

Technology Theme Charts

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Table: 7.1a: Technology Standards and Objectives: Alignment with CAEP Technology Standards

| EPP Standards | EPP Standards' Technology Objectives |
|--|---|
| <p>EPP Standard 1: Knowledge Goal: Candidates have a comprehensive understanding of the Liberal Arts and Sciences and Education Foundations' content, concepts and modes of inquiry and make connections among disciplines.</p> | <p><u>Objective:</u> 1.3 Use technology proficiently and understand its potential as a tool for teaching and learning. CAEP 1.5, 3.4</p> |
| <p>EPP Standard 2: Personal and Global Consciousness Goal: Candidates examine, deconstruct, and reconstruct their own and others' beliefs, values and perspectives to understand their own cultures and to develop empathy and acceptance towards others' cultures.</p> | <p><u>Objective:</u> 2.3 Use technology to gain knowledge of the beliefs, values, and perspectives of their own community and communities worldwide. CAEP 1.5, 2.3</p> |
| <p>EPP Standard 3: Analytical Ability Goal: Candidates effectively and comprehensively deconstruct texts to uncover hidden meanings, to make connections, to draw inferences and to develop multiple perspectives toward various ideas and issues.</p> | <p><u>Objective:</u> 3.4 Use technology as a problem-solving tool to gather, organize and analyze information. CAEP 1.5, 2.1,2.3</p> |
| <p>EPP Standard 4: Creativity Goal: Candidates conceptualize, design, and develop imaginative and innovative work.</p> | <p><u>Objective:</u> 4.4 View technology as a path to new and effective ways of teaching and learning. CAEP 1.5, 2.1,2.3,3.4</p> |
| <p>EPP Standard 5: Professionalism Goal: Candidates adopt a reflective practitioner stance toward teaching, learning, and collaboration with parents, colleagues and students that embraces inquiry, reciprocity and critique.</p> | <p><u>Objective:</u> 5.3 Use technology and other media to enhance learning. <u>Objective:</u> 5.5 Use technology as a tool for teaching and learning. CAEP 1.5, 2.1,2.3, 3.4</p> |

| | |
|---|--|
| <p>EPP 6: Effective Communication Goal: Candidates speak and write in appropriate registers depending on audiences and purposes and as a tool to share, analyze demonstrate comprehensive fluency in numeracy.</p> | <p><u>Objective:</u> 6.2 Use technology as an efficient and innovative means of communication. CAEP 2.1, 2.3, 3.4</p> |
| <p>EPP Standard 7: Collaboration Goal: Candidates work effectively with other constituencies by seeking out others’ ideas, valuing multiple points of view, and building cooperative relationships.</p> | <p><u>Objective:</u> 7.3 Use technology and synthesize ideas. CAEP 1.5, 2.1,2.3, 3.4</p> |
| <p>EPP Standard 8: Commitment and Care Goal: Candidates practice social justice, with others, believe that all children can learn, hold high expectations themselves, and carry out sustained commitment to teaching and learning.</p> | <p><u>Objective:</u> 8.4 Recognize technology as a source of continuous education. CAEP 1.5, 2.1,2.3, 3.4</p> |

Table 7.1b: Candidate Performances on Technology-Related Course Activities, Fall '14- Spr '15

| Course Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|---|--|---|-----------|-----------|----------|----------------|
| EDUC 102: Introduction to the World of the Learners N=142 | Educational Autobiography (ePortfolio Project) | ePortfolio, PowerPoint, Video clips, Smartboard, Blackboard. (1.5, 2.1,2.3,3.4) | 46 (32%) | 42(30%) | 37(26%) | 17(12%) |
| EDUC 152: Introduction to Special Education N=128 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials. (1.5, 2.1,2.3,3.4) | 120(94%) | 0(0%) | 4(.03%) | 4 (.03%) |
| EDUC 203: Introduction to Developmental Disabilities N=8 | Case study presentation; Resource guide | Assistive technology tools, tablets, laptops, websites, videos. (1.5, 2.1,2.3,3.4) | 5(29%) | 12(71%) | 0(0%) | 0(0%) |
| EDUC 252: Principles of Early Intervention: Needs of Infants, Toddlers and Young Children with Developmental Disabilities N=20 | Memoir Project: PowerPoint presentation | PowerPoint presentation tools and multimedia tools, Video, Blackboard. (1.5, 2.1,2.3,3.4) | 15(75%) | 4 (20%) | 1 (5%) | 0 (0%) |
| EDUC 350: Computers in Education | WebQuest, Assistive technology research, internet lesson plan, | Blackboard, web resources, multimedia tools, Microsoft Word | 22(50%) | 16(36%) | 4(9%) | 2(4.5%) |

| | | | | | | |
|--|---|---|----------|----------|----------|---------|
| N=44 | ePortfolio | or multi-media software, Hyperstudio or PowerPoint. (1.5, 2.1,2.3,3.4) | | | | |
| EDUC 302: Curriculum and Instruction in Early Childhood Education N=12 | Thematic unit, teaching with technology | Smartboard, assistive technology, web resources. (1.5, 2.1,2.3,3.4) | 8(66%) | 4(40%) | 0(0%) | 0(0%) |
| EDUC 307: Educational Psychology N=48 | Projects to scaffold the development of a learning center psychological principles Essays, applying theories to education-based scenarios. | Blackboard, videoclips, laptops, iPads, PowerPoint. (1.5, 2.1,2.3,3.4) | 46 (32%) | 42(30%) | 37(26%) | 17(12%) |
| EDUC 314: Teaching Elementary Social Studies N=5 | Interdisciplinary unit plan | Blackboard, ePortfolio, videos, distance learning. (1.5, 2.1,2.3,3.4) | 46 (32%) | 42(30%) | 37(26%) | 17(12%) |
| EDUC 315: Teaching of Mathematics: N=36 | Website research, Unit Plan, Modified lesson plan | Websites, ebooks, applets, video clips, assistive technology tools, Blackboard, distance learning. (1.5, 2.1,2.3,3.4) | 17 (71%) | 4 (29%) | 0(0%) | 0(0%) |
| EDUC 317: Teaching Science N=11 | Interdisciplinary unit plan | PowerPoint, Blackboard, videoclips, videos, simulations, distance learning. (1.5, 2.1,2.3,3.4) | 10 (98%) | 1 (09%) | 0 (0%) | 0 (0%) |
| EDUC 311: Teaching Reading 1 N=12 | Reading family project and group presentation, Reading instruction and assessment plan | Blackboard, Smartboard, PowerPoint, Web resources, PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 4(33%) | 8(67%) | 0(0%) | 0(0%) |
| EDUC 312: Teaching Reading 2 N=12 | Guided Reading Lesson & Reflection | Blackboard, Smartboard, videos, PowerPoint. (1.5, 2.1,2.3,3.4) | 6(50%) | 6(50%) | 0(0%) | 0(0%) |
| EDUC 381: Reading Methods and Materials for Exceptional Learners N=33 | Reading Intervention Plan | Blackboard, smartboard, videos, and Assistive technology. (1.5, 2.1,2.3,3.4) | 8 (24%) | 15 (45%) | 1 (.03%) | 0 (0%) |
| | | | | | | |

Table 7.1bi: Candidate Performances on Technology-Related Course Activities, Fall '15-Spring '16

| Course Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|---|---|---|-----------|-----------|----------|----------------|
| EDUC 102: Introduction to the World of the Learners N=136 | Educational Autobiography (ePortfolio Project) | ePortfolio, PowerPoint, Video clips, Smartboard, Blackboard. (1.5, 2.1,2.3,3.4) | 38(28%) | 80(59%) | 18(15%) | 0(0%) |
| EDUC 152:Introduction to Special Education N=120 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials. (1.5, 2.1,2.3,3.4) | 41(34%) | 53(44%) | 26(22%) | 0(0%) |
| EDUC 203: Introduction to Developmental Disabilities N=17 | Case study presentation; Resource guide | Assistive technology tools, tablets, laptops, websites, videos. (1.5, 2.1,2.3,3.4) | 4(24%) | 13(76%) | 0(0%) | 0(0%) |
| EDUC 252: Principles of Early Intervention: Needs of Infants, Toddlers and Young Children with Developmental Disabilities N=26 | Memoir Project: PowerPoint presentation | PowerPoint presentation tools and multimedia tools, Video, Blackboard. (1.5, 2.1,2.3,3.4) | 6(23%) | 20(77%) | 0(0%) | 0(0%) |
| EDUC 350: Computers in Education N=25 | WebQuest | Blackboard, web resources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint, ePortfolio technology, assistive technology. (1.5, 2.1,2.3,3.4) | 16(64%) | 6(24%) | 1(.04%) | 6(24%) |
| EDUC 302: Curriculum and Instruction in Early Childhood Education N=12 | Thematic unit, teaching with technology | Smartboard, assistive technology, web resources. (1.5, 2.1,2.3,3.4) | 8(66%) | 4(40%) | 0(0%) | 0(0%) |
| EDUC 307: Educational Psychology N=46 | projects to scaffold the development of a learning center psychological principles Essays, applying theories to education-based scenarios. | Blackboard, video clips, laptops, ipads, PowerPoint. (1.5, 2.1,2.3,3.4) | 12(26%) | 29(63%) | 5(11%) | 0(0%) |
| EDUC 311: Teaching Reading 1 N=18 | Reading family project and group presentation, Reading instruction and assessment plan | Blackboard, Smartboard, PowerPoint, Web resources, PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 4(33%) | 8(67%) | 0(0%) | 0(0%) |
| EDUC 312: | Guided Reading | Blackboard, Smartboard, | 6(50%) | 6(50%) | 0(0%) | 0(0%) |

| | | | | | | |
|--|---|---|--------|---------|-------|-------|
| Teaching Reading 2 N=18 | Lesson & Reflection | videos, PowerPoint, Softchalk | | | | |
| EDUC 314: Teaching Elementary Social Studies N=0 | Interdisciplinary unit plan | Blackboard, ePortfolio, videos, distance learning. (1.5, 2.1,2.3,3.4) | | | | |
| EDUC 315: Teaching of Mathematics: N=24 | Website research, Unit Plan, Modified lesson plan | Websites, ebooks, applets, video clips, assistive technology tools, Blackboard, distance learning. (1.5, 2.1,2.3,3.4) | 9(38%) | 14(54%) | 2(8%) | 0(0%) |
| EDUC 317: Teaching Science N=8 | Interdisciplinary unit plan | PowerPoint, Blackboard, videoclips, videos, simulations, distance learning | 0(0%) | 8(100%) | 0(0%) | 0(0%) |
| EDUC 381: Reading Methods and Materials for Exceptional Learners N=20 | Reading intervention plan, guided reading lesson & reflection | Blackboard, Smartboard, PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 5(25%) | 15(75%) | 0(0%) | 0(0%) |
| | | | | | | |
| | | | | | | |

Table 7.1bii: Candidates Performances on Technology-Related Course Activities, Fall '16-Spr '17

| Course Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|--|---|--|-----------|-----------|----------|----------------|
| EDUC 102: Introduction to the World of the Learners N=143 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials. (1.5, 2.1,2.3,3.4) | 34(24%) | 105(73%) | 4(3%) | 0(0%) |
| EDUC 152:Introduction to Special Education N=103 | Case- study presentation; Resource guide | Assistive technology tools, tablets, laptops, websites, videos, Blackboard. (1.5, 2.1,2.3,3.4) | 25(24%) | 61(59%) | 17(17%) | 0(0%) |
| EDUC 203: Introduction to Developmental Disabilities N=17 | Memoir Project: PowerPoint presentation | PowerPoint presentation tools and multimedia tools, Video, Blackboard. (1.5, 2.1,2.3,3.4) | 4(24%) | 11(65%) | 2(11%) | 0(0%) |
| EDUC 252: Principles of Early Intervention: Needs of Infants, Toddlers and Young Children with Developmental Disabilities N=26 | Projects to scaffold the development of a learning center psychological principles Essays, applying theories to education-based scenarios. | Blackboard, webresources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint. (1.5, 2.1,2.3,3.4) | 10(38%) | 16(62%) | 0(0%) | 0(0%) |
| EDUC 350: Computers in Education N=79 | WebQuest, Assistive technology research, internet lesson plan, ePortfolio | Blackboard, videoclips, laptops, ipads, PowerPoint, website resources, assistive technology, excel program, smartboard. (1.5, 2.1,2.3,3.4) | 42(53%) | 20(25%) | 8(10%) | 9(11%) |

| | | | | | | |
|---|--|---|---------|----------|---------|-------|
| EDUC 307: Educational Psychology N=44 | Interdisciplinary unit plan | Blackboard, ePortfolio, videos, website resources, PowerPoint. (1.5, 2.1,2.3,3.4) | 14(32%) | 28(64%) | 2(5%) | 0(0%) |
| EDUC 311: Teaching Reading 1 N=34 | Reading family project and group presentation, Reading instruction and assessment plan | Blackboard, Smartboard, PowerPoint, Web resources, PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 15(44%) | 18(53%) | 2(.05%) | 0(0%) |
| EDUC 312: Teaching Reading 2 N=34 | Guided Reading Lesson & Reflection | Blackboard, Smartboard, videos, PowerPoint, website resources. (1.5, 2.1,2.3,3.4) | 15(44%) | 18(53%) | 2(.05%) | 0(0%) |
| EDUC 314: Teaching Elementary Social Studies N=13 | Interdisciplinary unit plan | Websites, ebooks, applets, video clips, assistive technology tools, Blackboard, distance learning, ePortfolio. (1.5, 2.1,2.3,3.4) | 0(0%) | 13(100%) | 0(0%) | 0(0%) |
| EDUC 315: Teaching of Mathematics: N=36 | Website research, Unit Plan, Modified lesson plan | PowerPoint, Blackboard, videoclips, videos, websites, ebooks, applets. (1.5, 2.1,2.3,3.4) | 0(0%) | 36(100%) | 0(0%) | 0(0%) |
| EDUC 317: Teaching Science N=8 | Interdisciplinary lesson plan | Blackboard, Smartboard, PowerPoint, distance learning, simulations. (1.5, 2.1,2.3,3.4) | 0(0%) | 8(100%) | 0(0%) | 0(0%) |
| EDUC 381: Reading Methods and Materials for Exceptional Learners N=33 | Reading intervention project, Guided Reading Lesson & Reflection | Blackboard, Smartboard, videos, PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 3(9%) | 30(91%) | 0(0%) | 0(0%) |
| | | | | | | |

Table 7.1c: Performance on Technology-Related Early Field and Clinical Activities: Fall '14-Spr '15

| Couse Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|---|--|--|-----------|-----------|----------|----------------|
| EDUC 501: Shadowing Professionals N=133 | Educational Autobiography (ePortfolio Project) | ePortfolio, PowerPoint, Video clips, Smartboard, Blackboard. (1.5, 2.1,2.3,3.4) | 114(86%) | 19(14%) | | |
| EDUC 502: Observation in Education N=118 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials. (1.5, 2.1,2.3,3.4) | 0(0%) | 118(100%) | 0(0%) | 0(0%) |
| EDUC 504: Technology in classroom N=44 | Teaching with WebQuest | Blackboard, videoclips, laptops, ipads, PowerPoint, website resources, assistive technology, excel program, smartboard. | 42(53%) | 20(25%) | 8(10%) | 9(11%) |

| | | | | | | |
|---|---|--|-------|----------|-------|-------|
| | | (1.5, 2.1,2.3,3.4) | | | | |
| EDUC 505: Working with individual learners N=29 | Case study presentation; Resource guide, teaching modified lesson | Assistive technology tools, tablets, laptops, websites, videos. (1.5, 2.1,2.3,3.4) | 2(7%) | 27(93%) | 0(0%) | 0(0%) |
| EDUC 506: Working with small group of learners N=27 | Family Science fair, case study/guided reading lesson, lesson plan on an era or event, in New York, based on American or Global history | PowerPoint presentation tools and multimedia tools, Video, Blackboard, ePortfolio, Smartboard, distance learning. (1.5, 2.1,2.3,3.4) | 0(0%) | 27(100%) | 0(0%) | 0(0%) |
| EDUC 507: Curriculum research and design N=22 | Memoir Project: PowerPoint presentation, | Blackboard, webresources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint. (1.5, 2.1,2.3,3.4) | 0(0%) | 22(100%) | 0(0%) | 0(0%) |
| EDUC 491/492: Clinical practice N=42 | Interdisciplinary unit plan, videotaped lesson plan | ePortfolio, video recording, video editing, video analysis, ebooks, PowerPoint, Smartboard, website resources. (1.5, 2.1,2.3,3.4) | 0(0%) | 42(100%) | 0(0%) | 0(0%) |

Table: 7.1ci: Performance on Technology-Related Early Field and Clinical Activities, Fall '15-Spr '16

| Couse Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|--|---|---|-----------|-----------|----------|----------------|
| EDUC 501: Shadowing Professionals N=126 | Educational Autobiography (ePortfolio Project) | ePortfolio, PowerPoint, video clips, Smartboard, Blackboard. (1.5, 2.1,2.3,3.4) | 0(0%) | 120(79%) | 6(.04%) | 0(0%) |
| EDUC 502: Observation in Education N=117 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials | 0(0%) | 112(96%) | 5(4%) | 0(0%) |
| EDUC 504: Technology in classroom N=29 | WebQuest, Assistive technology research, internet lesson plan, ePortfolio | Blackboard, web resources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint, ePortfolio technology, assistive technology. (1.5, 2.1,2.3,3.4) | 16(64%) | 6(24%) | 1(.04%) | 6(24%) |
| EDUC 505: Working with individual learners | Case study presentation; Resource guide | Blackboard, videoclips, laptops, iPads, PowerPoint. (1.5, | 0(0%) | 22(100%) | 0(0%) | 0(0%) |

| | | | | | | |
|--|---|--|----------|----------|-------|-------|
| N=22 | | 2.1,2.3,3.4) | | | | |
| EDUC 506: Working with small group of learners N=19 | Memor Project: PowerPoint presentation, family science fair, lesson plan on an era or event, in New York, based on American or Global history | PowerPoint presentation tools and multimedia tools, Video, Blackboard, distance learning. (1.5, 2.1,2.3,3.4) | 19(100%) | 0(0%) | 0(0%) | 0(0%) |
| EDUC 507: Curriculum research and design N=41 | Projects to scaffold the development of a learning center psychological principles Essays, applying theories to education-based scenarios. | Blackboard, web resources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint. (1.5, 2.1,2.3,3.4) | 0(0%) | 41(100%) | 0(0%) | 0(0%) |
| EDUC 491/492: Clinical practice N=47 | Interdisciplinary unit plan, Videotaping a lesson | ePortfolio, video recording, video editing, video analysis, ebooks, PowerPoint, Smartboard, website resources. (1.5, 2.1,2.3,3.4) | 0(0%) | 47(100%) | 0(0%) | 0(0%) |

Table 7.cii: Performance on Technology-Related Early Field and Clinical Activities: Fall '16-Spr '17

| Couse Work Early Field/Clinical Practice | Learning Experience | Technology Integration and Proficiencies | Exemplary | Competent | Emerging | Unsatisfactory |
|--|--|---|-----------|-----------|----------|----------------|
| EDUC 501: Shadowing Professionals N=121 | Educational Autobiography (ePortfolio Project) | ePortfolio, PowerPoint, video clips, Smartboard, Blackboard (1.5, 2.1,2.3,3.4) | 21(21%) | 100(82%) | 0(0%) | 0(0%) |
| EDUC 502: Observation in Education N=101 | Group presentation | PowerPoint presentation tools and multimedia tools, videos & simulation materials (1.5, 2.1,2.3,3.4) | 0(0%) | 87(86%) | 14(14%) | 0(0%) |
| EDUC 504: Technology in classroom N=79 | Teaching WebQuest | Blackboard, webresources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint, assistive technology. (1.5, 2.1,2.3,3.4) | 42(53%) | 20(25%) | 8(10%) | 9(11%) |
| EDUC 505: Working with individual learners N=35 | Case-study presentation; Resource guide | Assistive technology tools, tablets, laptops, websites, videos. (1.5, 2.1,2.3,3.4) | 0(0%) | 35(100%) | 0(0%) | 0(0%) |
| EDUC 506: Working with small group of learners N=34 | Memor Project: PowerPoint presentation | PowerPoint presentation tools and multimedia tools, Video, Blackboard | 0 (0%) | 34(100%) | 0 (0%) | 0 (0%) |

| | | | | | | |
|--|--|--|--------|----------|--------|--------|
| EDUC 507: Curriculum research and design N=14 | WebQuest, Assistive technology research, internet lesson plan, ePortfolio | Blackboard, web resources, multimedia tools, Microsoft Word or multi-media software, Hyperstudio or PowerPoint. (1.5, 2.1,2.3,3.4) | 0 (0%) | 14(100%) | 0 (0%) | 0 (0%) |
| EDUC 491/492: Clinical practice N=32 | Interdisciplinary unit plan, videotaping a lesson | Blackboard, ePortfolio, videos, distance learning (1.5, 2.1,2.3,3.4) | 0 (0%) | 32(100%) | 0 (0%) | 0 (0%) |
| | | | | | | |

**Table: 7.1d: Overall Candidates' Outcomes on WebQuest Design and Teaching, 2015-17 **

| Year | N | Unsatisfactory | Emerging | Competent | Exemplary |
|--------------|------------|----------------|--------------|---------------|------------|
| 2015 | | | | | |
| | 44 | 2 | 4 | 16 | 22 |
| 2016 | 25 | 6 | 1 | 4 | 14 |
| | | | | | |
| 2017 | | 9 | 8 | 20 | 42 |
| | 79 | | | | |
| Total | 148 | 11.49% | 8.78% | 27.03% | 53% |

Figure 7.1A: Candidate Outcomes on Webquest Design and Teaching Activities 2015-17

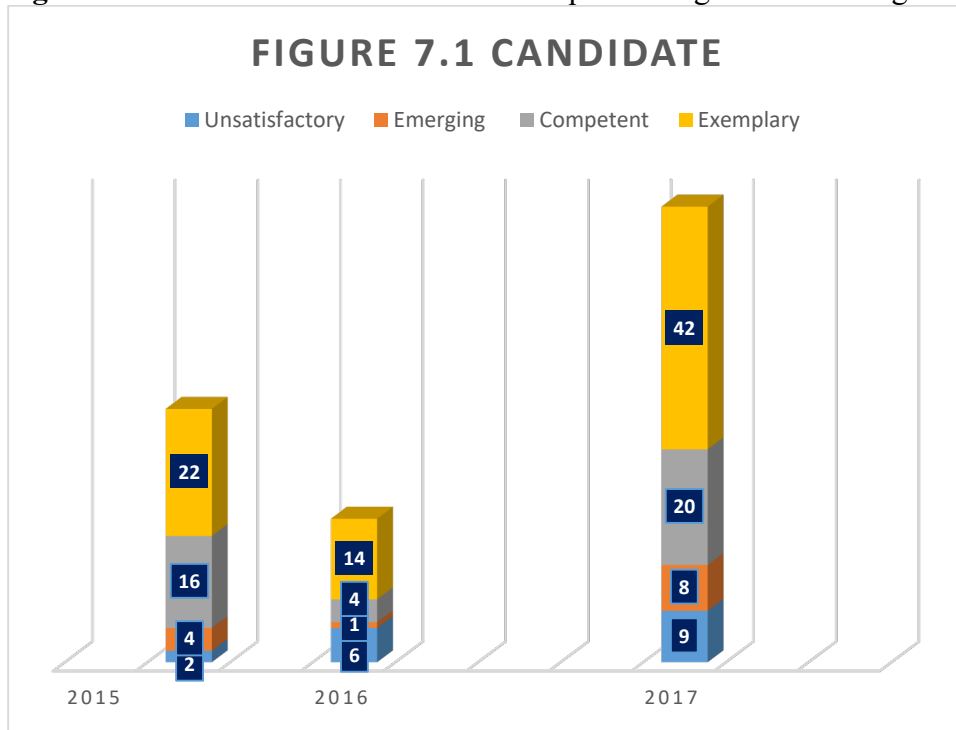


Table 7.1e: EDUC 504 and EDUC 350 Candidate Performance on Technology, 2015-17

| Year | N | Unsatisfactory | Emerging | Competent | Exemplary |
|-------|------|----------------|----------|-----------|-----------|
| 2015 | 44 | 0 | 3 | 15 | 26 |
| 2016 | 25 | 4 | 3 | 2 | 16 |
| 2017 | 79 | 5 | 12 | 18 | 44 |
| TOTAL | 148% | 6.08% | 12.16% | 23.65% | 58.11% |

Figure 7.1B: EDU 504 and EDU 350 Candidate Performance on Technology, 2015-17

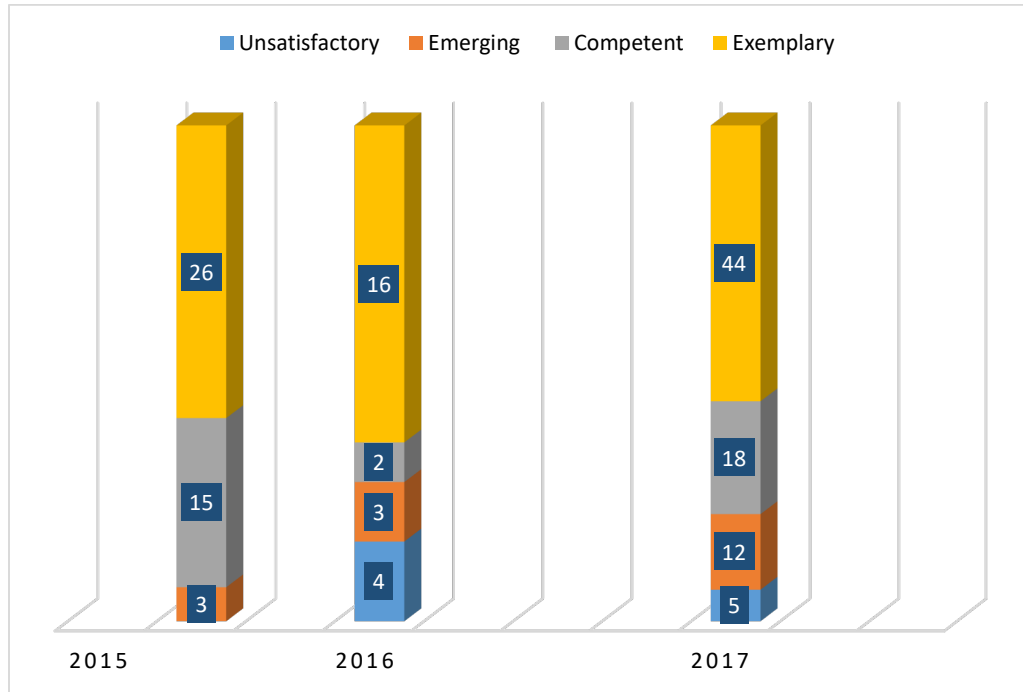


Table 7.1f: Use of Technology Tools by Faculty

| Technology Tools | Purpose of Use | Percentage of Uses |
|---------------------------------|---|--------------------|
| Black Board and ECHO 360 | Course management, assessment, data organization, instruction delivery, communication | 99% |
| Smart Boards | Instruction delivery, surfacing website, research | 99% |
| Power Point | Instruction delivery, presentations | 100% |
| Website Resources | Research, assessment, enhance instruction | 100% |
| Videos | Instruction, presentations | 80% |
| ePortfolio | Assessment, improved teaching | 30% |

| | | |
|---|--|-----|
| | and learning through reflective, integrative pedagogy | |
| ebooks | Instruction | 40% |
| Simulations, Virtual Reality | To enhance instruction | 40% |
| Excel Software | Data collection | 50% |
| Distance Learning | Collaboration with universities and faculty beyond USA | 20% |
| Soft Chalk | Instruction delivery | 30% |
| Skype | Collaboration, instructional delivery | 80% |
| Online Instruction/digital instruction and learning Technology | Instruction | 40% |
| Cloud Based Technology | Instruction, Assessment, Data Collection Space | 80% |

Table: 7.1g: Use of Technology Tools by Candidates between 2015-2017

| Technology Tools | Purpose of Technology Use | Percentage of Uses |
|--------------------------|---|---------------------------|
| Black Board | Learning, posting assignment, discussion, grade information | 99% |
| Smart Boards | Project presentations and learning | 99% |
| Power Point | Project presentation | 80% |
| Website Resources | Writing research paper, getting information | 99% |
| Videos | Projects, presentations, critical analysis | 80% |
| ePortfolio | Showcasing achievement | 80% |
| ebooks | For projects | 40% |

| | | |
|---|---|------|
| Simulations, Virtual Reality | For projects | 20% |
| Excel Software | Data management (To organize students' grade, and grade point average, students' academic performance, areas of strength and improvements). | 70% |
| Distance Learning | Learning and teaching | 20% |
| Soft Chalk | Learning and teaching | 30% |
| Skype | N/A | |
| SMARTTHINKING | Homework help | 30% |
| Online Instruction/digital instruction and learning Technology (Workshops) | Preparation for tests and academic preparation | 100% |
| Cloud Based Technology | Learning content, saving documents, assignment submission | 80% |

Table: 7.1h: Technology Performance on EPP Objectives, 2015-17

| Objective/ Criterion | Year | Unsatisfactory | Emergent | Competent | Exemplary |
|---------------------------------|-------------|-----------------------|-----------------|------------------|------------------|
| <u>EPP Objective:</u> 1.3 | 2015 | 1% | 0% | 0% | 99% |
| | 2016 | 1% | 0% | 0% | 99% |
| | 2017 | 1% | 0% | 0% | 99% |
| <u>EPP Objective:</u> 2.3 | 2015 | 0% | 0% | 2% | 98% |
| | 2016 | 0% | 0% | 2% | 98% |
| | 2017 | 0% | 0% | 2% | 98% |
| <u>EPP Objective:</u> 3.4 | 2015 | 0% | 0% | 2% | 98% |
| | 2016 | 0% | 0% | 2% | 98% |
| | 2017 | 0% | 0% | 2% | 98% |
| <u>EPP Objective:</u> | 2015 | 0% | 0% | 0% | 100% |

| | | | | | |
|--|------|----|----|-----|------|
| 4.4 | 2016 | 0% | 0% | 0% | 100% |
| | 2017 | 0% | 0% | 0% | 100% |
| <u>Objective: 5.3</u> <u>Objective: 5.5</u> | 2015 | 0% | 0% | 0% | 100% |
| | 2016 | 0% | 0% | 0% | 100% |
| | 2017 | 0% | 0% | 0% | 100% |
| <u>Objective: 6.2</u> | 2015 | 0% | 0% | 0% | 100% |
| | 2016 | 0% | 0% | 0% | 100% |
| | 2017 | 0% | 0% | 0% | 100% |
| <u>Objective: 7.3</u> | 2015 | 1% | 0% | 0% | 99% |
| | 2016 | 1% | 0% | 0% | 99% |
| | 2017 | 1% | 0% | 0% | 99% |
| <u>Objective: 8.4</u> | 2015 | 1% | 9% | 10% | 80% |
| | 2016 | 1% | 9% | 10% | 89% |
| | 2017 | 1% | 9% | 10% | 89% |

Table 7.1i: Candidate Performance on Technology Enhanced Lessons, 2015

| Clinical Practice Experience Assessment: College Supervisor Ratings | College Supervisor | Cooperating Teacher |
|--|--------------------|---------------------|
| | 2015 N= 18 | |
| <i>Design of learning opportunities that apply technology-enhanced instructional strategies</i> | 100% Competent | 100% Competent |
| <i>Implementation of curriculum plans that include methods and strategies for applying technology to maximize student learning</i> | 100% Competent | 100% Competent |
| <i>Application of technology to facilitate a variety of effective assessment and evaluation strategies</i> | 100% Competent | 100% Competent |

Table 7.1j: Candidate Performance on Technology Enhanced Lessons, 2016

| Clinical Practice Experience Assessment: College Supervisor Ratings | College Supervisor | Cooperating Teacher |
|--|--------------------|---------------------|
| | 2016 N= 19 | |
| <i>Design of learning opportunities that apply technology-enhanced instructional strategies</i> | 100% Competent | 100% Competent |
| <i>Implementation of curriculum plans that include methods and strategies for applying technology to maximize student learning</i> | 100% Competent | 100% Competent |
| <i>Application of technology to facilitate a variety of effective assessment and evaluation strategies</i> | 100% Competent | 100% Competent |

Table 7.1k: Candidate Performance on Technology Enhanced Lessons, 2017

| Clinical Practice Experience Assessment: College Supervisor Ratings | College Supervisor | Cooperating Teacher |
|--|--------------------|---------------------|
| | 2017 N= 22 | |
| <i>Design of learning opportunities that apply technology-enhanced instructional strategies</i> | 100% Competent | 100% Competent |
| <i>Implementation of curriculum plans that include methods and strategies for applying technology to maximize student learning</i> | 100% Competent | 100% Competent |
| <i>Application of technology to facilitate a variety of effective assessment and evaluation strategies</i> | 100% Competent | |

Table: 7.11: Use of Technology by Clinical Practice Students, 2015-17

| Technology Tools Used During Clinical Practice For Teaching | | | | | | | | | |
|--|----|---------------|------------|------------|---------|--------------------|-------------------|--------|----------------------|
| Year | N= | No Tech tools | Smartboard | PowerPoint | Laptops | Videos/ Videoclips | Website Resources | eBooks | Virtual Manipulative |
| 2017- | 34 | 5 | 7 | 3 | 2 | 8 | 7 | 2 | 0 |
| 2016 | 23 | 4 | 6 | 2 | 1 | 5 | 2 | 2 | 1 |
| 2015 | 16 | 0 | 4 | 4 | | 4 | 1 | 1 | 1 |
| | | | | | | | | | |
| | | | | | | | | | |

Table 7.1m: Rubric Used to Evaluate Candidates’ Use of Technology in Student Teaching

| Standard 3.5: Communication to Foster Collaboration | Unsatisfactory: SCORE 0 Grade Range: D/F (60-69) | Emerging: SCORE 1 Grade Range: C/C+ (70-79) | Competent: SCORE 2 Grade Range: B-/B+ (80-89) | Exemplary: SCORE 3 Grade Range: A-/A (90-100) |
|--|---|---|---|--|
| Candidates use various media and technological tools to enhance and enrich learning. | Candidates’ lessons do not meet required ACEI Standard 3.5 element. | Candidates’ lessons use basic communication tools – overhead projectors, tape recorders – to aid in their teaching. | Candidates create effective and creative power point presentations for their lessons. They use some innovative technology – computer cameras and webcams – when available to enhance children’s learning. | Candidates create lessons that integrate the use of technology for teaching, i.e., power point presentations and interactive video programs. They engage children in using a variety of media and technology learning tools, like Webquests, Skype, and creating videos in response to assignments, that both enrich and enhance children’s engagement in learning and acquisition of content knowledge. |

Table 7.1n: Summary of Special Education Candidates’ Use of Technology in Clinical Practice 2015-17

| Dimension/Rubric Element | N | Exemplary | Competent | Emerging | Unsatisfactory |
|--|-------------|-----------|-----------|----------|----------------|
| PLANNING RUBRIC | Term | | | | |
| <p><i>Planning and designing innovative learning experiences:</i> Special education candidate uses an understanding of developmentally appropriate learning practices and evidence-based instructional strategies, including Response to Intervention (RTI), Positive Behavioral Support (PBS), environmental routines, individual and cooperative projects, inquiry experiences and systematic instruction to enhance critical thinking, problem solving and performance skills. Plan emphasizes the importance of learning experiences on the development, maintenance, and generalization across settings and over time for students with ELN. Candidate identifies sources of specialized materials, curricula, resources and includes strategies for integrating student initiated learning experiences into instruction and adaptations and technology for students with ELN. [CEC Initial Preparation Standard 3 - Curricular Content Knowledge: 3.1, 3.2]</p> | N=12 | | | | |
| | FA 14 | 4 | 6 | 2 | 0 |
| | SP 15 | 7 | 4 | 1 | 0 |
| | N=14 | | | | |
| | FA 15 | 5 | 8 | 1 | 0 |
| | SP 16 | 7 | 6 | 1 | 0 |

| | | | | |
|--|--|---------------------------------|---------------------------------|---------------------------------|
| <p>INTASC Standard 7 – Planning for Instruction and Standard 5 – Application of Content]</p> | <p>N=5 FA 16</p> <p>SP 17</p> | <p>3</p> <p>2</p> | <p>0</p> <p>2</p> | <p>0</p> <p>0</p> |
| <p><i>Instructional Planning Methods:</i> Special education candidate demonstrates understanding of how best to teach, and is guided by individualized decision-making and instruction to create and select teaching methods, activities and materials that are aligned with NY State Learning Standards in the general curriculum and emphasizes adaptations, including accommodations and modifications for students with ELN. Candidate discusses theories and research that form the basis of curriculum development and instructional practice, the scope and sequence of general and special education curricula, and the NY curricular standards addressed in the lesson. Candidate incorporates behavior management with academic instruction and identifies the roles and</p> | <p>N=14 FA 15</p> <p>SP 16</p> | <p>5</p> <p>7</p> | <p>7</p> <p>6</p> | <p>2</p> <p>1</p> |
| | | | | |

| | | | | | |
|--|--------------------------------------|---|---|---|---|
| responsibilities of cooperating teachers and support staff in instruction, intervention and direct service. <i>Technology Enhanced Instruction:</i> Special education candidate designs developmentally appropriate learning opportunities that apply technology enhanced instruction and makes provisions for the use of assistive technology, alternative and augmentative communication strategies and devices to support the diverse needs of learners with ELN. [CEC Initial Preparation Standard 3 - Curricular Content Knowledge: 3.3] [INTASC Standard 7: Planning for Instruction] | N=5 FA 16 | 2 | 3 | 0 | 0 |
| | SP 17 | 1 | 3 | 1 | 0 |
| | N=12 | 4 | 6 | 2 | 0 |
| | FA 14 | 6 | 5 | 1 | 0 |
| | SP 15 | 7 | 4 | 1 | 0 |
| | N=12 | 8 | 4 | 0 | 0 |
| | FA 14 | | | | |
| | SP 15 | | | | |
| | | | | | |

| | | | | | |
|--|------------------|---|---|---|---|
| | N=14 FA 15 | 7 | 5 | 2 | 0 |
| | SP 16 | 8 | 5 | 1 | 0 |
| | N=5 FA 16 | 3 | 1 | 1 | 0 |
| | SP 17 | 1 | 2 | 2 | 0 |
| <p><i>Teaching Learners with Diverse Needs: Special education candidate recognizes the unique characteristics of students with exceptional learning needs and provides the support, [including augmentative and assistive technology] to encourage individual students' development, acquisition of knowledge, and motivation. [CEC Initial Preparation Standard 1 - Learner Development and Individual Learning Differences: 1.1, 1.2]</i></p> <p>INTASC Standard 2 – Learning Differences: 2(a)</p> | N=12 FA 14 | 6 | 5 | 1 | 0 |
| | SP 15 | 6 | 6 | 0 | 0 |
| | N=14 FA 15 | 5 | 8 | 1 | 0 |
| | SP 16 | 5 | 9 | 0 | 0 |

| | | | | | |
|---|------------------|---|---|---|---|
| | N=5 FA 16 | 2 | 2 | 1 | 0 |
| | SP 17 | 2 | 2 | 1 | 0 |
| <p><i>Using Effective Strategies to Promote Active Engagement in Learning:</i> Special education candidate understands individual and group motivation and behavior, and selects, adapts, and uses instructional strategies and materials, including research-supported methods for academic and nonacademic instruction. Candidate further identifies and teaches basic structures and relationships within and across curricula.</p> <p>Technology Enhanced Instruction: Special education candidate implements curriculum content using developmentally appropriate adaptations and technology for all individuals with exceptional learning needs [CEC Initial Preparation Standard 5-Instructional Planning and Strategies: 5.1, 5.2, 5.3] [INTASC Standard 8 – Instructional Strategies: 8(a)]</p> | N=12 FA 14 | 7 | 5 | 0 | 0 |
| | SP 15 | 6 | 5 | 1 | 0 |
| | N=14 FA 15 | 5 | 9 | 0 | 0 |
| | SP 16 | 5 | 9 | 0 | 0 |
| | N=5 FA 16 | 2 | 2 | 1 | 0 |
| | SP 17 | 1 | 3 | 1 | 0 |
| <p>Using Effective Instructional Plans: Special education candidate identifies and prioritizes areas of the general curriculum, makes accommodations for individuals with exceptional learning needs, selects and uses specialized instructional strategies appropriate to the abilities and needs of the students and incorporates and implements instructional and assistive technology into the lesson.</p> <p>Candidate prepares and organizes materials to implement daily lesson plans, uses</p> | | | | | |
| | N=14 FA 15 | 6 | 6 | 2 | 0 |
| | SP 16 | 6 | 6 | 2 | 0 |
| | N=5 FA 16 | 3 | 1 | 1 | 0 |
| | SP 17 | 1 | 3 | 1 | 0 |

| | | | | | |
|---|-------|---|---|---|---|
| <p>instructional time effectively, implements individualized reinforcement systems and environmental modifications at levels equal to the intensity of students' behaviors.</p> <p>Candidate makes responsive adjustments to instruction based on continual observations, and evaluates and modifies instructional practices in response to ongoing assessment data.</p> <p>[CEC Initial Preparation Standard 3 - Curricular Content Knowledge: 3.2, 3.3] [INTASC Standard 4 – Content Knowledge: 4(f)] [INTASC Standard 7: Planning for Instruction: 7(a)]</p> | N=12 | | | | |
| | FA 14 | 6 | 5 | 1 | 0 |
| | SP 15 | 6 | 4 | 2 | 0 |
| <p>Mathematics Rubric</p> <p>Use appropriate adaptations and technology for all individuals with exceptional learning needs</p> | N=12 | | | | |
| | FA 14 | 6 | 6 | 0 | 0 |
| | SP 15 | 6 | 5 | 1 | 0 |
| | N=14 | | | | |
| | FA 15 | 5 | 6 | 3 | 0 |
| | SP 16 | 5 | 7 | 2 | 0 |
| | N= 5 | | | | |
| FA 16 | 2 | 3 | 0 | 0 | |
| SP 17 | 2 | 3 | 0 | 0 | |
| <p>Use task analysis approaches [including technology] to solve mathematical problems</p> | N= 12 | | | | |
| | FA 14 | 6 | 4 | 2 | 0 |
| | SP 15 | 6 | 6 | 0 | 0 |

| | | | | | |
|--|---------------------------------------|----------|----------|----------|----------|
| | | | | | |
| | N=14 FA 15 | 5 | 7 | 2 | 0 |
| | SP 16 | 5 | 7 | 2 | 0 |
| | N=5 FA 16 | 2 | 2 | 1 | 0 |
| | SP 17 | 2 | 2 | 1 | 0 |

Appendix 7.1A: Technology Survey Instrument - Clinical Practice Candidates

| Technology Tools/Resources | Using for Instruction in Clinical Practice Classrooms | Using For Certification Purposes | Require your Students to use |
|--|---|----------------------------------|------------------------------|
| Black Board Learning, posting assignment, discussion, grade information | | | |
| Smart Boards Project presentations and learning | | | |
| Power Point Project presentation | | | |
| Website Resources Writing research paper, getting information | | | |
| Videos Projects, presentations, critical analysis | | | |
| Videomaking Tools Creating, editing, and uploading videos | | | |
| ePortfolio Portfolio submission for edTPA certification | | | |
| ebooks For instruction | | | |
| Instructional Software and Applets | | | |
| Simulations, Virtual Reality For instruction | | | |
| Excel Software Data management (To organize students' grade, and grade point average, students' academic performance, etc). | | | |
| Soft Chalk For instruction | | | |
| SMARTTHINKING Homework help | | | |
| Online Instruction/digital instruction and learning Technology | | | |
| Cloud Based Technology Uploading instructional and learning content, saving documents, assignment submission | | | |

Appendix 7.1B: Technology Survey Instrument- Faculty

| Technology Tools/Resources | Using for Instruction in your Courses | Require Students/Candidates to use |
|---|---------------------------------------|------------------------------------|
| Black Board Learning, posting assignment, discussion, grade information | | |
| Smart Boards Project presentations and learning | | |
| Power Point Project presentation | | |
| Website Resources Writing research paper, getting information | | |
| Videos Projects, presentations, critical analysis | | |
| Video Making Tools | | |
| ePortfolio For tracking candidates' performance, teaching them how to make Professional ePortfolio | | |
| ebooks For instruction | | |
| Instructional Software and Applets | | |
| Simulations, Virtual Reality For instruction | | |
| Excel Software Data management (To organize students' grade, and grade point average, students' academic performance, etc). Teaching candidates how to navigate the Software | | |
| Distance Learning Learning and teaching, visiting classrooms in different countries | | |
| Soft Chalk For instruction | | |
| Skype Discussion | | |
| SMARTTHINKING Homework help | | |
| Online Instruction/digital instruction and learning Technology (Workshops) | | |
| Cloud Based Technology Uploading instructional and earning content, saving documents, assignment submission | | |