Characteristics of Technology Infused Teacher Preparation Programs

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Pervasive Technology Content - *Technology-related content is infused throughout all components of the teacher preparation program.* Indicators include:

- Syllabi for all coursework (especially the methods courses) and all clinical experiences include assignments to help candidates use technology for PK-12 teaching and learning.
- Candidates report that all their coursework and clinical experiences contain content related to their developing expertise in using technology effectively in PK-12 instruction.

Shared Responsibility - *The responsibility for preparing teacher candidates to use technology effectively is shared among all teacher educators working with teacher candidates.* Indicators include:

- All teacher education faculty, clinical supervisors, and PK-12 mentor teachers have formally assigned roles and responsibilities to support the development of candidates' technology-related knowledge and skills (e.g., job descriptions, policy documents, mentor agreements).
- All teacher education faculty, clinical supervisors, and PK-12 mentor teachers can explain how they support the development of candidates' technology-related knowledge and skills.
- Candidates report that all their instructors, clinical supervisors, and PK-12 mentor teachers support their technology development.

Unified Vision - *Throughout the preparation program, both university faculty and PK-12 partners present candidates with a unified vision for the effective use of technology in PK-12 classrooms*. Indicators include:

- A vision for the effective use of technology in PK-12 schools is collaboratively constructed by key university and PK-12 partners (for example, college of education administrators, instructional technology faculty, non-instructional technology faculty, clinical supervisors, program coordinators, PK-12 mentor teachers, and PK-12 leaders)
- All teacher education faculty, clinical supervisors, and PK-12 mentor teachers demonstrate an understanding of the vision and a commitment to supporting this vision when working with candidates.
- The vision includes innovative and emerging technologies that might transform learning in the future.
- Candidates report that throughout their preparation program all their instructors, clinical supervisors, and PK-12 mentor teachers presented a unified vision of technology use.

Planned Curriculum - *University and PK-12 partners collaborate to construct a planned curriculum spanning the preparation program.* Indicators include:

- Specific, measurable technology-related learning outcomes describe what candidates must know or be able to do upon graduation.
- A scope and sequence describe how and when learning activities in coursework and clinical experiences support candidates' achievement of technology-related learning outcomes.
- Key university and PK-12 partners commit to the technology-related learning goals and curriculum plan.

Developmental, Practice-Based Approach - *The teacher preparation program deploys a developmental, practice-based approach to help candidates integrate technology effectively in PK-12 classrooms*. Indicators include:

- The preparation program includes opportunities for candidates to build foundational knowledge necessary to integrate technology effectively in PK-12 classrooms.
- Throughout the program, all faculty and PK-12 mentor teachers model the effective use of technology.
- The program includes iterative practice opportunities for candidates to design, implement, reflect on, and revise technology-supported, PK-12 learning experiences in coursework and PK-12 classrooms.
- Throughout their program, candidates receive coaching and feedback on their technology integration activities from faculty, clinical supervisors, and PK-12 mentor teachers.
- Candidates report they feel challenged but supported throughout their program as they learn to integrate technology effectively.

Varied, Multi-Stage Assessment for Continuous Improvement - *Candidates' technology-related learning outcomes are assessed throughout the preparation program in a variety of ways to meet accreditation requirements and support the continuous improvement of technology infusion*. Indicators include:

- There are key assessments developed to measure candidates' progress on technology-related learning outcomes at strategic stages in the program.
- Technology-related measures are infused into the primary assessment plan and instruments used in the teacher preparation program.
- Teacher education faculty, clinical supervisors, and PK-12 mentor teachers are involved in assessing candidates' technology related learning outcomes.
- At least some key assessments are direct measures of candidate performance, such as observations of candidates' teaching and review of lesson plans.
- After graduation, program completers and their employers provide satisfaction data related to the program's ability to prepare digital-age educators.
- All teacher educators frequently review candidate assessment data for the purposes of improving the technology-infused preparation program.

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Informed Design and Renewal - *Technology-related components of teacher preparation programs are continuously informed by theory, research, policy, standards, current instructional practices, and emerging technologies related to instructional technology*. Indicators include:

- The technology-related vision and the learning activities in course work and clinical experiences address equitable, challenging, engaging, authentic, student-centered learning in PK-12 educational environments.
- Teacher candidates are prepared to integrate technology in face-to-face and online instruction for PK-12 students.
- Instructional technology faculty provide necessary leadership and expertise to ensure the program keeps pace with theory, research, policy, and emerging technologies relevant to preparing digital-age educators.
- PK-12 partners provide ongoing input to ensure the program is aligned to technology-related needs in PK-12 schools.
- Candidates feel that technology-related content in their preparation program is relevant to their roles as future educators.
- Program stakeholders periodically review and refine the technology-related vision and the learning activities in course work and clinical experiences for alignment to theory, research, policy, and emerging technologies relevant to preparing digital-age educators.

Technology Competent Teacher Educators - *Teacher educators have the knowledge and skills necessary to implement an infused curriculum and to mentor candidates' developing technology integration expertise.* Indicators include:

- The program has adopted a set of technology competencies for faculty, clinical supervisors, and PK-12 mentor teachers working with candidates.
- High-quality, ongoing professional learning support is provided to help faculty, clinical supervisors, and PK-12 mentor teachers meet technology competencies.
- Teacher education faculty, clinical supervisors, and PK-12 mentor teachers are satisfied with professional development efforts to help them develop technology competencies.
- Teacher education faculty, clinical supervisors, and PK-12 mentor teachers are confident in their abilities to support candidates' emerging technology integration skills.
- Candidates are satisfied with the ability of their instructors, clinical supervisors, and PK-12 mentor teachers to model and coach technology integration.

Ubiquitous Access - *Candidates and teacher educators have 24/7 access to operable, modern computing devices, educational software, and web-based subscription services frequently used in PK-12 schools.* Indicators include:

- The types of tools found in PK-12 settings are mirrored in university learning experiences.
- There are minimum technology access requirements for PK-12 clinical experience settings.
- There are strategies to ensure candidates have after-hours access to technologies needed to complete assignments and plan technology-supported instruction in PK-12 schools.
- Candidates have access to innovative educational technologies for exploratory use in PK-12 classrooms.
- Candidates, teacher education faculty, clinical supervisors, and PK-12 mentor teachers are satisfied with their access to technologies needed to achieve the technology-related learning goals for the program.

Leadership Support for Systemic Change - *Leaders in higher education and PK-12 schools are guided by theories and research on change to navigate the transition toward technology-infused preparation programs.* Indicators include:

- Administrators of teacher preparation programs view the transition to technology-infusion as a long-term, systemic change initiative and are willing to provide resources/personnel to support sustained planning, coordination, and professional learning activities related to technology infusion.
- Teacher education faculty, clinical supervisors, and PK-12 mentor teachers believe that leaders assign high-priority to technology-infused teacher preparation programs and provide resources/personnel to support sustained planning, coordination, and professional learning activities related to technology infusion.
- College and/or department-level strategic plans include goals, strategies, and resources to support a technology-infused teacher preparation program.