Information Technology Competencies Table: District Staff Development Planning Guide

1. Leadership and Vision - Professional Staff

Environmental Goals:

Educational leaders facilitate the development of the vision for technology shared by all stakeholders and communicate it widely.

Educational leaders develop, implement, and monitor a dynamic, long-range, and systemic technology plan that supports the vision.

Educational leaders maintain cohesion and momentum within the school community to reach the shared vision. Educational leaders foster and nurture a culture of responsible risk-taking that promotes continuous innovation in technology.

Educational leaders use data to drive leadership decisions.

Educational leaders advocate for research-based best practices in all uses of technology.

| Staff Development Objectives: | Target Participant Profiles: | | |
|--|------------------------------|----------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Maintain an awareness of emerging technologies, their impact on society at large and the resulting consequeces placed on the school community. | \checkmark | ~ | \checkmark |
| Explore and implement various vehicles for effective dissemination of information, providing opportunities for community feedback. | \checkmark | ~ | \checkmark |
| Provide channels and structures for articulation among members of the educational community. | | \checkmark | \checkmark |
| Conduct research and communicate supportive data as an essential component of technology resource implementation. | | \checkmark | \checkmark |
| Establish motivational systems for promoting creative technology integration initiatives | | \checkmark | \checkmark |
| Reinforce technology mission and vision statements, and guiding values and principles components of the technology plan document in the context of budget justification. | | | \checkmark |
| Ensure ongoing evaluation and periodic revisions are performed on the technology plan congruent with changing needs, opportunities and challenges. | | | \checkmark |

2.A. Technology Operations and Concepts - Professional Staff

Environmental Goals:

Teachers demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students).

Teachers demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

| Staff Development Objectives: | Target Participant Profiles | | iles: |
|--|-----------------------------|----------------------|--------------|
| | Beginner Level | Intemediate Level | |
| Apply troubleshooting strategies for solving routine hardware and software problems that occur in the classroom. | \checkmark | \checkmark | \checkmark |
| Assess the availability of technology resources at the school site, plan activities that integrate available resources, and develop a method for obtaining the additional necessary software and hardware. | | \checkmark | \checkmark |
| Make appropriate choices about technology systems, resources, and services that are aligned with district and state standards. | | ~ | \checkmark |
| Identify capabilities and limitations of current and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. | | \checkmark | \checkmark |
| Demonstrate proficiency in the use of common input and output devices | | | \checkmark |
| Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. | | | \checkmark |
| Use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, informed decision making, knowledge construction, and creativity. | | | \checkmark |
| Collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works using productivity tools. | | | \checkmark |
| Use technology to locate, evaluate, and collect information from a variety of sources. | | | \checkmark |
| Use technology tools to process data and report results. | | | \checkmark |
| Use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, purchases, correspondence). | | | \checkmark |
| Evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks. | | | \checkmark |
| Use a variety of media and formats, including telecommunications, to collaborate, publish, and interact with peers, experts, and other audiences. | | | \checkmark |

| Related Performance Outcomes: | Skill Complexity Levels: | | S: |
|--|--------------------------|----------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Turn computer on, use a mouse, and launch a program. | \checkmark | | |
| Create, edit, format, save, and print text in a word processing program. | \checkmark | | |
| Use draw tools to create original graphics. | \checkmark | | |
| Manage classroom computers and peripherals including accessing control panels, selecting printers, operating large screen display, installing and uninstalling software, and performing basic troubleshooting. | \checkmark | | |
| Create a word document using proper page setup, tabs, clip art, bullets, numbering, headers, rooters, and borders. | \checkmark | | |
| Navigate the Internet using browsers, e-mail, search engines, and book marking. | \checkmark | | |
| Understand learning styles, multiple intelligences, and authentic assessment and how these contribute to the design of technology-supported, problem-based learning activities in today's classroom. | \checkmark | | |
| Create and edit a Web page with attention to copyright issues. | \checkmark | | |
| Employ features and functions embedded in computer operating systems. | \checkmark | | |
| Perform basic e-mail tasks (e.g., send, open, and save e-mail attachments). | \checkmark | | |
| Use videoconferencing resources. | \checkmark | | |
| Read and interpret error messages and employ troubleshooting strategies | \checkmark | | |
| Select technology resources appropriate to the task at hand. | \checkmark | | |
| Design a spreadsheet using proper format, data entry, simple formulas, and graphs. | | \checkmark | |
| Create, define, and sort a database file. | | \checkmark | |
| Create a multimedia presentation, which includes text, clipart, graphics, sound, animation, video and special effects. | | \checkmark | |
| Incorporate external data into a word processing document using mail merge features to create form letters and envelopes. | ł | \checkmark | |
| Manipulate images captured by a scanner and digital camera. | | \checkmark | |
| Make use of assistive technologies (hardware and software). | | \checkmark | |
| Use draw and paint tools for grouping, ungrouping, and layering, and to modify text and clip art. | | \checkmark | |
| Create a spreadsheet that employs formulas, complex layouts, and graphs. | | \checkmark | |
| Create a database that includes complex queries, forms, and reports. | | \checkmark | |
| Use the Internet to design and post online projects. | | \checkmark | |
| Use special purpose software programs and utilities (e.g., anti-virus software) | | \checkmark | |
| Use problems solving tools and software such as calendars and graphic organizers. | | \checkmark | |

| Operate a video camera, create storyboards and scripts, understand basic production techniques, and conduct simple editing. | ~ | |
|---|--------------|--------------|
| Organize, manage and maintain data within the structure of a computer-based file system, using appropriate tools. | \checkmark | |
| Design and use spreadsheets that incorporate complex formulas and functions, absolute cells, and chart functions. | | \checkmark |
| Create and design a Web site that incorporates links, tables, and graphics. | | \checkmark |
| Function as a peer coach and district leader to assist others in the infusion of all available technologies outlined in the district technology plan. | | \checkmark |

2.B. Technology Operations and Concepts - Support Staff

Environmental Goals:

Support staff demonstrates introductory knowledge, skills, and understanding of concepts related to technology.

Support staff demonstrates continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

| Staff Development Objectives: | Target Participant Profiles: | | |
|--|------------------------------|-------------------|--------------|
| | Beginner | inner Intemediate | Advanced |
| | Level | Level | Level |
| Apply troubleshooting strategies for solving routine hardware and software problems that occur. | \checkmark | \checkmark | \checkmark |
| Make appropriate choices about technology systems, resources, and services that address prefessional needs. | \checkmark | \checkmark | \checkmark |
| Demonstrate proficiency in the use of common input and output devices | \checkmark | \checkmark | \checkmark |
| Use technology tools and information resources to increase productivity. | \checkmark | \checkmark | \checkmark |
| Prepare publications and producing other documents using productivity tools. | \checkmark | \checkmark | \checkmark |
| Use technology to locate, evaluate, and collect information from a variety of sources. | \checkmark | \checkmark | \checkmark |
| Use technology tools to process data and report results. | \checkmark | \checkmark | \checkmark |
| Use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, | | (| / |
| purchases, correspondence). | v | v | v |
| Identify capabilities and limitations of current and emerging technology resources and assess the potential of these | | (| / |
| systems and services to address personal, lifelong learning, and workplace needs. | | v | v |

| Evaluate and select new information resources and technological innovations based on their appropriateness to specific | 1 | 1 |
|--|---|--------------|
| tasks. | | \checkmark |

Related Performance Outcomes:

| Related Performance Outcomes: | Skill Comp | Skill Complexity Levels: | | |
|--|-------------------|--------------------------|-------------------|--|
| | Beginner Level | Intemediate Level | Advanced Level | |
| Turn computer on, use a mouse, and launch a program. | \checkmark | | | |
| Create, edit, format, save, and print text in a word processing program. | \checkmark | | | |
| Manage computers and peripherals including selecting printers, installing and uninstalling software, and performing basic troubleshooting. | \checkmark | | | |
| Create a word document using proper page setup, tabs, clip art, bullets, numbering, headers, rooters, and borders. | \checkmark | | | |
| Navigate the Internet using browsers, e-mail, search engines, and book marking. | \checkmark | | | |
| Perform basic e-mail tasks (e.g., send, open, and save e-mail attachments). | \checkmark | | | |
| Read and interpret error messages and employ troubleshooting strategies | \checkmark | | | |
| Select technology resources appropriate to the task at hand. | \checkmark | | | |
| Use special purpose software programs and utilities (e.g., anti-virus software) | \checkmark | | | |
| Produce, update and post calendars. | \checkmark | | | |
| Organize, manage and maintain data within the structure of a computer-based file system, using appropriate tools. | \checkmark | | | |
| Access all data within the school administration software. | \checkmark | | | |
| Post information to records requiring daily updates (attendance, lunch program, etc.). | \checkmark | | | |
| Export data from school administrative software. | \checkmark | | | |
| Incorporate external data into a word processing document using mail merge features to create form letters and envelopes. | k | ~ | | |
| Create a spreadsheet using proper format, data entry, simple formulas, and graphs. | | \checkmark | | |
| Create, define, and sort a database file. | | \checkmark | | |
| Utilize a database to query, filter, and create forms and reports. | | \checkmark | | |
| Incorporate external data into a spreadsheet or database. | | \checkmark | | |
| Create a publication (newsletter, brochure, programs, etc.). | | \checkmark | | |
| Create and edit a Web page with attention to copyright issues. | | | \checkmark | |

3. Planning and Designing Learning Environmnets and Experiences - Professional Staff

Environmental Goals:

Educational leaders identify, use, and evaluate appropriate technologies to enhance and support curriculum and instruction that lead to high levels of student achievement.

Educational leaders facilitate and support collaborative technology-enriched learning environments that are conducive to innovation.

Educational leaders provide for the use of technology to meet the individual needs of learners in a studentcentered learning environment.

Educational leaders facilitate the use of technologies to guide and support instructional methods that promote higher-level thinking, decision-making, and problem-solving skills.

Educational leaders assure that quality professional development opportunities exist for learning and teaching with technology.

Teachers design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.

Teachers apply current research on teaching and learning with technology when planning learning environments and experiences.

Teachers identify and locate technology resources and evaluate them for accuracy and suitability.

Teachers plan for the management of technology resources within the context of learning activities.

Teachers plan strategies to manage student learning in a technology-enhanced environment.

| Staff Development Objectives: | Target Participant Profiles: | | |
|--|------------------------------|----------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Identify, evaluate, and select specific technology resources available at the school site and district level to support a coherent lesson sequence aligned with local and state standards. | \checkmark | \checkmark | \checkmark |
| Design, manage, and facilitate learning experiences using technology that affirm diversity and provide equitable access to resources across content areas and grade levels. | \checkmark | \checkmark | \checkmark |
| Create and implement a well-organized plan to manage available technology resources, provide equitable access for all students, and enhance learning outcomes. | \checkmark | \checkmark | \checkmark |
| Design and facilitate learning experiences that use assistive technologies to meet the special physical needs of students. | \checkmark | \checkmark | \checkmark |

| Design and teach a coherent sequence of learning activities that integrates appropriate use of technology resources to enhance student academic achievement and technology proficiency by connecting district, state, and national curriculum standards with student technology standards (as defined in the ISTE National Educational Technology Standards for | \checkmark | \checkmark | ~ |
|---|--------------|--------------|--------------|
| Students). | | | |
| Design, implement, and assess learner-centered lessons that are based on the current best practices on teaching and | \checkmark | \checkmark | \checkmark |
| learning with technology and that engage, motivate, and encourage self-directed student learning. | | | |
| Use multiple measures to analyze instructional practices that employ technology to improve planning, instruction, and | \checkmark | \checkmark | \checkmark |
| management. | | | |
| Select and apply suitable productivity tools to complete educational and professional tasks. | \checkmark | \checkmark | \checkmark |
| Assess the availability of technology resources at the school site, plan activities that integrate available resources, and | | | |
| develop a method for obtaining the additional necessary software and hardware to support the specific learning needs of | | \checkmark | \checkmark |
| students in the classroom. | | | |
| Engage in ongoing planning of lesson sequences that effectively integrate technology resources and are consistent with | | | |
| current best practices for integrating the learning of subject matter and student technology standards (as defined in the | | \checkmark | \checkmark |
| ISTE National Educational Technology Standards for Students). | | | |
| Plan and implement technology-based learning activities that promote student engagement in analysis, synthesis, | | / | , |
| interpretation, and creation of original products. | | \checkmark | ~ |
| Plan for, implement, and evaluate the management of student use of technology resources as part of classroom | | , | , |
| operations and in specialized instructional situations. | | \checkmark | \checkmark |
| Teach students methods and strategies to assess the validity and reliability of information gathered through technological | | , | , |
| means. | | \checkmark | \checkmark |
| Use results from assessment measures (e.g., learner profiles, computer-based testing, electronic portfolios) to improve | | , | , |
| instructional planning, management, and implementation of learning strategies. | | \checkmark | \checkmark |
| Differentiate between appropriate and inappropriate uses of technology for teaching and learning while using electronic | | | |
| resources to design and implement learning activities. | | | \checkmark |
| Identify technology resources available in schools and analyze how accessibility to those resources affects planning for | | | |
| instruction. | | | \checkmark |
| Identify, select, and use hardware and software technology resources specially designed for use by PK-8 students to | | | |
| meet specific teaching and learning objectives. | | | \checkmark |
| Plan for the management of electronic instructional resources within a lesson design by identifying potential problems and | | | |
| planning for solutions. | | | \checkmark |
| Design and teach technology-enriched learning activities that connect content standards with student technology | | | |
| standards and meet the diverse needs of students. | | | \checkmark |
| Design and peer teach a lesson that meets content area standards and reflects the current best practices in teaching and | | | |
| learning with technology. | | | \checkmark |
| leaning with technology. | | | |

| Plan and teach student-centered learning activities and lessons in which students apply technology tools and resources. | | \checkmark |
|---|--|--------------|
| Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information | | |
| resources to be used by students. | | ~ |

4. Teaching, Learning and the Curriculum - Professional Staff

Environmental Goals:

Teachers facilitate technology-enhanced experiences that address content standards and student technology standards.

Teachers use technology to support learner-centered strategies that address the diverse needs of students.

Teachers apply technology to develop students' higher order skills and creativity.

Teachers manage student learning activities in a technology-enhanced environment.

| Staff Development Objectives: | Target Par | Target Participant Profiles: | | |
|--|-------------------|------------------------------|-------------------|--|
| | Beginner Level | Intemediate Level | Advanced Level | |
| Guide collaborative learning activities in which students use technology resources to solve authentic problems in the subject area(s). | \checkmark | ~ | \checkmark | |
| Apply technology productivity tools and resources to collect, analyze, and interpret data and to report results to parents and students. | \checkmark | ~ | \checkmark | |
| Identify, evaluate, and select specific technology resources available at the school site and district level to support a coherent lesson sequence. | \checkmark | ~ | \checkmark | |
| Create and implement a well-organized plan to manage available technology resources, provide equitable access for all students, and enhance learning outcomes. | \checkmark | \checkmark | \checkmark | |
| Design and facilitate learning experiences that use assistive technologies to meet the special physical needs of students. | \checkmark | \checkmark | \checkmark | |
| Design and teach a coherent sequence of learning activities that integrates appropriate use of technology resources to enhance student academic achievement and technology proficiency by connecting district, state, and national curriculum standards with student technology standards (as defined in the ISTE National Educational Technology Standards for Students). | \checkmark | \checkmark | \checkmark | |

| Design, implement, and assess learner-centered lessons that are based on the current best practices on teaching and | \checkmark | \checkmark | \checkmark |
|--|--------------|--------------|--------------|
| learning with technology and that engage, motivate, and encourage self-directed student learning. | | | |
| Use multiple measures to analyze instructional practices that employ technology to improve planning, instruction, and | \checkmark | \checkmark | \checkmark |
| management. | | | |
| Select and apply suitable productivity tools to complete educational and professional tasks. | \checkmark | \checkmark | \checkmark |
| Facilitate students' use of technology that addresses their social needs and cultural identity and promotes their interaction | | \checkmark | \checkmark |
| with the global community. | | | |
| Implement a variety of instructional technology strategies and grouping strategies (e.g., whole group, collaborative, | | | |
| individualized, and learner centered) that include appropriate embedded assessment for meeting the diverse needs of | | \checkmark | \checkmark |
| learners. | | | |
| Facilitate student access to school and community resources that provide technological and discipline-specific expertise. | | \checkmark | \checkmark |
| Arrange equitable access to appropriate technology resources that enable students to engage successfully in learning | | ✓ | ✓ |
| activities across subject/content areas and grade levels. | | v | v |
| Engage in ongoing planning of lesson sequences that effectively integrate technology resources and are consistent with | | | |
| current best practices for integrating the learning of subject matter and student technology standards (as defined in the | | \checkmark | \checkmark |
| ISTE National Educational Technology Standards for Students). | | | |
| Plan and implement technology-based learning activities that promote student engagement in analysis, synthesis, | | / | / |
| interpretation, and creation of original products. | | \checkmark | \checkmark |
| Plan for, implement, and evaluate the management of student use of technology resources as part of classroom | | ✓ | |
| operations and in specialized instructional situations. | | v | \checkmark |
| Recognize students' talents in the use of technology and provide them with opportunities to share their expertise with their | | | |
| teachers, peers, and others. | | \checkmark | \checkmark |
| Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic | | | , |
| learning. | | | \checkmark |
| Use content-specific tools (e.g., software, simulation, environmental robes, graphing calculators, exploratory | | | , |
| environments, Web tools) to support learning and research. | | | \checkmark |
| Use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, | | | , |
| informed decision making, knowledge construction, and creativity. | | | \checkmark |
| Use technology tools to process data and report results. | | | \checkmark |
| Use technology in the development of strategies for solving problems in the real world. | | | \checkmark |
| Observe and experience the use of technology in their major field of study. | | 1 | \checkmark |
| Evaluate and select new information resources and technological innovations based on their appropriateness to specific | | 1 | |
| tasks. | | | \checkmark |
| Identify the benefits of technology to maximize student learning and facilitate higher order thinking skills. | | | \checkmark |
| | | | , |

| Differentiate between appropriate and inappropriate uses of technology for teaching and learning while using electronic | |
|---|--------------|
| resources to design and implement learning activities. | v |
| Identify specific technology applications and resources that maximize student learning, address learner needs, and affirm | |
| diversity. | v |
| Design and teach technology-enriched learning activities that connect content standards with student technology | 1 |
| standards and meet the diverse needs of students. | v |
| Design and peer teach a lesson that meets content area standards and reflects the current best practices in teaching and | \checkmark |
| learning with technology. | |
| | \checkmark |
| Plan and teach student-centered learning activities and lessons in which students apply technology tools and resources. | |
| Apply online and other technology resources to support problem solving and related decision making for maximizing | \checkmark |
| student learning. | , |
| Participate in online professional collaborations with peers and experts. | \checkmark |

5. Assessment and Evaluation - Professional Staff

Environmental Goals:

Educational leaders assess staff knowledge, skills, and performance in using technology and use results to facilitate quality professional development and inform personnel decisions.

Educational leaders use technology to assess and evaluate managerial and operational systems.

Educational leaders assess and evaluate, using multiple methods, appropriate uses of technology resources for learning, communication, and productivity.

Educational leaders and teachers use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.

Teachers apply technology in assessing student learning of subject matter using a variety of assessment techniques.

Teachers apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning,communication,and productivity.

| Staff Development Objectives: | Target Par | arget Participant Profiles: | |
|--|-------------------|-----------------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Develop and use criteria for ongoing assessment of technology-based student products and the processes used to create those products. | \checkmark | \checkmark | \checkmark |
| Design an evaluation plan that applies multiple measures and flexible assessment strategies to determine students' technology proficiency and content area learning. | \checkmark | \checkmark | \checkmark |
| Apply technology productivity tools and resources to collect, analyze, and interpret data and to report results to parents and students. | \checkmark | ~ | \checkmark |
| Design, implement, and assess learner-centered lessons that are based on the current best practices on teaching and learning with technology and that engage, motivate, and encourage self-directed student learning. | \checkmark | ~ | \checkmark |
| Use multiple measures to analyze instructional practices that employ technology to improve planning, instruction, and management. | \checkmark | ~ | \checkmark |
| Guide students in applying self — and peer-assessment tools to critique student-created technology products and the process used to create those products. | | ~ | \checkmark |
| Use technology tools to collect, analyze, interpret, represent, and communicate data (student performance and other information) for the purposes of instructional planning and school improvement. | | ~ | \checkmark |
| Identify capabilities and limitations of current and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. | | \checkmark | \checkmark |
| Assess the availability of technology resources at the school site, plan activities that integrate available resources, and develop a method for obtaining the additional necessary software and hardware to support the specific learning needs of students in the classroom. | | ~ | \checkmark |
| Plan for, implement, and evaluate the management of student use of technology resources as part of classroom operations and in specialized instructional situations. | | ✓ | \checkmark |
| Teach students methods and strategies to assess the validity and reliability of information gathered through technological means. | | ✓ | \checkmark |
| Use results from assessment measures (e.g., learner profiles, computer-based testing, electronic portfolios) to improve instructional planning, management, and implementation of learning strategies. | | ~ | \checkmark |
| Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. | | | \checkmark |
| Use technology to locate, evaluate, and collect information from a variety of sources. | | | \checkmark |
| Use technology tools to process data and report results. | | | \checkmark |
| Evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks. | | | \checkmark |

| Differentiate between appropriate and inappropriate uses of technology for teaching and learning while using electronic resources to design and implement learning activities. | \checkmark |
|--|--------------|
| Design and teach technology-enriched learning activities that connect content standards with student technology standards and meet the diverse needs of students. | \checkmark |
| Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information resources to be used by students. | ~ |
| Discuss technology-based assessment and evaluation strategies. | \checkmark |
| Examine multiple strategies for evaluating technology-based student products and the processes used to create those products. | ~ |
| Examine technology tools used to collect, analyze, interpret, represent, and communicate student performance data. | \checkmark |
| Integrate technology-based assessment strategies and tools into plans for evaluating specific learning activities. | \checkmark |

6.A. Productivity and Professional Practice - Professional Staff

Environmental Goals:

Educational leaders use technology to facilitate change for organizational improvement.

Educational leaders model the routine, intentional, and effective use of technology.

Educational leaders and teachers use technology resources to engage in ongoing professional development and lifelong learning.

Educational leaders and teachers use technology to communicate and collaborate with peers, staff, parents, and the larger community.

Educational leaders and teachers continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.

Educational leaders and teachers apply technology to increase productivity.

| Staff Development Objectives: | Target Par | Target Participant Profiles: | |
|---|-------------------|------------------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Participate in online professional collaboration with peers and experts as part of a personally designed plan, based on self | \checkmark | ✓ | \checkmark |
| assessment, for professional growth in technology. | v | v | v |
| Design, implement, and assess learner-centered lessons that are based on the current best practices on teaching and learning with technology and that engage, motivate, and encourage self-directed student learning. | \checkmark | \checkmark | \checkmark |
| select and apply suitable productivity tools to complete educational and professional tasks. | \checkmark | \checkmark | \checkmark |
| Model safe and responsible use of technology and develop classroom procedures to implement school and district technology acceptable use policies and data security plans. | ✓ | √ | √ |
| Use technology resources to facilitate communications with parents or guardians of students. | | \checkmark | \checkmark |
| Participate in technology-based collaboration as part of continual and comprehensive professional growth to stay abreast of new and emerging technology resources that support enhanced learning for PK-8 students. | | \checkmark | \checkmark |
| Demonstrate and advocate for legal and ethical behaviors among students, colleagues, and community members regarding the use of technology and information. | | ~ | \checkmark |
| lidentify capabilities and limitations of current and emerging technology resources and assess the potential of these systems and services to address personal, lifelong learning, and workplace needs. | | \checkmark | \checkmark |
| Recognize students' talents in the use of technology and provide them with opportunities to share their expertise with their teachers, peers, and others. | | \checkmark | \checkmark |
| Use technology tools and information resources to increase productivity, promote creativity, and facilitate academic learning. | | | \checkmark |
| Use content-specific tools (e.g., software, simulation, environmental robes, graphing calculators, exploratory environments, Web tools) to support learning and research. | | | \checkmark |
| Use technology resources to facilitate higher order and complex thinking skills, including problem solving, critical thinking, informed decision making, knowledge construction, and creativity. | | | \checkmark |
| Collaborate in constructing technology-enhanced models, preparing publications, and producing other creative works using productivity tools. | | | \checkmark |
| Use technology to locate, evaluate, and collect information from a variety of sources. | | | \checkmark |
| Use technology tools to process data and report results. | | | \checkmark |
| Use technology in the development of strategies for solving problems in the real world. | | | \checkmark |
| Observe and experience the use of technology in their major field of study. | | | \checkmark |
| Use technology tools and resources for managing and communicating information (e.g., finances, schedules, addresses, purchases, correspondence). | | | \checkmark |
| Evaluate and select new information resources and technological innovations based on their appropriateness to specific tasks. | | | \checkmark |

| Use a variety of media and formats, including telecommunications, to collaborate, publish, and interact with peers, | | ~ |
|---|------|--------------|
| experts, and other audiences. | | v |
| Exhibit positive attitudes toward technology uses that support lifelong learning, collaboration, and productivity. | | \checkmark |
| Differentiate between appropriate and inappropriate uses of technology for teaching and learning while using electronic | | \checkmark |
| resources to design and implement learning activities. | | |
| Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information | | \checkmark |
| resources to be used by students. | | |
| Develop a portfolio of technology-based products from coursework, including the related assessment tools. | | \checkmark |
| Identify and engage in technology-based opportunities for professional education and lifelong learning, including the use | | \checkmark |
| of distance education. | | |
| Apply online and other technology resources to support problem solving and related decision making for maximizing | | 1 |
| student learning. | | • |
| Participate in online professional collaborations with peers and experts. | | \checkmark |
| Use technology productivity tools to complete required professional tasks. | | \checkmark |

6.B. Productivity and Professional Practice - Support Staff

Environmental Goals:

Support staff applies technology to increase productivity.

| Staff Development Objectives: | Target Par | Target Participant Profiles: | | |
|---|-------------------|------------------------------|-------------------|--|
| | Beginner Level | Intemediate Level | Advanced Level | |
| Select and apply suitable productivity tools to complete professional tasks. | \checkmark | \checkmark | \checkmark | |
| Use technology resources to facilitate communications with parents or guardians of students. | \checkmark | \checkmark | \checkmark | |
| Use technology tools and information resources to increase productivity. | \checkmark | \checkmark | \checkmark | |
| Exhibit positive attitudes toward technology uses that support productivity. | \checkmark | \checkmark | \checkmark | |
| Use technology productivity tools to complete required professional tasks. | \checkmark | \checkmark | \checkmark | |
| Identify capabilities and limitations of current and emerging technology resources and assess the potential of these systems and services to address workplace needs. | | \checkmark | \checkmark | |

7. Support, Management and Operations - Professional Staff

Environmental Goals:

Educational leaders develop, implement, and monitor policies and guidelines to ensure compatibility of technologies.

Educational leaders allocate financial and human resources to ensure full implementation of the technology plan.

Educational leaders integrate strategic plans, technology plans, other improvement plans, and policies to align efforts and leverage resources.

Educational leaders design policies and procedures to drive continuous system improvements and to support technology replacement cycles.

| Staff Development Objectives: | Target Par | Target Participant Profiles: | |
|--|-------------------|------------------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Recognize the nature of technology with regard to obsolescence and establish proceedures for evaluating, repurposing and refreshing available resources as appropriate. | \checkmark | ~ | \checkmark |
| Determine the relative value of support structures such as staff development, technical staffing, and outside support and ensure that available funds are appropriated proportionally with the acquisition of new resources. | | \checkmark | \checkmark |
| Ensure linkages are identified across all existing plans and programs, and that the use of all associated funding is maximized. | | ~ | \checkmark |
| Maintain a wholistic approach to facilities planning, recognizing and incorporating technology needs within plans to build, retrofit or upgrade. | | ~ | \checkmark |
| Strive to maintain existing entities and create new structures facilitating the acquisition of both financial and human resources from external sources. | | ~ | \checkmark |
| Reinforce technology mission and vision statements, and guiding values and principles components of the technology plan document in the context of budget justification. | | ~ | \checkmark |
| Ensure ongoing evaluation and periodic revisions are performed on the technology plan congruent with changing needs, opportunities and challenges. | | ~ | \checkmark |

8.A. Social, Ethical, Legal and Human Issues - Professional Staff

Environmental Goals:

Educational leaders identify, communicate, model, and enforce social, legal, and ethical practices related to technology use.

Educational leaders promote and enforce security and online safety related to the use of technology.

Educational leaders and teachers promote environmentally safe and healthy use of technology resources.

Educational leaders and teachers facilitate equitable access to technology resources for all students.

Teachers model and teach legal and ethical practice related to technology use.

Teachers apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.

Teachers identify and use technology resources that affirm diversity

| Staff Development Objectives: | Target Par | Farget Participant Profiles: | |
|--|-------------------|------------------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Model safe and responsible use of technology and develop classroom procedures to implement school and district technology acceptable use policies and data security plans. | \checkmark | ~ | \checkmark |
| Enforce classroom procedures that guide students' safe and healthy use of technology and that comply with legal and professional responsibilities for students needing assistive technologies. | | \checkmark | \checkmark |
| Advocate for equal access to technology for all students in their schools, communities, and homes. | | \checkmark | \checkmark |
| Implement procedures consistent with district and school policies that protect the privacy and security of student data and information. | | \checkmark | \checkmark |
| Arrange equitable access to appropriate technology resources that enable students to engage successfully in learning activities across subject/content areas and grade levels. | | ~ | \checkmark |
| Demonstrate an understanding of the legal, ethical, cultural, and societal issues related to technology. | | | \checkmark |
| Exhibit positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity. | | | \checkmark |
| Discuss diversity issues related to electronic media. | | | \checkmark |
| Identify and discuss the health and safety issues related to technology use. | | | \checkmark |

| Differentiate between appropriate and inappropriate uses of technology for teaching and learning while using electronic | 1 |
|---|--------------|
| resources to design and implement learning activities. | · · |
| Identify specific technology applications and resources that maximize student learning, address learner needs, and affirm | |
| diversity. | v |
| Design and teach technology-enriched learning activities that connect content standards with student technology | |
| standards and meet the diverse needs of students. | v |
| Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information | |
| resources to be used by students. | v |
| Identify technology-related legal and ethical issues, including copyright, privacy, and security of technology systems, data, | |
| and information. | v |
| Examine acceptable use policies for the use of technology in schools, including strategies for addressing threats to | (|
| security of technology systems, data, and information. | v |
| Identify issues related to equitable access to technology in school, community, and home environments. | \checkmark |
| Identify and use assistive technologies to meet the special physical needs of students. | \checkmark |
| | |

8.B. Social, Ethical, Legal and Human Issues - Support Staff

Environmental Goals:

Support staff members identify, communicate, model, and enforce social, legal, and ethical practices related to technology use.

| Staff Development Objectives: | Target Participant Profiles: | | |
|---|------------------------------|----------------------|-------------------|
| | Beginner Level | Intemediate Level | Advanced Level |
| Demonstrate responsible use of technology in accordance with district technology acceptable use policies and data security plans. | \checkmark | \checkmark | \checkmark |
| Implement procedures consistent with district and school policies that protect the privacy and security of student data and information. | \checkmark | \checkmark | \checkmark |
| Demonstrate legal and ethical use of technology, including copyright, privacy, and security of technology systems, data, and information. | \checkmark | \checkmark | \checkmark |