

Indiana Department of Education

Indiana Content Standards for Educators

VIRTUAL INSTRUCTION

Virtual instructors are expected to have a broad and comprehensive understanding of the knowledge and skills needed for this educator license, and to use that knowledge to help students in online and blended courses prepare for the challenges and opportunities of the twenty-first century. This requires the ability to identify, comprehend, analyze, synthesize, and evaluate the basic principles, fundamental concepts, and essential skills and abilities defined in these standards, and to apply that knowledge to the tasks of planning and delivering effective virtual instruction and online assessment.

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Table of Contents

Virtual Instruction Educator Standards	1
Selected Bibliography of Standards and Sources Related to Virtual Instruction	9
Alignment of Educator Standards with National Standards	11

Virtual Instruction Educator Standards

Standard 1: Online and Blended Learning Environments

Virtual instructors have a broad understanding of the continuum of learning environments and demonstrate the ability to establish highly interactive, productive, and safe online and blended learning environments that welcome all students.

Standard 2: Online Learning Processes

Virtual instructors have a broad understanding of online learning processes that facilitate student achievement and support student success in online and blended learning environments.

Standard 3: Planning and Delivering Virtual Instruction

Virtual instructors have a broad understanding of instructional planning and delivery in online and blended learning environments and demonstrate the ability to deliver individualized virtual instruction that creates rich and meaningful learning experiences, makes effective use of online resources, and helps all students achieve learning goals.

Standard 4: Online Assessment

Virtual instructors have a broad understanding of online assessment practices and demonstrate the ability to use a variety of online assessments to monitor student progress and guide instruction in online and blended courses.

Standard 5: Student Diversity in Online and Blended Learning Environments

Virtual instructors have a broad understanding of the diversity of students in online and blended courses and demonstrate the ability to provide virtual instruction that is responsive to student differences and that promotes active learning for all students.

Standard 6: Technology for Virtual Instruction

Virtual instructors have a broad understanding of existing and emerging technologies that support student learning and engagement and demonstrate the ability to use a variety of tools for content and instruction delivery, collaboration, and communication in online and blended learning environments.

Standard 7: The Professional Environment for Virtual Instructors

Virtual instructors have a broad understanding of their professional environment and demonstrate the ability to collaborate with others, promote digital citizenship, follow legal and ethical guidelines specific to online and blended learning environments, and engage in continuous professional growth.

Virtual Instruction Educator Standards

Standard 1: Online and Blended Learning Environments

Virtual instructors have a broad understanding of the continuum of learning environments and demonstrate the ability to establish highly interactive, productive, and safe online and blended learning environments that welcome all students, including:

- 1.1** knowledge of the continuum of learning environments (e.g., face-to-face, blended, fully online), and the ability to adapt learning experiences and instruction to each environment
- 1.2** strategies for creating safe, supportive, and inclusive online and blended learning environments, including setting expectations for student–instructor interaction, student–student interaction, and instructor response times; modeling appropriate online behavior; and educating students about cybersecurity and cyberbullying
- 1.3** strategies for creating a community in online and blended learning environments (e.g., creating a relationship of trust; using a range of communication methods; supporting independence, creativity, and collaboration) and reaching and engaging all students, including students who are struggling in online and blended learning environments
- 1.4** procedures for establishing and maintaining a consistent presence in the online learning environment (e.g., welcome calls and e-mails, webinars, blog postings, text messages) and facilitating student learning, class discussions, and time management
- 1.5** skills and strategies for facilitating and monitoring student–student collaboration in online and blended instruction groups that are goal oriented, focused, project based, and inquiry oriented
- 1.6** knowledge of online and blended course management tasks (e.g., tracking student enrollments, communication logs, attendance records), and strategies for providing course materials and communication in a consistent, timely manner

Virtual Instruction Educator Standards

Standard 2: Online Learning Processes

Virtual instructors have a broad understanding of online learning processes that facilitate student achievement and support student success in online and blended learning environments, including:

- 2.1** knowledge of major theories and concepts related to online learning and virtual instruction (e.g., student-centered instruction, collaborative learning, inquiry- and project-based learning, role of educational technology, technology integration)
- 2.2** knowledge of the online learning experience and the diverse perspectives of online students, and the ability to use this knowledge to assess student readiness, recognize and respond to obstacles to student success, and anticipate challenges and problems in online or blended learning environments
- 2.3** strategies for establishing connections with students and parents/guardians; creating and communicating appropriate objectives for online and blended courses; setting and communicating clear expectations; and maintaining strong, regular, individualized, and supportive communication
- 2.4** strategies for keeping students motivated and engaged, facilitating students' progress through online and blended courses, helping students manage time and work space, and providing strong support to promote successful course completion
- 2.5** strategies for promoting student independence; encouraging students to define learning goals, monitor their progress, and share their perceptions of how they are learning; and creating opportunities for student self-assessment
- 2.6** knowledge of twenty-first-century and information literacy skills (e.g., defining inquiry, evaluating sources of information, synthesizing information from multiple sources), and the ability to use this knowledge to prepare students for participation in the global community

Virtual Instruction Educator Standards

Standard 3: Planning and Delivering Virtual Instruction

Virtual instructors have a broad understanding of instructional planning and delivery in online and blended learning environments and demonstrate the ability to deliver individualized virtual instruction that creates rich and meaningful learning experiences, makes effective use of online resources, and helps all students achieve learning goals, including:

- 3.1** knowledge of the structure and components that comprise online and blended courses (e.g., course site, calendar, modules, synchronous and asynchronous activities, discussion boards)
- 3.2** strategies for planning online and blended courses (e.g., assessing student needs and resources; developing or modifying a clear, specific online syllabus; using online resources effectively; establishing appropriate milestones and deadlines)
- 3.3** knowledge of instructional approaches that are appropriate for online and blended courses (e.g., student-centered instruction, collaborative learning, self-directed learning, project-based learning), and the ability to apply current best practices for virtual instruction
- 3.4** the ability to implement activities and assignments (e.g., lessons, discussions, labs, simulations, individual and group projects) that are interactive; integrate digital media, online content, and offline resources; provide multiple paths for learning experiences; and promote independent learning and collaboration
- 3.5** strategies for individualizing virtual instruction to meet students' diverse abilities and learning needs
- 3.6** the ability to provide students with timely, specific, constructive, and personalized responses and feedback using a variety of methods and communication tools
- 3.7** strategies for monitoring course effectiveness, including the interpretation and appropriate use of observational data in online and blended courses (e.g., tracking data, Weblogs, e-mail); encouraging student feedback; and modifying virtual instruction to improve effectiveness and meet student needs

Virtual Instruction Educator Standards

Standard 4: Online Assessment

Virtual instructors have a broad understanding of online assessment practices and demonstrate the ability to use a variety of online assessments to monitor student progress and guide instruction in online and blended courses, including:

- 4.1** fundamental concepts related to assessment in online and blended learning environments, including continuous evaluation, formative and summative assessments, and alignment of assessment to instructional goals
- 4.2** knowledge of computer-managed online assessment instruments (e.g., checklists; automatically graded quizzes, tests, and assignments; surveys), and the ability to create or select adequate and appropriate assessment instruments
- 4.3** knowledge of tools for authentic and performance-based assessment in online and blended courses (e.g., written assignments, simulations and games, individual and collaborative projects, portfolios), and strategies for providing students with opportunities to demonstrate understanding and acquired knowledge and skills
- 4.4** procedures for implementing online assessments that ensure validity, reliability, and the security of student data
- 4.5** strategies for clearly communicating assessment criteria; providing prompt, personalized reporting of results and specific feedback; and using online assessment data to monitor learner progress, inform instruction, guide students' management of coursework and resources, and develop interventions as needed

Virtual Instruction Educator Standards

Standard 5: Student Diversity in Online and Blended Learning Environments

Virtual instructors have a broad understanding of the diversity of students in online and blended courses and demonstrate the ability to provide virtual instruction that is responsive to student differences and that promotes active learning for all students, including:

- 5.1** knowledge of types of student diversity (e.g., cultural, economic, and linguistic background; gender; religion; family structure; exceptionalities), and the ability to use this knowledge to promote learning for all students in online and blended courses
- 5.2** the ability to differentiate virtual instruction, modify course delivery, and adjust communication with students and parents/guardians according to students' diverse backgrounds, learning needs (e.g., advancement, flexibility, credit recovery), learning styles, and life situations
- 5.3** the ability to accommodate diverse student populations in online and blended courses, including students with exceptionalities and English Learners
- 5.4** knowledge of digital equity issues and strategies for accommodating students with differing levels of access to technology resources (e.g., high-speed Internet, desktop and laptop computers, communication tools)

Virtual Instruction Educator Standards

Standard 6: Technology for Virtual Instruction

Virtual instructors have a broad understanding of existing and emerging technologies that support student learning and engagement and demonstrate the ability to use a variety of tools for content and instruction delivery, collaboration, and communication in online and blended learning environments, including:

- 6.1** knowledge of computer hardware, peripherals, and mobile devices (e.g., desktop, laptop, and tablet computers; microphones; webcams; smartphones) and their use in delivering virtual instruction and participating in online and blended courses
- 6.2** knowledge of learning management systems (LMS); basic development tools and productivity software (e.g., word processors, Web browsers, presentation software); and multimedia, visual, and Internet resources, and their use in developing, managing, and delivering online and blended courses
- 6.3** knowledge of collaborative tools (e.g., blogs, wikis, multimedia sharing, social networking, drawing tools, webinars, backchannel tools) and how they are incorporated into virtual instruction
- 6.4** knowledge of communication technologies, including tools for synchronous and asynchronous communication (e.g., e-mail, discussion boards, instant messaging, video chat tools, text messaging), and their use in supporting interaction with and among students
- 6.5** knowledge of the principles of universal design for learning (UDL) and adaptive and assistive technologies, and the ability to use appropriate tools and technologies to support effective virtual instruction for diverse student populations, including students with exceptionalities and English Learners
- 6.6** knowledge of emerging technologies in virtual instruction, and strategies for continuously updating knowledge and skills related to evolving virtual instruction technology
- 6.7** the ability to apply basic troubleshooting skills, provide basic technical support to students, and forward technical issues to support teams as appropriate

Virtual Instruction Educator Standards

Standard 7: The Professional Environment for Virtual Instructors

Virtual instructors have a broad understanding of their professional environment and demonstrate the ability to collaborate with others, promote digital citizenship, follow legal and ethical guidelines specific to online and blended learning environments, and engage in continuous professional growth, including:

- 7.1** strategies for establishing and maintaining ongoing, frequent, and professional communication with parents/guardians, mentors, learning coaches, and local school contacts and facilitating the involvement of all stakeholders in students' success in online and blended courses
- 7.2** procedures for establishing and maintaining a professional work environment, and the ability to recognize and prioritize essential tasks (e.g., daily, weekly, monthly) associated with virtual instruction and manage time effectively
- 7.3** the application of state and federal privacy standards (e.g., the Family Educational Rights and Privacy Act [FERPA]) in online and blended learning environments and the ability to communicate privacy rules to students
- 7.4** knowledge of the responsibilities of digital citizenship, and strategies for promoting digital citizenship, information literacy, and students' understanding of copyright laws, intellectual property policies, and fair use standards
- 7.5** the ability to establish clear expectations for academic integrity and identify risks for academic dishonesty in online and blended learning environments, and strategies for recognizing the authenticity of student work and intervening in incidents of academic dishonesty
- 7.6** procedures for engaging in ongoing professional development activities appropriate to virtual instructors, including updating knowledge of pedagogy and practice for online and blended learning environments and participating in personal learning networks and professional learning communities

Selected Bibliography of Standards and Sources Related to Virtual Instruction

State and National Standards and Curriculum Frameworks

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8. Dawley, L., Rice, K., & Hink, G. (2010). *Going virtual! 2010: The status of professional development and unique needs of K–12 online teachers*. Boise, ID: Department of Educational Technology, Boise State University. <http://edtech.boisestate.edu/goingvirtual/goingvirtual3.pdf>
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Selected Bibliography of Standards and Sources Related to Virtual Instruction

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11. Archambault, L., & Crippen, K. (2009). K–12 distance educators at work: Who's teaching online across the United States. *Journal of Research on Technology in Education*, 41(4), 363–391.
12. Boettcher, J. V., & Conrad, R. (2010). *The online teaching survival guide: Simple and practical pedagogical tips*. San Francisco: Jossey-Bass.
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14. Ferdig, R. E., & Cavanaugh, C. (Eds.). (2011). *Lessons learned from virtual schools: Experiences and recommendations from the field*. Vienna, VA: International Association for K–12 Online Learning (iNACOL).
15. Kerr, S. (2010). Tips, tools, and techniques for teaching in the online high school classroom. *TechTrends: Linking research and practice to improve learning*, 55(1), 28–31.
16. Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. <http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>
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Alignment of Educator Standards with National Standards

Indiana Educator Standards for Virtual Instruction	iNACOL National Standards for Quality Online Teaching	SREB Standards for Quality Online Teaching	ISTE National Educational Technology Standards
<p><u>Standard 1: Online and Blended Learning Environments</u></p> <p>Virtual instructors have a broad understanding of the continuum of learning environments and demonstrate the ability to establish highly interactive, productive, and safe online and blended learning environments that welcome all students.</p>	<p>A; B; C; D; I</p>	<p><i>The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.</i></p> <p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher models, guides and encourages legal, ethical, safe and healthy behavior related to technology use.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p>	<p>1c–1d; 2b; 3b–3c; 4b–4c</p>
<p><u>Standard 2: Online Learning Processes</u></p> <p>Virtual instructors have a broad understanding of online learning processes that facilitate student achievement and support student success in online and blended learning environments.</p>	<p>A; B; C; D; I</p>	<p><i>The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.</i></p> <p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher has experienced online learning from the perspective of a student.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of learning goals.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p> <p><i>The teacher demonstrates frequent and effective strategies that enable both teacher and students to complete self- and pre-assessments.</i></p>	<p>1a–1c; 2b; 3b; 4c–4d; 5c</p>

Alignment of Educator Standards with National Standards

Indiana Educator Standards for Virtual Instruction	iNACOL National Standards for Quality Online Teaching	SREB Standards for Quality Online Teaching	ISTE National Educational Technology Standards
<p><u>Standard 3: Planning and Delivering Virtual Instruction</u></p> <p>Virtual instructors have a broad understanding of instructional planning and delivery in online and blended learning environments and demonstrate the ability to deliver individualized virtual instruction that creates rich and meaningful learning experiences, makes effective use of online resources, and helps all students achieve learning goals.</p>	<p>A; B; C; D; I; K</p>	<p><i>The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.</i></p> <p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of learning goals.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p> <p><i>The teacher demonstrates frequent and effective strategies that enable both teacher and students to complete self- and pre-assessments.</i></p>	<p>1a–1d; 2a–2c; 3b–3c; 4b; 5b</p>

Alignment of Educator Standards with National Standards

Indiana Educator Standards for Virtual Instruction	iNACOL National Standards for Quality Online Teaching	SREB Standards for Quality Online Teaching	ISTE National Educational Technology Standards
<p><u>Standard 4: Online Assessment</u></p> <p>Virtual instructors have a broad understanding of online assessment practices and demonstrate the ability to use a variety of online assessments to monitor student progress and guide instruction in online and blended courses.</p>	<p>B; D; G; H; I</p>	<p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher models, guides and encourages legal, ethical, safe and healthy behavior related to technology use.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher demonstrates competencies in creating and implementing assessments in online learning environments in ways that assure validity and reliability of instruments and procedures.</i></p> <p><i>The teacher develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of learning goals.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p>	<p>2d; 3c</p>
<p><u>Standard 5: Student Diversity in Online and Blended Learning Environments</u></p> <p>Virtual instructors have a broad understanding of the diversity of students in online and blended courses and demonstrate the ability to provide virtual instruction that is responsive to student differences and that promotes active learning for all students.</p>	<p>C; F</p>	<p><i>The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.</i></p> <p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p> <p><i>The teacher demonstrates frequent and effective strategies that enable both teacher and students to complete self- and pre-assessments.</i></p>	<p>2c; 4b</p>

Alignment of Educator Standards with National Standards

Indiana Educator Standards for Virtual Instruction	iNACOL National Standards for Quality Online Teaching	SREB Standards for Quality Online Teaching	ISTE National Educational Technology Standards
<p><u>Standard 6: Technology for Virtual Instruction</u></p> <p>Virtual instructors have a broad understanding of existing and emerging technologies that support student learning and engagement and demonstrate the ability to use a variety of tools for content and instruction delivery, collaboration, and communication in online and blended learning environments.</p>	<p>B; D; F; K</p>	<p><i>The teacher has the prerequisite technology skills to teach online.</i></p> <p><i>The teacher understands and is responsive to students with special needs in the online classroom.</i></p> <p><i>The teacher develops and delivers assessments, projects and assignments that meet standards-based learning goals and assesses learning progress by measuring student achievement of learning goals.</i></p>	<p>3a; 3d; 4b; 5a–5c</p>
<p><u>Standard 7: The Professional Environment for Virtual Instructors</u></p> <p>Virtual instructors have a broad understanding of their professional environment and demonstrate the ability to collaborate with others, promote digital citizenship, follow legal and ethical guidelines specific to online and blended learning environments, and engage in continuous professional growth.</p>	<p>A; C; E; F; I; J</p>	<p><i>The teacher plans, designs and incorporates strategies to encourage active learning, interaction, participation and collaboration in the online environment.</i></p> <p><i>The teacher provides online leadership in a manner that promotes student success through regular feedback, prompt response and clear expectations.</i></p> <p><i>The teacher models, guides and encourages legal, ethical, safe and healthy behavior related to technology use.</i></p> <p><i>The teacher demonstrates competencies in using data and findings from assessments and other data sources to modify instructional methods and content and to guide student learning.</i></p>	<p>3b–3d; 4a; 4c–4d; 5a; 5c–5d</p>