Amity – Region 5   **Draft Digital Literacy Standards**

This Scope and Sequence is adapted from the Fresno County Office of Education Recommended Digital Literacy and Technology Skills to Support the California Common Core State Standards.

		Grades 7-8	Grades 9-12
Demonstrate proficiency in the use of computers and applications as well as an understanding of the concepts underlying hardware, software and connectivity.	A. Basic Operations	1. Use features of a computer operating system (e.g., determine available space on local storage devices and external storage resources, access the size and format of files, and determine the version of an application). 2. Identify successful troubleshooting strategies for minor hardware and software issues/problems (e.g., "frozen screen"). 3. Independently operate peripheral equipment (e.g., scanner, digital camera), if available. 4. Identify and use (save and access) a variety of storage media (e.g., flash drives, school servers, and online storage spaces). 5. Demonstrate basic keyboarding skills (e.g. typing with two hands on the keyboard and use of keyboard shortcuts), and mouse skills (e.g. hover, drag, highlight, etc.) 6. Create, name, and save a range of file types in the most appropriate virtual space. 7. Organize and store files in the most useful way possible.	1. Manage multiple the platform, version, properties, function, and Inter-operability of computing devices including a wide range of devices that compute and/or manage digital media. *2.* Use online help and other support to learn about features of hardware and software, as well as to assess and resolve problems. *3.* Install and uninstall software; compress and expand files (as per AUP). *4.* Explain effective backup and recovery strategies. *5.* Determine appropriate for a given task (e.g., features, versions, capacity). 6. Demonstrate keyboarding techniques, including the use of keyboard shortcuts. *7.* Identify and assess the capabilities and limitations of emerging technologies.
	B. Word Processing & Desktop Publishing	8. Demonstrate use of features in word processing applications (e.g., tabs, indents, headers and footers (including "different first page"), bullet and automatic numbering, alignments, columns, tables, text formatting, margin size, object text wrapping, and equation writing). 9. Create, save, open, and import a document in different file formats (e.g. PDF, Google Doc).	8. Apply advanced formatting and page layout features when appropriate (e.g., columns, templates, and styles). 9. Use editing features appropriately (e.g., track changes, insert comments).
	C. Database	10. Use library and online databases to access information.	10. Save database files in various formats.

	D. Spreadsheet (Tables and Graphs)	11. Use spreadsheets in various applications (e.g., Excel, Google Spreadsheet, Numbers) to calculate, graph, organize, and present data. 12. Create an original spreadsheet by entering usable data. 13. Use formulas, row and column headings, merge and center, and relative cell addressing. 14. Use various data formats (e.g., numbers, dates, plain text, percentage, currency, etc.) as appropriate. 15. Produce simple and logical graphs from a spreadsheet. 16. Distinguish among different types of charts and graphs, and choose the most appropriate type to represent given data. 17. Apply basic formatting features to customize tables and graphs. 18. Utilize Print Option to preview print job, and access and use page setup.	11. Define and use functions of a spreadsheet application (e.g., sort, filter, find). 12. Use formulas and functions appropriately and accurately. 13. Explain and use advanced formatting features of a spreadsheet application (e.g., reposition columns and rows, add and name worksheets). 14. Differentiate between formulas with absolute and relative cell references. 15. Use multiple sheets within a workbook, and create links among worksheets to solve problems. 16. Import and export data between spreadsheets and other applications. 17. Create and use pivot tables. 18. Understand how various formatting options are used to convey information in charts or graphs.
	E. Internet, Networking & Online Communications	19. Use Web browsing to access information (e.g., enter a URL, access links, create bookmarks/favorites, print Web pages). 20. Evaluate websites for reliability. 21. Use e-mail functions and features (e.g., replying, forwarding, attachments, subject lines, signature, and address book.)	19. Explain and demonstrate effective search strategies for locating and retrieving electronic information (e.g., using syntax and Boolean logic operators). 20. Describe good practices for password protection and authentication. 21. Understand terminology related to Web page authoring (e.g., HTML, URL, links, browsers, plug-ins, Web servers).
	F. Multimedia & Presentation Tools	22. Use a range of technology tools to create a multimedia presentation using effective message design (short phrases and readable font), uploaded/inserted graphics, hyperlinks, transitions/paths, and custom animations. 23. Use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of work.	22. Use a variety of applications to plan, create, and edit multimedia products (e.g., slide presentations, videos, animations, simulations, podcasts). 23. Link information residing in different applications (e.g., linking a chart in a word-processing document to the spreadsheet where it was created).

| Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school and in society. | A. Ethics, Safety & Society | 24. Demonstrate compliance with the school's Acceptable Use Policy.
25. Explain ethical issues related to privacy and plagiarism.
26. Explain how copyright law protects the ownership of intellectual property, and explain possible consequences of violating the law.
27. Explain issues related to the responsible use of technology (e.g., privacy, security).
28. Explain fair use guidelines for using copyrighted materials (e.g., images, music, video, text) in school projects.
29. Describe appropriate usage and the potential risks with communication tools and digital information (e.g., chats, instant messaging, blog, Internet, mobile phones, texting, and social-networking sites).
30. Provide examples of safe and unsafe practices online.
31. Describe cyber-bullying and ways to report and prevent it. | 24. Identify examples of plagiarism, and discuss the possible consequences of plagiarizing the work of others.
25. Write correct in-text citations and reference lists for text and images gathered from electronic sources.
26. Give examples of the appropriate and responsible use of communication tools (e.g., chats, instant messaging, blogs, wikis).
27. Discuss misuse of technology for personal and commercial reasons (e.g., software piracy, unauthorized file sharing/downloading, virus spreading, and hacking); explain possible consequences.
28. Evaluate school and work environments in terms of ergonomic practices.
29. Describe and use safe and appropriate practices when participating in online communities (e.g., discussion groups, blogs, social-networking sites).
30. Explain and use practices to protect one's personal safety online (e.g., not sharing personal information with strangers, being alert for online predators, reporting suspicious activities).
31. Explain ways individuals can protect their technology systems and information from unethical users. |

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Demonstrate the ability to use technology for research, critical thinking, decision making, communication and collaboration, creativity and innovation.	A. Research (Gathering & Using Information)	32. Demonstrate effective searching and browsing strategies when working on projects. 33. Collect, organize, and analyze digital information from a variety of sources, with correct citation practice for each of the varied media used (e.g., website, online book, photo, online newspaper, etc.) 34. Select the most appropriate search engines for specific research tasks. 35. Identify successful troubleshooting strategies for minor browser issues/problems. 36. Use a variety of computing devices (e.g., probeware, handheld computers, digital cameras, scanners) to collect, analyze, and present information for curriculum assignments. 37. Analyze and explain how media and technology can be used to distort, exaggerate, and misrepresent information.	32. Determine and demonstrate strategies for efficiently collecting and organizing information from electronic sources. 33. Compare, evaluate, and select appropriate electronic resources to locate specific information. 34. Select the most appropriate search engines and directories for specific research tasks. 35. Search for information within an electronic source (e.g., using the find command). 36. Evaluate the authenticity, accuracy, appropriateness, and bias of electronic resources, including Web sites. 37. Analyze the values and points of view that are presented in media messages.
	C. Communication & Collaboration	38. Plan, design, and develop a range of multimedia product to present research findings and creative ideas effectively, citing sources. 39. Identify differences between various media and explain issues associated with repurposing information from one medium to another (e.g., from print to the Web). 40. Use a variety of telecommunication tools (e.g., e-mail, Web pages, blogs, etc.) to collaborate and communicate with peers, experts, and other audiences (at district's discretion). 41. Use a variety of multi-user software programs (adjusting sharing and privacy settings as appropriate) to work in partnership with peers, teachers, and beyond the school walls, to create presentations, documents, spreadsheets, projects, informational web pages, etc.	38. Use a variety of media to present information for specific purposes (e.g., reports, research papers, presentations, newsletters, Web sites, podcasts, blogs), citing sources. 39. Demonstrate how the use of various techniques and effects (e.g., editing, music, color, rhetorical devices) can be used to convey meaning in media. 40. Use online communication tools to collaborate with peers, community members, and field experts as appropriate (e.g., bulletin boards, discussion forums, listservs, Web conferencing). 41. Plan and implement a collaborative project with students in other classrooms and schools using telecommunications tools (e.g., e-mail, discussion forums, groupware, interactive Web sites, video-conferencing).

		Grades 7-8	Indicators
Demonstrate proficiency in the use of computers and applications as well as an understanding of the concepts underlying hardware, software and connectivity.	A. Basic Operations	1. Use features of a computer operating system (e.g., determine available space on local storage devices and external storage resources, access the size and format of files, and determine the version of an application). 2. Identify successful troubleshooting strategies for minor hardware and software issues/problems (e.g., "frozen screen"). 3. Independently operate peripheral equipment (e.g., scanner, digital camera), if available. 4. Identify and use (save and access) a variety of storage media (e.g., flash drives, school servers, and online storage spaces). 5. Demonstrate basic keyboarding skills (e.g. typing with two hands on the keyboard and use of keyboard shortcuts), and mouse skills (e.g. hover, drag, highlight, etc.) 6. Create, name, and save a range of file types in the most appropriate virtual space. 7. Organize and store files in the most useful way possible.	1 Navigates to correct location to ascertain storage and software version information. 2 Familiar with 'CRTL-ALT-DELETE' and the *Task Manager* window. Identifies rare instances when a 'hard' shutdown is required. Changes browser to ascertain if problem is program/browser issue. Problem solves by closing program and reopening. 3. As available and required: takes digital pictures and/or videos for projects; uses scanner to create a PDF. 4 Creates and saves files to own network folder; student shared drives; flashdrives; Google Docs (both as a Google File and other), etc. 5 Uses two hands on the keyboard. Demonstrates knowledge of keyboard shortcuts and mousing skills on projects and standardized tests. 6 Transfers files to other locations via flash drives, NAPS, Drop Folder, Dropbox, Moodle, Google, iCloud, etc. Accesses files saved in other locations such as the above. 7 Creates folders in personal folder to organize files.

| | B. Word Processing & Desktop Publishing | 8. Demonstrate use of features in word processing applications (e.g., tabs, indents, headers and footers (including "different first page"), bullet and automatic numbering, alignments, columns, tables, text formatting, margin size, object text wrapping, and equation writing).

9. Create, save, open, and import a document in different file formats (e.g. PDF, Google Doc). | 8a Indents paragraphs with tabs
8b Uses tabs for spacing as appropriate
8c Inserts automatic page numbers
8d Employs different alignments for text
8e Uses automatic button lists and numbering features
8f Creates and works in columns. Uses columns and page breaks
8g Inserts and manipulates tables
8h Uses font effects for emphasis i.e. bold, italics, size, underline, etc.
8i Inserts headers and/or footers
8j Formats headers/footers with "different first page"
8k Manipulates graphics and objects using text wrap options (tight, square, in-line w/ text, top/bottom, in front of text)
8l Adjusts margin size
8m Inserts and uses equations
9 Use different file formats |
| | C. Database | 10. Use library and online databases to access information. | 10 Use of databases for projects. |

| | D. Spreadsheet (Tables and Graphs) | 11. Use spreadsheets in various applications (e.g., Excel, Google Spreadsheet, Numbers) to calculate, graph, organize, and present data.
12. Create an original spreadsheet by entering usable data.
13. Use formulas, row and column headings, merge and center, and relative cell addressing.
14. Use various data formats (e.g., numbers, dates, plain text, percentage, currency, etc.) as appropriate.
15. Produce simple and logical graphs from a spreadsheet.
16. Distinguish among different types of charts and graphs, and choose the most appropriate type to represent given data.
17. Apply basic formatting features to customize tables and graphs.
18. Utilize Print Option to preview print job, and access and use page setup. | 11 Creates organized and logical spreadsheets in various applications and is able to save and convert between the applications.
12 Enters data and recognizes unusable data (e.g., "8 minutes" cannot be graphed as a number)
13 Titles spreadsheets and information by using row and column headings, and merge & center. Copies and pastes and/or uses fill down to copy/move formulas (relative cell addressing). Knowledgeable of term "relative cell addressing."
14 Uses both Ribbon Icons and pull down menus to format the data as required on files
15 Constructs graphs by highlighting the correct cells for specific project chart (e.g., does not highlight too few or extra cells). Can distinguish between logical and inappropriate chart/display of data).
16 Chooses correct graph to display the data in the most organized and logical view.
17 Labels title and axes. Includes title row on table.
18 Uses Print Preview BEFORE printing and realigns data and graph as needed so information is printed correctly (e.g., charts are not divided up between two papers, student prints what is desired so reprinting is not needed - saves paper and ink!). Recognizes that printing over and over is NOT the correct procedure to obtain desired printout. Adds name and other information into header, footers, and other locations accessed through page setup on the print window. |
| | E. Internet, Networking & Online Communications | 19. Use Web browsing to access information (e.g., enter a URL, access links, create bookmarks/favorites, print Web pages).
20. Evaluate websites for reliability.
21. Use e-mail functions and features (e.g., replying, forwarding, attachments, subject lines, signature, and address book.) | 19 Uses Web browsing to access information (e.g., enters a URL, accesses links, creates bookmarks/favorites, prints Web pages).
20. Distinguishes between reliable webpage and possible unreliable source.
21. Uses and familiar with e-mail functions and features (e.g., reply, forward, attach, subject line, signatures, and address book.) |

	F. Multimedia & Presentation Tools	22. Use a range of technology tools to create a multimedia presentation using effective message design (short phrases and readable font), uploaded/inserted graphics, hyperlinks, transitions/paths, and custom animations. 23. Use a variety of technology tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to maximize the accuracy of work.	22 Familiar with varied multimedia software. Builds successful and 'professional' multimedia presentations and presents appropriately (e.g., includes bulleted points (not sentences and/or paragraphs), expands upon bulleted items (does not read ALL information from slides), includes graphics, links, animations, etc. to enhance presentation). 23 Uses tools (e.g., dictionary, thesaurus, grammar-checker, calculator) to ensure accurate copy of FINAL copy. From software that does not have grammar and spell check - copy text into WORD or another appropriate media to check accuracy of work before 'publishing.'
Demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media at home, in school and in society.	A. Ethics, Safety & Society	24. Demonstrate compliance with the school's Acceptable Use Policy. 25. Explain ethical issues related to privacy and plagiarism. 26. Explain how copyright law protects the ownership of intellectual property, and explain possible consequences of violating the law. 27. Explain issues related to the responsible use of technology (e.g., privacy, security). 28. Explain fair use guidelines for using copyrighted materials (e.g., images, music, video, text) in school projects. 29. Describe appropriate usage and the potential risks with communication tools and digital information (e.g., chats, instant messaging, blog, Internet, mobile phones, texting, and social-networking sites). 30. Provide examples of safe and unsafe practices online. 31. Describe cyber-bullying and ways to report and prevent it.	24 Demonstrates appropriate and responsible computer behavior. Follows district's rules for technology usage, including, but not limited to, computers and phones. 25 Demonstrates ethical technology practices, and describes and uses correct privacy and citation practices. 26 Familiar with copyright laws and rules about using others' information. 27 Sets privacy and security options in files and documents as needed. Responsibly collaborates with peers on projects (e.g., does not change others' work) 28 Distinguishes between free-use material and copyrighted items. Follows copyright laws when using others' work (e.g. uses 30 seconds or less of a song in project) 29 Familiar with and follows basic safety when working with technology (e.g., does not give out personal info). Explains what information is appropriate to share or "say" online, in texts, etc. 30 Demonstrates correct and safe practices when working on Internet projects and/or sites. 31 Recognizes traits of cyber-bullying. Familiar with concept of people misrepresenting themselves online. Does not participate in cyber-bullying. Knows when, where, and how to report instances to a responsible adult.

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