BIG IDEAS

Services and products can be designed through consultation and collaboration.	Business creates opportunities to enable change.	Tools and **technologies** can be adapted for specific purposes.

Learning Standards

Curricular Competencies	Content
Students are expected to be able to do the following:	*Students are expected to know the following:*
Applied Design	• **computer peripherals**
• Conduct **research** to determine the product best suited to the application	• basic operating systems and software operations on multiple platforms
• Choose a direction and **point of view** for the task at hand	• industry-standard **business application** software
• **Identify** potential users, intended impact, and possible unintended negative consequences	• **efficient** integration of multiple software **components** within all aspects of business application suites
• Make decisions about **premises and boundaries** that define the task at hand	• business approach to creating and formatting **documents** and using custom tools for enhancement, including:
• Identify **gaps to explore** options with the goal of enhancing the potential of the product	− e-mail protocol and etiquette
• Generate ideas, individually and collaboratively, to contribute to the creation of a business product	− header, footer, table of contents, mail merge, font, word art, text box
• Prioritize ideas for drafting a sample product for the task	− business protocol, formality, and tone in business documents and applications
• Identify, critique, and use a variety of sources of inspiration and information	− formulas and functions in a spreadsheet
• Outline and design a **draft approach** based on research, premises, and boundaries	− design, creation, and manipulation of **databases and database objects**
• Create and use complex business applications to support business and client needs	− calendar scheduling, viewing, and syncing, including resource scheduling in shared calendars
• **Record and track** iterations of work generated	− narration, custom animations, and effects in presentation software
	− notetaking and note-management software
	− brochures, flyers, calendars, publications, and other business communications

Learning Standards (continued)

Curricular Competencies	Content
- Obtain and evaluate critical feedback from multiple **sources**, both initially and over time - Based on feedback received and evaluated, make changes to business application products or processes as needed - Engage in problem-solving practices by applying appropriate skills to discover optimal solution(s) based on prevailing circumstances - Identify tools, technologies, materials, processes, and time needed for development and implementation - Use **project management processes** when working individually or collaboratively to create processes or products - Share progress to increase feedback and collaboration - Create projects that use integrated business software applications - Critically evaluate their ability to work effectively, both individually and collaboratively **Applied Skills** - Choose an **appropriate form, scale, and level of detail** for communicating outcomes in a clear and concise manner - Identify and critically assess skills needed related to current or projected tasks, and **develop specific plans** to learn or refine skills over time - Evaluate **safety issues** for themselves, co-workers, and users in both physical and digital environments - Evaluate and apply a framework for problem solving	**meeting protocol and etiquette** **file management** techniques - cloud-based computing and work applications **interpersonal and public relations skills** to promote products or services and to interact with potential customers/clients - industry best practices - career options and opportunities in various business sectors

Learning Standards (continued)

Curricular Competencies	Content
Applied Technologies • Explore existing, new, and emerging tools, technologies, and systems and evaluate their suitability for the task at hand • Evaluate impacts, including unintended negative consequences, of choices made about technology use • Analyze the role and personal, interpersonal, social, and environmental impacts of technologies in societal change • Identify appropriate tools, technologies, materials, processes, and time needed for production, and where/how these could be made available • Use tools and technologies for efficiency • Use business productivity software to manipulate data and find solutions to business problems • Resolve simple problems that may be encountered while using a computer and undertake basic troubleshooting	

- **technologies:** tools that extend human capabilities

- **research:** for example, of the business requirements, including formats, timelines, deliverables, and audience
- **point of view:** for example, what shape will the document/spreadsheet/presentation/database take?
- **Identify:** for example, document the recipients, establish information transfer protocols
- **premises and boundaries:** for example, platform-based or cloud-based; security requirements
- **gaps to explore:** for example, how the business application can be creatively developed to best suit the recipient/client; positives/negatives of stand-alone applications versus networked/web-based
- **draft approach:** for example, the data and features to be included in the business application being created
- **Record and track:** for example, track versions, back up data, track edits
- **sources:** for example, those who can provide feedback that will support the development of a better-designed business application
- **project management processes:** setting goals, planning, organizing, constructing, monitoring, and leading during execution
- **appropriate form, scale, and level of detail:** present the ideas developed after looking at best practices, and make the presentation succinct
- **develop specific plans:** for example, explore opportunities and options for professional development and certification
- **safety issues:** for example, viruses, phishing, privacy (digital); ergonomics, lifting, repetitive stress injuries (physical)

- **computer peripherals:** input/output, mouse, scanner, printer/fax/copier, alternative input devices such as virtual keyboard, stylus, tablet
- **business application:** for example, word processing, spreadsheets, digital presentation software suites, databases, digital printing
- **efficient:** fast data processing, easy information retrieval
- **components:** for example, spreadsheets, text documents, calendars, databases
- **documents:** for example, business letters, research documents, flyers, spreadsheets, tables, graphs, charts, posters
- **databases and database objects:** for example, tables, fields, records, views, queries, forms, reports
- **meeting protocol and etiquette:** for example, organizing and conducting a meeting, creating an agenda, gathering input, determining intended outcomes, facilitating consensus, taking minutes, publishing minutes
- **file management:** manipulating electronic files and folders in local, networked, and cloud-based environments
- **interpersonal and public relations skills:** for example, professional communications, collaboration, follow-ups, and courtesies; technological or visual supports to accompany marketing or demonstrations at meetings and conferences; social media and networking