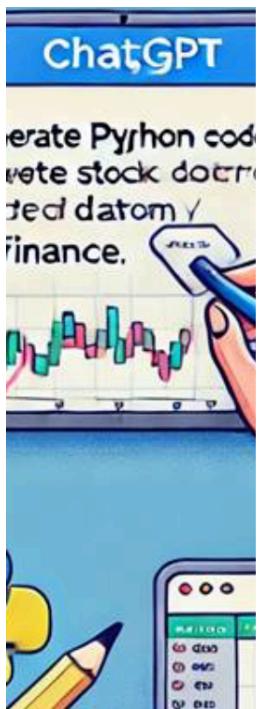


Evaluation of a Microsoft Certification and Digital Literacy Curriculum for High School Freshmen

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A	B	C	D	E	F	G	H	I	J	K	L
Stocks	Price	Change	High	Low	Volume						
1 NASDAQ:AAPL	182.68	0.85	183.45	182.18	11,005,058.00						
2 NASDAQ:AMZN	315.62	-2.12	319.93	314.88	2,851,628.00						
3 NASDAQ:GOOGL	131	0.82	131.76	130.78	3,307,938.00						
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In this example, different attributes are listed in **row 1** and referenced in the formula to get corresponding data without manually changing the formula each time.



Executive Summary

The speed of change in digital technologies in the 2000's has left many Generation Alpha students with the illusion of digital fluency: because these students grew up with technologies like search engines, smartphones, and cloud computing, they feel familiar with these technologies while lacking the ability to navigate them beyond a low functional level. Students may not have the initiative to attempt unfamiliar operations, and thus need guidance to develop critical thinking and research skills, typing skills, and productivity software skills, in order to support digital literacy. The need for digital literacy skills is corroborated by the education standards of the Saint Louis Public School system and Missouri's Department of Elementary and Secondary Education (DESE). Missouri DESE's strategic plan for education, "Show Me Success," identifies "success-ready students and workforce development" as an area of priority for state public schools ("Show Me Success," n.d.). The Saint Louis Public School system identifies the ability to work effectively and efficiently with computer software as a required skill students must develop by the end of their math and science education ("What Every Child Should Know," n.d.). To fill this gap, a hybrid course is in development at the Collegiate School of Medicine (CSMB) and Bioscience in Saint Louis, Missouri to educate high school freshmen on these topics. In order to maximize the usability, effectiveness, and impact of this class, an evaluation plan has been drafted.

This evaluation plan describes the intended steps to determine the strengths and weaknesses of this hybrid class curriculum. A mixed methods approach will be undertaken to evaluate the development and ultimate effectiveness of the course. Due

to the interests of both teachers and students in the development and implementation of this curriculum, they are considered as primary and secondary stakeholders, respectively.

Introduction

This plan is broken down into two major sections: formative and summative. Within each of these sections, specific topics are considered in subsections, such as Purposes and Stakeholders of each. Stakeholders include students, teachers, administrators of the CSMB community. Though the information in these subsections overlap between evaluation plans, the length of time and stakeholders considered in each do differ. The main evaluative questions, the data collection methods used for each, and the data collection instruments are listed in each section, and a description of data collection instruments is available in the Appendices of this document.

The authors of this plan are three graduate students in the University of Missouri online instructional design program. All three have some degree of teaching experience in various settings. This course is being developed under the oversight of the Collegiate School of Medicine and Bioscience (CSMB) in the Saint Louis public school district, which is the workplace of one of the authors.

The goal of this project is to evaluate the formation, effectiveness, impact, and required maintenance of the digital literacy course. In order to approach this goal, the course will be assessed against the curricular standards of the school, the expectations of employers and internship hosts, the needs of students, and the perspectives of involved teachers. A mixed methods approach will be used in order to rigorously and comprehensively evaluate the curriculum. Quantitative approaches will be used in

formative usability testing and in effectiveness testing, and qualitative methods will be used to understand user experiences and stakeholder expectations.

Client Assumptions

Insights provided by Mr. Steele, the principal of CSMB, further underscore the necessity of this evaluative effort. According to Mr. Steele, even though students are surrounded by technology from a young age, there is a marked discrepancy between their proficiency with social media or entertainment apps and their understanding of fundamental digital operations. He observes that many students lack exposure to the inner workings of digital systems, such as system operations, file management, or basic programming, which are critical for a deeper digital literacy. Mr. Steele elaborates that while students are capable of using core productivity tools like Microsoft Word, PowerPoint, Excel, and Outlook at a basic level, they often miss essential functionalities. For example, in Microsoft Word, students typically can write and edit text but fail to engage with advanced formatting, effective document structuring, and proper citation management. Similar gaps exist in their use of PowerPoint, where a lack of familiarity with templates leads to unstructured presentations, and in Excel, where even rudimentary calculations and data analysis remain daunting. In Microsoft Outlook, poor email management and underutilized calendar features further reveal an overall deficiency in organized digital practices. These challenges extend beyond technical skills to include critical organizational strategies such as file management and following detailed instructions. Moreover, Mr. Steele emphasizes that these deficiencies are compounded by a lack of persistence and resilience, attributes essential for troubleshooting and adapting to technological challenges. His perspective strongly

supports the introduction of a comprehensive, hands-on freshman technology, digital literacy, and professional development course designed to transition students from basic users to innovative and thoughtful digital creators. The full interview is available in Appendix A.

Background

The purpose of the digital literacy curriculum is to enhance the knowledge and skills of students by providing materials and learning activities. There are nine units with associated learning goals: foundations of digital literacy, mastering word processing software, data management with spreadsheets, effective presentations with slideshow creation software, communication and organization with productivity software, cloud storage and collaboration, navigating the internet and effective search strategies, research skills and tools, and introduction to generative AI and responsible use. By the completion of these units, students should have gained relevant conceptual knowledge of foundational digital literacy concepts, the skill to work with the software presented, and the attitudes to responsibly and ethically interact with others in digital environments.

The projected lifespan of the course would be at least ten years. In that time, the software discussed in the course will undoubtedly update and change, but it is unlikely that the core functions of those software would become fully defunct in that time. Further, the fundamental skills taught in this course, such as critical thinking, evaluation of reliable sources, and readiness to attempt unfamiliar tasks, are broadly transferable skills.

These course materials would be used during the school year in a hybrid delivery format, with certain content presented as in-class lecture material and some through the

course's learning management system. The course to be evaluated is adapted from a similar one created by one of this plan's authors for a previous school district. The original course from which the current one is modeled took place over one year. Sessions were held twice a week for two hours, including interactive application activities of the concepts presented by a teacher. The author's new school district has less curricular flexibility, which will impact eventual implementation. There is, however, the motivation to implement such a course in order to help students excel in internship settings, as noted in the Client Assumptions above.

These course materials are currently prototypes. A week-by-week structure for which learning goals are presented has been drafted, as well as one module of financial analysis using spreadsheets for Unit 3, and some formative assessment material.

The focus of the formative evaluation will be the Unit 3 spreadsheet activity. It must meet the standards for usability, pedagogical usability, as well as supporting the learning goals of helping students work toward certification in Microsoft Office Systems (MOS). Although the module's activities take place in Google Sheets, the skills to navigate Google Sheets and Microsoft Excel broadly overlap. Further, this evaluation will focus on the presentation and structure of the module rather than content specifications.

The summative evaluation of the proposed Microsoft Certification and Digital Literacy Curriculum centers on assessing the program's overall effectiveness and impact following its implementation. A primary focus is to determine the extent to which the curriculum meets its stated learning objectives, particularly regarding the enhancement of students' digital literacy skills. Concurrently, the evaluation aims to

gauge the program's success in preparing students for Microsoft Certification examinations, utilizing metrics such as certification pass rates. The evaluation seeks to understand the curriculum's broader impact on students, including its practical benefits for using digital tools in academic or workplace settings, as well as its influence on student engagement. Identifying the program's strengths and weaknesses through feedback from both students and instructors is another critical component. Ultimately, the findings are intended to guide evidence-based decisions concerning the curriculum's future, such as potential refinements, expansion, continuation, or discontinuation, based on identified implementation challenges and recommendations for improvement. A mixed-methods approach, incorporating quantitative data from pre/post-tests and certification results alongside qualitative data from surveys and interviews, will be employed to achieve these evaluative goals.

Both evaluations will assess the curriculum against applicable standards.

Curricular Standards

- The Missouri Department of Elementary and Secondary Education Computer Science Standards (Ibid, “Computer Science Standards”)
- Microsoft OS Certifications for each curricular area (Microsoft)
- Saint Louis Public Schools curricular standards (Ibid. “What every child should know.”)

Usability and Accessibility

- Nielsen's 10 Usability Heuristics
- WCAG 2, the current standard for web accessibility

Instructional Strategy Standards

- Moore, Dickson-Deane & Liu, 2014 Pedagogical Usability standards

An additional potential challenge for evaluating the Unit 3 activity is that the CSMB has put in place a moratorium on research-related activities during the writing of this plan. This moratorium would prevent involving students of this school district with any usability testing of the module. However, since feedback from users in the target demographic is still required, other sources of potential testers must be considered.

Formative Evaluation Plan

Purposes

The purpose of this formative evaluation is to identify any needed revisions to the content or media in order to align with the client purposes listed in Client Assumptions.

The main purpose is to develop a comprehensive, hands-on course that helps students in early high school gain the knowledge, skills, and attitudes to effectively interact with digital technology. The client purposes also include the goals that the resulting course

- must be appropriate for a high school freshman setting
- must encourage attitudinal skills of persistence and resilience
- must introduce students to the underlying structures of computing systems
- must provide interactive assignments in word processing, spreadsheet, presentational, and productivity software
- must align with usability and curricular standards
- must meet the needs identified by CSMB teachers and prospective internship employers

The primary outcome of this formative evaluation will yield an evaluation report that will inform stakeholders of next steps to take in the development of this course.

Secondary outcomes would include additions or revisions to the curriculum prototypes. Recommendations will be included for instructional strategy, fitness for the target audience, usability, and curricular alignment. Although the main focus of the curriculum content will not change, the type of assignments, the content delivery, or the user interface may be updated.

Stakeholders for the Formative Plan

The main client of the evaluation is the principal, Frederick Steele, of the Collegiate School of Medicine and Bioscience (CSMB) in St Louis, Missouri. He shared his perspectives in a client interview, summarized in Appendix A. The primary audience or consumer group of the evaluation is the teaching staff that must disseminate these materials. CSMB has a staff of thirty-nine faculty members, twenty-three of whom are teaching staff (*Collegiate School of Medicine and Bioscience*, “Faculty Directory”). In particular, the teaching staff members most immediately affected by the evaluation include Everett Stuckey, a ninth and tenth grade counselor and the author of this report, Alexander Schenk, a Computer Science instructor, and Samantha Moyerman, an internship coordinator. The vested interests of Stuckey and Schenk in the outcomes of this evaluation are readily apparent: Stuckey initiated both the course and its evaluation, demonstrating a commitment to its continuous improvement, while Schenk’s classroom structure may be directly influenced by feedback on the digital literacy course. Additionally, this evaluation may interact with Moyerman’s work in connecting CSMB students to internships, as her role is fundamentally linked to ensuring that students acquire the robust digital skills required by potential employers.

The relevant stakeholders of this evaluation are any CSMB teachers other than the three listed above and CSMB students. Even teachers who do not directly lead the digital literacy course could be impacted by this evaluation in that the course that is ultimately developed will shape the digital literacy skills with which students enter their classes. Although those skills may not be a primary focus of a teacher’s given courses, students’ level of preparedness arising from the course evaluated herein may impact their level of engagement in other classes. Students will be affected in that the results of

the formative evaluation will determine what course content they encounter in the final version of the digital literacy course. Because of the intended lifespan of the digital literacy course, as many as ten freshman classes may encounter the content of this course that has been shaped by this formative evaluation.

Decisions for the Formative Plan

Because this formative evaluation will assess the curriculum content against client purposes, curricular standards, and identified needs, the evaluation results may help to decide the further direction of course development. This could include decisions about pacing, types of assignments, and the user interface for online elements. The Unit Three prototype will provide a working model for what works or does not work for the target demographic. Additionally, the implementation of the course may also be impacted by the results of this evaluation.

Questions for the Formative Plan

Formative evaluation questions are listed below. Component sub-questions that will direct data collection follow each main evaluation question. These questions and their related data collection methods are listed again in Table 1 in the “Methods” section.

1. What recommendations can be made to revise Unit Three activities to better align with identified needs?
 - a. What skills gaps have teachers noted?
 - b. What gaps have been noted in the literature?
 - c. What skills are employers looking for?
 - d. What curricular standards may guide revision?

2. What recommendations can be made to revise Unit Three in terms of pedagogical usability?
 - a. What are the intended pedagogical uses of these activities?
 - b. How well does the current prototype reflect these intended uses?
 - c. How is the alignment between current prototype and intended use?
3. What recommendations can be made to enhance the media of Unit Three's supplemental audio content, interactive tests, and video tutorials?
4. What recommendations can be made to optimize the Unit Three module for usability and accessibility?
 - a. How well does the prototype align with Nielsen's 10 Usability Heuristics?
 - b. How well does the prototype meet accessibility standards?
 - c. What problems have users identified?
5. How can the course structure be optimized for implementation at CSMB?
 - a. What implementation constraints does CSMB have for this course?

Participant Sample for the Formative Plan

The participants for the formative evaluation include teachers to answer a needs assessment survey, student participants for a usability test, a subject matter expert, and usability experts. Teachers will be able to give insight into the gaps in digital literacy that they observe in their classrooms, which will help to direct the type of content that students will be exposed to. Student usability testers can identify issues that the content may uniquely pose for those in their demographic.

For the teacher needs assessment survey, the target population (N) is the CSMB teaching faculty (N=23) (*Collegiate School of Medicine and Bioscience, “Faculty*

Directory"). We aim to achieve a response rate of at least 25% (approximately 6 responses), although the survey will be distributed to all 23 teaching staff members. The final evaluation report will state the actual number of surveys distributed and the achieved response rate. Depending on the actual response rate, there may still be adequate statistical power to determine an applicable statistical effect. For example, depending on the response rate, ANOVA may be used to find the difference in the mean score among the three curriculum topic options faculty are asked to weigh on a Likert scale (see Appendix B, stakeholder survey).

Student usability testers can identify issues that the content may uniquely pose for those in their demographic. Due to a research moratorium at CSMB preventing the involvement of current students, **convenience sampling** will be used to recruit five student participants for the usability test from the target demographic (high school freshmen) outside the CSMB district. Five participants is a generally accepted number for tests of systems with one main user demographic (Loranger, 2016). The recruitment plan for the student sample is convenience sampling in our target demographic but outside CSMB because of its current research moratorium. This moratorium indicates that excessive evaluation anxiety (XEA) may be at play in this school context, so communicating the value of evaluation is important for the success of this project. The research moratorium arose due to concerns within the school board over the disconnect between what services are provided to students versus the amount of research being done at CSMB. This likely also arose as a concern due to tension between local universities and the CSMB district. The disconnect between students lacking resources and an increase of research in schools are symptoms of the same problem, but

demonstrating that this evaluation may help to improve student access to new technologies and student learning outcomes remains critical throughout the process of the evaluation, particularly in interacting with CSMB.

Two main types of expert reviews will be conducted:

- A document review informed by the Subject Matter Expert (SME), Everett Stuckey, covering curricular standards, research, employer needs, and CSMB implementation constraints.
- A heuristic evaluation of the module prototype against Nielsen's heuristics conducted by usability experts Scott Kubik and Madeleine Jarecki.

Together, these constitute the expert reviews. Although five is also a generally accepted number for evaluators in an expert review (Wong, 2021), three are planned here because the combination of usability testing and expert review is likely to identify gaps missed by either test alone.

Method for the Formative Plan

The formative evaluation will take a mixed-methods approach. The first data collection method is a client interview that guided the development of this evaluation plan. A needs assessment of primary stakeholders will be conducted using a Microsoft Forms survey. The survey will focus on what skills teachers have identified as most critical to student success and most lacking in the status quo. This survey will include both quantitatively scored questions using a Likert scale and qualitative through open-ended questions. See Figure 1 of Appendix B for the full question list.

The supervised usability test will include four scenario-based tasks focusing on efficient navigation through the module. Users will be introduced to the test by a scripted

protocol (see Appendix B), given a chance to fill out demographic questions through a survey, then given tasks to complete. As they complete the tasks, they will be prompted for feedback through a think-aloud procedure. Administrators of the usability test will observe and take notes to help identify any problematic areas within the activity module. After each task, users will be given the chance to verbally note any strengths or weaknesses of the module to indicate their satisfaction with the task in a qualitative fashion. In addition to satisfaction, tasks will also be scored based on task effectiveness (percentage of sub-tasks completed effectively) and time on task. At the end of the test, users will be given the System Usability Scale (SUS) to rate their experience of the module as a whole in order to gather quantitative feedback. The SUS includes 10 items that users rate on a scale of 1-5, with 5 indicating the strongest agreement with the statement (Birkett, 2021). Most are positive statements “I think that I would like to use this system frequently” but some are reverse-coded. When scored, the SUS yields a score out of 100, where 68 is average (Sauro, 2011).

Two types of expert review will be conducted: document review and heuristic evaluation. The document review will compile a list of relevant curricular standards, research on student digital literacy skills, desired digital literacy skills for high school student interns, and the skills required to earn a MOS certification. The internship skills will be compiled from documentation from companies like KPMG, organizations like the Junior Achievers, and from general informational sources such as Indeed. CSMB implementation standards will also inform the document review, in order to make implementation recommendations for the course. This list of skills will provide criteria against which to assess course materials.

The second expert review will focus on the usability of the system. Three evaluators will independently assess the Unit Three activity module against Nielsen's Ten Usability Heuristics (Nielsen, 2024). The module's features will be scored on a scale of 1-4, with 1 indicating very poor demonstration of the heuristic and 4 indicating very good. Problems will be noted and rated on a severity scale of 0-4, 0 indicating no problem and 4 indicating a very severe problem. After the evaluators independently assess the module on these ten heuristics, scores will be discussed and averaged to come to a final score, which will be included in the following report along with recommendations for improving on any heuristic or ameliorating any identified problems.

Data analysis will proceed with the tool most appropriate to the type of data collected. Automated tools available within Microsoft Forms, such as word clouds, will help to determine common themes in free-response answers from teachers. These themes will be triangulated with those noted from the document review. Quantitative usability scores from the SUS and the heuristic evaluation will be compared against benchmarks to give a rating for the usability of the module.

Table 1.

Matrix of Formative Questions and Data Collection Methods.

Evaluation Questions	Evaluation Method	Data Collection Instrument	Data Analysis Method
1. Recommendations to align Unit Three with needs?	Formative		Triangulation of findings
1.a Gaps noted by teachers?	Formative	Microsoft Forms survey	Thematic analysis; word clouds
1.b Gaps noted by	Formative	Document review	Thematic analysis

literature?

1.c Skills sought by employers?	Formative	Document review	Thematic analysis
1.d Curricular standards?	Formative	Document review	Thematic analysis
2. Pedagogical usability recommendations?	Formative		Triangulation of findings
2.a. Intended pedagogical uses?	Formative	Client interview; expert review	Thematic analysis
2.b. Alignment between current prototype and intended use?	Formative	Expert review	Thematic analysis
3. Recommendations to enhance media	Formative	Expert review	Thematic analysis
4. Recommendations to optimize for usability and accessibility?	Formative		Comparison against benchmarks
4.a. Alignment between prototype and Nielsen's 10 Heuristics?	Formative	Heuristic evaluation	Scoring system
4.b. Alignment between prototype and accessibility standards?			
4.b. Problem areas identified by users?	Formative	Usability testing	System Usability Scale
5. Recommendations to optimize for implementation?	Formative		Recommendations based on constraints
5.a. CSMB optimization constraints?	Formative	Document review	Thematic analysis

Logistics for the Formative Plan

Responsibilities for different evaluative activities are summarized below and in Table *. Everett is responsible for deploying the needs assessment survey and other elements that directly interface with CSMB. Everett and Madeleine will administer at least one usability test of the module, with participants recruited via social connections or volunteer organizations. Each member will take one type of document review (curricular, research literature, job skills). Each member will conduct a heuristic evaluation separately, then those scores will be discussed and finalized. Scott and Madeleine will be responsible for the final revision of the report. Implementation of the formative evaluation will begin April 14. Evaluative activities should wrap up by May 2, which will allow sufficient time to analyze, report, and revise.

Table 2.

Formative evaluation team responsibilities.

Team Member	Responsibilities	Date
Everett	Deploy needs assessment	April 16, 2025
	Administer 1-2 usability tests	April 21-27, 2025
	Perform curricular standards document review	April 14-20, 2025
	Conduct heuristic evaluation	April 14-20, 2025
Madeleine	Administer 1-2 usability tests	April 21-27, 2025
	Perform research literature document review	April 14-20, 2025
	Conduct heuristic	April 14-20, 2025

	evaluation	
	Revise and formalize report	April 28 - May 15, 2025
Scott	Perform career skills document review	April 14-20, 2025
	Conduct heuristic evaluation	April 14-20, 2025
	Revise and formalize report	April 28 - May 15, 2025

Budget for the Formative Plan

The total budget for the formative evaluation would be \$7500. Because the school system may be able to perform these activities in-house, this price represents the percentage of time for cost allocation but may not change actual cash flow in the school district. Based on a pay rate of \$52,000 per year for a Saint Louis Public School system teacher, each hour of personnel time would be roughly \$27 (Saint Louis Public Schools. (n.d.) “Teacher, physics, 2025 -2026”). The project time for evaluation activities would be roughly sixty hours split among three evaluators, which would yield a total personnel cost of \$4860. Software expenses, such as access to Microsoft Office 365 and Qualtrics, could be as much as \$2000. Because the SLPS district already pays for these subscriptions, there would be no additional cost. Participant incentives for usability testers could be as much as \$50 (five participants at \$10 each). The \$590 difference between the total up to this point and \$7500 would be earmarked as a contingency budget.

Summative Evaluation Plan

Purposes

The purpose of this summative evaluation plan is to determine the worth and merit of the Microsoft Certification and Digital Literacy Curriculum. The intended outcome of the summative evaluation is to determine what impact the digital literacy curriculum is having on students. The evaluation will be used to determine to what extent the curriculum is improving digital literacy skills and passing of Microsoft Certification tests. The evaluation will provide insight into how well the curriculum is meeting its intended learning outcomes and provide additional feedback from students enrolled in the program. The evidence collected in the evaluation will help to determine if the curriculum is currently meeting its intended learning outcomes. Information learned from the program will help evaluators understand areas of strength and weakness in the curriculum. If significant areas of weakness are revealed in the assessment, this information can be used to make revisions to the curriculum.

Stakeholders for the Summative Plan

In the summative evaluation of the Microsoft Certification and Digital Literacy Curriculum there will be several primary audiences, including curriculum developers, students, administrators, and counselors. Stakeholders that are directly impacted by the evaluation also include teachers and students.

The evaluation client would be the building administration that is wanting to receive feedback on the educational program. If the program is having a positive impact on the student body, the curriculum can be expanded to reach a larger audience. School administrators, curriculum coordinators, and counselors will utilize the evaluation

data to make strategic decisions regarding resource allocation, teacher training, and overall curricular adjustments.

Teachers involved in the course are immediate stakeholders. They have an interest in the evaluation results since they are the ones implementing the curriculum. Our evaluation plan recognizes a broader group beyond this whose roles are equally critical to the program's long-term success. CSMB teachers not directly involved in delivering the digital literacy course will eventually work with students whose academic and organizational skills have been enhanced by the course revisions. As these teachers adapt their instructional strategies based on improved student competencies, the evaluation findings will inform school-wide professional development and curricular integration efforts.

The students are stakeholders because they are the ones using and learning via the curriculum. The information learned from their feedback and experiences can be used to improve the program for future students. Future students also represent a critical stakeholder group. Although many current students may not participate directly in the digital literacy course, they are indirectly affected by the broader instructional environment fostered by its enhancements. Future cohorts, in particular, will benefit from iterative curriculum refinements informed by this evaluation, ensuring that the course remains responsive to evolving technological and educational standards.

The secondary audiences that have indirect interest in the summative evaluation results include the school board, upper level district administration, and parents. The school board and district administration are the ultimate decision-makers in a school district. All curriculum and new programs are implemented with board approval. The

information learned from the summative assessment will be used to decide if the program continues in its current state, is revised, or removed from district curriculum. Parents are also a secondary audience since they have a vested interest in their child's education and in knowing what opportunities are available to their students. The college or career preparation different programs can offer their children is a critical concern for many parents.

Finally, the evaluation takes into account the systemic implications of enhanced digital literacy across the entire academic community. As students develop stronger digital skills, a ripple effect will be observed, leading to improved teaching practices and more effective learning outcomes in all subject areas. This comprehensive approach, underpinned by the insights from Mr. Steele and the active involvement of key stakeholder groups, reinforces the idea that the digital literacy curriculum is not an isolated intervention but a foundational element that supports the overall educational mission of CSMB.

Decisions for the Summative Plan

The results of the summative assessment will be used to guide decision-making related to curriculum refinement of the Microsoft Certification and Digital Literacy Curriculum. The results of the evaluation will give stakeholders feedback on the current state of the program and identify areas for improvement and areas of strength. If the program is shown to have many strengths and is shown to have a positive impact on the student body, the program can be expanded to include more students or additional grade levels. If significant weaknesses are identified this information can be used to

modify content or retrain teachers to improve learning outcomes for the students enrolled in the program.

Evidence of improved digital competencies among students can validate the expansion of the program, justify investments in new technologies, and encourage the integration of digital skills across various subject areas. By capturing both the immediate and systemic effects of the curriculum, this evaluation ensures that the digital literacy initiative not only meets its course-specific objectives but also contributes to a sustained enhancement of educational practices throughout the school.

Questions for the Summative Plan

1. How effective is the program in meeting its intended learning outcomes?
 - a. To what extent has the program improved student digital literacy skills?
 - b. How well does the program prepare students for Microsoft Certification exams?
 - c. Does the program benefit students in preparing for them to use digital tools in class or the workplace?
2. How do students and instructors describe their experiences learning through and using the CSMB digital literacy course?
 - a. What challenges have students, instructors, and administrators faced when implementing the curriculum?
 - b. What key features or resources of the curriculum have had the greatest impact on student engagement and success?
3. What elements are needed to support and improve the course going forward?

- a. What recommendations can be made to improve the program for future students?
- b. Are there any specific teaching strategies or support materials in place for students who may struggle with the content?

Participant Sample for the Summative Plan

The summative evaluation of Microsoft Certification and Digital Literacy Curriculum will include a wide range of participants to assess the program. The participants will include the following groups:

Students- Students are the primary consumers of the learning program. Since the ultimate goal of the program is to provide instruction in digital literacy, the assessment will measure how well students are learning and retaining information learned in the program. Each student enrolled in the program will be surveyed at the end of the course to ensure a wide range of data is collected. The program will enroll approximately 80 students so this will represent the anticipated number of participants in the data collection. The pre- and posttest scores can be collected anonymously in the aggregate from class performance information, and the survey will be delivered via email, with the possible incentive of extra credit in the course for completing the survey.

Teachers- Teachers play an important role in the delivery and development of the digital literacy program. The teachers are responsible for delivering instruction and interacting with students enrolled in the program. Teachers have a good understanding of the quality of instructional materials and may have ideas for improving them for students enrolled in the program. They could also give feedback on the structure of the course and course deliverables. There are approximately eight teachers that would be

directly involved in the program, this is the expected number to be used in our data collection.

School Administration (Principals, Counselors, Curriculum Coordinators)

School administrators have important responsibilities since they oversee the school building and are responsible for making key decisions within the school. The school administration ultimately decides if a program has value in the school building. They will also oversee how the program gets worked into the school schedule and how it is staffed to meet the needs of students. These stakeholders will be surveyed to determine their attitudes towards the current program. This information will be used to evaluate if any changes need to be made to the program in its current state.

Method for the Summative Plan

The summative evaluation of the Microsoft Certification and Digital Literacy Curriculum will be a mixed-methods approach that will provide a variety of qualitative and quantitative data. The inclusion of a large variety of data forms will give insight into the effectiveness of the program and identify any areas of improvement or revision. Students will be given a pre-test and post-test before and after participating in the program. This will allow stakeholders to quantify how much the students learned during the program. Another data point to analyze is how many students pass the Microsoft Certification tests. This is another quantitative method for identifying the number or percentage of students who earn certifications after completing the program. Teachers, administrators, and other stakeholders will be interviewed and surveyed to gain a greater understanding of the quality of the design of the program and identify strengths and weaknesses.

Instruments- The following instruments will be used in data collection during the summative evaluation:

- **Student Pretest and Post Test (Quantitative)**

- Students will be given a pretest prior to starting the program and a post test at the end of the program. The tests will be used to measure the amount of learning that took place in the program. Each student will take an identical test before and after the program. The identical nature of each test will give stakeholders feedback on how much information was learned by students enrolled in the program.

- **Student Surveys (Mixed Methods)**

- Students will be given a survey in class during the last week of instruction. The survey will give students perspectives on the quality of the program at the end of the course. The survey will consist of likert questions and open ended questions. This variety of questions will provide quantitative and qualitative data to the stakeholders.

- **Instructor Surveys (Mixed Methods)**

- Instructors will be surveyed to gain an understanding of their perspectives on the program. Instructors will be responsible for teaching the curriculum to students so they have unique perspectives on the program. Instructors will be given a survey that consists of both Likert and open ended questions. This survey will give both quantitative and qualitative since a variety of question types will be used in the survey.

- **Administrator Surveys (Mixed Methods)**

- Administrators will be surveyed to gain understanding of their attitudes towards the program. The building administrators are the key decision makers in the building. The building administrators will be given a survey that consists of Likert and open ended questions. The variety of question types will be used to provide both qualitative and quantitative data.
- **Microsoft Certification Test Results (Quantitative)**
 - Many students will take Microsoft Certification Tests upon completion of their coursework. The number of students taking and passing the certification tests will be tracked as a data collection method.

Summative Surveys: The summative surveys can be found in the Appendix section of this document. The surveys were created on Google Forms as a means of sharing the survey and collecting data. Separate surveys were given to teachers and students to gather feedback on the Microsoft Certification and Digital Literacy Curriculum.

Data Analysis Strategies

Pretest/Post Test: Statistical analyses can help to identify the number of correct and incorrect responses on each test, as well as multiple factors that may influence this performance. The evaluators will look at trends between each test to identify if there are any patterns indicating the level of success students had in completing the program.

Surveys (Mixed Methods): Likert and open-ended questions will be analyzed with descriptive analysis and thematic analysis. Descriptive statistics can be used to investigate trends in the quantitative data from the Likert-scaled questions. Open-ended questions will be examined for recurrent themes. The evaluation will use this information to identify strengths and weaknesses in the program.

Microsoft Certification Tests: Descriptive data based on the pass/fail rate of certification tests can be used to evaluate the program effectiveness in supporting student learning. This information can also be used to ensure that the curriculum is properly aligned with the Microsoft Certification Program.

Table 3.

Matrix of Summative Questions and Data Collection Methods

Evaluation Questions	Evaluation Method	Data Collection Instrument / Method	Data Analysis Method
1. Program effectiveness in meeting its intended learning outcomes?	Effectiveness / Impact	Pretest/Post Test Results	Examine pretest/post test results to determine what percentage of students learned essential content.
1.a. Improvement in student digital literacy skills?	Effectiveness	Pretest/Post Test, Student and staff surveys	Open Ended Survey Question- Thematic Analysis for common trends
1.b Quality of program preparation for Microsoft Certification exams?	Effectiveness	Pass/Fail Rates, Instructor Feedback	Descriptive and inferential statistics of students passing Certification tests
1.c. Benefit to students in preparing them to use digital tools in class or the workplace?	Impact	Student and instructor surveys	Thematic analysis of open ended survey questions
2. Experiences learning through and using the CSMB digital literacy course?	Effectiveness / Maintenance / Impact		
2.a. Challenges when implementing the curriculum?	Maintenance	Administrator, teacher, student survey results	Thematic analysis of open ended survey questions
2.b. Key curriculum features with the greatest impact on student engagement and success?	Impact	Student and teacher surveys	Check box selection- Quantitative Count Open Ended Follow up question- Thematic analysis

3. What elements are needed to support and improve the course going forward?	Maintenance		
3.a. Recommendations for future improvement?	Maintenance	Instructor, student and administrator survey results	Thematic analysis of open ended survey questions
3.b. Teaching strategies or support materials for struggling students?	Maintenance	Student and teacher survey results	Thematic analysis of open ended question

Logistics for the Summative Plan

Summative evaluation activities could commence as soon as the digital literacy course was implemented. The target date for course implementation would be August 2025. The pre-test for student knowledge would be administered at the beginning of every unit, and the post-test at the end of every unit. Everett would be responsible for collecting these scores from teachers, as well as the Microsoft Certification pass/fail rates. At the end of the school year, Scott would be responsible for deploying the teacher survey and the student survey and analyzing results. Madeleine would be responsible for collecting these findings in a final report, in which all members would make recommendations for the continuance, revision, or discontinuance of the course. A target wrap date for the report would be June 2026, which would allow CSMB to determine the direction of the course moving forward.

Table 4.

Summative evaluation team responsibilities.

Team Member	Responsibilities	Date
Everett	Collecting pre- and posttest scores	August 2025 - May 2026

	Collect Microsoft Certification pass/fail data	August 2025 - May 2026
Madeleine	Revise and formalize report	May - June 2026
Scott	Deploying surveys	April - May 2026

Budget for the Summative Plan

The total budget for the formative evaluation would be \$15,700. Based on a pay rate of \$52,000 per year for a Saint Louis Public School system teacher, each hour of personnel time would be roughly \$27 (Saint Louis Public Schools. (n.d.) "Teacher, physics, 2025 -2026"). The project time for evaluation activities would be roughly 120 hours split among three evaluators, which would yield a total personnel cost of \$9720. Because this evaluation may proceed in-house, this cost may be figured as a percentage of time allocated rather than direct cash flow. Software expenses, such as access to Microsoft Office 365 and Qualtrics, could be as much as \$2000. Because the SLPS school district already has access to these software programs, this cost may be possible to omit. The cost of each Certiport exam is \$100 (Microsoft, n.d.). For 80 students across four different types of assessments, this would total \$3200. The \$780 difference between the total up to this point and \$15,700 would be earmarked as a contingency budget.

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Appendix A: Client Interview

Mr. Steele: Even though students are growing up with technology all around them, there's a noticeable gap between how easily they use social media and entertainment apps and their deeper understanding of how computers work. Many students haven't had much exposure to the inner workings of digital systems, such as system operations, file management, or even the basics of programming.

Mr. Stuckey: You mentioned that while these students can operate digital devices, their skills in handling core productivity software are often superficial. Can you elaborate on their deficiencies in using tools like Microsoft Word, PowerPoint, Excel, and Outlook?

Mr. Steele: Absolutely. With Microsoft Word, many students can write and edit text, but they often miss out on advanced formatting, effective document structuring, and proper citation management, skills that are really important for school projects and future work. When it comes to Microsoft PowerPoint, many students do not know how to use templates at all. They find the software daunting and tend to stick with a very basic, unstructured approach rather than exploring its design options or built-in features. Similarly, in Microsoft Excel, many students struggle with even rudimentary calculations. They often feel overwhelmed by the interface and functions, so they avoid trying tasks like data analysis or even basic arithmetic operations. With Microsoft Outlook, issues include poor email management, a limited grasp of calendar integrations, and inadequate task management. These challenges point to a larger problem: a difficulty in moving from simple interaction with digital tools to a more thoughtful, organized, and analytical approach.

It sounds like these challenges extend beyond just technical skills. How do these deficiencies show up in broader areas like using a calendar, saving work, organizing files, and reading directions?

Mr. Steele: That's a great question. Many students don't have effective strategies for saving work and organizing files. They often save things haphazardly, which can lead to lost documents and confusion about which version of a file is the latest, a big problem in a school setting where organization is key. When it comes to using a calendar, especially in programs like Outlook, many students don't use it to its full potential for managing deadlines, appointments, and project timelines. This is made worse by a tendency to skim or even skip reading directions and technical documentation. Without taking the time to understand the details, they miss out on best practices that could really help them work more efficiently.

Beyond technical and organizational skills, what about personal attributes like persistence and resiliency? How do these come into play with digital literacy?

Mr. Steele: Persistence and resiliency are crucial when tackling digital challenges. Many students tend to get frustrated quickly when they run into problems, like a software glitch or a feature they don't understand. Instead of taking a step back and methodically troubleshooting or

looking for help, they often give up or try the same approach repeatedly without learning from their mistakes. This lack of persistence not only makes it harder for them to solve immediate issues but also stops them from developing the critical thinking skills they need to adapt to new challenges in technology.

Given these widespread deficiencies from application-specific skills in Microsoft Office to broader organizational and problem-solving challenges—what educational reforms do you think could help bridge these gaps?

Mr. Steele: I believe the solution lies in a comprehensive, hands-on approach. One promising intervention is a freshman technology, digital literacy, and professional development class. Such a course would lay a solid foundation by introducing students to the basics of computer science and the inner workings of digital systems, not just how to use them. It would also offer practical, hands-on instruction in essential productivity tools like Microsoft Word, PowerPoint, Excel, and Outlook. For instance, students would learn how to properly use templates in PowerPoint and perform even simple calculations in Excel without feeling overwhelmed. The class would include exercises focused on saving work, organizing files, and using digital calendars effectively. Additionally, by encouraging students to tackle challenges head-on, learn from their mistakes, and develop systematic problem-solving skills, the curriculum would help build persistence and resiliency. With this well-rounded approach, students can evolve from being mere users of technology to becoming innovative and thoughtful digital creators.

Thank you, Mr. Steele, for sharing your insights. Your perspective really sheds light on the digital literacy challenges faced by today's students and underscores the need for targeted, hands-on educational strategies.

Mr. Steele: Thank you. I'm confident that with the thoughtful introduction of a freshman technology, digital literacy, and professional development class, we can empower students to build a strong, well-rounded digital literacy that will serve them well in both school and their future careers.

Appendix B: Formative Data Collection Instruments

Figure 1.

Stakeholder Survey for Formative Assessment. [Link.](#)

9th grade Needs Assessment Survey: Computer & Professional Skills

Skills Assessment
Please rate the following aspects of student proficiency scale from 1 (Not Proficient) to 5 (Highly Proficient):

	1	2	3	4	5
Basic Computer Operations and Troubleshooting	<input type="radio"/>				
Proficiency with Office Software (word processing, spreadsheets, presentations)	<input type="radio"/>				
Digital Literacy (Internet research, cybersecurity awareness)	<input type="radio"/>				
Effective Communication (written, verbal, and digital)	<input type="radio"/>				
Teamwork and Collaboration	<input type="radio"/>				
Problem Solving and Critical Thinking	<input type="radio"/>				

In a brief response, please describe any other computer or professional skills you believe are lacking in our students and that should be addressed in the curriculum. [\[link\]](#)

Enter your answer

Submit

Never give out your password. [Report abuse](#)

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This content is created by the owner of the form. The data you submit will be sent to the form owner. Microsoft is not responsible for the privacy or security practices of its customers, including those of this form owner. Never give out your password.
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9th Grade Needs Assessment Survey: Computer & Professional Skills Assessment

1. Please rate the following aspects of student proficiency. Scale from 1 (Not proficient) to 5 (Highly proficient)

	1	2	3	4	5
Basic Computer Operations and Troubleshooting					
Proficiency with Office Software (word processing, spreadsheets, presentations)					
Digital literacy (Internet research, cybersecurity awareness)					
Effective Communication (written, verbal, and digital)					

Teamwork and Collaboration					
Problem Solving and Critical Thinking					

2. In a brief response, please describe any other computer or professional skills you believe are lacking in our students and that should be addressed in the curriculum.
 [Text entry]

Usability Test Protocol Script and Directions

Intro Script

Thanks for joining me for this usability test of a digital literacy course. We'll be looking at how easy it is for you to complete five tasks on this topic. It should take roughly 45 minutes.

This is a test of the system, not you. Please don't feel pressured by the success or failure of these tasks. Any issues you find will help us improve the course!

First, let's have you fill out these demographic questions, then we'll get to the test tasks.

(give them time to fill out the demographic questions)

For each task, I'll give you a short scenario. Try to approach each task from the mindset of that scenario. As you go, please narrate your thoughts and impressions aloud. For example, "I'm looking for the 'next' button." After each task, I'll have you answer some survey questions. Take a minute to familiarize yourself with the module.

Let me know when you're ready to begin.

(give them at most 5 minutes to explore the course. Return them to the homepage)

Task 1

You're a high school freshman enrolled in the Digital Literacy course. This week's assignments focus on spreadsheet software, so navigate to that module.

Task 2

You're planning your study time for the week, and need to estimate how long this module will take. Note how many pages of content there are, and click to view one of the videos.

Task 3

This week's main assignment involved 3 test exercises that are assigned within the module but must be completed using outside software. Navigate to the page that has these three exercises.

Task 4

Your teacher marked three Google Sheets terms that will be on your next quiz. Find and write down the definitions for “ticker” and “interval”

End of a Task

Task success script:

“Great, you [*task they just did*]. In one sentence, could you describe how this task went for you? Any obstacles you encountered?

Task failure:

“It’s okay to stop now. Thanks for taking the time to try that one! What obstacles did you face in this task?

Closing

“Thanks so much for your time! You gave some very helpful feedback on the site’s functions. This will be helpful in evaluating this digital literacy site. Any final comments or questions for today?”

Demographic Questions for the Usability Test

1. Are you a student? (Select one.)
 Yes
 No
2. Select your grade level. (Select one / Question not shown if “no” is selected on 1)
 6
 7
 8
 9
 10
 11
 12
 College
 Graduate school
3. What is your comfort level with technology? (Select one)
 Extremely uncomfortable
 Somewhat uncomfortable
 Neutral
 Somewhat comfortable
 Extremely comfortable

System Usability Scale (Birkett, 2021)

“The SUS includes 10 items:

I think that I would like to use this system frequently.

I found the system unnecessarily complex.

I thought the system was easy to use.

I think that I would need the support of a technical person to be able to use this system.

I found the various functions in this system were well integrated.

I thought there was too much inconsistency in this system.

I would imagine that most people would learn to use this system very quickly.

I found the system very cumbersome to use.

I felt very confident using the system.

I needed to learn a lot of things before I could get going with this system.

To score the SUS:

For odd items, subtract one from the user response.

For even-numbered items, subtract the user responses from five.

This scales all values from 0 to 4 (with 4 the most positive response).

Add up the converted responses for each user and multiply that total by 2.5. This converts the range of possible values from 0 to 100 instead of from 0 to 40." (Birkett, 2021)

Appendix C: Summative Data Collection Instruments

Figure 2.

Teacher Experiences Survey. Full questions below. [Link.](#)

The screenshot shows a Microsoft Forms survey page. At the top, it displays the title: "Microsoft Certification and Digital Literacy Curriculum Summative Evaluation- Survey of Teachers". Below the title is a descriptive text: "Please respond to each of the following questions. The purpose of this survey is to evaluate the Microsoft Certification and Digital Literacy courses offered at our school. The survey data will be used to evaluate the program and feedback will be used to improve the program as needed." Underneath this, there is an email address "madeleine.jarecki@gmail.com" followed by a "Switch account" link and a cloud icon. Below that is a note "Not shared". A red asterisk indicates a required question. The main question visible is "How effective is the program at improving student digital literacy skills? *". It includes five response options: "Very Effective", "Somewhat Effective", "Neutral", "Not Effective", and "Not Effective At All".

Microsoft Certification and Digital Literacy Curriculum Summative Evaluation- Survey of Teachers

Please respond to each of the following questions. The purpose of this survey is to evaluate the Microsoft Certification and Digital Literacy courses offered at our school. The survey data will be used to evaluate the program and feedback will be used to improve the program as needed.

1. How effective is the program at improving student digital literacy skills?
 - a. Very effective
 - b. Somewhat effective
 - c. Neutral
 - d. Not effective
 - e. Not effective at all
2. How well does the curriculum align with the student learning outcomes?

- a. Very Well
 - b. Somewhat Well
 - c. Neutral
 - d. Not Very Well
 - e. Not Well at All
3. How would you rate the overall curriculum in its current state (Lesson Plans, Activities, etc.)?
- a. Excellent
 - b. Good
 - c. Average
 - d. Poor
 - e. Very Poor
4. Did you feel prepared to teach the course?
- a. Yes
 - b. No
5. If you answered no, for what reasons did you feel unprepared to teach the course?
- a. [Text entry box]
6. In your opinion, did your students show improvements in digital literacy by taking the course?
- a. Yes
 - b. Somewhat
 - c. No
7. Do you think the curriculum properly prepares students for Microsoft Certification exams?
- a. Yes
 - b. Somewhat
 - c. No
8. What improvements would you suggest to enhance the curriculum for future students and teachers?
- a. [Text entry box]
9. Were there any specific student challenges that you observed during the course? Explain.
- a. [Text entry box]
10. What recommendations can be made to improve the program for future students?
- a. [Text entry box]
11. What are the key features or resources of the curriculum that you believe will have had the greatest impact on student engagement and success?
- a. [Text entry box]

Microsoft Certification and Digital Literacy Curriculum Summative Evaluation- Survey of Administrators

Please respond to each of the following questions. The purpose of this survey is to evaluate the Microsoft Certification and Digital Literacy courses offered at our school. The survey data will be used to evaluate the program and feedback will be used to improve the program as needed.

1. How effective is the program at improving student digital literacy skills?
 2. Very effective
 - a. Somewhat effective
 - b. Neutral
 - c. Not effective
 - d. Not effective at all
 3. How well does the curriculum align with the student learning outcomes?
 - a. Very Well
 - b. Somewhat Well
 - c. Neutral
 - d. Not Very Well
 - e. Not Well at All
 4. How would you rate the overall curriculum in its current state (Lesson Plans, Activities, etc.)?
 - a. Excellent
 - b. Good
 - c. Average
 - d. Poor
 - e. Very Poor
 5. Did you feel prepared to teach the course?
 - a. Yes
 - b. No
 6. If you answered no, for what reasons did you feel unprepared to teach the course?
 - a. [Text entry box]
 7. In your opinion, did your students show improvements in digital literacy by taking the course?
 - a. Yes
 - b. Somewhat
 - c. No
 8. Do you think the curriculum properly prepares students for Microsoft Certification exams?
 - a. Yes
 - b. Somewhat
 - c. No
 9. What improvements would you suggest to enhance the curriculum for future students and teachers?
 - a. [Text entry box]

10. Were there any specific student challenges that you observed during the course?
Explain.
 - a. [Text entry box]
11. What recommendations can be made to improve the program for future students?
 - a. [Text entry box]
12. What are the key features or resources of the curriculum that you believe will have had the greatest impact on student engagement and success?
 - a. [Text entry box]

Figure 3.

Sample Pre- and Posttest Questions Presented as Flashcards. Full questions available below.

Add symbol (within text)	Insert > Symbol	
Adjust page margins (mirrored)	Layout > Margin	
Add banded quote textbox.	Insert > Textbox > Select Specific Style	
Insert a table of contents.	References > TOC > Select Style	
Insert contents of a document located in the "My Documents" folder.	Insert > Object > Text From File > Browse	
Inspect a document (Remove headers/footers/water marks)	File > Check For Issues	
Add soft round bevel (picture effect)	Picture Tools > Format > Picture Effects > Bevel	
Insert a picture from file	Insert > Pictures	
Rearrange direction of SmartArt	Smart Art Tools > Design > Right to Left	

Table 5.

Sample Pre- and Posttest Questions.

Prompt given to student	Correct response path
Sort tables in ascending order	Table tools > Layout > Sort
Configure table so headings repeat on next page	Table tools > Layout > Data > Repeat header row
Create a table from text. Spread it across the entire width of the document.	Insert > Table > Convert to table > Auto fit to window
Add a footnote	References > Insert footnote
Add text “Draft” to status property	File > Properties > Advanced properties
Box page border (color / width)	Design Tab > Page > Borders
Bookmark	Insert > Link > Bookmark
Hyperlink	Insert > Link > Hyperlink
Add symbol (within text)	Insert > Symbol
Adjust page margins (mirrored)	Layout > Margin
Add banded quote textbox	Insert > Textbox > Select specific style
Insert a table of contents	References > TOC > Select style
Insert contents of a document located in the “My Documents” folder	Insert > Object > Text from File > Browse
Inspect a document (Remove headers / footers / watermarks)	File > Check for Issues
Add soft round bevel (picture effect)	Picture Tools > Format > Picture Effects > Bevel
Insert a picture from file	Insert > Pictures
Rearrange direction of SmartArt	Smart Art Tools > Design > Right to Left
Line Spacing	Home > Paragraph > Line Spacing Options
Format text (intense emphasis)	Highlight Text > Home > Styles
Insert banded header (not displayed on page one)	Insert > Header > Different First Page

Page background color	Design > Page Color
Change text to 2 columns (spacing 0.3" between)	Layout > Columns > More Columns > Adjust Spacing
Insert a next page section break.	Layout > Breaks > Next Page
Format a list by applying a custom bullet (from file)	Highlight Text > Home > Paragraph > Bullets > Define New Bullet
Decrease list levels	Home > Decrease Indent
Remove formatting from text	Highlight Text > Home > Clear All Formatting
Change the style set to casual.	Design > Document Formatting > Casual
Change line spacing to exactly 14pt	Home > Paragraph dialogue box > Spacing Exactly
Apply the strong style headings	Highlight Text > Home > Styles
Convert table to text (by tabs)	Table Tools > Layout > Data > Convert to Text
Change the color scheme of a diagram	SmartArt Tools > Design > Change Colors
Add alternative text to table	Right click > Table Properties > Alt Text
Inspect and remove personal information	File > Check for Issues > Inspect Document
Add a horizontal scroll shape and add text to it.	Insert > Shapes > Stars and Banners > Draw Shape > Right click > Add Text
Use go to feature (Heading)	Home > Editing > Find > Go To
Apply a highlight to text (turquoise)	Home > Font > Text Highlight Color
Reconfigure the list to start at 5.	Right click > Set Numbering Value
Merge Cells	Highlight > Right click > Merge