Colorado CTE

Education & Training (2015): Grades 9, 10, 11, 12, Higher Education

Adopted 2015

Achieve additional academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within a career cluster. TCTR.01

01. Employ fundamental principles of psychology to enhance learner achievement. TCTR.01.01

- a. Employ fundamental knowledge of developmental theory to enhance learner achievement. TCTR.01.01.A
- b. Employ fundamental knowledge of learning theory to enhance learner achievement. TCTR.01.01.B

02. Employ fundamental principles of sociology to enhance learner achievement. TCTR.01.02

- a. Employ fundamental knowledge of the social interaction of individuals and institutions to enhance learner achievement. TCTR.01.02.A
- b. Analyze social barriers to learning. TCTR.01.02.B
- c. Employ fundamental knowledge of the dynamics of sociological change to enhance professional practice. TCTR.01.02.C

03. Utilize knowledge about the history and belief systems of multiple cultural, ethnic, and racial groups to enhance learner achievement. TCTR.01.03

- a. Explain the history of multiple cultural, ethnic, and racial groups as it relates to learning. TCTR.01.03.A
- b. Explain multiple cultural, ethnic, and racial groups' belief systems that relate to learning. TCTR.01.03.B

04. Analyze and apply knowledge of the relationships between education and society to enhance learner achievement. TCTR.01.04

- a. Employ fundamental knowledge of educational philosophies to enhance learner achievement. TCTR.01.04.A
- b. Analyze structures for governing professional practices in learning settings. TCTR.01.04.B
- c. Apply fundamental knowledge of economics to enhance learner achievement. TCTR.01.04.C

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05. **Explain and apply a variety of instructional models to enhance learning achievement.** TCTR.01.05

- a. Explain models of instruction. TCTR.01.05.A
- b. Employ models of instruction to enhance learner achievement. TCTR.01.05.B

06. **Employ knowledge of economic principles to enhance understanding of professional practices in learning settings.** TCTR.01.06

- a. Employ fundamental knowledge of macroeconomics to enhance funding for professional practices in learning settings. TCTR.01.06.A
- b. Employ fundamental knowledge of microeconomics to enhance funding for professional practices in learning settings. TCTR.01.06.B

Use oral and written communication skills in creating, expressing and interpreting information and ideas including technical terminology and information. TCTR.02

01. **Apply verbal communication skills to enhance learning and stakeholder commitment to learning organization.** TCTR.02.01

- a. Provide information using motivational and engaging communication techniques. TCTR.02.01.A
- b. Use non-verbal communication to enhance verbal communication. TCTR.02.01.B
- c. Customize communication messages to fit the audience members. TCTR.02.01.C
- d. Recognize and address barriers to oral communication. TCTR.02.01.D
- e. Give clear verbal directions. TCTR.02.01.E
- f. Utilize feedback to improve communication. TCTR.02.01.F

02. **Employ communication skills in interactive situations to enhance learning and stakeholder commitment to the organization.** TCTR.02.02

- a. Utilize interviewing skills. TCTR.02.02.A
- b. Utilize discussion skills. TCTR.02.02.B
- c. Utilize questioning skills. TCTR.02.02.C
- d. Apply listening skills to enhance learning and stakeholder investment in learning organization. TCTR.02.02.D
- e. Follow verbal directions. TCTR.02.02.E

03. **Use writing skills to enhance stakeholder commitment to the learning organization.** TCTR.02.03

- a. Write informational correspondence to stakeholders in the learning environment. TCTR.02.03.A
- b. Write clear directions for learners. TCTR.02.03.B
- c. Write summative reports regarding the learning environment. TCTR.02.03.C
- d. Write position papers on issues affecting learning environments and organizations. TCTR.02.03.D

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e. Employ graphic communication to enhance learning and stakeholder investment in learning organization. TCTR.02.03.E

04. Use knowledge of reading strategies in the content area to enhance learner achievement. TCTR.02.04

a. Understand content, technical concepts, and vocabulary to analyze information and follow directions. TCTR.02.04.A

b. Communicate information, data, and observations that apply information learned from reading to actual practice. TCTR.02.04.B

Solve problems using critical thinking skills (analyze, synthesize, and evaluate) independently and in teams. Solve problems using creativity and innovation. TCTR.03

01. Apply problem-solving and critical thinking skills in educational and training settings to enhance instruction and learner achievement. TCTR.03.01

a. Utilize scientific thinking to solve education and training related problems. TCTR.03.01.A

b. Synthesize multiple and conflicting data and viewpoints to derive a position on educational issues. TCTR.03.01.B

c. Utilize reflection strategies to improve instructional skills and learner achievement. TCTR.03.01.C

d. Utilize perspective-taking to enhance instruction and learner achievement. TCTR.03.01.D

e. Utilize conflict resolution strategies to resolve issues in educational contexts. TCTR.03.01.E

02. Evaluate educational perspectives, policies and procedures using critical thinking in order to intelligently discuss educational issues. TCTR.03.02

a. Analyze the diversity of objectives and perspectives of multiple stakeholders. TCTR.03.02.A

b. Analyze public and organizational policies and procedures. TCTR.03.02.B

Use leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives. TCTR.04

01. Employ knowledge of group processes and skills for working collaboratively to enhance professional practice. TCTR.04.01

a. Employ interpersonal skills to enhance professional practice. TCTR.04.01.A

b. Employ group processes knowledge and skills to enhance professional practice. TCTR.04.01.B

Know and understand the importance of professional ethics and legal responsibilities. TCTR.05

01. Analyze and explain ethical and legal boundaries of professional practice in learning settings to enhance professionalism in education and training. TCTR.05.01

a. Explain major laws that govern behavior within learning settings. TCTR.05.01.A

b. Analyze ethical responsibilities in professional practice within learning settings. TCTR.05.01.B

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c. Explain institutional policies and procedures that relate to ethical and legal behavior. TCTR.05.01.C

02. Explain legal rights that apply to stakeholders and practitioners within learning settings to enhance professionalism in education and training. TCTR.05.02

a. Explain legal rights of stakeholders within learning settings. TCTR.05.02.A

b. Explain legal rights of professional practitioners within learning settings. TCTR.05.02.B

03. Exhibit ethical and legal behavior within educational and training settings to model professional behaviors. TCTR.05.03

a. Perform work duties according to legal boundaries. TCTR.05.03.A

b. Perform work duties in accordance with legal rights of stakeholders and coworkers. TCTR.05.03.B

c. Perform work duties according to ethical boundaries. TCTR.05.03.C

Know and understand the importance of employability skills. Explore, plan, and effectively manage careers. Know and understand the importance of entrepreneurship skills. TCTR.06

01. Explore, describe, and determine career options using research skills in order to plan for a career in education and training. TCTR.06.01

a. Use self-assessment and assessment by others to match personal characteristics to those associated with successful professional practice. TCTR.06.01.A

b. Explain career trajectories in education and training. TCTR.06.01.B

c. Use relationships with other professionals to explore career options. TCTR.06.01.C

d. Construct an individual career plan. TCTR.06.01.D

Use the technical knowledge and skills required to pursue the targeted careers for all pathways in the career cluster, including knowledge of design, operation, and maintenance of technological systems critical to the career cluster. TCTR.07

01. Employ and adapt instructional strategies within educational and training settings to enhance learner achievement. TCTR.07.01

a. Apply instructional strategies to enhance learner achievement. TCTR.07.01.A

b. Adapt instructional strategies based on learner performance. TCTR.07.01.B

c. Use instructional tools to enhance learner achievement. TCTR.07.01.C

02. Employ organizational and logic skills and enhance professional practice. TCTR.07.02

a. Employ record keeping skills to enhance professional practice and meet accountability standards. TCTR.07.02.A

b. Employ logic skills to enhance professional practice. TCTR.07.02.B

03. Conduct, interpret, and share research findings to enhance professional practice. TCTR.07.03

a. Identify credible sources of research to enhance professional practice. TCTR.07.03.A

b. Conduct research to enhance professional practice. TCTR.07.03.B

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c. Interpret research to enhance professional practice. TCTR.07.03.C

d. Disseminate research results to enhance professional practice. TCTR.07.03.D

Planning/Preparing TCTR.08

01. Use fundamental knowledge of subject matter to plan/prepare effective instruction. TCTR.08.01

a. Use resources and professional development to update knowledge and skills on an ongoing basis. TCTR.08.01.A

b. Identify prerequisite knowledge that will provide a bridge between past and future knowledge for learners. TCTR.08.01.B

c. Apply principles of scope and sequence while planning instruction. TCTR.08.01.C

d. Integrate various content to make explicit the connections to other subject matter. TCTR.08.01.D

e. Explain connection to life and career applications when making content relevant. TCTR.08.01.E

02. Meet the needs of learners and organizations to design courses/programs. TCTR.08.02

a. Analyze standards, organization goals, and learners when selecting content. TCTR.08.02.A

b. Use assessment tools when determining needs of learners and organizations. TCTR.08.02.B

c. Employ analytical skills while evaluating instructional resources and program materials. TCTR.08.02.C

03. Employ knowledge of learning and developmental theory to describe individual learners. TCTR.08.03

a. Locate theory-based information to describe individual learners. TCTR.08.03.A

b. Apply learning and developmental theory to relate individual characteristics to the learning process. TCTR.08.03.B

04. Examine and apply teaching/learning theory and instructional skills to plan appropriate educational strategies. TCTR.08.04

a. Use knowledge of learners when aligning instructional strategies to learners' backgrounds. TCTR.08.04.A

b. Apply teaching/learning theory while selecting learning activities. TCTR.08.04.B

c. Employ multiple methods for grouping learners. TCTR.08.04.C

d. Employ organizational skills while designing a coherent structure of instructional strategies. TCTR.08.04.D

e. Develop strategies to encourage the transfer of knowledge and skills. TCTR.08.04.E

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05. Identify and locate materials/resources needed to support instructional plans. TCTR.08.05

- a. Identify materials and resources needed to enhance instruction. TCTR.08.05.A
- b. Identify resources to aid learners in learning. TCTR.08.05.B

Learning Environment TCTR.09

01. Establish a positive climate to promote learning. TCTR.09.01

- a. Establish respect and rapport to foster positive social and intellectual interactions. TCTR.09.01.A
- b. Explain the importance of content to promote interest in learning. TCTR.09.01.B
- c. Establish challenging expectations for each learner. TCTR.09.01.C

02. Employ motivational, social, and psychological theory and effective practices to guide learners' personal conduct. TCTR.09.02

- a. Document standards of conduct and expectations clearly. TCTR.09.02.A
- b. Monitor learners' personal conduct using a variety of strategies. TCTR.09.02.B
- c. Respond to learners' personal conduct by providing appropriate feedback. TCTR.09.02.C

03. Use organizational and relationship-building skills to manage instructional activities and related procedures. TCTR.09.03

- a. Utilize engagement of learners to optimize benefits of instructional groups. TCTR.09.03.A
- b. Manage instructional transitions while employing time management skills. TCTR.09.03.B
- c. Employ organizational skills while managing instructional resources (i.e., tools, equipment, supplies, and materials). TCTR.09.03.C
- d. Perform non-instructional duties. TCTR.09.03.D
- e. Supervise learners using organizational and relationship-building skills. TCTR.09.03.E

04. Consider physical elements in an educational or training setting to optimize learning. TCTR.09.04

- a. Arrange space, equipment, and furniture within learning settings to optimize learning. TCTR.09.04.A
- b. Use physical access and spacing requirements within learning settings. TCTR.09.04.B

Instruction TCTR.10

01. Employ instructional strategies in a learning setting to advance learning. TCTR.10.01

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- a. Use appropriate representations to make content meaningful to learners. TCTR.10.01.A

b. Use learning activities and assignments to challenge and engage learners. TCTR.10.01.B

c. Use content and knowledge of teaching/learning while delivering instruction. TCTR.10.01.C

d. Employ instructional materials and resources to enhance learning. TCTR.10.01.D

e. Use questioning techniques to encourage higher-order thinking. TCTR.10.01.E

f. Use discussion techniques to engage learners. TCTR.10.01.F

g. Employ educational technology to enhance learning. TCTR.10.01.G

h. Use cooperative learning techniques to engage learners. TCTR.10.01.H

i. Use work-based learning techniques to extend learning. TCTR.10.01.I

j. Use project-based learning techniques to extend learning. TCTR.10.01.J

k. Provide support for learning organizations and activities to extend learning opportunities. TCTR.10.01.K

Professional Responsibilities TCTR.11

01. **Assess past teaching/training performance to determine effectiveness of instructional practices.** TCTR.11.01

    a. Construct an active philosophy of instruction to form criteria for assessing effective instructional practice. TCTR.11.01.A

    b. Employ various strategies while systematically monitoring effectiveness of instruction. TCTR.11.01.B

    c. Refine instructional practice based upon analysis of past actions. TCTR.11.01.C

02. **Employ community-building skills and strategies with others to advance the education profession and learning organizational vision.** TCTR.11.02

    a. Form partnerships with colleagues to establish a community of learners. TCTR.11.02.A