

# Education and Training

**Business Operations/21st Century Skills: Students apply principles of economics, business management, marketing and employability in an entrepreneur, manager and employee role to the leadership, planning, developing and analyzing of business enterprises related to the career field. 1**

- 1 Employability Skills: Develop career awareness and employability skills (e.g., face-to-face, online) needed for gaining and maintaining employment in diverse business settings. 1.1**
  - 1 Identify the knowledge, skills and abilities necessary to succeed in careers. 1.1.1
  - 2 Identify the scope of career opportunities and the requirements for education, training, certification, licensure and experience. 1.1.2
  - 3 Develop a career plan that reflects career interests, pathways and secondary and postsecondary options. 1.1.3
  - 4 Describe the role and function of professional organizations, industry associations and organized labor and use networking techniques to develop and maintain professional relationships. 1.1.4
  - 5 Develop strategies for self-promotion in the hiring process (e.g., filling out job applications, résumé writing, interviewing skills, portfolio development). 1.1.5
  - 6 Explain the importance of work ethic, accountability and responsibility and demonstrate associated behaviors in fulfilling personal, community and workplace roles. 1.1.6
  - 7 Apply problem-solving and critical-thinking skills to work-related issues when making decisions and formulating solutions. 1.1.7
  - 8 Identify the correlation between emotions, behavior and appearance and manage those to establish and maintain professionalism. 1.1.8
  - 9 Give and receive constructive feedback to improve work habits. 1.1.9
  - 10 Adapt personal coping skills to adjust to taxing workplace demands. 1.1.10
  - 11 Recognize different cultural beliefs and practices in the workplace and demonstrate respect for them. 1.1.11
  - 12 Identify healthy lifestyles that reduce the risk of chronic disease, unsafe habits and abusive behavior. 1.1.12
  - 13 Manage time, priorities and resources to achieve personal and professional goals. 1.1.13

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**2 Leadership and Communications: Process, maintain, evaluate and disseminate information in a business. Develop leadership and team building to promote collaboration. 1.2**

- 1 Extract relevant, valid information from materials and cite sources of information (e.g., medical reports, fitness assessment, medical test results). 1.2.1
- 2 Deliver formal and informal presentations. 1.2.2
- 3 Identify and use verbal, nonverbal and active listening skills to communicate effectively. 1.2.3
- 4 Use negotiation and conflict-resolution skills to reach solutions. 1.2.4
- 5 Communicate information for an intended audience and purpose. 1.2.5
- 6 Use proper grammar and expression in all aspects of communication. 1.2.6
- 7 Use problem-solving and consensus-building techniques to draw conclusions and determine next steps. 1.2.7
- 8 Identify the strengths, weaknesses and characteristics of leadership styles that influence internal and external workplace relationships. 1.2.8
- 9 Identify advantages and disadvantages involving digital and/or electronic communications. 1.2.9
- 10 Use interpersonal skills to provide group leadership, promote collaboration and work in a team. 1.2.10
- 11 Write professional correspondence, documents, job applications and résumés. 1.2.11
- 12 Use technical writing skills to complete forms and create reports. 1.2.12
- 13 Identify stakeholders and solicit their opinions. 1.2.13
- 14 Use motivational strategies to accomplish goals. 1.2.14

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**3 Business Ethics and Law: Analyze how professional, ethical and legal behavior contributes to continuous improvement in organizational performance and regulatory compliance. 1.3**

- 1 Analyze how regulatory compliance affects business operations and organizational performance. 1.3.1
- 2 Follow protocols and practices necessary to maintain a clean, safe and healthy work environment. 1.3.2
- 3 Use ethical character traits consistent with workplace standards (e.g., honesty, personal integrity, compassion, justice). 1.3.3
- 4 Identify how federal and state consumer protection laws affect products and services. 1.3.4
- 5 Access and implement safety compliance measures (e.g., quality assurance information, safety data sheets [SDSs], product safety data sheets [PSDSs], United States Environmental Protection Agency [EPA], United States Occupational Safety and Health Administration [OSHA]) that contribute to the continuous improvement of the organization. 1.3.5
- 6 Identify deceptive practices (e.g., bait and switch, identity theft, unlawful door-to-door sales, deceptive service estimates, fraudulent misrepresentations) and their overall impact on organizational performance. 1.3.6
- 7 Identify the labor and practice laws that affect employment and the consequences of noncompliance for both employee and employer (e.g., harassment, labor, employment, employment interview, testing, minor labor laws, Americans with Disabilities Act, Fair Labor Standards Acts, Equal Employment Opportunity Commission [EEOC], human trafficking) and interpret personal safety rights according to the employee Right-to-Know Plan. 1.3.7
- 8 Verify compliance with computer and intellectual property laws and regulations. 1.3.8
- 9 Identify potential conflicts of interest (e.g., personal gain, project bidding) between personal, organizational and professional ethical standards. 1.3.9

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**4 Knowledge Management and Information Technology: Demonstrate current and emerging strategies and technologies used to collect, analyze, record and share information in business operations. 1.4**

- 1 Use office equipment to communicate (e.g., phone, radio equipment, faxmachine, scanner, public address systems). 1.4.1
- 2 Select and use software applications to locate, record, analyze and present information (e.g., word processing, e-mail, spreadsheet, databases, presentation, Internet search engines). 1.4.2
- 3 Verify compliance with security rules, regulations and codes (e.g., property, privacy, access, accuracy issues, client and patient record confidentiality) pertaining to technology specific to the industry pathway. 1.4.3
- 4 Use system hardware to support software applications. 1.4.4
- 5 Use information technology tools to maintain, secure and monitor business records. 1.4.5
- 6 Use an electronic database to access and create business and technical information. 1.4.6
- 7 Use personal information management and productivity applications to optimize assigned tasks (e.g., lists, calendars, address books). 1.4.7
- 8 Use electronic media to communicate and follow network etiquette guidelines. 1.4.8

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**5 Global Environment: Evaluate how beliefs, values, attitudes and behaviors influence organizational strategies and goals. 1.5**

- 1 Describe how cultural understanding, cultural intelligence skills and cultural awareness are interdependent. 1.5.1
- 2 Describe how cultural intelligence skills influence the overall success and survival of an organization. 1.5.2
- 3 Use cultural intelligence to interact with individuals from diverse cultural settings. 1.5.3
- 4 Recognize barriers in cross-cultural relationships and implement behavioral adjustments. 1.5.4
- 5 Recognize the ways in which bias and discrimination may influence productivity and profitability. 1.5.5
- 6 Analyze work tasks for understanding and interpretation from a different cultural perspective. 1.5.6
- 7 Use intercultural communication skills to exchange ideas and create meaning. 1.5.7
- 8 Identify how multicultural teaming and globalization can foster development of new and improved products and services and recognition of new opportunities. 1.5.8

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## **6 Business Literacy: Develop foundational skills and knowledge in entrepreneurship, financial literacy and business operations. 1.6**

- 1 Identify business opportunities. 1.6.1
- 2 Assess the reality of becoming an entrepreneur, including advantages and disadvantages (e.g., risk versus reward, reasons for success and failure). 1.6.2
- 3 Explain the importance of planning your business. 1.6.3
- 4 Identify types of businesses, ownership and entities (i.e., individual proprietorships, partnerships, corporations, cooperatives, public, private, profit, not-for-profit). 1.6.4
- 5 Describe organizational structure, chain of command, the roles and responsibilities of the organizational departments and interdepartmental interactions (e.g., following physician's orders). 1.6.5
- 6 Identify the target market served by the organization, the niche that the organization fills and an outlook of the industry. 1.6.6
- 7 Identify the effect of supply and demand on products and services. 1.6.7
- 8 Identify the features and benefits that make an organization's product or service competitive. 1.6.8
- 9 Explain how the performance of an employee, a department and an organization is assessed. 1.6.9
- 10 Describe the impact of globalization on an enterprise or organization. 1.6.10
- 11 Describe how all business activities of an organization work within the parameters of a budget. 1.6.11
- 12 Describe classifications of employee benefits, rights, deductions and compensations. 1.6.12

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**7 Entrepreneurship/Entrepreneurs: Analyze the environment in which a business operates and the economic factors and opportunities associated with self-employment. 1.7**

- 1 Compare and contrast the four types of business ownership (i.e., individual proprietorships, partnerships, corporations, cooperatives). 1.7.1
- 2 Explain the role of profit as the incentive to entrepreneurs in a market economy. 1.7.2
- 3 Identify the factors that contribute to the success and failure of entrepreneurial ventures. 1.7.3
- 4 Assess the roles of nonprofit and for-profit businesses. 1.7.4
- 5 Develop a business plan. 1.7.5
- 6 Describe life cycles of an entrepreneurial business and an entrepreneur. 1.7.6
- 7 Create a list of personal strengths, weaknesses, skills and abilities needed to be successful as an entrepreneur. 1.7.7
- 8 Explain pathways used to become an entrepreneur. 1.7.8
- 9 Conduct a self-assessment to determine entrepreneurial potential. 1.7.9
- 10 Describe techniques for obtaining experience (e.g., apprenticeship, co-operative [co-op] education, work placement, internship, job shadowing) related to an entrepreneurial objective. 1.7.10
- 11 Identify initial steps in establishing a business (e.g., limited liability company [LLC], tax ID, permits, insurance, licensing). 1.7.11
- 12 Identify resources available to entrepreneurs (e.g., Small Business Administration, mentors, information resources, educational opportunities). 1.7.12
- 13 Protect intellectual property and knowledge (e.g., copyright, patent, trademark, trade secrets, processes). 1.7.13

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**8 Operations Management: Plan, organize and monitor an organization or department to maximize contribution to organizational goals and objectives. 1.8**

- 1 Forecast future resources and budgetary needs using financial documents (e.g., balance sheet, demand forecasting, financial ratios). 1.8.1
- 2 Select and organize resources to develop a product or a service. 1.8.2
- 3 Analyze the performance of organizational activities and reallocate resources to achieve established goals. 1.8.3
- 4 Identify alternative actions to take when goals are not met (e.g., changing goals, changing strategies, efficiencies). 1.8.4
- 5 Use inventory and control systems to purchase materials, supplies and equipment (e.g., Last In, First Out [LIFO]; First In, First Out [FIFO]; Just in Time [JIT]; LEAN). 1.8.5
- 6 Identify the advantages and disadvantages of carrying cost and Just-in-Time (JIT) production systems and the effects of maintaining inventory (e.g., perishable, shrinkage, insurance) on profitability. 1.8.6
- 7 Collect information and feedback to help assess the organization's strategic planning and policymaking processes. 1.8.7
- 8 Identify routine activities for maintaining business facilities and equipment. 1.8.8
- 9 Develop a budget that reflects the strategies and goals of the organization. 1.8.9
- 10 Analyze how business management and environmental management systems (e.g., health, safety) contribute to continuous improvement and sustainability. 1.8.10

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**9 Financial Management: Use financial tools, strategies and systems to develop, monitor and control the use of financial resources to ensure personal and business financial well-being.** 1.9

- 1 Create, analyze, and interpret financial documents (e.g., budgets, income statements). 1.9.1
- 2 Identify tax obligations. 1.9.2
- 3 Review and summarize savings, investment strategies and purchasing options (e.g., cash, lease, finance, stocks, bonds). 1.9.3
- 4 Identify credit types and their uses in order to establish credit. 1.9.4
- 5 Identify ways to avoid or correct debt problems. 1.9.5
- 6 Explain how credit ratings and the criteria lenders use to evaluate repayment capacity affect access to loans. 1.9.6
- 7 Review and summarize categories (types) of insurance and identify how insurances can reduce access to loans. 1.9.7
- 8 Identify income sources and expenditures. 1.9.8
- 9 Compare and contrast different banking services available through financial institutions. 1.9.9
- 10 Identify the role of depreciation in tax planning and liability. 1.9.10
- 11 Implement established accounting processes and internal cash controls. 1.9.11

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**10 Sales and Marketing: Manage pricing, place, promotion, packaging, positioning and public relations to improve quality customer service. 1.10**

- 1 Identify how the roles of sales, advertising and public relations contribute to a company's brand. 1.10.1
- 2 Determine the customer's/client's needs and identify solutions and potential community resources. 1.10.2
- 3 Communicate features, benefits and warranties of a product or service to the customer/client. 1.10.3
- 4 Identify the company policies and procedures for initiating product and service improvements. 1.10.4
- 5 Monitor customer/client expectations and determine product/service satisfaction by using measurement tools. 1.10.5
- 6 Discuss the importance of correct pricing to support a product's or service's positioning in the marketing mix. 1.10.6
- 7 Describe the importance and diversity of distribution channels (i.e., direct, indirect) to sell a product. 1.10.7
- 8 Use promotional techniques to maximize sales revenues (e.g., advertising, sales promotions, publicity, public relations). 1.10.8
- 9 Describe how product mix (e.g., product line, product items) maximizes sales revenues, market, share and profit margin. 1.10.9
- 10 Demonstrate sales techniques. 1.10.10

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**11 Principles of Business Economics: Examine and employ economic principles, concepts and policies to accomplish organizational goals and objectives. 1.11**

- 1 Identify the economic principles that guide geographic location of an industry's facilities (e.g., relative scarcity, price, quantity of products and services). 1.11.1
  - 2 Identify the difference between monetary and nonmonetary incentives and explain how changes in incentives cause changes in behavior. 1.11.2
  - 3 Use economic indicators to identify economic trends and conditions (e.g., inflation, interest rate fluctuations, unemployment rates). 1.11.3
  - 4 Determine how the quality, quantity and pricing of goods and services are affected by domestic and international competition in a market economy. 1.11.4
  - 5 Analyze factors that affect currency and exchange rates. 1.11.5
  - 6 Explain how financial markets and government policies influence interest rates (credit ratings/debt ceiling), trade deficits and unemployment. 1.11.6
  - 7 Describe how economic performance and culture are interdependent. 1.11.7
  - 8 Identify the relationships between economy, society and environment that lead to sustainability. 1.11.8
  - 9 Describe how laws and regulations influence domestic and international trade. 1.11.9
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**Foundations of Education: Students apply educational philosophies, historical perspectives and organizational insights to enhance their interactions with stakeholders. 2**

- 1 History and Philosophy: Examine and employ education’s historical and philosophical underpinnings to benefit from best practices and lessons-learned that can be used to enhance stakeholder understanding and interaction. 2.1**
  - 1 Determine historical aspects of education that impact the current learning environment. 2.1.1
  - 2 Compare educational models, and explain how they impact the classroom. 2.1.2
  - 3 Explain the impact of constructivism on the learning environment, instruction, learning activities and assessment. 2.1.3
  - 4 Describe the shift from instructor-led to learner-directed education. 2.1.4
  - 5 Explain the nature of learning and its relationship to emerging pedagogies. 2.1.5
  - 6 Compare theories and philosophies of education and training impacting learners with exceptionalities. 2.1.6
  - 7 Incorporate changing and emerging educational philosophies into the learning environment. 2.1.7
  - 8 Explain social development theories and their implications for education and training practices. 2.1.8
  - 9 Describe the development of modern education and training. 2.1.9
  - 10 Explain the impact of education and training on society. 2.1.10
  - 11 Describe the relationships between social stratification and educational equity and their impact on learning and achievement gaps. 2.1.11
  - 12 Explain the impact of economic, social and technological changes on education and training. 2.1.12
  - 13 Explain the evolving knowledge base of educational research and theory that guides practice. 2.1.13
  - 14 Apply educational research findings to improve learner performance. 2.1.14

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**2 Education Systems: Understand the organization and structure of education systems, the roles of their stakeholders and the nature of their funding sources to enhance students' contribution and role in education. 2.2**

- 1 Explain the goals of education and their role in shaping the education system. 2.2.1
- 2 Describe the environments in which education and training are delivered. 2.2.2
- 3 Distinguish among federal, state and locally mandated policies, rules and regulations. 2.2.3
- 4 Describe the organizational hierarchy in education and training systems. 2.2.4
- 5 Describe the role and responsibilities of state and federal education agencies. 2.2.5
- 6 Explain learners' and stakeholders' roles, rights and responsibilities in education systems. 2.2.6
- 7 Identify how decisions are made in education systems. 2.2.7
- 8 Determine the change process and change forces in education systems. 2.2.8
- 9 Describe barriers to and impact of systemic change in education systems. 2.2.9
- 10 Describe funding sources and levels of contribution to the education system. 2.2.10
- 11 Explain financial accountability of education systems and their stakeholders. 2.2.11
- 12 Describe accreditation requirements of education systems. 2.2.12
- 13 Analyze the community's shifting demographics, and recommend ways that the education system can respond. 2.2.13

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**3 Professionalism: Model behaviors of professional educators, maintain needed licenses or certifications, and advance needed skills to exhibit a desire to contribute to professional growth and development. 2.3**

- 1 Compare and contrast professional development processes guiding the preparation of educators. 2.3.1
- 2 Identify processes used to integrate new teachers into an educational institution's culture. 2.3.2
- 3 Target and actively participate in relevant professional development opportunities that foster growth. 2.3.3
- 4 Utilize advocacy skills that can be used to shape educational policies and regulations. 2.3.4
- 5 Adhere to the legal and ethical framework of the teaching profession, and explain the consequences of failing to do so. 2.3.5
- 6 Explain the relationship between educational negligence and liability, and describe protections against liability. 2.3.6
- 7 Engage in reflective practices to strengthen education and training knowledge and skills. 2.3.7
- 8 Seek and use feedback and input from peers and administrators to foster professional growth. 2.3.8
- 9 Create, implement, and evaluate personal action plan for performance improvement. 2.3.9
- 10 Promote active and informed citizenship. 2.3.10
- 11 Assess and address personal biases that potentially impact stakeholder interactions. 2.3.11
- 12 Determine requirements for being an Ohio educator, and explain reasons those requirements change. 2.3.12
- 13 Develop a professional development plan for lifelong learning. 2.3.13
- 14 Develop a personal philosophy of education. 2.3.14
- 15 Create and maintain a professional portfolio. 2.3.15

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#### **4 Operational Responsibilities: Recognize and fulfill the day-to-day tasks that support teaching and learning.** 2.4

- 1 Identify operational responsibilities of educators and trainers. 2.4.1
- 2 Complete and maintain up-to-date records (e.g., incident reports, gradebooks, immunization records). 2.4.2
- 3 Identify and document mastery of standards. 2.4.3
- 4 Maintain up-to-date financial records. 2.4.4
- 5 Determine the nature of needed documentation and paperwork, and complete them according to protocol. 2.4.5
- 6 Select and maintain classroom equipment and supplies. 2.4.6
- 7 Develop a community resource file for use in planning instructional activities. 2.4.7

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#### **5 Human Resource Considerations: Determine human resource considerations in obtaining and maintaining employment in education or training.** 2.5

- 1 Describe staff rights and evolving roles in educational settings. 2.5.1
- 2 Identify sources that can be used to determine available positions in education or training. 2.5.2
- 3 Describe evaluation methods and procedures used with professionals in education and training. 2.5.3
- 4 Identify how to access information about educator or trainer benefit packages. 2.5.4
- 5 Explain the nature and impact of organized labor on education or training staff and administrators. 2.5.5
- 6 Analyze job descriptions to determine roles and responsibilities. 2.5.6
- 7 Identify procedures followed by educational agencies when dismissing employees. 2.5.7

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#### **Learners and Their Development: Students apply basic physical, cognitive and social development theories to enable learners to thrive in the learning environment.** 3

#### **1 Growth and Development Theories: Apply the theoretical foundations of human growth and development that can enhance work with learners.** 3.1

- 1 Describe the interdependence of the developmental domains (e.g., social, emotional, cognitive, language, sensory, creative, physical, adaptive). 3.1.1
- 2 Explain developmental stages and milestones. 3.1.2
- 3 Explain growth and development theories (e.g., Piaget's stages of cognitive development, Erickson's theory of human development, Kohlberg's stages of moral development). 3.1.3
- 4 Apply development theories to different ages and stages of learner development. 3.1.4
- 5 Develop holistic view of learners through the application of growth and development theories. 3.1.5

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## **2 Cognitive Growth and Development: Apply cognitive growth and development principles to develop a holistic picture of a learner. 3.2**

- 1 Describe how learning processes occur neurologically. 3.2.1
- 2 Evaluate learners to determine their learning styles. 3.2.2
- 3 Explain sequences, stages and milestones of cognitive development. 3.2.3
- 4 Describe issues associated with cognitive development and growth. 3.2.4
- 5 Explain how interactions and the environment impact brain function, growth and development. 3.2.5
- 6 Create opportunities for learners to explore theirself-interests. 3.2.6
- 7 Observe, analyze, and determine a learner's cognitive growth and development. 3.2.7
- 8 Align instructional strategies and interventions to learners' stages of cognitive development and learning. 3.2.8

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## **3 Physical Growth and Development: Apply physical growth and development principles to develop a holistic picture of a learner. 3.3**

- 1 Describe the milestones of physical growth and development. 3.3.1
- 2 Determine learners' physical development stages and milestones. 3.3.2
- 3 Analyze strategies to support learners' physical growth and development. 3.3.3
- 4 Implement activities and strategies that can be used to promote motor-skill development. 3.3.4
- 5 Allocate time for structured and unstructured physical activity based on age band. 3.3.5
- 6 Organize structured activities to promote learners' health. 3.3.6
- 7 Align strategies to learners' stages of physical development. 3.3.7

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**4 Social and Emotional Growth and Development: Apply social and emotional growth and development principles to develop a holistic picture of a learner. 3.4**

- 1 Identify learner characteristics and differences, and explain how they impact learning. 3.4.1
- 2 Explain genetic and environmental conditions that affect social growth and development. 3.4.2
- 3 Identify how attachment impacts relationships. 3.4.3
- 4 Identify factors impacting learners' self-regulation. 3.4.4
- 5 Describe how caring, consistent relationships with adults provide external supports. 3.4.5
- 6 Implement strategies to ease separation anxiety. 3.4.6
- 7 Use strategies to help learners express their emotions. 3.4.7
- 8 Incorporate strategies that support social and emotional growth. 3.4.8
- 9 Explain how play provides opportunity for learners to grow and develop. 3.4.9
- 10 Model self-control for learners. 3.4.10
- 11 Apply behavioral-management techniques to advance learners' social and emotional growth. 3.4.11
- 12 Use communication techniques that promote social growth and development. 3.4.12

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**5 Language Growth and Development: Apply linguistic principles and practices in the development of language skills. 3.5**

- 1 Explain the interrelationships of language development with cognitive, physical and social/emotional development. 3.5.1
- 2 Explain how language is developed. 3.5.2
- 3 Describe the importance of listening, conversing and gesturing as foundations for learning languages or multiple languages. 3.5.3
- 4 Identify the relationship between oral language development and reading. 3.5.4
- 5 Explain the purposes for which learners use oral language. 3.5.5
- 6 Describe the significance of learners' self-talk. 3.5.6
- 7 Use the technique of recasting to support a learner's language skills and development. 3.5.7
- 8 Explain stages of English acquisition for multi-language learners. 3.5.8
- 9 Explain the role of the home language in promoting development of English language and literacy. 3.5.9
- 10 Identify the home-language environment of each learner. 3.5.10
- 11 Determine stage of a learner's English language development sequence. 3.5.11
- 12 Demonstrate purposeful, intentional use of language that encourages conversation. 3.5.12
- 13 Apply techniques to respond to code switching. 3.5.13
- 14 Use code switching as a teaching strategy. 3.5.14
- 15 Model correct use of language (e.g., structures, grammar, tone, volume, expression). 3.5.15
- 16 Collaborate with families to set language learning goals for their learners. 3.5.16
- 17 Promote development of home language while facilitating English language acquisition. 3.5.17
- 18 Determine staff supports needed to assess and individualize instruction for multilingual learners. 3.5.18

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**6 Literacy Development: Apply strategies to determine a learner's stage of literacy development, and implement needed supports to facilitate literacy growth. 3.6**

- 1 Explain the interaction of reading, writing, speaking and listening in literacy development. 3.6.1
- 2 Describe factors impacting a learner's preparation to read. 3.6.2
- 3 Describe stages of literacy development. 3.6.3
- 4 Explain factors impacting the progression of the learner through the stages of reading development. 3.6.4
- 5 Describe how content areas support literacy development. 3.6.5
- 6 Identify characteristics of proficient readers. 3.6.6
- 7 Identify the knowledge and skills that learners need to read with comprehension and fluency. 3.6.7
- 8 Analyze a learner's writing samples to determine literacy growth and development. 3.6.8
- 9 Evaluate a learner's reading readiness through classroom observation and assessment. 3.6.9

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**7 Cultural Growth and Development: Determine the impact of culture on learner development and behaviors to guide interactions, curriculum decisions, resource selections and instructional planning and delivery. 3.7**

- 1 Explain the growth and development of a person's culture. 3.7.1
- 2 Describe the role of cultural and environmental influences on a learner's development. 3.7.2
- 3 Describe the impact of culture on adults' behavior with learners. 3.7.3
- 4 Acquire unbiased information about cultural groups in the community. 3.7.4
- 5 Obtain information about a learner's culture. 3.7.5
- 6 Implement strategies and techniques that encourage self-esteem and responsibility in learners. 3.7.6
- 7 Determine personal contributions to working with culturally diverse communities and learners by reflecting on one's own personal culture. 3.7.7
- 8 Address cultural relevance in making curriculum choices and adaptations. 3.7.8
- 9 Establish goals for multilingualism, multi-literacy and multiculturalism. 3.7.9

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## **8 Learner Characteristics: Select educational services aligned to learner characteristics. 3.8**

- 1 Identify a learner's interests, abilities and developmental progress. 3.8.1
- 2 Compare the relationship between academic achievement and a learner's physical, emotional and mental health. 3.8.2
- 3 Identify types of accommodations and modifications that support learners' social, emotional, cognitive and physical growth. 3.8.3
- 4 Identify exceptional learners based on established criteria and provide aligned services as needed. 3.8.4
- 5 Identify multi-language learners to determine needed support services. 3.8.5
- 6 Compare the purposes, value and uses of Individualized Family Service Plans (IFSPs), Individualized Education Programs (IEPs), and Section 504 Plans and Curriculum Accommodation Plans (DCAPs). 3.8.6
- 7 Identify the processes and procedures for writing a plan for intervention services. 3.8.7

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**Learning Environment: Students apply principles of safe, healthy, productive and respectful learning environments to promote positive interactions, active engagement in learning and stakeholder collaboration. 4**

## **1 Safe Environments: Establish and maintain a physically and emotionally safe environment for learners, staff, administrators and volunteers. 4.1**

- 1 Ensure a safe learning environment. 4.1.1
- 2 Follow established first aid and CPR protocols for addressing medical emergencies. 4.1.2
- 3 Develop and follow emergency action plans. 4.1.3
- 4 Design, maintain, and modify the classroom layout to create a safe environment. 4.1.4
- 5 Identify staff or agencies needed to resolve safety issues or violations. 4.1.5
- 6 Identify the signs, symptoms and impact of physical and mental abuse; and adhere to reporting protocol. 4.1.6
- 7 Recognize signs of drug or alcohol abuse, and adhere to reporting protocol. 4.1.7
- 8 Identify resources, organizations and agencies committed to assisting victims of physical and/or mental abuse. 4.1.8
- 9 Identify restraint-training techniques and the impact of initiating them. 4.1.9
- 10 Identify foods and objects that may cause choking in learners. 4.1.10

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## **2 Healthy Environments: Establish, implement, and monitor practices and conditions to promote health. 4.2**

- 1 Model appropriate cleanliness and hygiene practices. 4.2.1
- 2 Maintain a sanitary environment by following appropriate policies and procedures. 4.2.2
- 3 Update and maintain health records according to protocol. 4.2.3
- 4 Identify signs and symptoms of common childhood health issues and diseases. 4.2.4
- 5 Follow established protocols for monitoring and reporting suspected cases of distress or communicable diseases. 4.2.5
- 6 Implement procedures for administering physician's orders or parent instructions when treating a learner with a medical condition. 4.2.6
- 7 Integrate activities that promote healthy, active living. 4.2.7
- 8 Collaborate with families to establish strategies for healthy lifestyles. 4.2.8

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## **3 Nutrition: Establish and implement activities related to proper nutrition. 4.3**

- 1 Identify the role that nutrition plays in growth and development. 4.3.1
- 2 Determine appropriate dietary guidelines for healthy meals orsnacks. 4.3.2
- 3 Identify nutritional needs of learners based on age and stage of development. 4.3.3
- 4 Describe the effects of nutrients on health, appearance and peak performance. 4.3.4
- 5 Identify barriers that prevent learners from obtaining proper nutrition. 4.3.5
- 6 Implement strategies that promote healthy eating habits. 4.3.6
- 7 Identify and adhere to special dietary needs of learners. 4.3.7
- 8 Identify strategies to broaden learners' food experiences. 4.3.8
- 9 Develop menus for healthy meals and snacks. 4.3.9
- 10 Explain the importance of social interaction for learners during snack and mealtimes. 4.3.10
- 11 Document and report food-related concerns or incidents to a learner'sfamily. 4.3.11

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#### **4 Environmental Design: Create and maintain an environment to promote learning, encourage interaction and facilitate classroom management. 4.4**

- 1 Compare the effectiveness of different learning environments. 4.4.1
- 2 Analyze the impact of environmental factors on the learning environment. 4.4.2
- 3 Create a learning environment that fosters collaborative and individual work. 4.4.3
- 4 Incorporate learning areas in classroom design to provide learners space to build, create and engage in self-expression. 4.4.4
- 5 Maintain and modify the learning environment to accommodate performance and behavior. 4.4.5
- 6 Create an inclusive learning environment by implementing Universal Design principles and guidelines. 4.4.6
- 7 Create learning centers to enable learners to work independently and in small groups. 4.4.7
- 8 Design the physical learning environment to address learner needs and abilities. 4.4.8

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#### **5 Responsive Environment: Establish and maintain a productive and respectful learning environment. 4.5**

- 1 Describe the benefits of a globally based learning environment. 4.5.1
- 2 Distinguish between individual and group diversity. 4.5.2
- 3 Identify the impact of diversity on the learning environment. 4.5.3
- 4 Demonstrate cultural awareness. 4.5.4
- 5 Model respect for individuals' or groups' culturally unique factors. 4.5.5
- 6 Develop rapport with learners. 4.5.6
- 7 Interact with learners in responsive, consistent, encouraging and supportive ways. 4.5.7
- 8 Use positive guidance techniques. 4.5.8
- 9 Create a supportive and inclusive learning environment that promotes positive interactions and behaviors to minimize risks. 4.5.9
- 10 Set and communicate high and attainable expectations for all learners. 4.5.10
- 11 Establish and follow classroom routines. 4.5.11
- 12 Determine the impact of diversity in an education and training setting (e.g., linguistics, intellectual abilities, beliefs and values). 4.5.12
- 13 Create a culturally compatible learning environment. 4.5.13

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**6 Stakeholder Relationships: Establish and maintain productive relationships with family members, caregivers and community partners. 4.6**

- 1 Describe the advantages and importance of family or caregiver involvement in learner development. 4.6.1
- 2 Identify and implement techniques to constructively and supportively communicate with families or caregivers. 4.6.2
- 3 Plan, facilitate, and document parent-teacher conferences. 4.6.3
- 4 Use family engagement strategies to partner with families in making decisions. 4.6.4
- 5 Collaborate with families to enhance support provided to the learner. 4.6.5
- 6 Communicate reading strategies to families to help them engage learner's literacy interests. 4.6.6
- 7 Involve family or caregiver in resolving a learner's conflicts or issues. 4.6.7
- 8 Assist families or caregivers in addressing challenging learner behaviors outside the learning environment. 4.6.8
- 9 Explain the role and value of external support agencies in education. 4.6.9
- 10 Collaborate with stakeholders and intervention team to meet requirements of learners. 4.6.10
- 11 Explain ways in which community members can contribute to learning experiences. 4.6.11
- 12 Establish and grow positive relationships with community partners. 4.6.12
- 13 Engage community partners in developing learning opportunities. 4.6.13

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## **7 Classroom Management: Manage classroom behavior to create an environment conducive to learning. 4.7**

- 1 Identify the importance of learner self-regulation as related to classroom management. 4.7.1
  - 2 Recognize reasons that learners exhibit inappropriate behavior, and recommend and implement intervention strategies. 4.7.2
  - 3 Communicate and monitor classroom expectations. 4.7.3
  - 4 Apply classroom-management techniques to monitor learner engagement. 4.7.4
  - 5 Respond to and redirect learner behavior. 4.7.5
  - 6 Implement techniques to foster positive learner behavior. 4.7.6
  - 7 Implement strategies to encourage learners to comply with classroom rules and procedures. 4.7.7
  - 8 Identify ways that cultural perspectives can impact conflicts. 4.7.8
  - 9 Determine when to involve stakeholders in conflict-resolution activities. 4.7.9
  - 10 Involve learners in development of behavioral standards for the learning environment. 4.7.10
  - 11 Differentiate instructional strategies to keep all learners engaged. 4.7.11
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**Curriculum and Instruction: Students apply developmentally and intellectually appropriate pedagogies to develop curriculum and implement instructional strategies that promote the physical, cognitive and emotional development of learners. 5**

## **1 Curriculum Planning: Develop curriculum that ensures learners receive integrated, coherent learning experiences. 5.1**

- 1 Identify school, district and state curriculum priorities. 5.1.1
- 2 Solicit and use stakeholder input into curriculum planning. 5.1.2
- 3 Develop curriculum map through collaboration with colleagues. 5.1.3
- 4 Assess learners' prior level of understanding. 5.1.4
- 5 Create instructional calendar to schedule curriculum topics and planned assessments. 5.1.5
- 6 Write objectives aligned to desired learning outcome. 5.1.6
- 7 Align curriculum to state and national standards. 5.1.7
- 8 Integrate standards across the curriculum. 5.1.8
- 9 Integrate employability skills into the curriculum and activities. 5.1.9
- 10 Identify factors to evaluate in determining mastery of content. 5.1.10

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## **2 Instructional Planning: Plan instructional strategies and activities to promote learner development.** 5.2

- 1 Incorporate relevant, real-life experiences into lessons. 5.2.1
- 2 Evaluate game-based learning and gamification. 5.2.2
- 3 Describe types of learning styles and their influence on instruction. 5.2.3
- 4 Use multiple strategies within a lesson to support differentiated instruction. 5.2.4
- 5 Create instructional plans. 5.2.5
- 6 Determine time required for implementation of instructional activities. 5.2.6
- 7 Plan developmentally appropriate learning experiences that engage learners in individual and collaborative learning activities. 5.2.7
- 8 Integrate language and literacy into all classroom activities. 5.2.8
- 9 Incorporate instructional scaffolding. 5.2.9
- 10 Use reflection strategies for evaluating the effectiveness of a lesson. 5.2.10
- 11 Select reflection strategies for learner implementation. 5.2.11
- 12 Determine adjustments to instructional plan based on learners' growth, development and understanding. 5.2.12
- 13 Incorporate evaluation strategies that measure a lesson's learning outcomes. 5.2.13

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## **3 Resources: Select, prepare, and utilize resources; and provide opportunities to promote learner development and advancement.** 5.3

- 1 Determine resources needed to support identified learning objectives. 5.3.1
- 2 Select materials that extend or reinforce learning and comprehension. 5.3.2
- 3 Utilize resources that facilitate the global learning process. 5.3.3
- 4 Select and implement learning materials and experiences that provide a multicultural perspective. 5.3.4
- 5 Determine opportunities for involving stakeholders in learners' activities. 5.3.5
- 6 Prepare and engage stakeholders for participation in learning experiences with learners. 5.3.6
- 7 Identify technology resources to support the needs of learners. 5.3.7
- 8 Engage learners in community activities that extend classroom curriculum. 5.3.8
- 9 Implement intra-curricular activities that can be used to extend or reinforce learning. 5.3.9
- 10 Create opportunities that support learner growth and development through extracurricular activities. 5.3.10
- 11 Identify opportunities available for learners to acquire postsecondary credit. 5.3.11

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#### **4 Instructional Implementation: Implement instructional strategies and methods to meet the needs of all learners. 5.4**

- 1 Determine advantages and disadvantages of instructional strategies and methods. 5.4.1
- 2 Use theories and research-based principles of learning to deliver effective instruction. 5.4.2
- 3 Use techniques to develop learner interest in lessons. 5.4.3
- 4 Implement pacing and time-management techniques to ensure achievement of a lesson's outcomes. 5.4.4
- 5 Review performance criteria with learners to clarify their understanding of desired outcomes. 5.4.5
- 6 Implement current and emerging technology to deliver instruction. 5.4.6
- 7 Utilize questioning techniques to determine, clarify or extend learner understanding. 5.4.7
- 8 Contextualize concepts and examples to facilitate learner understanding. 5.4.8
- 9 Scaffold new ideas to learners' existing knowledge. 5.4.9
- 10 Provide clear and specific directions and feedback to learners. 5.4.10
- 11 Anticipate and clarify learner misconceptions. 5.4.11
- 12 Implement and adjust instructional plan to accommodate learner needs or unforeseen circumstances. 5.4.12
- 13 Apply grouping strategies to support instructional activities. 5.4.13
- 14 Implement strategies to overcome language barriers between instructor and learner. 5.4.14
- 15 Implement developmentally appropriate instructional activities that support differentiated learning. 5.4.15
- 16 Implement learner reflection strategies to extend and enhance learning. 5.4.16

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**5 Foundations of Teaching Literacy: Examine the foundational principles of literacy to enhance instruction. 5.5**

- 1 Explain the importance of early reading success to lifelong learning. 5.5.1
- 2 Recognize the purposes of phonemic awareness, phonics and word study in instruction. 5.5.2
- 3 Identify the benefits of using segmenting, blending and manipulating sounds in teaching phonemic awareness. 5.5.3
- 4 Identify instructional approaches used to teach reading and writing. 5.5.4
- 5 Identify instructional strategies used to teach reading. 5.5.5
- 6 Identify factors to consider in the selection of texts for readers. 5.5.6
- 7 Compare the use of traditional reading groups and guided reading groups. 5.5.7
- 8 Compare independent reading with silent-sustained reading. 5.5.8
- 9 Explain reading comprehension strategies used by the learner. 5.5.9
- 10 Describe features and types of factual and fictional texts. 5.5.10
- 11 Describe the characteristics, purposes and examples of graphic organizers. 5.5.11
- 12 Identify oral language activities appropriate for specific instructional strategies. 5.5.12

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**6 Literacy Instruction: Implement instructional strategies and methods to develop learners' reading, writing, listening and speaking skills. 5.6**

- 1 Collaborate with learners to establish reading goals and expectations. 5.6.1
  - 2 Plan and implement strategies to promote phonemic awareness, phonics and word study. 5.6.2
  - 3 Implement activities to encourage readers to respond to texts. 5.6.3
  - 4 Implement activities for learners to identify similarities and differences in the structure of texts, sentences, words and letters. 5.6.4
  - 5 Develop and implement reading activities that activate and extend a learner's background knowledge. 5.6.5
  - 6 Implement reading comprehension strategies. 5.6.6
  - 7 Select and implement instructional methods to enhance learners' reading comprehension. 5.6.7
  - 8 Model how to decode words. 5.6.8
  - 9 Implement strategies to enable learners to build their vocabulary in the context of reading. 5.6.9
  - 10 Model reading strategies for learners to utilize for challenging words. 5.6.10
  - 11 Plan and conduct read-alouds. 5.6.11
  - 12 Conduct shared readings. 5.6.12
  - 13 Use prompts, questions and cues to encourage readers to figure out difficult words and texts. 5.6.13
  - 14 Plan and conduct guided reading lessons. 5.6.14
  - 15 Plan, conduct, and monitor independent reading. 5.6.15
  - 16 Utilize techniques that help to develop prewriting skills. 5.6.16
  - 17 Implement writing activities to use for reading instruction. 5.6.17
  - 18 Implement scaffolding strategies to expand language and writing experiences based on children's interests. 5.6.18
  - 19 Provide support to readers in their zone of proximal development. 5.6.19
  - 20 Assist learners in developing non-verbal cues and listening skills. 5.6.20
  - 21 Promote learner-to-learner and learner-to-adult conversations. 5.6.21
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**Technology and Online Instruction: Students apply technology in the learning environment and use developmentally and intellectually appropriate pedagogies to design and implement online instructional materials and strategies that promote learners' growth and development.** 6

**1 Technology for the Learning Environment: Understand tools and applications that provide the basis for the use of technology in the learning environment.** 6.1

- 1 Identify the capabilities of technology. 6.1.1
- 2 Explain technology concepts that emphasize user-generated content used in learning environments. 6.1.2
- 3 Engage in continuous learning in relation to current and emerging technologies used in the learning environment. 6.1.3
- 4 Engage colleagues, learners and stakeholders in educational networking sites. 6.1.4
- 5 Compare and contrast the use of social media for personal and educational purposes. 6.1.5
- 6 Follow established protocol and practices necessary to maintain professional identity and reputation while using social media and educational networking sites. 6.1.6
- 7 Assist learners in understanding short and long-term impacts of digital footprints. 6.1.7
- 8 Develop and maintain an online personal learning network. 6.1.8
- 9 Assist learners in using educational networking tools to communicate and problem-solve. 6.1.9
- 10 Collaborate with learners and stakeholders to address technology gaps. 6.1.10

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**2 Blended and Online Learning Foundations: Apply principles and concepts of online learning to course design and implementation.** 6.2

- 1 Compare online learning versus traditional learning environments. 6.2.1
- 2 Describe types of online learning. 6.2.2
- 3 Describe components of effective online learning. 6.2.3
- 4 Describe issues associated with accessibility and inclusivity in online learning. 6.2.4
- 5 Explain issues associated with copyrights and property norms in online learning. 6.2.5
- 6 Describe how online learning can be used to promote higher-order thinking skills. 6.2.6
- 7 Describe the implications of behavioral, cognitive and constructivist perspectives for online learning. 6.2.7
- 8 Describe influences that affect the design of online learning activities. 6.2.8
- 9 Analyze trends in online instructional design and implementation. 6.2.9

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### **3 Online Instructional Design: Design online courses or materials to deliver curriculum.** 6.3

- 1 Use online design principles to identify course materials suited for a blended learning environment. 6.3.1
- 2 Select background colors and fonts that contribute to readability. 6.3.2
- 3 Determine capabilities of available learning management system. 6.3.3
- 4 Design online course navigation. 6.3.4
- 5 Develop introductory material and syllabus for online course. 6.3.5
- 6 Structure content in learning management system. 6.3.6
- 7 Use multimedia tools and online learning management system to enrich blended and online learning opportunities. 6.3.7
- 8 Design and sequence planned online learning interactions. 6.3.8
- 9 Apply interactive capabilities of online learning management system. 6.3.9
- 10 Prepare resources that can be used to support learners' learning styles. 6.3.10
- 11 Construct online learning content, activities and assessments utilizing Universal Design principles. 6.3.11
- 12 Incorporate online tools that facilitate teacher-to-learner and learner-to-learner communication. 6.3.12
- 13 Integrate digital literacy strategies into the curriculum. 6.3.13
- 14 Incorporate formal and informal course and curriculum feedback methods for learners and stakeholders. 6.3.14

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### **4 Online Implementation: Implement online instructional strategies and methods to meet targeted goals.** 6.4

- 1 Orient learners to online platform and course processes and procedures. 6.4.1
  - 2 Instruct learners on providing online peer-to-peer feedback. 6.4.2
  - 3 Implement instructional methods and electronic media to support standards-based lessons. 6.4.3
  - 4 Interact with online learners through regular postings. 6.4.4
  - 5 Implement engagement techniques for online instruction. 6.4.5
  - 6 Monitor and respond to learner feedback and questions. 6.4.6
  - 7 Address technical challenges and issues encountered. 6.4.7
  - 8 Foster collaboration through online community platforms. 6.4.8
-

**Observation and Assessment: Students create and administer observations and diagnostic, formative and summative assessments and use the resulting data to modify and improve instruction, to determine needed remediation and to adjust future observations and assessments.** 7

**1 Observation and Assessment Foundations: Describe the value and need for observation and assessment in the education process.** 7.1

- 1 Compare the purpose, value and use of formal and informal observation. 7.1.1
- 2 Describe the impact of observation findings on curriculum and needed environmental changes. 7.1.2
- 3 Explain the purposes and impact of assessment. 7.1.3
- 4 Explain how assessments can be used as an effective medium for communication between the instructor and the learner. 7.1.4
- 5 Distinguish among formative, summative and diagnostic assessment. 7.1.5
- 6 Distinguish between norm-referenced and criterion-referenced assessments. 7.1.6
- 7 Describe the need to provide immediate and frequent feedback to learners. 7.1.7
- 8 Explain the potential use of adaptive technologies in assessment. 7.1.8
- 9 Describe the use and value of mastery learning techniques. 7.1.9
- 10 Identify interventions often used to assist learners with testing. 7.1.10

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**2 Observation: Administer formal observations to evaluate learners' growth and development progress and to diagnose problems. 7.2**

- 1 Identify procedures and best practices for administering formal observations. 7.2.1
- 2 Select tools for recording and categorizing learner progress. 7.2.2
- 3 Screen learners' overall health status, developmental strengths and weaknesses. 7.2.3
- 4 Analyze a learner's nonverbal behaviors and rely on behavioral cues to see what a learner knows and can do. 7.2.4
- 5 Identify the development of learners' receptive and expressive language skills by regularly and systematically observing learners in various contexts. 7.2.5
- 6 Maintain observational and anecdotal records to monitor learners' development. 7.2.6
- 7 Use observation records to identify patterns, trends and conclusions about individuals and groups of learners. 7.2.7
- 8 Use formal observation to develop a holistic picture of the learner. 7.2.8
- 9 Use observation to scaffold learning for individual learners. 7.2.9
- 10 Prepare formal and informal learner observations that are objective and factual. 7.2.10
- 11 Assess development of learners' literacy capabilities. 7.2.11
- 12 Identify reading concerns, and implement interventions. 7.2.12
- 13 Create a developmental plan for the learner. 7.2.13
- 14 Utilize ongoing learner observation to recognize developmental goal attainment. 7.2.14
- 15 Assess learners' readiness to transition. 7.2.15
- 16 Use observations to align curricular activities. 7.2.16
- 17 Communicate observation outcomes to stakeholders. 7.2.17

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### **3 Assessment: Develop and administer assessments to evaluate learner understanding and skill development.** 7.3

- 1 Describe the characteristics, strengths, limitations and uses of assessment tools. 7.3.1
- 2 Explain potential consequences of misusing or overusing assessment procedures. 7.3.2
- 3 Align assessments with desired or mandated learning outcomes. 7.3.3
- 4 Choose assessment methods appropriate for learning environment and instructional goals. 7.3.4
- 5 Identify required assessment and testing instruments. 7.3.5
- 6 Develop selected-response test items and keys. 7.3.6
- 7 Develop constructed-response test items and scoring guide. 7.3.7
- 8 Distinguish between holistic and analytical rubrics. 7.3.8
- 9 Develop performance scenarios and rubrics. 7.3.9
- 10 Facilitate development of learners' portfolios. 7.3.10
- 11 Prepare learners for the demands of specific assessment formats. 7.3.11
- 12 Administer assessments. 7.3.12
- 13 Use scoring guides and rubrics to score projects and essay questions. 7.3.13
- 14 Create and use rubrics and rating scales to score performance assessments. 7.3.14
- 15 Communicate assessment outcomes to stakeholders. 7.3.15

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### **4 Test Analysis: Evaluate quality and effectiveness of assessments.** 7.4

- 1 Describe reasons learners respond incorrectly to test items. 7.4.1
- 2 Determine test-item discrimination. 7.4.2
- 3 Distinguish between validity and reliability. 7.4.3
- 4 Explain types of validity. 7.4.4
- 5 Determine test-item validity and reliability. 7.4.5
- 6 Resolve issues or problems with test items. 7.4.6
- 7 Interpret commonly reported scores on standardized tests. 7.4.7
- 8 Interpret summary indexes often reported with assessment results. 7.4.8
- 9 Determine patterns in assessment data for groups of learners. 7.4.9

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**5 Data Applications: Apply data to improve curriculum and instruction and to foster learner growth and development. 7.5**

- 1 Identify types and sources of data that can be used for educational improvement. 7.5.1
- 2 Display data in visual representations to illustrate learning results. 7.5.2
- 3 Describe ways that data can be used for educational improvement. 7.5.3
- 4 Explain ways that data are used by administrators to drive educational performance. 7.5.4
- 5 Explain the importance of considering measurement errors when making learner decisions. 7.5.5
- 6 Determine and implement needed corrective measures based on test analysis. 7.5.6
- 7 Construct and administer surveys to obtain curricular feedback. 7.5.7
- 8 Analyze formal and informal feedback for curriculum evaluation purposes. 7.5.8
- 9 Interpret data to inform teaching responses and strategies. 7.5.9
- 10 Interpret and use assessment data to motivate learners and enhance their performance. 7.5.10