

Alignment Between the Indiana REPA Educator Standards for Computer Education and state and national student and teacher standards for Computer Education

The alignment notations below indicate the content included in state and national standards that is addressed, in whole or in part, by each of the REPA Educator Standards for Computer Science.

Standard 1: Operations and Concepts Related to Computers and Technology	
Computer education teachers have a broad and comprehensive understanding of operations and concepts related to computers and technology.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Data and Information (DI): K-2.DI.3, 3-5.DI.5 Computing Devices and Systems (CD): K-2.CD.1, 3-5.CD.1–2, 6-8.CD.3-4 Programs and Algorithms (PA): 3-5.PA.1 Networking and Communication (NC): K-2.NC.1-2
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 1—Empowered Learner: 1c, 1d Standard 2—Digital Citizen: 2b Standard 3—Knowledge Constructor: 3a Standard 5—Computational Thinker: 5a
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	Standard 1—Facilitate and inspire student learning and creativity: 1a, 1b Standard 3—Model digital age work and learning: 3a, 3b Standard 4—Promote and model digital citizenship and responsibility: 4a, 4c Standard 5—Engage in professional growth and leadership: 5a
Standard 2: Hardware and Software Resources	
Computer education teachers have a broad and comprehensive understanding of the management of hardware and software resources.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Data and Information (DI): K-2.DI.1, K-2.DI.3 Computing Devices and Systems (CD): 3-5.CD.3, 6-8.CD.1–2 Programs and Algorithms (PA): K-2.PA.1, 3-5.PA.1, 6-8.PA.1 Impact and Culture (IC): K-2.IC.1, 3-5.IC.1, 3-5.IC.3, 3-5.IC.4
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 1—Empowered Learner: 1b–1d Standard 2—Digital Citizen: 2c, 2d Standard 3—Knowledge Constructor: 3a, 3b Standard 5—Computational Thinker: 5a Standard 6—Creative Communicator: 6a
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	Standard 1—Facilitate and inspire student learning and creativity: 1b Standard 2—Design and develop digital age learning experiences and assessments: 2a–2c Standard 3—Model digital age work and learning: 3a, 3d

Alignment Between the Indiana REPA Educator Standards for Computer Education and state and national student and teacher standards for Computer Education

	Standard 4—Promote and model digital citizenship and responsibility: 4a–4c Standard 5—Engage in professional growth and leadership: 5a, 5c
Standard 3: Use of Technology Resources Computer education teachers have a broad and comprehensive understanding of concepts and skills related to the use of technology resources.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Data and Information (DI): K-2.DI.1, 3-5.DI.4, 6-8.DI.2 Computing Devices and Systems (CD): 3-5.CD.2 Programs and Algorithms (PA): K-2.PA.1-2, 3-5.PA.1, 6-8.PA.1 Networking and Communication (NC): K-2.NC.1-2, 3-5.NC.1-2, 6-8.NC.1 Impact and Culture (IC): K-2.IC.1, 3-5.IC.3, 6-8.IC.3-4
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	LST.5: THE WRITING PROCESS (WRITING): 6-8.LST.6.2 LST.7: THE RESEARCH PROCESS (WRITING): 6-8.LST.7.2
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 3—Knowledge Constructor: 3a, 3b Standard 4—Innovative Designer: 4a, 4b Standard 5—Computational Thinker: 5a, 5c Standard 6—Creative Communicator: 6a–6d Standard 7—Global Collaborator: 7b
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	Standard 1—Facilitate and inspire student learning and creativity: 1b–1d Standard 2—Design and develop digital age learning experiences and assessments: 2a, 2b Standard 3—Model digital age work and learning: 3a–3d Standard 4—Promote and model digital citizenship and responsibility: 4a, 4c, 4d Standard 5—Engage in professional growth and leadership: 5b, 5c
Standard 4: Computer-based Learning Environments Computer education teachers have a broad and comprehensive understanding of the design, development, and uses of computer-based learning resources, tools, and environments.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Computing Devices and Systems (CD): 3-5.CD.2, 3-5.CD.4 Impact and Culture (IC): K-2.IC.1-2, 3-5.IC.1, 3-5.IC.4, 6-8.IC.4 Programs and Algorithms (PA): K-2.PA. 1, 3-5.PA.1-2, 6-8.PA.1 Networking and Communication (NC): 6-8.NC.1
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 1—Empowered Learner: 1d Standard 2—Digital Citizen: 2a–2d Standard 4—Innovative Designer: 4a, 4b Standard 6—Creative Communicator: 6c Standard 7—Global Collaborator: 7a
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	Standard 1—Facilitate and inspire student learning and creativity: 1b, 1d Standard 2—Design and develop digital age learning experiences and assessments: 2a–2c Standard 3—Model digital age work and learning: 3a, 3d

Alignment Between the Indiana REPA Educator Standards for Computer Education and state and national student and teacher standards for Computer Education

	Standard 4—Promote and model digital citizenship and responsibility: 4a–d Standard 5—Engage in professional growth and leadership: 5a, 5c
<u>Standard 5: Computer Programming</u> Computer education teachers have a broad and comprehensive understanding of concepts and skills related to computer programming.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Data and Information (DI): K-2.DI.2, 3-5.DI.1-4, 6-8.DI.1, 6-8.DI.3-5 Computing Devices and Systems (CD): 3-5.CD.3, 6-8.CD.1–3 Programs and Algorithms (PA): K-2.PA.3, 3-5.PA.1-3, 6-8.PA.1–3
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 3—Knowledge Constructor: 3d Standard 4—Innovative Designer: 4a Standard 5—Computational Thinker: 5a–5d
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	
<u>Standard 6: Social, Ethical, Legal, and Human Issues</u> Computer education teachers have a broad and comprehensive understanding of the appropriate use of computer technology and the interrelationships between technology and society.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Impact and Culture (IC): K-2.IC.1-2, 3-5.IC.1-4, 6-8.IC.1-4
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	
International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)	Standard 1—Empowered Learner: 1a, 1d Standard 2—Digital Citizen: 2a–2d Standard 7—Global Collaborator: 7c, 7d
International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)	Standard 3—Model digital age work and learning: 3c Standard 4—Promote and model digital citizenship and responsibility: 4a–4d Standard 5—Engage in professional growth and leadership: 5a–5d
<u>Standard 7: Instruction and Assessment</u> Computer education teachers have a broad and comprehensive understanding of content-specific instruction and assessment in computer education.	
Indiana K-2, 3-5, and 6-8 Computer Science Standards (2016)	Programs and Algorithms (PA): K-2.1, 3-5.PA.1, 6-8.PA.1-3 Networking and Communication (NC): K-2.NC.1, 3-5.NC.1 Impact and Culture (IC): 6-8.IC.12
Indiana Academic Standards Content Area Literacy: Science/Technical Subjects (2014)	

Alignment Between the Indiana REPA Educator Standards for Computer Education and state and national student and teacher standards for Computer Education

<p>International Society for Technology in Education (ISTE), The 2016 ISTE Standards for Students (2016)</p>	
<p>International Society for Technology in Education (ISTE), ISTE Standards for Teachers (2008)</p>	<p>Standard 1—Facilitate and inspire student learning and creativity: 1b–1d</p> <p>Standard 2—Design and develop digital age learning experiences and assessments: 2a–2d</p> <p>Standard 3—Model digital age work and learning: 3a, 3d</p> <p>Standard 4—Promote and model digital citizenship and responsibility: 4b</p>