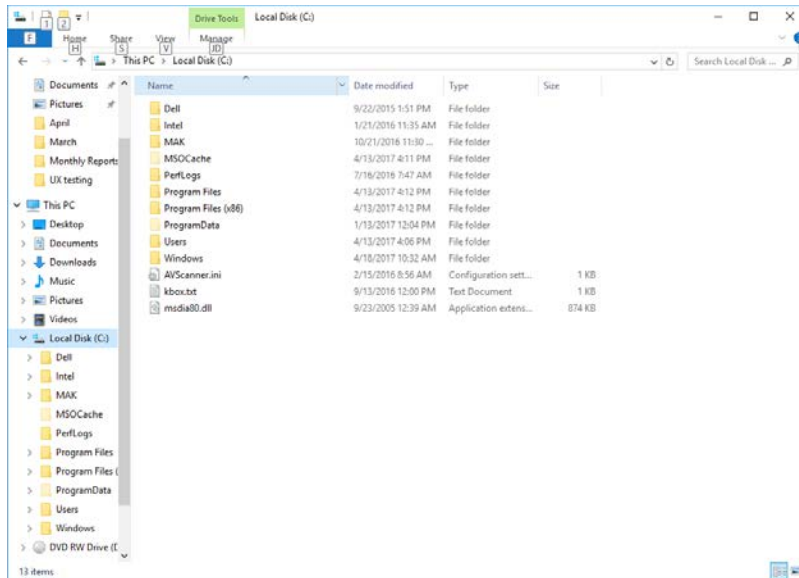


Figure 55. Navigate to C:.

From within the **Users** folder, open the **User** folder (This could say "MLC#"). Inside the **User** folder, look for a folder labeled **App Data**. If this folder is not there, go to **View** in the top of the Explorer window. On the top right, you should see an option called "Hidden Items."

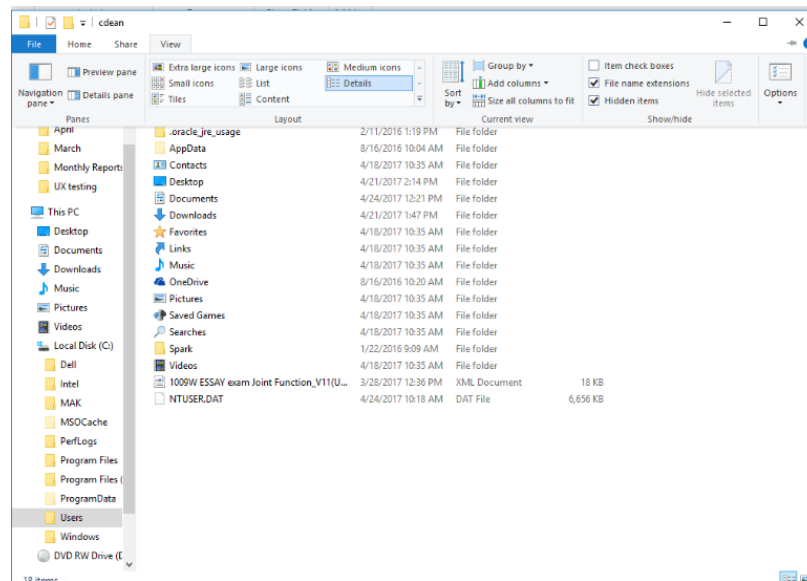


Figure 56. Navigate to AppData

Once visible, open **App Data** Folder. From within, open the **Local** folder.

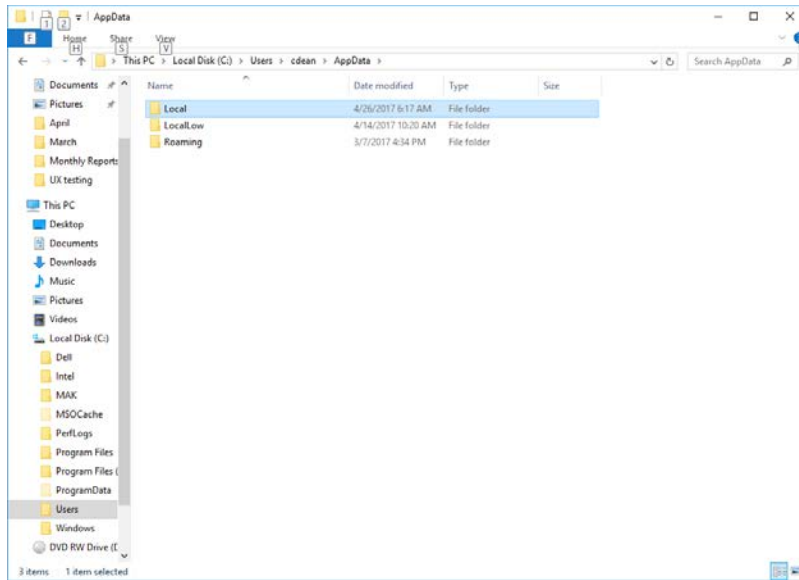


Figure 57. Local folder within AppData

Next, open the **MlcSpotlite** folder.

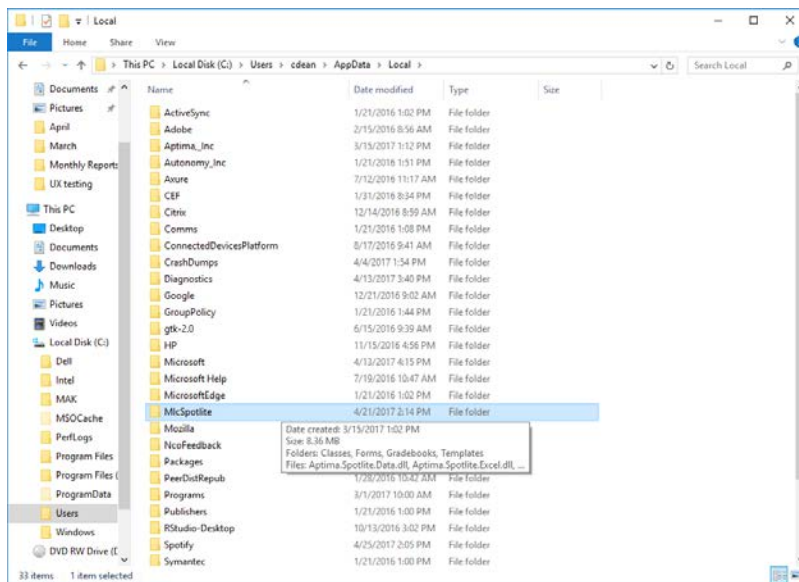


Figure 58. MLC SPOTLITE Root Folder

Open the **Classes** Folder. Here you will find any past rosters. They should be labeled MLC #-YY NCOA.xml. Delete any of these files you wish to remove. This will remove the roster from the application.

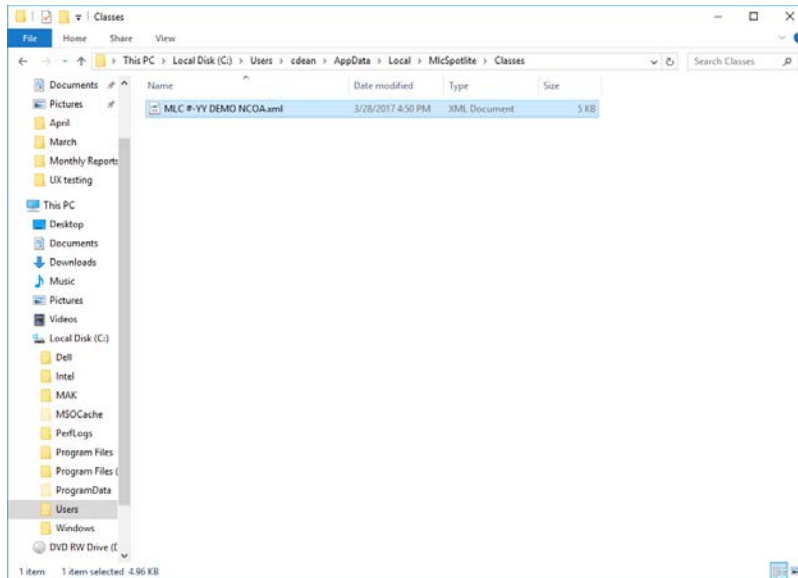


Figure 59. Finding a roster within the Classes Folder

Next, navigate back to the **MlcSpotlite** folder. Open the **Forms** folder. Inside the Forms folder, you should find a folder with a label consistent with the roster title (e.g., MLC #-YY Demo NCOA).

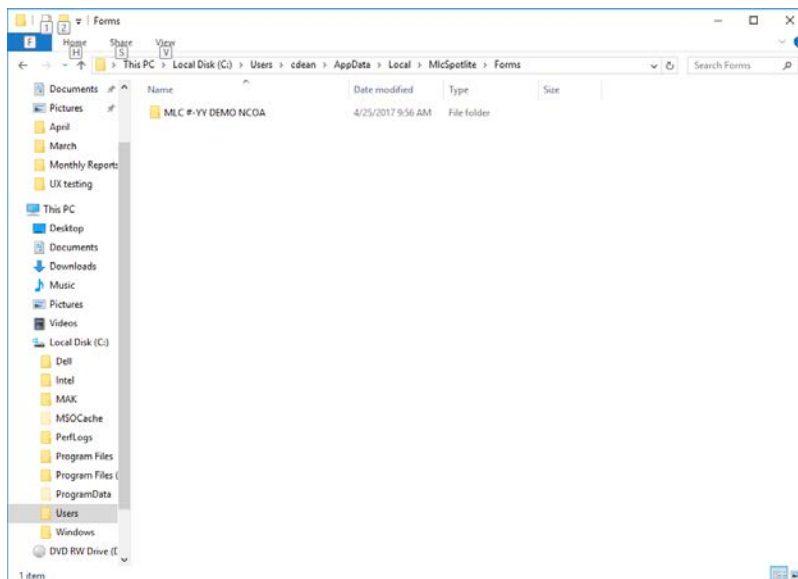


Figure 60. Deleting Assessment records for students

Delete this folder to remove all records for the class. Repeat for all desired class folders (if more than one).

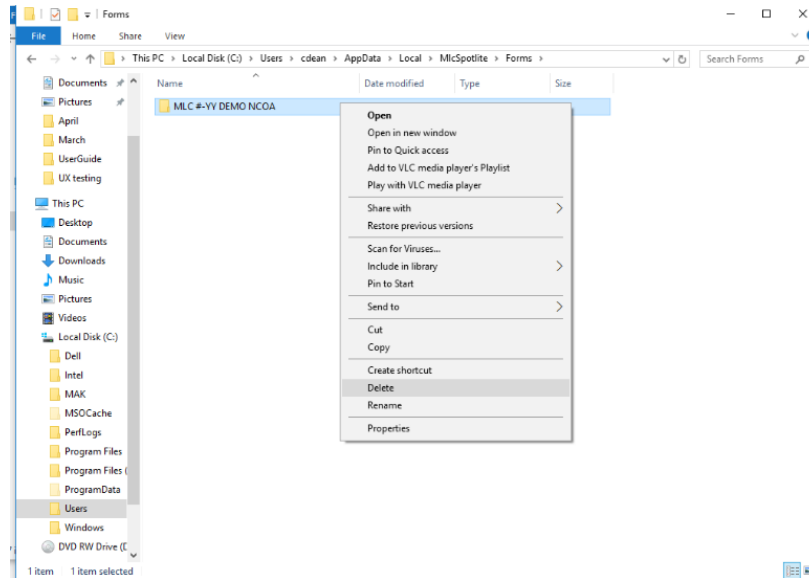


Figure 61. Deleting an entire assessment record for a class

Opening this MLC #... folder will reveal folders for each student. You can delete specific student records one at a time here.

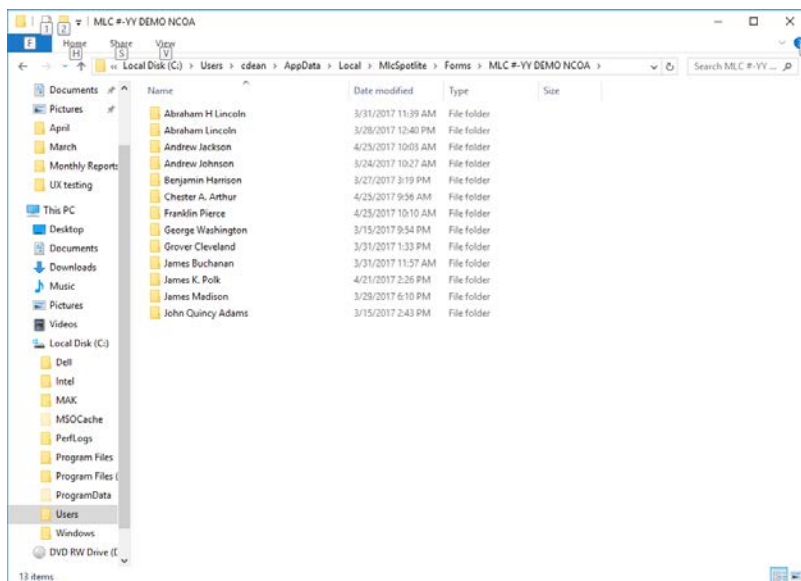


Figure 62. Individual folder for each student within a class

TROUBLESHOOTING AND FAQs

Q: Why is my CAC not appearing?

- A: If your CAC is not being detected, the CAC reader may be off. Verify it is receiving power by unplugging it from the USB port and plugging it in again. Verify that the light on the peripheral smart card reader is on. Reinsert your card. If all else fails, restart the computer.

Q: Why is my system so slow? What happened to my performance?

- A: As a best practice, shut down your MLC SPOTLITE computer (Microsoft Surface Pro 4) when not in use for more than a few hours. Restart the computer frequently (ideally daily). This is a common best practice for Windows computers and will ensure that the Surface performs as intended.

Q: Where is the Windows desktop that I am used to? Why can't I find desktop files like MLC Instructor Materials?

- A: If you cannot see your Windows desktop, check the notifications tray in the bottom right. Verify that **Tablet Mode** is OFF

Q: I am trying to brief, but when I hold the Surface in Portrait mode, the user interface is still landscape. How do I make it reorient?

- A: If the interface will not rotate when you rotate the surface, click the notifications button in the lower right and make sure **Rotation Lock** is OFF

Q: Why aren't my exported student records working? Why are all my PDFs corrupted?

- A: When exporting PDFs, especially if it is a full roster, wait 30 seconds after hitting the Save as PDF... if you close the system mid-save, it will corrupt the PDF. If, after you export, a PDF is 0kb in size, it is corrupted. Re-export and make sure you provide sufficient time for the system to save the file.

Q: I'm typing, but not getting the text or characters I expected. What is wrong?

- A: If the keyboard is not typing correctly, check connection to surface. Check to make sure **Function lock** ("Fn" on the keyboard) is turned OFF.

Q: I updated my rubric, but the students' scores still follow the old rubric. What gives?

- A: This is expected. In order to be sure that existing grades reflect the instructor's intention, changes to a rubric will not affect existing grades. You should see that your rubric is updated each time you use it in the future.

Q: I deleted a rubric template, but there is still a completed form for one of my students. Why?

- Deleting a template from the top menu of SPOTLITE only removes the template from the tool. Any rubrics that you started or completed for students will still have a record. If you want to remove that record from your student's file, simply delete the record in the student's rubric list.

Q: I uploaded an updated 1009"x" rubric, but the old one still shows up for one of my students. Why?

- It is likely that there is a record for this student that already exists. If you started 1009"x" for your student, then updating the template will not take affect for that record. You will

need to delete the completed or in-progress assessment to access the updated rubric. This applies to all students for which you have already begun an assessment of that rubric.

Q: How do I make a rating of zero for a rubric item?

- A. Try tapping on the slider without dragging it. Once activated, it should start at zero.

APPENDIX B

Usability and Utility Evaluation Results

Table 1

Usability Survey 1 Results

Question	Percent Agree	Percent Disagree	Percent Not Answered
I knew exactly where to go to capture an assessment.	100%	0%	0%
It was easy to tell if I had completed an assessment.	84.20%	10.50%	5.30%
At times, I had trouble remembering where I was in the system.	21.10%	78.90%	0%
I knew when all of the outcomes and attributes had been assessed.	73.70%	21.10%	5.30%
Sometimes, it was hard to remember how to use the tool.	36.80%	57.90%	5.30%
The tool used the same language we use during the MLC.	84.20%	10.50%	5.30%
The terms were used consistently throughout the tool.	94.70%	0%	5.30%
It was clear to me that the tool was saving my ratings.	78.90%	21.10%	0%
The user interface supported my work style and allowed me to capture data in the way that I think is most effective.	94.70%	0%	5.30%
It was easy to navigate to different assessments.	94.70%	5.30%	0%
Sometimes, I wanted to go back to an assessment to change my entry, but it was difficult to find.	10.50%	84.20%	5.30%
When I made a mistake, it was easy to undo my error.	84.20%	15.80%	0%
I knew where to go to view student and class results.	100%	0%	0%
I found the class report card to be easy to use.	84.20%	10.50%	0%
I found that I made many errors when I selected a 1009 form for a student.	15.80%	78.90%	5.30%
I found that I made many errors when I used the roster to select a student.	15.80%	78.90%	5.30%
I found that I made many errors when I completed an assessment for a student.	78.90%	15.80%	5.30%
I found that I made many errors when I selected behavioral anchors for attributes.	15.80%	78.90%	5.30%
I found that I made many errors when I used the cumulative summary sheet CSS.	10.50%	73.70%	15.80%

I hardly ever made an error when using the MLC SPOTLITE tool	63.20%	31.60%	5.30%
When I made an error, I always knew it.	73.70%	15.80%	10.50%
It didn't take me long to learn how to select a 1009 form for a student.	89.50%	0%	5.30%
It didn't take me long to learn how to use the roster to select a student.	78.90%	21.10%	0%
It didn't take me long to learn how to complete an assessment for a student.	89.50%	5.30%	5.30%
It didn't take me long to learn how to select behavioral anchors for attributes.	89.50%	5.30%	5.30%
It didn't take me long to learn how to use the cumulative summary sheet CSS.	84.20%	0%	15.80%
I was able to enter assessments and comments quickly, even when using the tool for the first time.	84.20%	10.50%	5.30%
The interface was easy to read.	94.70%	0%	5.30%
The interface had too much information on it.	0%	94.70%	5.30%
The information shown on the display was helpful.	94.70%	5.30%	0%
I thought the interface was organized well.	89.50%	5.30%	5.30%

Table 2

General Satisfaction Results

Question	Mean	Standard Deviation
1. I think that I would like to use these display concepts frequently.	3.79	.54
2. I found the system to be unnecessarily complex.*	3.55*	.78
3. I thought the system was easy to use.	3.68	.58
4. I think that I would need the support of a technical person to be able to use the system.*	3.33*	.77
5. I found the various functions in the system to be well integrated.	3.53	.96
6. I thought there was too much inconsistency in the system.*	3.67*	.69
7. I imagine that most people would learn to use this system very quickly.	3.63	.60
8. I found the system to be very cumbersome to use.*	3.56*	.78
9. I felt confident using the system.	3.84	.38
10. I needed to learn a lot of things before I could get going with this system.*	3.31*	.95

* Reverse coded mean.