International Society for Technology in Education

ISTE SEAL OF ALIGNMENT REVIEW FINDINGS REPORT

Microsoft

Microsoft Office Specialist Courses (MOS)

July 2021

TABLE OF CONTENTS

ABOUT

ABOUT ISTE

The International Society for Technology in Education (ISTE) is the premier nonprofit membership organization serving educators and education leaders. ISTE is committed to empowering connected learners in a connected world and serves more than 100,000 education stakeholders throughout the world.

As the creator and steward of the definitive education technology standards, our mission is to empower learners to nourish in a connected world by cultivating a passionate professional learning community, linking educators and partners, leveraging knowledge and expertise, advocating for strategic policies, and continually improving learning and teaching.

ISTE SEAL OF ALIGNMENT

Resources and products designed with the ISTE Standards in mind are choosing to demonstrate their commitment to support critical digital age learning skills and knowledge. Regardless of a solution's intended grade level, purpose or content area, by addressing the ISTE Standards and earning a Seal of Alignment, a solution is shown to consciously, purposefully and meaningfully support best practices for digital age teaching and learning.

ISTE considers a solution aligned to the ISTE Standards only after an extensive review conducted by trained ISTE Seal of Alignment reviewers, and it has been determined to meet all critical elements of a particular standard indicator in accordance with specific review criteria.

By earning a Seal of Alignment, ISTE verifies that this product:

- Promotes critical technology skills
- Supports the use of technology in appropriate ways
- Contributes to the pedagogically robust use of technology for teaching and learning
- Aligns to the ISTE Standards in specific ways as described in the review finding report

RESOURCE DESCRIPTION

WHAT IS MICROSOFT OFFICE SPECIALIST [MOS]?

The resources reviewed consist of five teacher-led courses designed to help students develop knowledge and skills to improve their personal productivity by using Microsoft Word, Excel and PowerPoint and as a pathway to eventually earn certification. The courses within this curriculum have been primarily designed to prepare participants for the associated Microsoft Office Specialist (MOS) certification exams. The courses are offered in a portfolio of participant resources along with the certification exams. Although the courses are not required to earn certification, they are highly recommended by Microsoft for exam preparation.

The five MOS courses reviewed included:

1. MO-100: Microsoft Word (Word and Word 2019)
2. MO-200: Microsoft Excel (Excel and Excel 2019)
3. MO-300: Microsoft PowerPoint (PowerPoint and PowerPoint 2019)
4. MO-101: Microsoft Word Expert (Microsoft Apps 365 Word and Word 2019)
5. MO-201: Microsoft Excel Expert (Microsoft Apps 365 Excel and Excel 2019).

HOW IS MOS IMPLEMENTED?

The courses are designed as teacher-led learning experiences to be completed in approximately 40 hours each and offered "in a nine-week academic quarter in a school setting via daily 50-minute educator-led lessons." Teachers are provided with a toolkit of materials that include a course orientation, PowerPoint slides to use in class, supplemental assessments and a guide to a capstone project. Student facing materials include a course orientation, an etextbook, learning activity resources and a capstone guide. The courses are divided into modules which are subdivided into lessons. The core student learning materials are provided in both Word and PDF format.

A variety of assessment resources are incorporated into the curriculum. There are wrap-up questions with every lesson, cornerstone lessons with scorable student exercises and an end-of-course capstone project with its own scoring rubric. Additional assessment strategies and samples for teachers are also provided.

ISTE SEAL OF ALIGNMENT REVIEW

Product: Microsoft Office Specialist courses [MOS]
Organization: Microsoft
Date of Award: July 2021

REVIEW METHODOLOGY

ISTE Seal of Alignment reviews are conducted by a panel of education and instructional experts. Reviewers use data collected both separately and collectively to determine how a solution addresses specific elements described in each of the indicators of the ISTE Standards. Special instruments are used by reviewers to collect data on potential alignment across all resource materials. Alignment is determined based on the extent to which all or some of specific elements are addressed within the materials. Reviewers conduct regular calibrations to assure the validity and reliability of the results and final review findings are combined for an overall score for alignment on each individual indicator.

During the review process for *Microsoft Office Specialist*, reviewers:

- Collected data on when and how each activity addressed specific skills and knowledge described in the ISTE Standards for Standards at either a foundational or applied level
- Compiled findings to determine overall alignment across all ISTE Student standards and indicators.
- Used aggregate findings to form the basis of the overall alignment results.

SCOPE OF REVIEW

The five courses in the Microsoft Office Specialist curriculum were reviewed for alignment against the ISTE Standards for Students. ISTE reviewers examined both the learning materials for students and the support materials for educators related to this curriculum.

Student materials included “Course Orientation, Student Guides, Learning Activity Resources, Lesson Answer Keys, Cornerstone and Capstone Student Guides.” Educator materials included “Course Orientation, Teaching Guides, Lesson Plans, Educator Presentations, Learning Activity Solution Files, Cornerstone and Capstone Resources” and a course evaluation form. Student files are available as OneNote, PDF ebook and Word document versions.

REVIEW FINDINGS

The ISTE Standards can be aligned at the following levels:

- Foundational - Resources and activities aligned at the *foundational* level primarily focus on skills and knowledge that facilitate skill acquisition to eventually meet ISTE Standard indicators.
- Applied – Resources and activities aligned at the *applied* level primarily focus on practical, real-world, and/or relevant opportunities to practice the skills and knowledge learned in the curriculum.

MOS was found to align to the ISTE Standards for Students in the following areas:

ISTE STANDARDS FOR STUDENTS

	Standard 1 Empowered Learner	Standard 2 Digital Citizen	Standard 3 Knowledge Constructor	Standard 4 Collaborator	Standard 5 Innovative Designer	Standard 6 Computational Thinker	Standard 7 Creative Communicator
Indicator A							
Indicator B							
Indicator C							
Indicator D							

Foundational resources and activities focus primarily on knowledge that facilitates skills acquisition to eventually meet ISTE Standards indicators.

Applied resources and activities focus primarily on practical, real-world and/or relevant opportunities to practice the skills and knowledge learned in the curriculum.

MOS was found to address the ISTE Standards for Students in the following ways:

ISTE STANDARD	FOUNDATIONAL FINDING STATEMENT	APPLIED FINDING STATEMENT
1. Empowered Learner. Students leverage technology to take an active role in choosing, achieving and demonstrating competency in their learning goals, informed by the learning sciences.		
1.a. Articulate and set personal learning goals, develop strategies leveraging technology to achieve them and reflect on the learning process itself to improve learning outcomes.	All the courses engage students in learning to use software applications that enable them to plan, manage, and reflect on their learning. Word, Excel and PowerPoint all offer differing environments and a diverse set of creation tools and strategies that can be used to support goal setting, learning management, and reflection.	At the end of each module in the courses students complete a capstone project that requires them to select an opportunity or problem that is personally meaningful, to set goals and to create a plan for achieving them. Once the project is complete they share it with others and then reflect on challenges they experienced, skills they learned, tools they used and how well the project met the goals they set.
1.b. Build networks and customize their learning environments in ways that support the learning process.	Students learn how to configure Word, Excel and PowerPoint applications in a variety of ways to use them more efficiently and to adapt them to differing work needs and projects including advanced features such as expanding language options, creating macros and incorporating assistive features.	In the Word, Excel and PowerPoint courses students learn how to use customization features of these applications to adjust appearance, function and performance to make them more efficient and effective for their personal or collaborative use. Customization includes such things as menu options, language preferences, keyboard shortcuts, templates, styles and the use of macros.
1.c. Use technology to seek feedback that informs and improves their practice and to demonstrate their learning in a variety of ways.	Students learn how to use features such as joint editing and shared comments in various Office applications that enable them to seek feedback to improve their creations and extend their learning.	

1.d. Understand the fundamental concepts of technology operations, demonstrate the ability to choose, use and troubleshoot current technologies and are able to transfer their knowledge to explore emerging technologies.	While the main focus is on learning to use the software applications, to successfully complete the course students must also demonstrate understanding and use of current hardware and network technologies involved in the learning environment itself. As they learn about word processing, spreadsheet, and presentation software they have the opportunity to learn basic technology concepts and skills and how they can transfer from one application to another.	In the Capstone projects included in each course, students have the opportunity to demonstrate the knowledge and skills they have learned by using a wide array of software and hardware to create real world products and to reflect on the learning and creation process. The knowledge and skills used in one capstone project serve as the foundation for reinforcing and extending them in successive projects.
2. Digital Citizen. Students recognize the rights, responsibilities and opportunities of living, learning and working in an interconnected digital world, and they act and model in ways that are safe, legal and ethical.		
2.a. Cultivate and manage their digital identity and reputation and are aware of the permanence of their actions in the digital world.		
2.b. Engage in positive, safe, legal and ethical behavior when using technology, including social interactions online or when using networked devices.		
2.c. Demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.	Students learn how to use tools for creating and managing footnotes, citations and bibliographies that support copyright.	
2.d. Manage their personal data to maintain digital privacy and security and are aware of data-collection	Students learn how to configure and use features of various Office applications that enable them to use and share documents while protecting the integrity of the documents as well as the	In multiple courses of the Microsoft Office Suite students learn to manage and protect personal and business data by using different strategies for limiting and restricting access to

technology used to track their navigation online.	identity of authors. Features include searching for hidden information, using passwords and making documents "read only."	documents, understanding secure password practices and using encryption where needed. The tools allow a diverse set of restrictions on editing, formatting and identity protection that adds security while allowing collaborative work on documents.
3. Knowledge Constructor. Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.		
3.a. Plan and employ effective research strategies to locate information and other resources for their intellectual or creative pursuits.		
3.b. Evaluate the accuracy, perspective, credibility and relevance of information, media, data or other resources.		
3.c. Curate information from digital resources using a variety of tools and methods to create collections of artifacts that demonstrate meaningful connections or conclusions.	All the applications taught in these courses facilitate the creation, management, organization, and presentation of data for learning and communication. Each course highlights specific enhancements the tools can provide such as multiple ways to organize and present information using tables, lists, charts and images. They also learn how to create their own graphic organizers and concept maps using shapes and drawing tools.	

3.d. Build knowledge by actively exploring real-world issues and problems, developing ideas and theories and pursuing answers and solutions.	All these courses use a shared business scenario that provides a real world context for learning how and why to use many features of the applications. Knowledge and skills acquired by the directed practice in the early modules of the courses in this real world context provide a bridge to the more challenging knowledge building that is continued in the capstone project.	The capstone projects offer students the challenge of knowledge building in a project of personal interest to them. The projects require students to identify a real world problem or issue, develop a plan that uses Word, Excel or PowerPoint applications to help solve it, and create a product that demonstrates possible solutions. Projects are then shared with other students or real world audiences to test its ideas and implementation.
4. Innovative Designer. Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.		
4.a. Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts or solving authentic problems.	In the Word and PowerPoint courses, students learn basic design principles and how they can be used with multiple tools available in those applications. Excel provides tools for graphs, charts and visual models as well.	The capstone projects in all the courses include a structured design process that students learn to apply to individual projects and to transfer and refine in other courses. The capstone instructions and rubric guide students toward the creation of meaningful solutions to real world problems.
4.b. Select and use digital tools to plan and manage a design process that considers design constraints and calculated risks.	Students practice using basic planning features and design strategies and tools in both Word and Excel that can be used in planning and managing projects involving complex design processes.	
4.c. Develop, test and refine prototypes as part of a cyclical design process.	All courses help students learn how to use tools designed for repeated editing and revision and include examples of prototyping textual and graphic documents and presentations.	

4.d. Exhibit a tolerance for ambiguity, perseverance and the capacity to work with open-ended problems.		
5. Computational Thinker. Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.		
5.a. Formulate problem definitions suited for technology-assisted methods such as data analysis, abstract models and algorithmic thinking in exploring and finding solutions.	In the capstone projects for all courses, students are required to identify a project and determine how the Office application tools and strategies they have learned can be used to solve it. Students then lay out step-by-step processes based on algorithmic thinking, to illustrate how technology assisted methods can be used to approach a solution.	
5.b. Collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.	Students learn how to use tools to collect and represent data in a variety of ways including the creation of indexes, tables, graphs and charts. In the capstone projects students identify and analyze relevant project data and analyze it to reach a conclusion and present a solution.	
5.c. Break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.	In learning to use Excel, students practice deconstructing data into component parts for analysis and representation in various ways including graphs, charts and models that facilitate problem solving.	In the capstone projects, students learn how to identify a problem to solve then break it into logical components including how to organize and extract information, and analyze data to create models needed to pursue a solution.

5.d. Understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.	Learning experiences throughout these courses demonstrate how to use a stepwise approach to accomplishing a goal. Automated solutions such as macros show how automation can save time and illustrate algorithmic approaches. Capstone projects reinforce this learning with an opportunity to create and test such solutions.	
6. Creative Communicator. Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals.		
6.a. Choose the appropriate platforms and tools for meeting the desired objectives of their creation or communication.	In all courses, students are introduced in detail to the extensive and diverse features of the Word, Excel and PowerPoint applications. The business scenario is used to show how they can be selected and used to create products to meet specific objectives. By learning a variety of customization features in the tools students learn how to adapt their products to specific situations and audiences.	The capstone projects in all courses require students to select and use the most appropriate tools to accomplish a well defined goal by creating documents and other products.
6.b. Create original works or responsibly repurpose or remix digital resources into new creations.	Throughout the courses, students learn how to use various features of the tools to create original works or remix existing works such as letters, reports, presentations, flyers and graphic artifacts.	The capstone projects at the end of every course require students to create an original work of some kind including written reports, graphic models and multimedia presentations.
6.c. Communicate complex ideas clearly and effectively by creating or using a variety of digital objects such as visualizations, models or simulations.	Learning to use the Office Suite applications prepares students to present information in a variety of styles and formats that can enable them to consider how to adjust their communications to address topics and audiences clearly and effectively.	In the capstone projects, students have the opportunity to apply and test their abilities to present their project recommendations to an audience in ways that are clear and effective and to get feedback on their success.
6.d. Publish or present content that customizes the	Learning to use these applications prepares students to present information in a variety of styles and formats that can	In the capstone projects, students have the opportunity to apply and test their abilities to present their project

message and medium for their intended audiences.	enable them to consider how to adjust their communications to specific audiences including customizations of style, format, medium and even language.	recommendations to an audience in ways that are customized to their audiences and to get feedback on their success.
7. Global Collaborator. Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.		
7.a. Use digital tools to connect with learners from a variety of backgrounds and cultures, engaging with them in ways that broaden mutual understanding and learning.	Throughout the courses, students learn how Word, Excel and PowerPoint can be used not just to create and communicate informative documents but also to share them with others. Features that allow users to access documents remotely offer opportunities for connecting and engaging with diverse learners.	
7.b. Use collaborative technologies to work with others, including peers, experts or community members, to examine issues and problems from multiple viewpoints.	Throughout the courses students learn how Word, Excel and PowerPoint can be used not just to create and communicate informative documents but also to share them with others. The capstone projects require students to solicit feedback from others and are encouraged to examine their work from multiple viewpoints.	
7.c. Contribute constructively to project teams, assuming various roles and responsibilities to work effectively toward a common goal.	Throughout the courses students learn how to use the collaborative features of the Word, Excel and PowerPoint tools to co-create and share information. In the capstone project rubric, teamwork and leadership are both cited as outcomes to be measured.	
7.d. Explore local and global issues and use collaborative technologies to work with others to investigate solutions.	The capstone projects require students to explore a local or global issue of interest to them and have the opportunity to use the collaborative features of the Office tools they have learned.	

CONCLUSION

One of the great strengths of the Microsoft Office Specialist suite of courses is that they offer entry points for a wide range of students from beginning to intermediate and advanced. The student-facing materials have been designed to be inviting, engaging, and interactive in a way that will appeal to users of all ages for both learning and preparing participants for the associated certification exams.

In addition to extensive text material graphics, videos and multimedia presentations are included. Likewise, the courses include a broad range of support materials for educators including a course orientation, teaching guide, lesson plans, educator presentations, supplemental assessment resources, learning activity solution files, cornerstone/capstone resources, and a course evaluation form.

Flexibility is also a strength. Key documents are available in Word, PDF and OneNote formats. The capstone projects allow students to choose topics of interest and importance to them. A variety of assessment strategies are encouraged and supported.

These courses support a number of the ISTE Standards for Students at both the Foundational and Applied levels. While they focus first on “learning to use technology” by introducing participants to current as well as emerging tools and features, they also enable them to test and affirm their knowledge and skills with opportunities to demonstrate that they can “use technology to learn.” Both are important skill sets, and it is a strength that the courses enable students to do both. These courses will be a valuable resource to educators interested in engaging students in the effective use of technology as an amplifier of learning.