TRANSFORMING TO A 21st Century EDUCATOR PREPARATION PROGRAM

A Report of the 2023 Teacher Preparation Task Force

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Transforming to a 21st Century Educator Preparation Program

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CMU, and AA/EO institution, strongly and actively strives to increase diversity and provide equal opportunity within its community.
EXECUTIVE SUMMARY

PURPOSE

Central Michigan University has been a leader in educator preparation programs since 1892. To remain a leader, we must continue to examine and revise our program and implement those transformations that will continue to define us a premier educator preparation program. Pursuant to the charge of the 2023 Teacher Preparation Task Force, this report outlines our recommendations for a purposeful transformation of our program based on our vision of a 21st Century Educator. As we articulated this vision, we remained conscious of how our decisions regarding the curriculum, clinical experiences, selectivity and completion of candidates affects not only teacher candidates’ learning within the program, but also reflects the social and cultural contexts of our world. Therefore, our vision of our educator preparation program is based on the notion of a 21st Century Educator as an educational leader who is prepared with 21st Century Skills as well as the knowledge to be an effective change agent in today’s world.

VISION

We offer this vision of Central Michigan University’s educator preparation program:

CMU’s Education Preparation Program will be a 4.5 year, coherent, efficient, technology saturated clinically-based program committed to diversity, inclusion, and data-driven decision-making.

This vision will be realized through the creation of shared understandings about our role as an educator preparation program and the purposeful selection of students to maintain our history of access. This vision requires building on our current program’s distinguishing features, such as the CLeaR Conceptual Framework, Global Experiences in Education, existing relationships with P-12 schools and community partners, statewide network of Student Teaching Centers, and ePortfolio. Recommended revisions to our program include streamlining and aligning curriculum and coursework, greater infusion of diversity issues and technology across the curriculum, and tighter coherence throughout the program. Innovative additions to our program will include Clinical Immersion Programs (Residencies), Certificates in competency areas, unprecedented faculty collaboration and development, a Pre-Ed track to attract and retain quality candidates, and an increase in assessment-driven decision-making to guide teacher candidates and ourselves as teacher educators in being truly reflective practitioners.

PROCESS

To create this vision we

- Consulted relevant standards that are shaping 21st Century educator preparation
- Considered developments in P-12 education, the nature of learning, and the world
- Identified best practices in the initial preparation of teachers by examining the practices of exemplary programs
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- Inventoried the distinguishing characteristics and areas for improvement of CMU’s current teacher education program
- Focused on how to maintain a high quality program within the shifting context of the 21st Century
- Deliberated how to streamline the program in order to make it more efficient

RECOMMENDATIONS

Some of our recommendations are radical departures from what we know and will require substantive discussions and collaboration among faculty, departments, and colleges. We have organized our recommendations into six key areas starting with a section on designing a coherent program, followed by sections on integrating issues of diversity and inclusion, assessment of P-12 student learning, and technology use and concepts within the curriculum and coursework. These recommendations lead to our recommendations regarding clinical experiences as a clinically-based program—a program in which clinical practice serves as the core of instruction. The final section addresses the area of selecting and assessing 21st Century educators because such policies and procedures undergird our development of a 21st Century educator preparation program.

Designing Coherent Curriculum and Coursework

1. Update the CLeaR Conceptual Framework to reflect what teachers need to know and be able to do in terms of pedagogical content knowledge in order to be effective practitioners in today’s profession
2. Collaborate across departments and colleges to create curriculum maps that carefully sequence coursework to prepare teacher candidates to meet performance outcomes, state certification standards, and program entry requirements
3. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that bridge theory and practice and prompt candidates’ reflection
4. Draw on the principle of integration to streamline CMU’s educator preparation programs
5. Coherently integrate Diversity, Assessment, Technology, and Clinical Experiences with program coursework

Preparing Teachers for Globalization, Local Responsiveness, Diversity and Inclusion

6. Update CLeaR Conceptual Framework to convey faculty’s commitment to diversity and equity
7. Collaborate to create curriculum maps that coherently integrate issues of diversity and inclusion, and global and local perspectives into curriculum and coursework
8. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about diversity, inclusion, and global and local perspectives
9. Embed the program with pathways to recognized competencies in urban, rural, global, and inclusive environments
Preparing Teachers to Assess Learning and Teaching

10. Update CLeaR Conceptual Framework to include data-driven decision-making
11. Collaborate to coherently integrate assessment literacy, quantitative reasoning, and data-driven instructional decision-making into program coursework
12. Develop a faculty development plan that supports faculty in aligning, modeling, and employing data-driven decision-making throughout program

Preparing Teachers to Understand and Integrate Technology

13. Update CLeaR Conceptual Framework to include digital citizenship and technological pedagogical content knowledge
14. Collaborate to create curriculum maps that coherently integrate technology literacy, digital citizenship, and technology use into curriculum and coursework
15. Develop a professional development plan that supports faculty and clinical partners in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about technology and digitally-mediated learning environments and their ability to use technology for a variety of purposes
16. Embed the program with pathways to recognized competencies in online, flipped, and blended learning environments

Developing a Clinically-Based Educator Preparation Program

17. Align and sequence clinical experiences for vertical coherence
18. Create immersive clinical experiences for horizontal coherence
19. Develop a strategic plan for faculty to guide clinical experiences
20. Maintain duration of clinical experience during student teaching
21. Increase the duration of clinical experience in the B.S. in Education-Secondary Program
22. Offer clinical experiences in a variety of sites and learning environments using culturally responsive and place-based pedagogy

Selecting and Assessing 21st Century Teachers

23. Develop and institute a program-wide assessment plan that includes a more comprehensive approach to assessing teacher candidates prior to entry into the program, during the program, and upon completion of the program
24. Create a “Pre-ED” experience that supports teacher candidates prior to entry into the program

We look forward to engaging in conversation with our colleagues and discovering additional ways to improve our program. Implementation of these recommendations will challenge all of us to step out of our comfort zones and rethink how we currently do things. It will require reallocation of resources, making hard choices about our curriculum, building partnerships, developing a new support system for students, developing ourselves professionally, and building flexibility into administrative policies and procedures. We will need to transform and strengthen our own knowledge, literacies, skills, competencies and ways of working. We need to examine how best to support our faculty and administrators as they take on this incredible challenge. New incentives, funding models, organizational structures and professional development must be considered.
The time has come not only to consider these changes, but to act on them: to transport our program into the 21st Century. Throughout the country, educator preparation programs have been criticized and held to increasingly higher standards. As experts in this area, it is our role to step up and help our community members, policy makers, students and other stakeholders understand the components that make an excellent educator preparation program, and we must use data and research to guide our decisions concerning implementation of this vision.
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Update CLeaR Conceptual Framework to Convey Faculty’s Commitment to Diversity and Equity
Coherently Integrate Issues of Diversity and Inclusion, and Global and Local Perspectives into Curriculum

Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about diversity, inclusion, and global and local perspectives
Embed the Program with Pathways to Recognized Competencies in Urban, Rural, Global, and Inclusive Settings
Create a streamlined pathway to CMU’s Certificate of Cultural Competency.
Study the feasibility of offering certificates for teaching in global, urban, rural, and inclusive environments.

**PREPARING TEACHERS TO ASSESS LEARNING AND TEACHING**

**VISION**

**CONTEXT**

*Assessment Literacy*
- Authentic Assessments
- Valid and Reliable Summative Assessments
- Formative Assessments
- Evaluating Assessments

*Data-Driven Instructional Decision-Making*
- Quantitative Reasoning and Analytical Skills
- Data-Driven Instructional Decision-Making

**CMU CURRENT PRACTICES**

**RECOMMENDATIONS**

**RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION**

- Update CLeaR Conceptual Framework to include data-driven decision-making
- Collaborate to coherently integrate assessment literacy, quantitative reasoning, and data-driven instructional decision-making into program coursework
- Develop a faculty development plan that supports faculty in aligning, modeling, and employing data-driven decision-making throughout program

**PREPARING TEACHERS TO UNDERSTAND AND INTEGRATE TECHNOLOGY**

**VISION**

**CONTEXT**

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**CMU CURRENT PRACTICES**

**RECOMMENDATIONS**

**RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION**

- Update CLeaR Conceptual Framework to include digital citizenship and technological pedagogical content knowledge
- Collaborate to create curriculum maps that coherently integrate technology literacy, digital citizenship, and technology use into curriculum and coursework
- Develop a professional development plan that supports faculty and clinical partners in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about technology and digitally-mediated learning environments and their ability to use technology for a variety of purposes
- Embed the program with pathways to recognized competencies in online, flipped, and blended learning environments

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RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Align and Sequence Clinical Experiences for Vertical Coherence
Create Immersive Clinical Experiences for Horizontal Coherence
Develop a Strategic Plan for Faculty to Guide Clinical Experiences
Maintain Duration of Clinical Experience During Student Teaching
Increase the Duration of Clinical Experience in the B.S. in Education-Secondary Program
Offer Clinical Experience in a Variety of Sites and Learning Environments Using Culturally Responsive and Place-Based Pedagogy

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RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Develop and Institute a Program-wide Assessment Plan
- Update the CLeaR Conceptual Framework to include new knowledge areas.
- Include a more comprehensive approach to the use of formative and summative assessment measures before the beginning, during the continuation, and at the completion of the program.

Create a PRE-ED Experience

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“The teaching profession must look very different in 2030 if all of our students are going to be well prepared to meet the demands of the global economy and participate successfully in our nation’s ever-evolving democratic way of life.”

Barnett Berry, 2011, p. xiv

BACKGROUND: THE 2023 TEACHER PREPARATION TASK FORCE

Central Michigan University (CMU) opened in 1892 as the Central Michigan Normal School and Business Institute with a mission focused on teacher training. Since then CMU has grown in a variety of ways, but has continued to carry out that historic mission of preparing educators.

CMU’s mission today is to “provide student-centered education and foster personal and intellectual growth to prepare students for productive careers, meaningful lives, and responsible citizenship in a global society” (CMU, 2014). CMU’s teacher education program fulfills this mission by preparing educators who are effective professionals, critical thinkers, lifelong learners, and reflective practitioners for P-12 schools.

The landscape of P-12 schooling, the teaching profession, and teacher preparation have changed rapidly in recent years. In order to respond to these changes and capitalize upon opportunities they present, it is important for CMU’s teacher education program to develop a vision for the future. In September 2013, the Dean of the College of Education and Human Services, Dr. Dale-Elizabeth Pehrsson, charged a university-wide Task Force (Appendix A: 2023 Teacher Preparation Task Force Members) with the following:

Charge

[T]he charge of the 2023 Teacher Preparation Task Force (2023 TPT) is to examine best practices in the initial preparation of educators who will work within the P-14 settings in the years 2014, 2017, 2023 and beyond. Further, we must maintain the highest quality and we must do it in efficient ways while reducing student debt and time to graduation.

This task force will examine research, trends and exemplary programs with a perspective toward the future and that meet international, national (AACTE, NCATE, TEAC, CAEP, ATE, NEA and other appropriate leadership groups), regional, state (MDE) and CMU mission priorities.

The 2023 TPT will examine the role CMU plays in developing future teachers as leaders and suggest seamless pathways that promote continuous professional development beyond initial preparation for entry into practice.
Per the charge, our goal was “to examine best practices in the initial preparation of educators who will work within the P-12 settings in the years 2014, 2017, 2023 and beyond,” in order to “maintain the highest quality” program, “while reducing student debt and time to graduation.” (Appendix B: Teacher Preparation Task Force Charge)

We feel that it is important to highlight that the Task Force was commissioned and supported by Dean Pehrsson, but orchestrated and conducted by a team comprised primarily of CMU faculty with university-wide representation. This Task Force included members representing the College of Education and Human Services (CEHS), the College of Humanities and Social and Behavioral Sciences (CHSBS), the College of Communication and Fine Arts (CFA), the College of Science and Technology (CST), and the College of Health Professions (CHP), along with a P-12 representative, who collaborated to develop a vision for teacher preparation at CMU.

To develop this vision, the Task Force identified developments in P-12 and teacher education, analyzed data on CMU’s programs, reviewed research on effective teacher preparation, studied exemplary and comparable educator preparation programs, and consulted CMU faculty and staff with expertise in areas that could inform our vision of the teacher preparation program. We believe we developed recommendations that, when implemented, would distinguish our program from others, allow us to capitalize on emerging trends, and provide a high quality learning experience for our teacher candidates, and ultimately, their P-12 students.

We offer the recommendations delineated in this report to stakeholders in CMU’s teacher preparation as well as the implementation team that will be charged to enact this vision with administrative support. We viewed our charge as a visionary one and were encouraged to consider financial and institutional feasibility only briefly. For this reason, our recommendations are broad and comprehensive, allowing an implementation team to determine the pragmatic and logistical details of enacting this vision. In passing the baton, we offer the recommendations in this report with considerations for implementation so that the implementation team may successfully design the premiere educator preparation program we have envisioned.

THE 21ST CENTURY CONTEXT

21st Century Knowledge, Skills, and Educator Preparation

We situate the work of the 2023 Teacher Preparation Task Force within developments in P-12 and educator preparation. The 21st Century poses many challenges and opportunities for education and educator preparation programs. Changing economic, social, political, and technological landscapes have opened and altered possibilities for teaching and learning. Designing a premiere teacher preparation program in this evolving context requires consideration of the developments that have already impacted education and will most likely become even more important in the future.

The Partnership for 21st Century Skills (P21) has articulated a framework for 21st Century Teaching and Learning that is endorsed by the American Association of Colleges of Teacher Education (AACTE, 2010). Developed over a six-year period with input from a variety of stakeholders, this framework outlines the content, knowledge, skills, expertise, and literacies students need to succeed in work and life in the 21st Century. This framework informs the work
of educator preparation institutions because in order to equip P-12 students with 21st Century knowledge and skills, P-12 teachers need to possess, teach, and assess their students’ understanding in core subjects, interdisciplinary literacies, and multiple skill sets (AACTE, 2010; CAEP, 2013b). According to AACTE, 21st Century educators need to be prepared to

- Align instruction with standards that embody 21st Century knowledge and skills
- Create inclusive learning environments and employ a variety of strategies to reach diverse learners
- Balance direct instruction and project-oriented teaching methods
- Align technologies with content and pedagogy and tailor technologies to meet students’ specific learning needs
- Use a range of assessment strategies to evaluate student performance and differentiate instruction
- Collaborate with colleagues, participate in learning communities, and pursue lifelong learning

Preparing teachers who are 21st Century educators requires educator preparation programs to:

- Integrate 21st Century knowledge and skills into the program’s curriculum
- Provide extensive clinical experiences in which candidates’ apply their mastery of 21st Century knowledge and skills
- Leverage current technologies to enhance collaboration among teacher candidates
- Incorporate inquiry-based learning experiences to connect theory and practice of teaching 21st Century knowledge and skills
- Assess candidates’ proficiency in 21st Century skills and knowledge

AACTE’s vision of 21st Century educator preparation serves as a point of departure for the vision conveyed in this Task Force report.

**The Future of Learning**

Within this 21st Century context, a vision of learning is offered by KnowledgeWorks, a group dedicated to “providing meaningful, personalized learning so that students can thrive in college, career, and civic life” (KnowledgeWorks, 2013). This “Glimpse into the Future of Learning” depicts trends that will impact how, when and where learning takes place in the future (see Figure 1: KnowledgeWorks Forecast 3.0).
Several of these trends were taken into consideration by the Task Force as we considered, for example, the various sites and learning environments where teacher candidates will learn; how to effectively prepare candidates to differentiate instruction for diverse learners; and what forms of reputation markers, certificates, or credentials will best reflect teacher candidates’ competencies and make them marketable upon graduation.

Yet KnowledgeWork’s (2013) vision of personalized, individualized learning seems partially eclipsed by today’s educational policies which, in promoting rigor and readiness, also promote standardization in the P-12 teaching profession and educator preparation institutions. The array of standards, accreditation, tests, and evaluation systems taken into consideration by this Task Force in developing a vision for teacher preparation at CMU is indicative of this movement toward standardization:

- Council for the Accreditation of Educator Preparation (CAEP) Standards
- Common Core State Standards (CCSS)
- Smarter Balanced Assessments (SBAC)
- Interstate Teacher Assessment and Support Consortium (InTASC) Standards
- National Technology Education Standards for Teachers (NETS*T)
- Professional Readiness Exam (PRE)
- Michigan Test for Teacher Certification (MTTC) Objectives
- Praxis Tests
- Michigan Educator Evaluation System
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Toward Shared Understandings about the Role of Educator Preparation Institutions

Because the trend toward standardization is likely to continue (Cochran-Smith, 2013), educator preparation programs must balance the need to meet this array of standards with the need to prepare educators for the emerging and diversifying roles predicted by the KnowledgeWorks. This need for balance made it important for the Task Force to develop shared understandings about the role educator preparation institutions can play in the world today. Our shared understandings included the following:

- There are competing ideals of professionalism in teaching, and we are advocating for a specific vision.
- Focusing on our program’s distinguishing characteristics and unique expertise is important to developing our vision of a premiere educator preparation program.
- Affording students access to education is an important value we share.

These shared understandings developed through discussion of pre-eminent scholar Marilyn Cochran-Smith’s (2013) keynote speech, “The New Landscape of Teacher Education: Trends and Challenges,” presented at Eastern Michigan University’s College of Education Conference, “Educator Preparation: A Call to Action in Michigan,” which several Task Force members attended or viewed as a DVD. These shared understandings grounded our study of effective teacher preparation.

Areas of Focus

To study effective educator preparation, we consulted Linda Darling-Hammond’s (2006) book, Powerful Teacher Education: Lessons from Exemplary Programs—a comprehensive, research-based analysis of effective teacher education programs by, arguably, the most influential teacher education scholar in the U.S. In addition, we studied selected published literature (e.g., Stewart, 2013) and reports from organizations such as CAEP (2013), AACTE (2010), and the Council of Chief State School Officers (2012); and. Our research crystallized around six areas of focus:

1) Selectivity and Admission of Candidates. This area concerned the identification of best practices regarding the criteria to be used for admission, advising, and the continual assessment of teacher candidates.
2) Coursework and Curriculum. This area concerned the identification of best practices to streamline the program through coherent, innovative and integrated coursework.
3) Diversity and Global Experiences. This area concerned the best practices for designing a program to prepare teachers for globalization, local responsiveness, diverse learners, and inclusive settings.
4) Technology. This area concerned the best practices associated with designing a program to prepare teachers to understand concepts related to technology, develop technological literacy, and use technology as a pedagogical tool, as a learning environment, and as a force that shapes content and subject matter.
5) Assessment. This area concerned the best practices for designing a program to prepare teachers to employ a variety of assessments and to use data to drive instructional decision-making and assess student learning.
6) **Clinical Experiences.** This area concerned the best practices for designing a program to prepare effective teachers through immersive, coherently structured, guided, increasingly complex clinical experiences supported by strong and mutually-beneficial partnerships with P-12 schools and community partners.

In order to study these areas in more depth, we formed subgroups around each area. Within our subgroups, we generated preliminary recommendations that were presented to the entire Task Force for discussion and Strength/Weakness/Opportunities/Threat (SWOT) analysis. These preliminary recommendations were elaborated and revised through a recursive, dialogical process of collaborative brainstorming among Task Force members and with faculty who have expertise in a particular area. Recommendations for which consensus was reached by the Task Force were then presented as preliminary drafts of this report, which also included a description of the relevant contextual factors, the practices of exemplary programs, a rationale for the recommendations, and considerations for their implementation. Based on feedback from Task Force members, the recommendations were again revised and refined and the context and rationale elaborated per discussions. Further iterations of this report were presented to the Task Force for further discussion and feedback throughout the month of February 2014, resulting in this final product.

**Practices of Exemplary Educator Preparation Programs**

The Task Force charge invited us to “envision the future (to the year 2023) of this profession and, based on our present strengths, make changes that are consistent with current research and best practices as evidenced by exemplary programs.” In order to make recommendations that are consistent with current research and best practices, we identified a range of exemplary practices that aligned with our vision. This practices were synthesized from Cochran-Smith, 2013; CCSSO, 2012; Stewart, 2013; Darling-Hammond, 2006; AACTE, 2010; NCATE, 2010b; NCTQ, 2012; Nieto, 2000; and CAEP, 2013.

**Selectivity and Admission of Candidates**

- Exemplary programs are highly selective of teacher candidates during admission and during program completion, requiring them to be able to demonstrate evidence of teaching competence in order to graduate
- Exemplary programs assess candidates’ skills throughout the program, not just when completing course work
- Exemplary programs understand that assessment should not eliminate variation in teachers or limit their capacity for flexibility
- Exemplary programs use assessment to critique and raise questions about the status quo of candidate knowledge, skills, and abilities
- Exemplary programs understand the discrepancies between the current demographics of teachers and the student population and develop a plan to address this gap

**Coursework and Curriculum**

- Exemplary programs understand that teaching is complex and should therefore not be reduced to standardized testing
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• Exemplary programs have
  o alignment around a strong theory of learning to teach
  o pedagogies that support candidates in bridging theory and practice
  o learning opportunities to foster candidates’ development as reflective practitioners
    who continuously adapt and improve their teaching through individual and
    collegial reflection and ongoing professional learning
  o thoughtfully designed, carefully sequenced, and mutually reinforcing courses and
    clinical experiences
• Exemplary programs include
  o Collaboration among faculty
  o Curriculum maps to design their programs and demonstrate how courses connect
    and skills learned in each to build upon those before
  o Learning experiences with multicultural and international education
  o Experiences in teaching with technology and in digitally-mediated learning
    environments
  o Clinical experiences tied to content-specific methods coursework

Clinical Practice

• Exemplary programs connect theory to practice and help policy makers understand that
  practitioners theorize from field experiences
• Exemplary programs have support structures in place to help new teachers be successful
  in the field during induction, their first years of teaching
• Exemplary programs offer
  o Immersive field experiences comparable to residency programs in medical
    training
  o Opportunities in a variety of settings with diverse students, including
    international, rural, urban and inclusive settings
  o Guided, coherently-structured, and increasingly-complex clinical experiences in
    which candidates gradually take on responsibilities for teaching
  o Have strong partnerships with P-12 schools and community partners

Diversity and Global Experiences

• Exemplary programs prepare candidates to be agents of change who challenge social
  injustice and promote equity in their classrooms and in society
• Exemplary programs craft an explicit definition of diversity that meets the needs of local
  communities and prepares teachers for the diverse student populations they will
  encounter in P-12 classrooms
• Exemplary programs define diversity broadly in terms of social justice, equity, race,
  ethnicity, native language, socio-economic status, gender, gifted and special status, and
  students with disabilities
• Exemplary programs focus on diversity as an asset, a resource for learning, and not as a
  deficit
• Exemplary programs focus on social justice goals, not on market share
• Exemplary programs focus on preparing teacher candidates to have a better understanding of world affairs, a sense of worldliness, by offering study abroad and international teaching experiences

Technology

• Exemplary programs recognize and react to the continuation of trends in online and blended learning environments
• Exemplary programs model and prepare students to teach online and in hybrid, flipped, or blended learning environments by first focusing on the pedagogy and then the format
• Exemplary programs use technology to enhance relationships with clinical partners and to assess, evaluate, and provide teacher candidates with feedback

Assessment

• Exemplary programs understand and react to the continuation of trends in test-based accountability
• Exemplary programs model and prepare teacher candidates to employ data-driven instructional decision-making

CMU’S CURRENT PROGRAM AND PRACTICES

CMU’s current teacher education program is a B.S. in Education degree with certification in elementary, secondary, and special education. The B.S. in Education-Elementary program is currently structured so that candidates take subject matter preparation and some methods courses in disciplines, and take education courses as a cohort as part of a professional preparation sequence. Under this structure, responsibility for preparing teachers is dispersed across multiple departments in five colleges: the CEHS, CHSBS, CST, CCFA, and CHP. (Appendix C: What Is the Professional Education Unit? Information Sheet) The B.S. in Education has several notable features that if leveraged, could position CMU with a premiere educator preparation program.

Distinguishing Characteristics

In order to base our recommendations on CMU’s existing strengths, we identified what we viewed as distinguishing characteristics of our teacher education program:

• CLEAR Conceptual Framework and Outcomes
  This framework is designed to provide purpose, direction, and coherence to CMU’s educator preparation programs (Appendix D: CLeaR Conceptual Framework and Outcomes).

• Global Experiences in Education
  These pre-student and student teaching experiences provide candidates with opportunities to teach in international and domestic locations outside of Michigan (Appendix E: CMU Global Field Experiences, 2010-2013).
• **A Commitment to Providing Access to Educational Opportunities**
CMU has a large number of students who qualify for financial aid—nearly 80% (Johnson, 2013)—and many are first-generation college students.

• **Relationships with P-12 Schools and Community Partners**
CMU has relationships with schools and community organizations that can be developed into mutually beneficial partnerships (Appendix F: CMU Relationships with P-12 Schools and Community Partners)

• **Statewide Network of Student Teaching Centers**
CMU has a presence throughout Michigan with nine centers that allow teacher candidates to student teach in a variety of areas throughout the state (Appendix G: CMU Student Teaching Centers, 2013-2014)

• **Online Undergraduate Programs**
CMU’s online undergraduate programs were ranked highest in the country by *U.S. News and World Report* in 2014 (CMU Media Channel, 2014b).

• **EPortfolio**
The EPortfolio is an innovative assessment tool used by teacher candidates to document their growth and performance, assess their professional practice, and for employment opportunities.

We considered these distinguishing features as we generated a vision for our program, and the value of each feature is elaborated in other areas of the report.

**RECOMMENDATIONS: TOWARD A 21ST CENTURY EDUCATOR PREPARATION PROGRAM**

The following recommendations reflect a vision for teacher preparation at CMU. These recommendations are based on a review of accreditation standards, exemplary teacher preparation programs, comparable institutions, research on teacher education, and CMU’s distinguishing features. We have purposefully organized these recommendations around our areas of focus, beginning with a section on designing coherent curriculum and coursework, followed by sections on integrating within that coursework issues of diversity and inclusion, assessment of P-12 student learning, and technology use and concepts. These recommendations regarding program design culminate in the clinical experience recommendations that will result in a clinically-based program—a program in which clinical practice serves as the core of instruction. The final section addresses the area of selecting and assessing 21st Century educators because such policies and procedures undergird our development of a 21st Century educator preparation program.

**Designing Coherent Curriculum and Coursework**

1. Update the CLeaR Conceptual Framework to reflect what teachers need to know and be able to do in terms of pedagogical content knowledge in order to be effective practitioners in today’s profession
2. Collaborate across departments and colleges to create curriculum maps that carefully sequence coursework to prepare teacher candidates to meet performance outcomes, state certification standards, and program entry requirements
3. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that bridge theory and practice and prompt candidates’ reflection
4. Draw on the principle of integration to streamline CMU’s educator preparation programs
5. Coherently integrate Diversity, Assessment, Technology, and Clinical Experiences with program coursework

Preparing Teachers for Globalization, Local Responsiveness, Diversity and Inclusion
6. Update CLeaR Conceptual Framework to convey faculty’s commitment to diversity and equity
7. Collaborate to create curriculum maps that coherently integrate issues of diversity and inclusion, and global and local perspectives into curriculum and coursework
8. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about diversity, inclusion, and global and local perspectives
9. Embed the program with pathways to recognized competencies in urban, rural, global, and inclusive environments

Preparing Teachers to Assess Learning and Teaching
10. Update CLeaR Conceptual Framework to include data-driven decision-making
11. Collaborate to coherently integrate assessment literacy, quantitative reasoning, and data-driven instructional decision-making into program coursework
12. Develop a faculty development plan that supports faculty in aligning, modeling, and employing data-driven decision-making throughout program

Preparing Teachers to Understand and Integrate Technology
13. Update CLeaR Conceptual Framework to include digital citizenship and technological pedagogical content knowledge
14. Collaborate to create curriculum maps that coherently integrate technology literacy, digital citizenship, and technology use into curriculum and coursework
15. Develop a professional development plan that supports faculty and clinical partners in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about technology and digitally-mediated learning environments and their ability to use technology for a variety of purposes
16. Embed the program with pathways to recognized competencies in online, flipped, and blended learning environments

Developing a Clinically-Based Educator Preparation Program
17. Align and sequence clinical experiences for vertical coherence
18. Create immersive clinical experiences for horizontal coherence
19. Develop a strategic plan for faculty to guide clinical experiences
20. Maintain duration of clinical experience during student teaching
21. Increase the duration of clinical experience in the B.S. in Education-Secondary Program
22. Offer clinical experiences in a variety of sites and learning environments using culturally responsive and place-based pedagogy

Selecting and Assessing 21st Century Teachers

23. Develop and institute a program-wide assessment plan that includes a more comprehensive approach to assessing teacher candidates prior to entry into the program, during the program, and upon completion of the program
24. Create a “Pre-ED” experience that supports teacher candidates prior to entry into the program

FINAL THOUGHTS

The remainder of this report is structured around the components of a 21st Century educator preparation program identified above. For each of these components, we have provided a quote that captures the importance of the area, articulated a vision statement, described the context we face, outlined CMU’s current practice, presented our recommendations, and offered a rationale for those recommendations with considerations for their implementation. We have included this last section to convey how this vision could be achieved within CMU’s university context.

We recognize that despite the university-wide representation on this Task Force and our effort to consult a variety of faculty, these recommendations reflect only a partial perspective on how to build an exemplary program. However, we do believe that we have developed some innovative recommendations that could further distinguish our program from others and provide the best learning experiences for our teacher candidates. We offer these recommendations to the larger community as a starting point for conversation and collaboration as we transform into a 21st Century educator preparation program.
DESIGNING COHERENT CURRICULUM AND COURSEWORK

“Although it is important to have well-chosen courses that include core knowledge for teaching, it is equally important to organize prospective teachers’ experiences so they can integrate and use their knowledge skillfully in the classroom. This is probably the most difficult aspect of constructing a teacher education program. Teacher educators must worry not only about what to teach but how, so that knowledge for teaching actually shapes practice and enables teachers to become adaptive experts who can continue to learn.”

Linda Darling-Hammond, 2006, p. 97

VISION

Our vision for CMU’s educator preparation program is that of a program grounded in shared understandings about the knowledge base of teacher education; coherently designed with carefully sequenced, well-chosen coursework and pedagogical alignment; and streamlined based on the principle of integration.

In what follows, we explain how this vision was articulated from studying the practices of exemplary teacher education programs, relevant standards, and strategies for curricular design.

CONTEXT

Studying the practices of exemplary programs illuminates the importance of designing a coherent program around shared understandings about what teacher candidates need to learn and how they learn most productively. An analysis of the complex nature of teaching combined with a review of relevant standards and best practices in programmatic curricular design pointed to the concepts of coherence, integration, and alignment, which serve as guiding principles for enhancing the program. In addition, current conditions in the state of Michigan indicate that streamlining educator preparation programs is imperative if they are to thrive.

Programmatic Coherence

In exemplary teacher education programs, programmatic coherence derives from shared understandings about the knowledge base for teacher education and the theories of learning that undergird candidates’ development; in other words, what candidates need to learn and how they need to learn it. These understandings need to shape all aspects of the program, including curriculum and coursework, clinical experiences, and the selection and advising of candidates. To summarize, in exemplary teacher preparation programs, “coursework is carefully sequenced based on a strong theory of learning to teach; courses are designed to intersect with each other and collectively complete a well-understood landscape of learning, and they are tightly interwoven with the advisement process and students’ work in schools” (Darling-Hammond, 2006, p. 97).

The Knowledge Base of Teacher Education: What Teacher Candidates Need to Learn

The conceptualization of knowledge in exemplary teacher education programs is guided by the
Council for the Accreditation of Educator Preparation (CAEP) and Interstate Teacher Assessment and Support Consortium (InTASC) standards and spotlight P-12 students’ learning as the outcome of effective practice. As Darling-Hammond (2006) notes, “by examining teaching in the light of learning, rather than by looking only at the implementation of specific teaching behaviors, the new standards put considerations of effectiveness at the center of practice” (p. 81). In addition to standards, exemplary programs must consider the new knowledge, literacies and skills that 21st Century learners require.

**Curriculum in Teacher Education: 21st Century Knowledge, Literacies, and Skills**

The partnership for 21st Century skills (P21) has articulated a framework for 21st Century teaching and learning endorsed by the American Association of Colleges of Teacher Education (AACTE). In order to be prepared with 21st Century knowledge, literacies, and skills, teacher candidates need mastery in core content areas, which the Elementary and Secondary Education Act (ESEA) have defined as English, reading, or language arts; world languages; arts; mathematics; economics; science; geography; history; government; and civics. In addition to these core subjects, 21st Century learning must include interdisciplinary literacies in order to promote understanding. These interdisciplinary literacies include:

- Global Awareness
- Financial, Economic, Business and Entrepreneurial Literacy
- Civics Literacy
- Health Literacy
- Environmental Literacy

Teacher candidates must also be able to move beyond subject matter and be equipped with 21st Century competencies, including:

- Critical Thinking
- Problem Solving
- Communication
- Collaboration
- Creativity
- Innovation

To teach P-12 students 21st Century core subject area knowledge, interdisciplinary literacies, and critical thinking, and interpersonal skills, teacher candidates need to be able to align their instruction with standards that embody the 21st Century skills and knowledge (AACTE, 2010).

**Curriculum in Teacher Education: How Coherence Is Achieved**

In exemplary teacher preparation programs, vertical coherence is achieved when each course builds on the theories, concepts, and methods of prior coursework, scaffolding toward clearly articulated outcomes. Horizontal coherence is achieved through alignment across courses within a single semester, including between coursework and clinical experiences. To accomplish both vertical and horizontal coherence, faculty must be aware of what is taught in courses beyond their own, collaborate to create and align curriculum, and model the practices they describe.
Curriculum Design: Integration as a Guiding Principle

The concept of integration serves as a construct that captures the teacher’s complex intellectual work and serves as a foundational guiding principle for designing a teacher education program’s curriculum and coursework. Both Marilyn Cochran-Smith (2013) and Linda Darling-Hammond (2006) emphasize that teaching is a complex process (see also Lampert, 2001; Lee, 2007). Teaching involves striving for multiple, overlapping goals that support students’ cognitive, emotional, social, psychological and physical development. Teaching, then, requires integrating multiple kinds of knowledge, including knowledge of child development, subject matter, social interaction, students’ backgrounds and identities, and individual students’ needs and abilities. Moreover, “[N]ew teachers need more than technical skills: they need a repertoire of general and subject-specific practices and the understandings and judgment to engage all students in worthwhile learning” (NCATE, 2010b, p. 9). Organizing candidates’ learning experiences so that they can effectively integrate and use their knowledge in practices is likely the most challenging aspect of designing a teacher preparation program (Darling-Hammond, 2006).

Review of standards provided by CAEP (2013) and InTASC, as well as the Common Core State Standards (CCSS) (Common Core State Standards Initiative, 2010), illustrate the need to provide elementary teacher candidates with the ability to integrate content with instructional methods and to do so across multiple subject areas. CAEP (2013) defines content knowledge as the “depth of understanding of critical concepts, theories, skills, processes, principles, and structures that connect and organize ideas within a field” (p. 4). Pedagogical knowledge “involves a shift in teachers’ understanding from comprehension of subject matter for themselves, to advancing their students’ learning through presentation of subject matter in a variety of ways [...]” (p. 5). In the InTASC standards, which articulate the programmatic outcomes by which candidates are evaluated, content and pedagogical knowledge are portrayed as integrated and inseparable: “the teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make the discipline accessible and meaningful for learners to assure mastery of the content” (CAEP, 2013, p. 4). In other words, in order for candidates to convey subject matter to their students, they need a firm grasp of the content’s concepts, tools of inquiry, and disciplinary structure. This suggests that it is important to provide candidates a strong foundation in their content knowledge prior to developing their pedagogical knowledge, while acknowledging that candidates’ content knowledge can deepen as they integrate this knowledge with pedagogy to develop their pedagogical content knowledge.

CAEP (2013) states that to develop content and pedagogical knowledge, candidates need experiences that develop deep understanding of major concepts and principles within the candidate’s disciplinary field of study, including concepts and principles aligned with college and career-ready expectations. Such expectations are reflected in the Common Core State Standards (CCSS), which have been adopted by the state of Michigan.

Integration is central to the CCSS (CCSS Initiative, 2010). For instance, the K-5 English Language Arts Standards are based on an integrated approach to literacy, which requires candidates to integrate several anchor standards within their instructional planning to meet multiple standards in the same task (pp. 4-5). Within the CCSS for Reading K-5, “Integration of Knowledge and Ideas” is a key skill, and literacy is seen as an interdisciplinary undertaking across all grade levels.
Integration serves as a foundational principle within CAEP (2013) in another significant way: clinical experiences, diversity, and technology need to be integrated throughout teacher preparation. Programs need to provide coherent clinical experiences that are closely linked with general and content methods courses to cultivate candidates’ pedagogical and pedagogical content knowledge because clinically-based programs are part of a 21st Century educator preparation paradigm (AACTE, 2010; NCATE, 2010b). Likewise, diversity and technology are vital to a 21st Century program because technology access is both a source of and solution for societal inequities in P-12 schools serving diverse and economically disadvantaged students (CAEP, 2013). For this reason, CAEP considers both diversity and technology cross-cutting themes in educator preparation. CAEP specifies that diversity be integrated with the discussion of content in order to cultivate candidates’ ability to see from multiple perspectives. In addition, CAEP indicates that technology needs to be integrated through the domains of content knowledge, pedagogical knowledge, and pedagogical content knowledge (AACTE Committee on Innovation and Technology, 2008).

This review of CAEP, InTASC Standards, and the CCSS illuminates that integration is an important principle upon which to base decisions about curriculum design and coursework in CMU’s teacher education program.

**Pedagogical Alignment: How Teacher Candidates Learn**

Teacher education programs must address not only what to teach, but how to teach in order to prepare candidates to apply their knowledge as reflective practitioners (Darling-Hammond, 2006). Exemplary teacher education programs achieve coherence by consistently employing pedagogies that integrate theory and practice. This integration is accomplished by explicitly connecting coursework and clinical work, modeling and demonstrating effective practices, and considering learning and development within their sociocultural contexts. Pedagogical approaches that facilitate teacher candidates’ ability to bridge theory and practice through reflection include case studies, observation and evaluation of student work, performance assessments, portfolios, reflective writing, inquiry-based learning, and action research (Appendix H: Tools for Developing and Assessing Teacher Candidates’ Learning). These pedagogies that “build [candidates’] knowledge of practice in practice” (Darling-Hammond, 2006, p. 99), along with opportunities for candidates to reflect on their practice in relation to student learning, are critical aspects of exemplary programs.

**CMU CURRENT PRACTICE: PROGRAM DESIGN**

**The Knowledge Base of Teaching at CMU: The CLEAR Conceptual Framework**

CMU’s teacher preparation is guided by the CLeaR Conceptual Framework (Appendix D: CLeaR Conceptual Framework and Outcomes), which is intended to provide purpose, direction, and coherence to its undergraduate and graduate education programs. The CLeaR Conceptual Framework is designed to prepare teacher candidates to meet the standards of P-12 certification in the State of Michigan and to facilitate the development of professional practices that are concept and knowledge-driven, learner-centered, and reflective. These tenets of professional practice undergird and permeate the program’s six performance outcomes in the areas of Subject Matter, Pedagogy, Assessment, Diversity, Technology, and Professionalism. This university-wide conceptual framework was developed in the early 1990’s and revised in the 2000’s in response to new standards for accreditation. To remain relevant for CAEP accreditation and to
incorporate 21st Century knowledge, literacies, and skills, the CLeaR Framework should be revised once more.

**Pedagogical Alignment**

Disbursed responsibility for teacher preparation across multiple departments and colleges makes collaboration and communication among faculty across institutional boundaries difficult. Without collaboration and communication, faculty employ various teaching strategies and assessments that do not reflect alignment around shared understandings about effective pedagogies or mutually agreed upon goals for learning. This lack of pedagogical alignment is apparent to teacher candidates. In focus groups with student teachers conducted in Spring 2013 (Senter, 2013), candidates expressed the following:

I felt like everyday I went in there he would […] throw like three different strategies in an hour, and then you’d leave, and that was it. So, who’s gonna remember that? […] I mean all education research says don’t throw it at somebody and expect them to remember it.

So just, like making sure the classes are kind of in sync with one another, on the same level, teaching the same content. And by teaching, I don’t mean lecturing, because my biggest pet peeve […] is when I get into a cohort class, or like, the lecture today where they tell you ‘Be engaging! You have to be engaging!’ And then they’re sitting there lecturing to you.

They tell you to ‘teach by doing’…and you’re like, ‘OK, you do it. Show me.’ That’s my biggest negative is that they always tell us what we’re supposed to do, and you never see them do it.

Clearly, aligning pedagogies across courses would strengthen the program.

**Curriculum in the B.S. in Education Program**

The B.S. in Education-Elementary Program is currently structured so that candidates take content and some methods courses in disciplines, and take education courses as a cohort. Under this structure, responsibility for preparing teachers is dispersed across multiple departments in five colleges: CEHS, CHSBS, CST, CCFA, and CHP. Course designators indicate which courses are offered by which department, and the variety of departments with a stake in teacher education is apparent from a glance at the program (see Appendix I: CMU B.S. in Education-Elementary Program).

Teacher candidates in the B.S. in Education-Elementary Program receive courses in methods instruction housed in disciplines across colleges. Within this structure, candidates have access to faculty who have expertise in methods, faculty who have expertise in subject matter, and faculty who have strong ties to the professional education sequence. For instance, in English Language Arts, teacher candidates take subject matter preparation in children’s literature along with writing methods through the department of English Language and Literature and reading methods from the department of Teacher Education and Professional Education (TEPD). In science, teacher candidates take subject matter preparation in a variety of disciplines (astronomy, biology, physical science, chemistry, geology, and geography) and science methods exclusively in TEPD.
The strong ties to subject matter preparation are important to develop candidates' understanding of central concepts, tools of inquiry, and structures of the discipline (InTASC Standards as cited in CAEP, 2013). The strong ties to the professional education sequence are important for collaborating around the cohort model.

In the B.S.in Education-Secondary Program (see Appendix J: CMU B.S. in Education-Secondary Program), teacher candidates develop subject matter knowledge in content area courses and cultivate their pedagogical content knowledge in subject matter-specific methods courses in their respective disciplines. They also take education courses that develop their pedagogical knowledge.

**Curriculum Design: The Need for Streamlining**

Distributed responsibility for teacher preparation has resulted in redundancy within the program when program revisions have been made in response to evolving state standards. In 2011 the Michigan Department of Education (MDE) established new standards for elementary education. At that time, courses were added to meet the new requirements, resulting in a longer program. Currently, according to the Center for Student Services, it takes CMU teacher candidates 5-6 years to complete the elementary B.S. in Education-Elementary program. The average teacher candidate graduates with considerable student debt in a profession where financial compensation, job security, and employment opportunities have been eroded. Understandably, potential applicants to CMU’s teacher education program are concerned about time to degree and cost. The first and most frequently asked questions of CMU’s Center for Student Services staff at recruitment events are: *How long is your program? How much will it cost?* Because CMU’s program is longer than others, and because CMU’s tuition per credit hour is higher, other programs that are 4-5 years and have comparable or better certification rates look more appealing than CMU.

In order to remain viable, CMU’s educator preparation programs need to be streamlined, pursuant to the charge of this Task Force, in a way that maintains quality and ensures that standards are met. In 2012, the state of Michigan adopted

- New standards for teacher certification—the InTASC Standards
- A revised and more comprehensive Michigan Test for Teacher Certification in Elementary Education (MTTC)
- New standards for K-12 classrooms—the Common Core State Standards (CCSS)
- CAEP accreditation as a requirement for state accreditation

These changes in P-12 education and the teacher education landscape make enhancement of CMU’s teacher education program timely and necessary.

We offer the following recommendations to achieve the vision of a program grounded in shared understandings about the knowledge base of teacher education; coherently designed with carefully sequenced, well-chosen coursework and pedagogical alignment; and streamlined based on the principle of integration.
RECOMMENDATIONS

1. Update the CLeaR Conceptual Framework to reflect what teachers need to know and be able to do in terms of pedagogical content knowledge to be effective practitioners in today’s profession
2. Collaborate across departments and colleges to create curriculum maps that carefully sequence coursework to prepare teacher candidates to meet performance outcomes, state certification standards, and program entry requirements
3. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that bridge theory and practice and prompt candidates’ reflection
4. Draw on the principle of integration to streamline CMU’s educator preparation programs
5. Coherently integrate Diversity, Assessment, Technology, and Clinical Experiences with program coursework

RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

These recommendations and considerations for implementation emerged through the Task Force’s initial attempt to streamline the program by reducing the number of credits required in the existing B.S. in Education-Elementary Program (see Appendix K: Attempt to Reduce Credits Required in the B.S. in Education-Elementary Program). While our attempt resulted in reducing the number of credits required, it also raised concerns about program quality and whether the curriculum aligned with standards. This exercise allowed us to begin a difficult conversation, and what resulted, was the recognition that curricular mapping was vital to the process of curricular revision while highlighting the importance of the guiding principles—coherence, integration, and alignment. The comprehensive curricular overhaul that we are recommended remains to be completed and requires unprecedented, widespread participation from faculty across departments and colleges.

Update the CLeaR Conceptual Framework to Reflect What Teachers Need to Know and be Able to Do in Terms of Pedagogical Content Knowledge in Order to be Effective Practitioners in Today’s Profession

In exemplary programs, conceptualizations of knowledge that undergird teacher preparation

- Prioritize learners and learning in instructional decision-making
- Promote candidates’ subject-specific pedagogical knowledge
- Focus on design of curriculum in response to learners’ needs
- Consider the sociocultural context that influences learning
- Develop candidates’ repertoire of teaching strategies
- Emphasize feedback and assessment of candidates’ learning
- Enhance teachers’ capacity for reflective decision-making
- View teaching as a collaborative activity practiced within professional communities
While the CLeaR Conceptual Framework, for the most part, aligns with how knowledge is conceived in exemplary programs, updating the CLeaR Framework is necessary and beneficial given the changing landscape of teaching and teacher education. Darling-Hammond and Bransford (2005) have developed a nationally-recognized framework that conceptualizes the knowledge base for teaching in three areas: Learners and Learning in Social Contexts, 2) Curriculum and Subject Matter, and 3) Teaching. (Appendix L: Darling-Hammond and Bransford’s Figure for Conceptualizing the Knowledge Base for Teaching). This framework is based on two tenets: that teaching is a profession that involves serving students and communities, and that the purpose of schooling is to promote participation in a democracy, which includes providing equitable access to opportunities, both in the education system and society. These areas and tenets shape and give substance to teachers’ professional vision and practice through ongoing reflection that is critical to the enterprise of teaching. Research supports that when teachers engage in practitioner inquiry by studying and reflecting on their work and seeking solutions in research and theory, they are better equipped to identify and solve problems of practice (Darling-Hammond, 2006).

Therefore, we recommend the following considerations for implementation:

- Modify the CLeaR Tenets in light of nationally-recognized models to teacher candidates’ development and learning
- Modify the CLeaR Outcomes Subject Matter and Pedagogy to align with InTASC and CAEP standards by considering how to cultivate teacher candidates’ subject-specific pedagogical content knowledge in the Performance Outcomes Subject Matter and Pedagogy.
- Modify the CLeaR Model to align with InTASC and CAEP standards by articulating performance outcomes for Technology, Diversity, Assessment, and Professionalism.
- Consider the distinguishing features of CMU’s teacher education program.

Collaborate Across Departments and Colleges to Create Curriculum Maps That Carefully Sequence Coursework to Prepare Teacher Candidates to Meet Performance Outcomes, State Certification Standards, and Program Entry Requirements

Curriculum maps provide a snapshot of a program that illustrates how individual courses contribute to the goals or outcomes of that program. Curriculum maps assist faculty with the sequencing of coursework, so that it builds across courses in a seamless and coherent fashion (Center for University Teaching, Learning, and Assessment, 2012). By illuminating a program’s structure, curriculum maps can make visible a program’s strengths—where learning outcomes are thoroughly addressed. Maps can also shed light on gaps in curriculum design—where learning outcomes are not sufficiently addressed. Because they depict the skills and knowledge expected to be developed in each course, curriculum maps can also inform candidate advising and program assessment (Center for University Teaching, Learning, and Assessment, 2012). Concept maps of the learning sequence can convey to candidates how the program will help them develop the skills and knowledge to ensure their effectiveness in the classroom (CCSSO, 2012).

While curriculum maps are useful in a variety of ways, the process of faculty collaborating to map out curriculum is at the heart of this recommendation because it will engender conversations among faculty across departments and colleges and facilitate curricular coherence and
pedagogical alignment. This became apparent when we attempted to create curriculum maps for the B.S. in Education-Elementary Program (see Appendix M: Curriculum Maps Aligning the B.S. in Education-Elementary Program Courses with Objectives for the MTTC in Elementary Education (Test 103)).

To design a coherent program, we recommend the following for implementation:

- Create curriculum maps depicting candidates’ opportunities to develop, practice, and meet the CLeaR Performance Outcomes
- Create curriculum maps depicting candidates’ opportunities to develop understandings about subject matter as specified by the MTTC
- Create curriculum maps depicting candidates’ opportunities to develop the foundational skills for successful program entry

**Develop a Faculty Development Plan That Supports Faculty in Aligning, Modeling, and Employing Pedagogical Approaches That Bridge Theory and Practice and Prompt Candidates’ Reflection**

Faculty would benefit from professional development around pedagogies that bridge theory and practice and promote teacher candidates’ reflection. A variety of pedagogies can cultivate critical thinking, problem solving, collaboration, and communication skills and spark creativity: problem-based learning, inquiry-based learning, and collaborative or cooperative learning. These pedagogical approaches can be employed with assignments that support teacher candidates in bridging theory with practice and prompt their reflection (Appendix H: Tools for Developing and Assessing Teacher Candidates’ Learning). As considerations for implementation, we suggest the following:

- Draw from pedagogies employed by exemplary programs
- Provide opportunities for faculty to align pedagogical approaches in program courses.
- Develop a university-wide faculty development plan that supports teacher educators in incorporating innovative pedagogies, so they can model the pedagogies we expect teacher candidates to employ

**Draw on the Principle of Integration to Streamline CMU’s Educator Preparation Programs**

In line with the guiding principle of integration, we propose integrating general education with professional teacher education, both conceptually and pragmatically, and believe this integration can enhance students’ learning. The professional goals of teacher preparation give meaning to general education curricula, while the purposes of a liberal arts or general education are realized as teacher candidates develop their 21st Century skills and knowledge in an array of core subjects and interdisciplinary literacies. For elementary teacher candidates in particular, the subject matter knowledge required for the profession is sufficiently broad to encompass the range of general education curricula. In this sense, the purposes of the University Program are aligned with, and indeed, overlap with the goals of professional teacher preparation. The same can be said of some of the secondary subject areas, so when possible, University Program and
other General Education courses should be integrated with the B.S. in Education Programs so that they double-count for each program’s requirements.

The principle of integration may also be applied at the course level in order to ensure that each course fulfills multiple purposes. These purposes might include a combination of the following:

- Meeting B.S. in Education program entry requirements
- Meeting General Education requirements
- Meeting subject matter outcomes on the MTTC
- Preparing candidates with content knowledge they will need for teaching, including the CCSS
- Preparing candidates with pedagogical knowledge
- Integrating candidates’ content and pedagogical knowledge
- Providing candidates with clinical experiences
- Providing candidates with introductions to or practice with concepts and issues related to Diversity, Technology, and Assessment

In order to maximize the utility of each course, we recommend curricular mapping that makes visible how the objectives of each course fulfill multiple purposes. As considerations for implementation, we suggest the following:

- Integrate general education and professional education courses
- Ensure each course fulfills multiple purposes
- Use curriculum maps to ensure teacher candidates’ learning is reinforced, but not redundant

**Coherently Integrate Diversity, Technology, Assessment, and Clinical Experiences with Program Coursework**

The following sections: Preparing Teachers for Globalization, Local Responsiveness, Diversity, and Inclusion; Preparing Teachers to Assess Learning and Teaching; Preparing Teachers to Understand and Integrate Technology; and Developing a Clinically-Based Educator Preparation Program address these emerging areas of knowledge and skills for the 21st Century Learner.
PREPARING TEACHERS FOR GLOBALIZATION, LOCAL RESPONSIVENESS, DIVERSITY, AND INCLUSION

“Developing a world-class teacher and school leader workforce, equipped with the knowledge and skills to help our students succeed in an increasingly diverse and interconnected world, is a critical imperative for the nation and for higher education institutions”

Vivien Stewart, 2013, p. 82

“We feel it is important for rural teachers to understand the communities where they teach, to understand how these rural communities are linked to the world, and to appreciate the different expectations these communities might hold for their work in relation to rural contexts”

Jacqueline Edmondson and Thomas Butler, 2010, p. 152

“Developing the ability to see beyond one’s own perspective—to put oneself in the shoes of the learner and understand the meaning of that experience in terms of learning—is perhaps the most important role of teacher preparation.”

Linda Darling-Hammond, 2006, p. 234

VISION

Our vision for CMU’s educator preparation program is to prepare teachers who are committed to promoting equity and inclusion, are globally and culturally competent, and are well-prepared to respond to the needs of diverse learners and local communities.

In what follows, we convey how this vision was articulated from examining changes in the global environment, the needs of local communities in urban and rural areas, changing demographics in the P-12 students population, the practices of exemplary teacher education programs, relevant standards, and strategies for preparing teacher candidates for diversity, inclusion, globalization, and local responsiveness.

CONTEXT

Preparing Teachers for Globalization

The changes in technology described in the following section, along with the emergence of international competition and “the accelerating pace of scientific discovery” have created conditions that require teachers to become globally competent (Stewart, 2013). Globally competent individuals are able to recognize and move beyond their and other’s positions, translate and communicate, and realize their ideas through actions appropriate to a diverse audience (Stewart, 2013; Longview Foundation, 2000). Teachers need to develop global
Preparing Teachers for Globalization, Local Responsiveness, Diversity, and Inclusion

Competence in order to cultivate their students’ global competence. In fact, in their inaugural articulation of an international strategy, the U. S. Department of Education (2012) specified its main goal as enhancing the global competency of U. S. students, including those from disadvantaged backgrounds.

To promote teacher candidates’ global competence, teacher education programs should

- Require candidates to take courses in their early college years to develop knowledge of at least one world region, culture, foreign language, or issue
- Infuse program coursework, including general education courses, with a global perspective through which candidates can view their subject area and the field of education
- Require an in-depth, cross-cultural experience through study abroad, service-learning, clinical experiences, capstone teaching, or exchange programs
- Provide incentives, including financial resources and tenure/promotion criteria, for faculty to pilot courses, travel, and lead cross-cultural experiences
- Systematically collect data to ascertain the impact of global learning opportunities (Longview Foundation, 2008)

By considering trends in international education, several universities in the U. S. have begun a process of internationalization in light of the emergence of globalization (Stewart, 2013). For instance, some institutions have developed international experiences and exchanges abroad. Research shows that study abroad programs can promote open-mindedness, and global-mindedness (Hadis, 2005). When coupled with supported teaching experiences, global encounters can be particularly productive for promoting teacher candidates’ global competency (Longview Foundation, 2008). International teacher education programs have been found to expand teacher candidates’ capacity for cultural responsive teaching (Dantas, 2007), and cultivate their capacity to empathize with immigrant children (Palmer & Menard-Warwick, 2012). Despite the promises of global teaching experiences, they are rarely institutionalized and remain isolated events rather than part of a strategic, comprehensive plan to promote teacher candidates’ global competence (Stewart, 2013).

Preparing Teachers for Local Responsiveness

While processes of globalization require a global perspective, teachers need to attend to the needs and values of the local community to make learning relevant for their P-12 students. Urban teacher residency programs have emerged to prepare teachers to respond to the needs of local urban communities. Modeled after the kinds of immersive learning experiences used to prepare physicians in the medical profession, urban teacher residency programs resulted from challenges teacher education programs face:

- Recruiting teacher candidates of color
- Offering candidates opportunities to work in urban environments with effective teachers
- Addressing teacher shortages in urban areas and in subjects such as math, science, ESL, and special education (Berry, Montgomery, & Snyder, 2008)
Preparing Teachers for Globalization, Local Responsiveness, Diversity, and Inclusion

Originally conceived as graduate programs serving urban areas, residency programs have evolved to include the initial preparation of teachers and expanded to rural areas (U. S. Department of Education, 2010b).

Recently scholars have called for programs specializing in rural teacher education (Edmondson & Butler, 2010) and for the challenges of rural communities to be prioritized as social justice issues (Petrone & Eckert, 2013). Educator preparation programs that prepare rural teachers should

- Value and learn about the local community
- Prepare candidates to connect the curriculum to the lived experiences of the students
- Provide opportunities for candidates to study its economic history
- Develop candidates’ capacity for community organizing
- Offer clinical experiences that illuminate the efforts of rural educators and the diversity of rural life and schools (Edmondson & Butler, 2010; Eppley, 2009; Howley & Howley, 2010)

The most important aspect of preparing teacher candidates for rural teaching, according to Eppley (2009), is preparing them to connect the curriculum to the lived experiences of the students, which is challenging because the school-sanctioned curriculum often favors globalization and standardization at the expense of the local community’s values (Edmondson & Butler, 2010; Homrich, 2012; 2013).

Preparing Teachers for Diversity

The term “diversity” is a conceptual category that represents the importance of preparing teacher candidates for the diverse learners they will encounter in P-12 schools. In the CAEP (2013) standards, P-12 student diversity refers to “students with disabilities or exceptionalities, students who are gifted, and students who represent diversity based on ethnicity, race, socioeconomic status, gender, language, religion, sexual identification, and/or geographic origin” (p. 3). The first category refers to inclusion of students with special needs, and the latter category of geographic origin represents terms like global and local; urban, suburban, and rural. CAEP’s broad conception of diversity informs CMU’s teacher preparation program’s vision regarding what it means to prepare teachers for the diverse learners they will encounter in P-12 classrooms.

CAEP (2013) Standard 1: Content and Pedagogical Knowledge states that “Providers ensure that completers demonstrate skills and commitment that afford all P-12 students access to rigorous college and career ready standards” (p. 3). Meeting this standard requires educator preparation programs to prepare teacher candidates not only with the technical skills to differentiate instruction in ways that provides all P-12 students access to rigorous curriculum, but to cultivate teacher candidates’ commitment to afforded all students access to teaching and learning. This means attending to candidates’ beliefs and attitudes about diversity (Gay, 2010; Nieto, 2000).

CAEP (2013) emphasizes diversity in a variety of other ways, demonstrating the priority the accrediting body places on diversity as a cross-cutting theme that should permeate all aspects of teacher preparation. In the InTASC standards, which articulate expectations for teacher
candidates’ content and pedagogical knowledge, diversity refers to individual differences, the special needs of diverse learners, and diverse cultures and communities. InTasc Standard 3 on Learning Differences states, “The teacher uses understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards” (CAEP, p. 4). Per InTASC Standard 7, this understanding of learning differences and cultures should be reflected in teacher candidates’ planning of instruction “that supports every student in meeting rigorous learning goals by drawing on [...] knowledge of learners and the community context” (CAEP, p. 4).

Understanding the relationship between diverse learners’ needs and the community context requires an ecological approach to human development that considers how social context affects a child’s development (Darling-Hammond, 2006).

CAEP’s rationale for emphasizing diversity includes the increasing racial and ethnic diversity of the students populating today’s schools. At the national level, approximately 88% of the teaching force is white, while students of color represent 40% of the population (CAEP, p. 10). The “cultural mismatch” between teachers and students has been shown to have negative effects on student learning (e.g., Irvine, 1991; Ladson-Billings, 1994). To be effective for students when cultural mismatch is a factor, teachers need to develop cultural competence. Teachers who are culturally competent

- Understand culture and its role in education
- Take responsibility for learning about students’ cultures and communities
- Employ students’ cultures as a basis for learning
- Promote a flexible use of students’ local and global culture (Ladson-Billings, 2001)

Teachers who are culturally competent can then cultivate their students’ cultural competence, that is, their ability to understand and respect their own cultures (Ladson-Billings, 2001), which is vital for students of color in order to sustain them in a society that rewards assimilation (Paris, 2012).

Teachers who “think pedagogically” about diversity employ culturally responsive pedagogy (Banks, et al., 2005). In Geneva Gay’s (2000) model, culturally responsive teaching uses “the cultural knowledge, prior experiences, frames of reference and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them” (p. 29). In addition to using students’ cultural backgrounds as resources for learning, culturally responsive teaching is transformative and emancipatory: it fosters students’ political and social consciousness so that they may actively participate in challenging oppression, exploitation, prejudice, and racism in the world around them. Moreover, culturally responsive pedagogy empowers students so that they become highly competent, autonomous learners who monitor their own learning. Culturally responsive teaching is comprehensive and multidimensional. Teachers who practice culturally responsive pedagogy employ curriculum, instructional methods, and assessments to support all students’ learning and draw upon their knowledge of students, parents, and communities to do so.
In addition to cultural competence, exemplary programs prepare candidates to meet the needs of diverse learners by developing their ability to:

- Analyze learning environments and determine how to serve a range of student needs within that environment
- Assess and diagnose individual students’ contexts, strengths, and needs
- Tailor curriculum and instruction to address students’ strengths and needs and draw on their families and communities as resources for learning
- Teach explicit strategies that empower students to become successful learners
- Engage families, communities, and colleagues in supporting student success

(Brownell, Ross, Colon, & McCallum, 2005; Darling-Hammond, 2006)

**Preparing Teachers for Inclusive Education**

Meeting the needs of diverse learners is an important aspect of inclusive education, or the practice of including students with exceptionalities and special needs in general education classrooms (Van Laarhoven, Munk, Lynch, Bosma, & Rouse, 2007). Teachers who are competent in inclusive settings

- Make accommodations for students with special needs, including the use of assistive technologies
- Collaborate effectively to afford productive team teaching or co-teaching by general and special educators (Arthaud, Aram, Breck, Doelling, & Bushrow, 2007; Fisher, Fry, & Thousand, 2003; Van Laarhoven et al., 2007)

By considering how we prepare teacher candidates for a global society, local communities, diverse learners, and inclusive educational environments, CMU’s educator preparation program can achieve a vision that includes a commitment to promoting diversity and equity in schools and society.

**CMU CURRENT PRACTICES**

**Global Experiences in Education**

CMU’s global experiences take students to locations such as England; Ireland; Oaxaca, Mexico; Togo, Australia; and Immokalee, Florida. (Appendix E: CMU Global Field Experiences, 2010-2013) Students in both the Pre-Student or Student Teaching Experience explore new teaching environments with diverse student populations. For instance, a global teaching experience in Denmark afforded teacher candidates majoring in Special Education to practice teaching in a country with a social and governmental infrastructure recognized for supporting people with disabilities. Global experiences in education offer unique learning opportunities.

Although the particular coursework in these global experiences varies, faculty and students form a tight-knit social community that typically begins with a one-credit course to prepare candidates for teaching in a specific location. Teacher candidates study the site’s culture, history, and school environment. As part of additional coursework, candidates reflect on their experiences in
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journals, class discussions, and other assignments. The result is an immersive, rigorous global clinical experience.

Like other study abroad courses, the teacher education program’s global teaching experiences in international sites can fulfill University Program (UP) requirements for Subgroup IV-B Global Cultures and for domestic sites, IV-C Racism and Diversity in the U. S. While study abroad and global teaching may be costly, multiple scholarships are available (CMU Office of Study Abroad, 2014), and participating in study abroad reduces a candidate’s time to degree by three credits, according to the 2013-2014 Undergraduate Bulletin (Central Michigan University, 2013), which states that “Students who receive credit for an approved study-abroad experience may satisfy their UP requirement with a minimum of 27 hours, thereby eliminating the UP Elective requirement” (p. 27). Study abroad courses that feature clinical experiences could fulfill multiple purposes within the B. S. in Education.

While these global teaching experiences offer candidates valuable opportunities to develop their global competence, these experiences are elective rather than required, and teacher candidates may not learn about them until they enter the teacher education program.

Teaching English to Speakers of Other Languages (TESOL): The ESL Minor, MA TESOL, and the English Language Institute

The English as a Second Language (ESL) minor prepares undergraduate teacher candidates to teach English Language Learners in P-12 schools, and candidates receive an ESL endorsement upon completion of their degree. The M.A. in TESOL prepares graduate students to teach English in the U.S. and abroad. Both programs have grown significantly over the past few years; in the 2006-2007 school year the ESL minor had only 13 students and the M.A. TESOL program had only 9 students, but in 2012-2013 there were 28 ESL minors and 24 M.A. TESOL students. Some of this growth can be attributed to the rising need for ESL teachers both in the U.S. and abroad.

Teacher candidates in the ESL minor program share some classes and collaborate with graduate students in the M.A. TESOL program, over half of whom are international students. Currently, the M.A. TESOL program has students from Rwanda, China, Taiwan, Saudi Arabia, Jordan, Iraq, Indonesia, Nepal, and Russia. Integrating the ESL Minor and M.A. TESOL coursework creates a vibrant intercultural experience that promotes learning about diversity and globalization and expands native English-speaking teacher candidates’ capacity for viewing the world from multiple perspectives.

In addition, students in both programs must tutor in the English Language Institute (ELI) on campus. The ELI is a rapidly growing program that has five levels of English, from beginner to academic courses preparing students for admission to CMU. Students enrolled in the ELI come from all over the world, including Saudi Arabia, China, South Korea, Portugal, Egypt, Kazakhstan, Russia, the Congo, and India. Student enrollment in the ELI has more than doubled in the past year: 127 students were enrolled in 2012-2013 and 268 in 2013-2014.

The partnership between the ESL minor/M.A. TESOL program and the ELI has proven to be mutually beneficial. Notably, teacher candidates in both programs are encouraged to engage in
the Conversation Partners Program in which CMU students are paired with ELI students so that ELI students can practice their English and learn more about American customs and the CMU students can learn more about the customs and countries of the ELI students. The ELI is in constant need of conversation partners, and the teaching pipeline is unable to provide enough partners to match the ELI students.

**Diversity Requirements and Focused Coursework**

Preparing teachers for diversity is prioritized in CMU’s teacher education program as a student-learning outcome of the CLeaR Conceptual Framework, the model of teacher education that guides our preparation of teachers. One approach we use to prepare teacher candidates to meet the needs of diverse learners is by providing teacher candidates field experiences in diverse areas. Through this required fieldwork, our candidates gain experience with students from diverse racial and ethnic backgrounds, with low socioeconomic status, who have special needs, and who speak native languages other than English. Candidates also gain experience in urban and rural or suburban settings. To ensure candidates have experience with these different facets of diversity, candidates document 30 hours of fieldwork in designated schools that have diverse populations of students.

In addition to these clinical experiences, diversity issues are expected to be interwoven throughout content and methods coursework, although determining exactly how would require additional data collection. Notably, teacher candidates are required to take SPE 504 Teaching Students in Inclusive Settings, a course designed to prepare candidates to meet the needs of students with disabilities and exceptionalities.

Despite these efforts to prepare CMU teacher candidates for diversity, internal assessment indicates that additional steps are needed to bolster the preparation of teachers for diversity. Summary results for three years (2009-2012) of data from the Michigan Department of Education (MDE) Teacher Exit Survey show that only 81.4% of teacher candidates mostly or strongly agree that they were well-prepared to organize student learning for diverse populations of students. Specifically, only 77.8% of teacher candidates in the B.S. in Education-Elementary Program and 84.2% of those in the Secondary Program mostly or strongly agreed that they were well prepared to 1) plan for students with developmental disabilities, 2) challenge gifted and talented students, 3) motivate discouraged students for improved academic performance, 4) adapt instruction for students learning English as a second language, and 5) demonstrate understanding of multiple perspectives. This internal assessment indicates that our teacher education program needs to better prepare teacher candidates in the area of providing instruction and assessment for diverse student populations (Professional Education Unit, 2013).

These results are triangulated by results of an Alumni Survey (Senter, 2013b) conducted in Spring 2013 with 342 graduates from 2009-2010 and 2011-2012, 87.6% of whom were currently teaching full-time, part-time, or as a substitute. Only 77% of alumni reported that they were well-prepared or adequately prepared to design and deliver effective instruction to diverse populations of learners; 73% reported they were well- or adequately-prepared to adapt instruction to the special needs and backgrounds of all students, and 50% were prepared to challenge gifted and talented students.
Focus groups of student teachers conducted in Spring 2013 amplify and elaborate these results (Senter, 2013a). When discussing diversity, students spoke positively of the diversity requirement, but indicated that they had not fully understood the importance of diversity at the time. This points to the need for more guided clinical experiences in settings with diverse learners and a stronger orientation toward social justice and equity, which makes studying diversity meaningful for teacher candidates (Nieto, 2000). In addition, student teachers discussed diversity in terms of learning differences, but not culture, race, language, or social class. This suggests developing candidates’ cultural competency (Ladson-Billings, 2001) should be a priority.

How to prepare CMU teacher candidates for diversity is an enduring issue. In a research study conducted in 2000, CMU teacher education faculty Terrill and Mark (2000) found that CMU teacher candidates, 89% of whom were European American and 87% of whom had attended primarily European American schools, held significantly different expectations for learners based on a school’s geographic location and students’ racial and linguistic background. Specifically, teacher candidates expected that in schools with students of color, there would be higher levels of child abuse, fewer gifted and talented students, and lower levels of motivation. Candidates also conveyed negative expectations for Native American students in rural schools and African American students in urban schools, compared with European American students in a majority white, monolingual suburban school. Candidates indicated that they would feel less comfortable with African American and English Language Learners and less safe about conducting home visits in an African American, urban community.

While white teacher candidates’ negative perceptions about students who are different from themselves are not uncommon (Nieto, 2005; Gay, 2010), additional research into current teacher candidates’ beliefs about diversity is warranted because white teacher candidates are not a homogenous group (Lowenstein, 2009), and times have changed. Notably, CMU’s Office of Student Affairs has made great strides to include Multicultural Advisors in residence halls and promote diversity in other ways (Appendix N: CMU Office of Student Affairs Support for Diversity). Utilizing programs that foster cross-cultural and other kinds of intergroup encounters could be coherently integrated into teacher candidates’ learning experiences.

RECOMMENDATIONS

6. Update CLeaR Conceptual Framework to convey faculty’s commitment to diversity and equity
7. Collaborate to create curriculum maps that coherently integrate issues of diversity and inclusion, and global and local perspectives into curriculum and coursework
8. Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about diversity, inclusion, and global and local perspectives
9. Embed the program with pathways to recognized competencies in urban, rural, global, and inclusive settings

RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION
Update CLeaR Conceptual Framework to Convey Faculty’s Commitment to Diversity and Equity

In order to prepare teachers to be effective with students with a variety of backgrounds and needs, teacher preparation programs need to take a stand on social justice because a commitment to addressing inequities in schools makes studying diversity meaningful (Nieto, 2000). In addition, educator preparation programs need to recognize the role they play in preparing teachers who prepare students for participation in democracy, as Banks et al. (2005) argue:

[T]o support democracy, educators must seek to eliminate disparities in educational opportunities among all students, especially those students who have been poorly served in our current system. Furthermore, in order for all citizens to be prepared to participate in a democracy, children must experience democracy in schools. Therefore teachers need to have the knowledge, skills, and attitudes to create democratic classroom to implement a culturally responsive and inclusive curriculum. (p. 233)

Built around a commitment to democracy and/or equity, exemplary programs have a clearly articulated vision about diversity faculty share. These programs view “education as a social force” and spotlight that “teachers are moral change agents” (Darling-Hammond, 2006, p. 238). Candidates are asked to think about the consequences of their decisions and actions for students’ individual and social development, for promoting or undermining equity, and for contributing to a participatory democracy. These programs foster candidates’ commitment to social action through explicit statements about diversity. For example, at Alverno College the student handbook includes a clearly specified view of diversity that calls for candidates to develop a pro-active stance by actively working to dispel stereotypes and taking action that support all learners. “You will do this,” the handbook states, “by reviewing literature for bias, by examining your own teaching performance for actions that neglect one group or individual, and by planning for the infusion of diversity throughout the curriculum” (Alverno College Faculty, 1995, p. 27, cited in Darling-Hammond, p. 217).

In actualizing such statements, faculty in exemplary teacher education programs show a willingness to struggle with issues of race and class:

An important aspect of the effort to educate for equity is the necessary, always difficult struggle to help all members of the teaching and teacher education community confront and deal with the deep social and psychological influences of the -isms that affect society and schools and must inevitably affect teachers and students as well. (Darling-Hammond, 2006, p. 242)

Yet, learning to see from the perspective of those most marginalized, oppressed, and discriminated against in society is difficult for those in the majority group who have not experienced such challenges.

Faculty in exemplary educator preparation programs view engagement around issues of race, class, gender, and social inequality as crucial to the work of teacher preparation, and opportunities for learning about these issues are integrated in conversations that emerge from the everyday practice of teaching and learning as well as in planned discussions (Darling-Hammond, 2006). Engagement with course readings alone is insufficient for productive discussions; learning must be experiential as well. Tensions that surface in discussions of diversity must be
addressed and worked through in order for candidates to develop cultural competence and
awareness, an inquiry-based stance from which questions ensue, and a commitment to stay
engaged in diversity issues and pursue answers.

To accomplish this we suggest that faculty draft a statement that clearly conveys the program’s
commitment to diversity, and, in order to do so,

- Consider distinguishing features of CMU’s teacher education program
- Draw from diversity statements used by other universities
- Build on the language offered by this Task Force below
- Revise the CLeaR Conceptual Framework Performance Outcomes accordingly

Consider distinguishing features of CMU’s teacher education program in defining diversity.

To align with CAEP (2013), CMU teacher preparation should endeavor to prepare candidates to
meet the needs of all P-12 learners, while capitalizing on the particular resources its geographic
location, candidate population, and global experiences afford with respect to diversity.

CMU’s geographic location in a rural setting combined with a student body drawn partially from
Mid and Northern Michigan positions CMU’s teacher education program to prepare educators to
serve rural schools in Michigan. This could be a distinguishing feature of CMU’s educator
preparation program. Because many CMU students are first generation college students, they can
serve as role models for students from rural areas whose path to college comes at a sacrifice
because valuing education may come at the expense of undermining community (Azano, 2011;
Homrich, 2012; 2013).

Another distinguishing feature could be a focus on preparing candidates for high poverty
schools. Given that 80% of CMU students are on some sort of financial aid (Johnson, 2013),
preparing candidates to serve low income communities would allow us to build on the facets of
diversity candidates bring to their teacher preparation as a strength. Faculty and staff hear stories
of students who are struggling to work while taking courses, whose families lose medical
insurance because of layoffs, who sell their books back or don’t buy them at all, who cancel their
internet access at home or can’t afford a car for transport to their field placement. Having faced
economic challenges, CMU teacher candidates may be more empathetic to the challenges faced
by children in poverty (Rose, 2013) and amenable to seeing issues of class as a point of departure
for understanding interlocking systems of oppression that could inform their teaching of all P-12
students. By successfully recruiting students from Mid and Northern Michigan, many of whom
are first generation college students and/or from lower socioeconomic backgrounds, CMU can
fulfill a vital service to the state of Michigan by preparing educators for high poverty and rural
schools.

While part of CMU’s student body comes from Mid and Northern Michigan, a significant
portion comes from the urban areas surrounding cities like Detroit, Lansing, and Grand Rapids
and may seek to return to their communities. With student teaching centers in these urban and
metropolitan areas, CMU is well positioned geographically to prepare urban educators.
(Appendix G: CMU Student Teaching Centers, 2013-2014) The urban dimension could be
another way CMU’s teacher education program can distinguish itself.
A most distinguishing feature of CMU’s teacher education program is its Global Experiences in Education that allow candidates to teach across the globe. As noted, such international or cross-cultural teaching experiences cultivate teacher candidates’ global competency (Longview Foundation, 2008; Stewart, 2013; U. S. Department of Education, 2012). With good reason, teacher candidates with these cross-cultural and international teaching experiences are highly marketable.

The ESL Minor and M.A. TESOL program, as well as the English Language Institute’s Conversation Partners can also develop teacher candidates’ global competence, providing them with the opportunity for intercultural exchanges on campus. The increase in enrollment of international students in 2013-2014 creates an opportunity to prepare teacher candidates for linguistically-diverse environments.

These distinguishing features show that CMU values the global and local, the urban and rural. That CMU serves so many students who are on financial aid shows our institutional commitment to affording students from low income backgrounds access to higher education, and our successful efforts to recruit international students and provide global experiences in education shows our commitment to fostering our students’ global perspectives.

**Draw from the diversity statements of other universities.**

Teacher education programs, including Wayne State University (WSU), Michigan State University (MSU), and Eastern Michigan University (EMU) make statements about diversity in a variety of ways (see Appendix O: Diversity Statements). WSU’s College of Education includes diversity in their broad mission statement as a distinguishing feature of their university. Their mission statement is, “to develop teachers who are effective, urban educators who are reflective, innovative and committed to diversity,” and this mission is amplified by the Elementary Education Department’s belief statement: “We believe that learning is central to a democratic society. For this reason we raise issues about equity and social justice, such as inviting our students to critique historical narratives, and analyzing who is privileged, marginalized and/or silence din these accounts” (Wayne State University, 2014).

Concepts related to diversity permeate MSU’s mission. The teachers they prepare “work to improve schooling in a democratic society and build a more just, sustainable world,” and their teacher candidates develop “equitable and inclusive teaching practices that are responsive to diverse learners, communities and a global society” (College of Education, Michigan State University, 2011).

EMU portrays diversity as an outcome. EMU’s faculty “prepare students to teach diverse learners”: “Students from EMU’s Teacher Education programs are prepared to teach students with a range of needs. These include differences in gender, culture, race, class, economic level, learning style, patterns of ability and handicapping conditions. Students are prepared to address diverse needs within a classroom that recognizes and builds on the strengths in both individuality and community” (Eastern Michigan University, 2014).
These diversity statements from other educator preparation institutions can serve as examples for crafting CMU’s statement.

**Build on language to craft a statement**

In order to craft a diversity statement, we recommend drawing from the following language:

- In urban, rural, global, and inclusive environments
- Diversity, global perspective, and local responsiveness
- Meet the needs of diverse learners
- Ensure all learners have equitable access to learning opportunities to support them in meeting rigorous academic standards
- View diversity as a resource for teaching and learning and the individual student’s background as a strength upon which to build
- Use candidates’ individual and shared backgrounds and identities to foster understandings about interlocking systems of oppression
- Promote equity in schools and society

In addition to the suggestion above, we also believe that in order to cultivate a commitment to promoting equity and inclusion in classrooms and society, we will need to:

- Continue with professional development around diversity issues begun by TEPD faculty
- Collect data on where our graduates work after graduation and the populations they teach
- Support research on rural teaching and learning, preparing candidates from economically-disadvantaged backgrounds, and the impact of global field experiences

**Coherently Integrate Issues of Diversity and Inclusion, and Global and Local Perspectives into Curriculum**

In exemplary programs, coursework integrates the study of diversity issues and classroom strategies for diverse learners throughout the program. Coursework is grounded in an ecological view of human development that includes tools for 1) learning about students’ lives, families, communities, and social contexts and 2) using that knowledge to promote students’ learning and to establish support structures for students from various backgrounds (Darling-Hammond, 2006; Brownell, Ross, Colon, McCallum, 2005).

Coursework around diversity is structured for vertical coherence. For instance, the exemplary program at Bank Street offers a course called Family, Child, and Teacher Interaction in Diverse and Multicultural Settings, in which candidates role play teacher-family conferences, prepare students’ progress reports for parents and caregivers, and study community conditions and resources (Darling-Hammond, 2006). This focus on cultural communication practices within communities allows candidates to marshal students’ home and family resources to support their learning. Along with this course, candidates take courses that promote the purpose of education as educating for democracy and equity; these courses illuminate the history of education and
embedded equity issues, including racism, classism, and sexism. Multiculturalism is defined broadly to include geographic locale and family structures. In addition to reflecting on their own schooling experiences in these courses, candidates visit schools that exemplify particular philosophies and from these experiences, raise questions from a personal and philosophical viewpoint. As a result of this coherently sequenced coursework, candidates are well-equipped to use their knowledge of students’ cultures and communities as resources for teaching and learning and to build effective school-family collaborations that support students’ success.

In exemplary programs, early coursework in education and content area courses prompts candidates to begin considering the needs of diverse learners. For instance, at the University of California, Berkeley, candidates begin in a course called “Education in Inner Cities,” where they are introduced to place-based pedagogy, and at the University of Virginia, candidates for secondary English are advised to take at least one course in linguistics, women’s studies, African American literature, or other literature from non-dominant cultures in addition to their subject matter courses (Darling-Hammond, 2006). These early courses pave the way for candidates’ subsequent learning about diversity in methods and clinical experiences and can play a significant role in helping candidates see the world from international perspectives (Longview Foundation, 2008).

Integration of diversity issues in methods courses is accomplished through the faculty’s stance toward diversity, acknowledgement that teaching is a political and critical act, belief that teachers should be change agents, and explicit intention to introduce candidates to perspectives different than their own so that they are better prepared to teach in ways that respond to their students’ needs (Darling-Hammond, 2006). Evidence of this integration includes the textbooks required in the course, goals articulated in the syllabus, activities that promote candidates’ reflection on their learning, question-posing, and modeling of critical pedagogy (e.g. Freire & Macedo, 1987). These methods courses also carefully guide candidates through clinical experiences in ways that promote learning about diversity and inclusion.

Therefore, we make the following suggestions to implement this recommendation:

- Create a curriculum map displaying how coursework will provide candidates with opportunities to develop, practice, and meet the CLearR Performance Outcome of Diversity
- Ground coursework on diversity in shared understandings about diversity
- Capitalize on early coursework of University Program requirements in sub-areas IV-B and IV-C to cultivate teacher candidates’ global and cultural competence
- Infuse issues of diversity, inclusion, and local responsiveness into methods courses and clinical experiences

Create a curriculum map highlighting the CLearR Performance Outcome of Diversity
Curriculum maps can illuminate strengths and weaknesses in curricular design as well as areas that will provide candidates with opportunities to develop, practice, and meet CLeaR outcomes while engendering productive conversations about diversity and inclusion among faculty across the program.

**Capitalize on early coursework and University Program requirements in sub-areas IV-B and IV-C to cultivate teacher candidates’ global and cultural competence**

Analysis of exemplary programs shows that early experiences with diversity are critical in laying candidates’ foundation for subsequent learning. Pursuant to the principle of integration, University Program requirements in sub-areas III-A, III-B, IV-B and IV-C should be viewed as opportunities to cultivate candidates’ cultural, global, and local competencies. For instance, the learning objectives of courses in University Program Subgroup IV-C Racism and Diversity in the U. S. aim to promote students’ cultural competence and align with indicators of proficiency in diversity as specified by CAEP (2013), which expects candidates to develop “An understanding of their own frames of reference (e. g. culture, gender, language, abilities, ways of knowing) [and] the potential biases in these frames” (p. 21). Similarly, the learning objectives for courses in UP Subgroup III-B: Studies in Social Structures align with CAEP’s expectations that candidates develop “An understanding of [...] the relationship of privilege and power in schools” (p. 21). At this time, none of the courses offered these two subgroups seem to focus on education-related topics. Yet all CMU students would be better prepared to participate in democracy as informed citizens with knowledge about the education system, making such courses ideal for the University Program.

To capitalize on the opportunities for learning about diversity afforded by these University Program requirements, we recommend revising existing or developing courses for subgroups IV-B and IV-C to address education-related topics (regardless of course designator) and be designed to lay the foundation for teacher candidates’, and all CMU students’, subsequent learning about diversity. For instance, a course on comparative global education in formal and informal contexts called Learning around the World could be developed for Group IV-B and one on U. S. schools called Race and Diversity in U. S. Schooling for Group IV-C.

In addition to traditional courses, field experiences that broaden teacher candidates’ horizons could be better utilized and institutionalized. Global teaching experiences and studies abroad that have already been developed could be institutionalized to meet UP requirements and provide a clinical experience that cultivates candidates’ global and cultural competency. These courses could simultaneously meet UP requirements and provide a clinical experience that cultivates candidates’ global and cultural competency. The feasibility of semesters abroad and student exchanges should also be explored.

**Infuse issues of diversity and inclusion and global and local perspectives into methods courses and clinical experiences.**
One way to achieve horizontal coherence around diversity within a single semester is to offer SPE 504 Teaching Students in Inclusive Settings alongside methods courses and an immersive clinical experience in an inclusive learning environment. If linked to a clinical experience where candidates could interact with students with disabilities and special needs, SPE 504 would become more relevant and engaging for candidates. Faculty who have taught the course report that a significant aspect of preparing general education candidates for inclusive settings requires cultivating a commitment to equity and inclusion, and research substantiates this claim (Carrington & Saggers, 2008; Novak, 2010). SPE 504 would be more effective at providing foundational theory and specialized methods for meeting the needs of diverse learners, including those with disabilities or special needs, if taken concurrently with other methods and a clinical experience and if faculty modeled the kind of collaboration skills that make team teaching and co-teaching between general and special educators effective (Van Laarhoven, et al., 2007).

Because CMU does not require professional education courses focused on other facets of diversity, it is vital that issues related to teaching students who represent diversity in terms of ethnicity, race, gender, language, socioeconomic status, religion, and sexual identification, as well as global and local perspectives, are incorporated into methods courses and clinical experiences in ways that bridge theory with practice and promote candidates’ reflection.

Clinical experiences are especially important for preparing culturally competent teacher candidates. Field experiences provide candidates with opportunities to gain informed knowledge about teaching students from diverse cultural backgrounds that may differ from their own (Zeichner, 1992). In exemplary programs, clinical experiences take place in carefully selected, culturally diverse settings and are linked to consciously guided discussions about diversity (Darling-Hammond, 2006). It is vital that candidates’ clinical experiences in diverse settings, and their emergent understandings about the students in those settings, be carefully monitored to prevent candidates from reverting to preconceived notions of deficit about students because of their background (Ladson-Billings, 1999). In exemplary programs, candidates complete weekly reflective logs that are reviewed by faculty for comments, allowing faculty to address candidates’ beliefs and attitudes toward students different from themselves (Darling-Hammond, 2006). These reflective logs are an important step in candidates’ development, and they are part of a sequence augmented by university coursework that focuses on diversity issues in the profession.

**Ground coursework around shared understandings about diversity and equity.**

One way to ground coursework in shared understandings about diversity is to draw on the work of recognized scholars. H. Richard Milner (2010) provides an overview of five essential concepts in diversity that are foundational to teacher preparation, particularly in predominantly white contexts. These concepts are color-blindness, cultural conflict, meritocracy, deficit conceptions, and expectations. Milner’s approach is based on the idea that teacher candidates’ conceptions of diversity—their belief systems and attitudes—need to be examined because white candidates essentially live in different worlds than students of color and may have developed deficit notions of students’ capabilities that shape their practice (see also Gay, 2010; Nieto, 2005). Yet it should be understood that illuminating teacher candidates’ preconceived notions offers opportunities for learning about difference and diversity and is a non-negotiable aspect of professionalism and ethical practice. Because Milner’s framework addresses teacher candidates’ beliefs and attitudes,
it aligns with CMU students’ learning needs as identified by Terrill and Mark (2000). This framework should be interwoven in the fabric of the curriculum and teaching and learning.

**Develop a faculty development plan that supports faculty in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about diversity, inclusion, and global and local perspectives**

Place-based, inquiry-based, community-based, experiential, and service-learning pedagogies are noted for promoting candidates’ learning about diversity, inclusion, and global and local perspectives. In addition, modeling pedagogies that respond to the needs of diverse learners can also promote candidates’ learning. This will include the ability to

- Model how to use diversity as a resource, foster a global perspective, value the local, and differentiate instruction to meet students’ needs
- Consistently employ inquiry-based, place-based, and other pedagogies that promote candidates’ learning about diversity and self-reflection

Exemplary programs also employ inquiry-based pedagogies to promote candidates’ learning about diversity, and they include assignments and assessments that distinctly display candidates’ ability to design instruction for diverse learners. At UC Berkeley, candidates engage in inquiry. First, they pose the question, *What can a teacher do about issues of race, class, and first and second language development in classrooms, schools, communities, and the educational ‘system’?* Then they strive to answer this question throughout the subsequent curriculum, which is structured so that each semester’s coursework builds on candidates’ work completed in prior courses. Clinical experiences include work with cultural and linguistic minority students in classrooms and after school programs, and candidates present their answer by designing curriculum that meets the needs of their diverse learners, articulating a rationale for their curricular design, and presenting their work for an audience of teachers.

Exemplary programs also employ forms of community-based and experiential learning. Community-based approaches connect home and school in order to “critically examine the patterns of interaction between family and school as well as expectations, attitudes and policies which encourage or inhibit family-school collaboration” (Darling-Hammond, 2006, p. 267). Candidates learn how to use parent-teacher conferences to gain critical information that allows them to develop child case studies. Experiential approaches engage candidates in role playing, skits, and simulations in order to cultivate their awareness about disabilities and inform their discussion about complex issues, such as the inclusion of students with special needs in regular classrooms.
To prepare candidates for inclusive settings, service learning in the community provides candidates experiences with students from a variety of backgrounds, promotes understanding of the culture of disability, and helps shape their ethical framework for inclusion (Carrington & Saggers, 2008; Novak, 2010; Santos, Ruppar & Jeans, 2012).

In addition to employing such pedagogies, faculty should model pedagogy that responds to the needs of teacher candidates as diverse learners. This modeling begins with assessing teacher candidates’ disposition toward, beliefs about, experience with, and knowledge of diversity issues. In Terrill and Mark’s (2000) study, data were collected through a questionnaire that asked respondents to predict characteristics of school settings according to seven variables: curriculum, discipline, parental support, child abuse, mentally/emotionally impaired students, gifted/talented students, motivation, feelings of comfort with students, and feelings of safety in the community. The candidates’ responses where coded on a scale 1 to 4, with 1 equaling positive expectations and 4 equaling negative expectations. Such a questionnaire might be used to assess our teacher candidates as they progress through the program.

Modeling pedagogies that meet the needs of teacher candidates would require faculty to learn more about candidates’ individual and collective backgrounds and identities and use those backgrounds as resources for teaching and learning. Institutionally, we know very little about our teacher candidates’ collective backgrounds and as faculty, only glean information about them when they experience crisis. From these anecdotal experiences, combined with the publicized facts that 80% of CMU’s students are on some form of financial aid and many are first generation college students, we speculate that many of our candidates experience a host of challenges due to socioeconomic disadvantages. Students from low income families are more likely to have to work to pay for their education, and in some cases they have full-time jobs (Engle & Tinto, 2008). Notably, first generation college students are reluctant to take on debt in order to finance their education (Engle & Tinto, 2008). Academically, first generation college students may have difficulty ascertaining professors’ expectations and struggle to meet them (Collier & Morgan, 2008; Ramos-Sanchez & Nichols, 2007). While students whose parents have gone to college can receive advice and support from home, low income and first generation college students often do not have family members to support them financially or with information about college life and procedures (Davis, 2010). As teacher educators, we should model the principle of drawing on our students’ resilience in facing these challenges as resources for learning. This explicit modeling would help teacher candidates see their students’ backgrounds as strengths, not deficits, and orient them toward equity in classrooms and society.

Collect data on how faculty currently address issues of diversity and equity in their courses. This will allow us to build on our existing strengths in the area of diversity in order to plan professional development. Such data could be collected through a review of syllabi or a survey.

Embed the Program with Pathways to Recognized Competencies in Urban, Rural, Global, and Inclusive Settings
Once the B.S. in Education programs are streamlined and the number of required credit hours reduced, CMU teacher candidates can distinguish themselves from graduates of other programs by earning certificates that indicate their competency in teaching in certain areas, such as rural, urban, global, or inclusive settings.

**Create a streamlined pathway to CMU’s Certificate of Cultural Competency.**

The Certificate of Cultural Competency (16-18 credit hours) is one of the Culture and Global Studies Certificates designed to help CMU students gain greater competency in their understanding of cultures and people whose social identities are different from their own so that they can articulate the benefits of diversity for everyone. The Certificate’s curriculum can support candidates in cultivating the proficiencies related to diversity outlined by CAEP (2013), and because the certificate allows for the double-counting of UP courses, some of which could include global experiences, the Certificate offers candidates a streamlined pathway to a recognition of their cultural competence that could add only 3-9 to a candidate’s program of study, depending on requirements for their major and minor (see Appendix P: A Streamlined Pathway to the Cultural Competency Certificate).

**Study the feasibility of offering certificates for teaching in global, urban, rural, and inclusive environments.**

CMU’s teacher education program has the capacity to offer multiple pathways to teaching in rural, high poverty, urban, and global environments, which, if carved out, could pave the way for teacher candidates to graduate CMU with recognition of their competency in specialized settings.

Offering CMU Certificates as reputation markers to demonstrate candidates’ competency in teaching in various learning environments or with particular populations of students could enhance their opportunities for finding jobs. Research should be done to determine what kinds of certificates would make candidates most marketable both within and beyond the state of Michigan.
PREPARING TEACHERS TO ASSESS LEARNING AND TEACHING

“Teacher decisions and the evidence that guides them are the lifeblood on which classrooms function...Evidence gathering and decision making are necessary and ongoing aspects of life in all classrooms, and classroom decisions should be made on the basis of good evidence.”
(Airasian, 1996, p. 3)

VISION

Our vision for CMU’s educator preparation program is a program that prepares candidates who 1) understand the contexts, concepts, purposes, and processes of assessment, and 2) effectively gather accurate and relevant assessment data and use it to improve their own practices and those of the schools in which they teach.

In what follows, we explain how this vision was articulated as a response to relevant standards, new areas of knowledge and skills needed for the 21st Century educator, and the practices of exemplary teacher education programs.

CONTEXT

In her recent keynote address at Eastern Michigan University’s “Teacher Education: A Call to Action in Michigan,” Marilyn Cochran-Smith (2013) emphasized the need for teacher education programs to address the shifting notions of accountability driving education today. She cautioned that the trend to focus on outcomes and test-based accountability leads to an overly simplistic, reductionist view of teaching and learning. Cochran-Smith encouraged teacher educators to help their teacher candidates understand that teaching is an inherently complex, “value added” process that should focus on students’ growth and not rely on standardized testing as the sole (or even primary) measure of student learning.

Successfully navigating and challenging the dominant paradigm of accountability, teacher candidates must be prepared with assessment literacy, analytical skills for working with data, and the ability to make instructional decisions based on data (Greenberg & Walsh, 2012).

Assessment Literacy

Assessment literacy includes an understanding of the context of accountability, the ability to design or select assessments for various purposes, and the skills to use multiple sources of data to make instructional decisions.

Exemplary teacher education programs ensure that their candidates are assessment literate and can use assessments to promote students’ growth (Kahl, Hofman, & Bryant, 2013). In Powerful Teacher Education (2006), Linda Darling-Hammond shows how exemplary programs emphasize the concepts and processes of assessment in order to help candidates become “reflective decision makers who can carefully observe, inquire, diagnose, design, and evaluate learning and teaching.
An important aspect of promoting students’ growth is being able to diagnose students’ particular learning needs (Kahl, Hofman, & Bryant, 2013). Darling-Hammond (2006) suggests that first candidates must be able to “assess student abilities, learning styles, and developmental levels” for both general and subject-specific content (p. 200). This skill relies on candidates’ ability to develop authentic assessments to inform the differentiated instruction they must use to meet the needs of all students (Shepard, 2000; NCATE, 2010b). Darling-Hammond further defines this skill, saying that candidates need the opportunity to

study how students learn and what they know and understand by listening to them, observing them, examining their work, investigating how language, culture, and other aspects of experience affect their learning, and discovering what interests or approaches each brings that might offer entrée into the subject matter. (p. 201)

Using formative assessments to make these inquiries, teacher candidates study their students so that they can translate this research into instructional decisions that improve students’ learning.

Teacher candidates also need to learn to work with large-scale data sets. In particular, they need to be able to disaggregate large-scale data in order to tailor instruction to students’ learning needs. Candidates are often informed by state or other large-scale assessments that a “problem” exists, but then struggle to decide what to do about it. They need to “know how to use the results from large-scale assessments to make appropriate improvements in curriculum and instruction” (Shepard et al., 2005, p. 313). Teacher candidates also need to be able to work with large-scale data sets for the purposes of instructional program evaluation (Kahl, Hofman, & Bryant, 2013). Yet there is currently a lack of focus on data analysis skills in educator preparation programs (Greenberg & Walsh, 2012; NCATE, 2010b).

The need to balance assessment priorities for a range of stakeholders in the context of accountability makes it important for teacher candidates to be able to identify, select, create, and critique assessments used for accountability. The information needed to improve teaching and learning cannot be gleaned solely from aggregated, delayed results of standardized testing, but rather must include a range of classroom assessments that take into consideration the uniqueness of individual students as well as the content and context of learning (Cochran-Smith, 2013). This means teacher candidates need to be able to triangulate data from multiple sources, and they need to seek out data that can inform their instruction. To prepare teacher candidates who can promote their students’ learning, educator preparation programs need to “effectively encourage candidates to search for, analyze, and act on other data about students, families, their community, or their own practice” (NCATE, 2010b, p. 17). Understanding the context of accountability is essential for balancing these assessments and warrants the triangulation of data from multiple sources to glean an accurate picture of students’ learning.

To become assessment literate, teacher candidates need to be able to employ authentic assessments, create valid and reliable assessment tools, and use formative assessment to drive instruction, and they need to understand the context of accountability so that they can critique and improve existing assessments (Cochran-Smith, 2013; Shepard, et al., 2005). Teacher candidates need to be well-versed in the use of multiple forms of assessment for many reasons, as Shepard et al. (2005) explain: “First, the goal of capturing important learning is best served by
using a wide variety of formats. Second, the availability of multiple formats makes it more feasible to integrate assessment with instruction. Third, multiple sources of evidence protect against the biases inherent in any one form of measurement” (p. 294).

**Authentic Assessments**

Authentic assessments are performance-based assessments that require students to apply their knowledge. These assessments are comprehensive in that they present the students with an array of complex and challenging tasks that represent “ill structured,” real-world challenges designed to prepare learners for the ambiguities of real life (Wiggins, 1990, p. 2). These tasks reflect engaging, high-impact educational practices that are grounded in the real world. Teacher candidates need experiences with identifying and constructing tasks that illuminate students’ conceptual understanding (Shepard, et al., 2005).

**Valid and Reliable Summative Assessments**

Because of their complexity and comprehensiveness, authentic performance tasks are valuable for evaluations of student learning at the end of a unit or project. In order to assess students’ performances on authentic tasks, teacher candidates need to be able to create valid and reliable summative assessments that are aligned with local, state, and national standards. Authentic assessment is valid and reliable when appropriate criteria for scoring varied products is articulated and expectations are anchored or aligned with the expectations of others (Wiggins, 1990). Teacher candidates, then, need thoughtfully designed experiences and assignments that require them to evaluate assessment tasks (Shepard, et al., 2005).

**Formative Assessments**

In contrast to the evaluative purposes of summative assessment, formative assessments are used to provide students with feedback so that they may improve their learning. Teacher candidates need to be able to employ a variety of formative assessments because they have the potential to dramatically improve students’ learning (Shepard, et al., 2005). Yet summative grading continues to be the primary means of assessing students, suggesting that candidates need opportunities to practice formative assessments that can inform students of their progress and guide their instructional decision making. Examples of formative assessments include:

- Oral questioning of students
- Observation
- Written work products
- Oral presentations
- Interviews
- Projects
- Portfolios
- Tests and quizzes (Shepard, et al., 2005)

Preparing teacher candidates to employ formative assessments requires developing their cultural competence so that they can effectively and ethically assess their students, as Shepard et
al.(2005) state: “Teachers must become familiar with relevant experiences and discourse patterns in diverse communities so that children who come to school with very different experiences will be able to demonstrate their competence rather than appear deficit because they are unfamiliar with the teacher’s mode of questioning” (p. 296).

**Evaluating Assessments**

In the context of accountability, it is important that teacher candidates be able to critique and improve assessment instruments and methods (Cochran-Smith, 2013). Evaluating the quality of assessments is important because decisions about program improvement and instruction depend upon a solid understanding of test quality and the need for comparable data and data triangulation (Kahl, Hofman, & Bryant, 2013). To prepare candidates to critique assessment instruments, educator preparation programs need to not only provide them with experiences with evaluation, but also illuminate the philosophies that undergird evaluation practices (Shepard, et al., 2005), including standardized testing and grading, which are often taken for granted.

Most teacher candidates cannot rely on their own experiences growing up for models of effective assessment practices...many cannot necessarily rely on the models they observe in their field experiences. Therefore teacher education programs must provide both new theory and research evidence and specifically structured assignments that provide candidates with well-grounded practical opportunities for gaining this experience. (Shepard, et al., 2005, pp. 325-326)

By cultivating teacher candidates’ assessment literacy, educator preparation programs can prepare teacher candidates to assess their students’ learning, and by extension, their teaching, while balancing the demands of accountability.

**Data-Driven Instructional Decision-Making**

While teachers have always assessed their students in some way in order to make instructional decisions, assessment has taken on greater significance in the age of accountability, and the practice of data-driven instructional decision-making has emerged as “a more organized and collaborative commitment to use data from a variety of assessments—as well as information on student attendance, student engagement, demographics, attendance and school climate—in order to develop or adjust instruction (Greenberg & Walsh, 2012, p. 2). Preparing teacher candidates to engage in data-driven instructional decision-making requires cultivating their quantitative reasoning and analytical skills, capacity for reflection, and problem-solving skills.

**Quantitative Reasoning and Analytical Skills**

Teacher candidates need to know how to “dissect, describe, and display the data that emerges from assessments (Greenburg & Walsh, 2012, p.2). Preparing candidates for data-driven decision-making to inform their instruction involves preparing them first with quantitative reasoning and analytical skills, which include the abilities to

- Analyze student performance data from various assessments
- Interpret performance data
- Triangulate data from multiple assessments
Reflect on and apply findings to improve instruction and student learning

**Data-Driven Instructional Decision-Making**

Once candidates are assessment literate and armed with quantitative reasoning and analytical skills, they should be able to:

- Make instructional decisions based on triangulated data analysis
- Connect every step of the planning, implementing, and assessing process in the context of the learning environment and teaching situation
- Become truly reflective practitioners who are capable of effectively evaluating their teaching performances and use that analysis to improve their classroom practices.

Being an effective instructional decision-maker requires teacher candidates to be able to engage in inquiry in order to solve the problems of practice they encounter. To solve these problems, candidates need to see themselves as lifelong learners and be able to access resources that will inform their decision-making.

Clinical experiences are essential for developing teacher candidates’ assessment-driven instructional decision-making skills: “a defined clinical curriculum will provide the prospective teacher with real responsibilities, the opportunity to make decisions and to develop skills to analyze student needs and adjust practices using student performance data while receiving continuous monitoring and feedback from mentors” (NCATE, 2010b, p. 9). These skills will become much more important as the Michigan Department of Education increases its expectations regarding the ability of teacher candidates to assess their own learning as well as that of their students.

**CMU CURRENT PRACTICES**

CMU’s educator preparation program currently prioritizes assessment as an instructional outcome through its focus on the CLeaR Conceptual Framework (see Appendix D: CLeaR Conceptual Framework and Outcomes), which holds that teacher candidates will “successfully design, implement, analyze, and critique student assessments to improve learning and teaching.”

Instruction and learning on assessment is intended to be threaded throughout the program and focused on in two courses: EDU 310 Psychological Foundations of Education (in the Secondary Program) and EDU 393 Learning Theory in Elementary Education (in the Elementary Program), where teacher candidates learn to assess student learning, use data to diagnose student needs, and plan accordingly. More specifically, in EDU 393, teacher candidates have opportunities to 1) develop learning objectives based on state standards, 2) design a variety of formative and summative assessments to monitor students’ progress toward mastery of those objectives, 3) develop scoring guides (e.g., rubrics, checklists, rating scales) to effectively communicate feedback and help students to self-regulate their learning, and 4) design accommodations for students based on their diverse learning needs.
The program also offers courses that teach subject-specific assessment skills, such as reading diagnostics in EDU 330 Reading in the Elementary School and EDU 431 Corrective Reading in the Classroom. Both courses provide elementary teacher candidates with a variety of diagnostic tools and remedial techniques. Such classes are augmented by workshops and on-campus conferences offered to teacher candidates, which consider a variety of assessment topics.

Internal assessment shows that CMU candidates perceive themselves as equipped in some areas of assessment, but less so in other areas. Three years of data from the MDE Teacher Exit Survey (2009-2012) indicates that at least 90% of candidates mostly or strongly agreed that they were well prepared to 1) use state and local student learning standards to assess and improve teaching and 2) use authentic assessments (Professional Education Unit, 2013).

However, less than 90% of candidates mostly or strongly agreed that they were well prepared to 1) communicate information about students’ progress to parents, 2) use a variety of assessments to guide decisions about what to teach, 3) plan for and modify assessments for students with special needs and developmental disabilities, 4) challenge gifted and talented students, and 5) adapt instruction for students learning English as a second language. This data suggest that candidates need more preparation in assessment, particularly to inform differentiated instruction to meet the unique needs of individual students.

The demand for better preparing teacher candidates to assess their students is supported by an Alumni Survey conducted in Spring 2013 with 348 graduates from 2009-2010 and 2011-2012, 87.6% of whom were currently teaching full-time, part-time, or as a substitute (Senter, 2013b). The results indicate that only 50% of alumni felt they were well prepared or adequately prepared to explain assessment and standardized results to parents; 78% considered themselves well or adequately prepared to design effective assessment tools; and 84% thought they were well or adequately prepared to use assessments to improve the teaching-learning process. Likewise, in a 2012 focus group, teacher candidates described themselves as unprepared to interpret and communicate assessment data to administrators and parents. In a 2013 focus group, candidates remarked that some of the courses in their major went into sufficient depth about some assessments, but overall, they were not well versed in other aspects of assessment (Senter, 2013a).

This data suggests that assessment literacy and the use of assessment data to inform instruction should be more consistently integrated, developed, evaluated, and reported on throughout the teacher education program.

RECOMMENDATIONS

10. Update CLeaR Conceptual Framework to include data-driven decision-making
11. Collaborate to coherently integrate assessment literacy, quantitative reasoning, and data-driven instructional decision-making into program coursework
12. Develop a faculty development plan that supports faculty in aligning, modeling, and employing data-driven decision-making throughout program
RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Exemplary programs are adding new content in assessment in order to address the most recent demands on teachers to use data to make informed instructional decisions. The ability to use quantitative reasoning and data analysis needs to be researched, mapped into the educator preparation curriculum, and provided to faculty through professional development opportunities.

Update CLeaR Conceptual Framework to include data-driven decision-making

While the CLeaR Outcome for Assessment already invokes the concepts of assessment literacy and data-driven instructional decision-making, language could be modified to more closely align the framework with the context of P-12 education.

Collaborate to coherently integrate assessment literacy, quantitative reasoning, and data-driven instructional decision-making into program coursework

While we do have courses that provide valuable information on assessment, we need to further integrate and expand on assessment literacy skills throughout the program. For instance, the development and use of authentic and formative assessments should receive greater emphasis, with the goal of enabling teacher candidates to apply multiple modes of informal and formal assessment to ensure that all students have equal opportunities to learn.

The integration of assessment literacy into the curriculum, including developing and using authentic and formative assessment tools and techniques; aligning assessments with local, state, and national standards; and critiquing and improving existing assessment instruments and methods are all critical and curriculum mapping should be done to tighten and support our curriculum in this area.

Exemplary programs have developed pedagogical approaches that are seamlessly and strategically integrated throughout the program. For example, the Extended Teacher Education Program [ETEP] at the University of Southern Maine helps candidates develop a theory-practice based understanding of assessment by integrating coursework with field experiences (Darling-Hammond, 2006). Teacher candidates study the assessment tools used by their partnership schools and participate in assessment activities at the school site. This purposeful connection “reinforces understanding about assessment and its role in learning and development, substantiates what that looks like in practice, and ultimately, makes it possible for ETEP graduates to integrate those understandings of assessment into their future classrooms” (Shepard et al., 2005, p. 325).

We deliberated developing a course focused on assessment. We considered that candidates in the B. S. in Education-Secondary Program who are math and science majors and minors have multiple opportunities to cultivate their quantitative reasoning and analytical skills, while teacher education candidates in other majors may not. Integrating such opportunities into the General Education program aligns with the purpose of the University Program, Subgroup II-A Quantitative Sciences and the competency requirement of Quantitative Reasoning, and would benefit all students at CMU who want to better understand how to assess their own learning. Therefore, we propose the creation of a course, perhaps called “Assessing and Improving
Learning through Data Analysis,” that would meet the UP Subgroup II-A Quantitative Sciences requirement and the Quantitative Reasoning requirement. This course could also bolster potential applicants’ math skills that qualify them for entry into the teacher education program. Counting the course as part of the program draws on the principle of integration and allows students’ professional education to begin prior to entering the program, engaging them in coursework that is meaningful to them.

**Develop a faculty development plan that supports faculty in aligning, modeling, and employing data-driven decision-making throughout program**

In order for faculty to be effective in the classroom, they must themselves understand the different types of assessments available, when and why to use them, and how a combination of formative and summative assessments work in conjunction to inform instructional decision making. Understanding the role that assessment plays in the overall planning, implementing, and evaluation of instruction is crucial for effective teachers. Faculty can model these new knowledge and skills in each course in order to first help candidates “unlearn” what they know about assessment (Darling-Hammond, 2006).
PREPARING TEACHERS TO UNDERSTAND AND INTEGRATE TECHNOLOGY

“Technology has forever changed not only what we need to learn, but the way we learn.”
ISTE, https://www.iste.org/standards

VISION

Our vision for the CMU educator preparation program is a program that integrates the knowledge, skills, and use of technology into the curriculum, recognizing the evolving nature and definition of technology as an instructional tool, as a learning environment, and as embedded in subject matter contexts.

In what follows, we explore trends in technology, including the future of learning and learning environments, relevant standards, practices of exemplary educator preparation programs, and opportunities to utilize technology more effectively in our program and clinical partnerships.

CONTEXT

The Future of Learning

The KnowledgeWorks portrays the future of learning as highly personalized, full of choices, and unlimited by time and space. As noted in previous sections, rapid changes in technology, combined with increased international competition and scientific discovery, have played a significant role in the movement toward a progressively globalized society (Stewart, 2013). Succeeding in this global, interconnected, technology-driven work environment calls for the 21st Century skills articulated by the Partnership for 21st Century Skills (P21) and endorsed by the American Association of Colleges of Teacher Education (AACTE, 2010).

21st Century Technology Literacy

In order to prepare P-12 students for the 21st Century, teacher candidates need to cultivate what P21 has identified as three important areas of technological literacy:

- Information Literacy: the ability to access, evaluate, and manage information
- Media Literacy: the ability to analyze and create media products
- Information Communication Technology (ICT) Literacy: the ability to use appropriate technological tools to research, organize, evaluate, and convey information (AACTE, 2010)

These literacies represent the kind of technology skills P21 students and their teachers need, and educator preparation institutions need to provide, in the 21st Century.

Digital Citizenship and Ethical Considerations
In addition to technological skills, teacher candidates and their students need to understand the context and implications of their use. One of the most important developments in technology education is the concept of digital citizenship. This concept of citizenship guides our use of technology and includes the ability to not only use technology competently, but also to

- Interpret, understand, and evaluate the credibility of digital content
- Think critically about the ethical opportunities and challenges of the digital world
- Make safe, responsible, respectful choices in online environments (Common Sense Media, 2011)

In this world in which so much of students’ lives is lived virtually, teacher candidates need to be aware of their own “digital footprint” so that they can guide their P-12 students through the ethical decision-making that will shape theirs.

**Future of Learning Environments: Online and Virtual Learning**

KnowledgeWorks predicts, “Learning will no longer be defined by time and place” (KnowledgeWorks.org). The seemingly limitless possibilities for learning via digital networks, platforms, and content resources speak to the appeal of virtual learning as an integral part of our everyday lives and of formal education. In 2011, 40 states had a virtual school or some state-sponsored online initiative, comprising 536,272 online course enrollments (Watson, et al., 2011) (see Figure 2: States with State Virtual Schools or State-Led Online Initiatives). One reason that online learning has become so popular from the learners’ perspective is because it provides flexible access to course material at any time, from any place, making it especially appealing for learners who cannot attend traditional face-to-face course offerings (U. S. Department of Education, 2010a). From an institutional perspective, online courses are generally more lucrative because instructional content can be delivered more cost-efficiently and instructors can handle more students without compromising quality (U. S. Department of Education, 2010a).

Online learning is prevalent in the state of Michigan. In 2011 Michigan ranked fifth in terms of the number of K-12 students enrolled in online courses (17,700) (Watson, et al., 2011). Currently, the state of Michigan requires all school districts to offer students in grades 5-12 the option of taking up to two online classes each semester per Section 21f of the School Aid Budget (Michigan Association of School Administrators, 2013). Although schools have options in terms of how they implement this state mandate, schools must comply with these new requirements beginning the second semester of the 2013-2014 school year. Students can choose from local course offerings or statewide course offerings, such as those from the Michigan Virtual High School. Making online learning successful in Michigan, however, will require effective teachers capable of teaching in online environments and the design of rigorous and engaging online courses.

In Michigan, staffing online and blended learning courses with state-certified teachers seems to be preferred over other methods of offering online courses for grades 5-12. A survey conducted by the Michigan Association of Secondary School Principals (MASSP) and Michigan Virtual University (MVU) (2013) showed that 75% of MASSP principals believe that it is slightly or very important for online courses to be taught by Michigan certified teachers. These principals indicated that their greatest needs for the 2013-2014 school year were
Preparing teachers to teach in online and blended learning environments
Setting up blended learning
Training teachers to mentor online learners
Evaluating online programs and teacher effectiveness
Updating the school improvement plan to incorporate online and blended learning

Administrators’ greatest concerns were maintaining quality, rigor, and standards. These concerns about the quality of online and blended learning courses combined with principals’ preference for staffing them with certified teachers and the need to comply with the state’s mandate of two online courses per semester presents a valuable opportunity for educator preparation institutions in shaping the future of education in Michigan.

Figure 2: States with State Virtual Schools or State-Led Online Initiatives

The Future of Learning Environments: Blended Learning
In contrast to online classes in which course material is delivered exclusively online, blended learning involves the integration of face-to-face and online learning so that online activities extend, augment, and mediate face-to-face activities (Keengwe & Kang, 2013). Teacher candidates need to learn how to create productive blended learning experiences for their students.
To be most effective for learners, blended learning must be personalized and adaptive, support high levels of cognitive engagement, and balance computer and teacher guidance with learner control (Bullmaster-Day, 2011).

Teacher candidates’ experiences in blended learning environments in their educator preparation program could serve as a model for the kind of learning experience they could create for their students through blended learning. Research suggests that in order to effectively use blended learning for teacher preparation, programs should integrate blended learning with other pedagogical methods, such as collaborative learning, project-based learning, and problem-based learning, in order to minimize teacher candidates’ isolation and maximize their understanding and engagement in the curriculum (Keengwe & Kang, 2013).

**Technology as a Cross-Cutting Theme in Educator Preparation**

Technology is a critical area of teacher education that will require substantial innovation by educator preparation institutions (CAEP, 2013). Because technology has the potential to improve the quality of education for all P-12 students, teacher candidates need to be prepared to identify and evaluate disparities related to technological access so that they can “help their students gain access to what technology has to offer” (CAEP, 2013, p. 22). Digital citizenship and the ethical use of technology for teacher candidates goes much deeper than for other citizens: they must be able to envision the possibilities technology offers in connecting a diverse group of learners with the growing availability of electronic content, but also recognize the limitations of technology in solving all problems.

As a cross-cutting theme that permeates every aspect of teacher preparation, technology plays multiple roles in the preparation of teachers as demonstrated by the multiple Council for the Accreditation of Educator Preparation (2013) standards that refer to technology. First, educator preparation programs need to prepare teacher candidates to use technology for pedagogical purposes, guide their students in using technology, and incorporate technology standards into their design, implementation, and assessment of students’ learning experiences. In Standard 1, CAEP endorses the InTASC standards, which emphasize that teachers must know how to use digital and interactive technologies to promote students’ learning and be able to guide their students in using such technologies. CAEP Standard 1.5 expects that educator programs will “ensure that completers model and apply technology standards as they design, implement and assess learning experiences to engage students and improve learning; and enrich professional practice” (p. 3). To apply technology standards in their teaching, teacher candidates should refer to discipline-specific standards (e.g. Association of Mathematics Teacher Educators, 2013; National Council of Teachers of English, 2012) as well as the International Society for Technology in Education (ISTE*T) standards to learn how to design, implement, and assess their students’ learning experiences. To prepare candidates to meet CAEP Standards 1 and 1.5, educator preparation programs need to cultivate candidates’ technological pedagogical content knowledge.

To develop teacher candidates’ pedagogical content knowledge, The *Handbook of Technological Pedagogical Content Knowledge for Educators* (TPCK), developed by AACTE Committee on Innovation and Technology (2008), provides an effective framework for the integration of technologies within an educator preparation program. CAEP Standard 3.4 stresses the need for
providers to “present multiple forms of evidence to indicate candidates’ developing content knowledge, pedagogical content knowledge, pedagogical skills, and the integration of technology in all of these domains” (p. 9). Assessing candidates as they develop their technological pedagogical content knowledge is critical to meeting this standard.

Secondly, CAEP encourages the use of technology in educator preparation programs to collaborate and communicate with clinical partners, for instance, in developing assessment criteria and assessing teacher candidates. CAEP Standard 2.2 outlines the importance of using technology to orchestrate clinical placements: “in collaboration with their partners, providers use multiple indicators and appropriate technology-based applications to establish, maintain, and refine criteria for selection, professional development, performance evaluation, continuous improvement, and retention of clinical educators in all clinical placement settings” (p. 6).

Educator preparation programs can capitalize upon technology to provide timely and responsive feedback on teacher candidates’ performance in clinical experiences and to enhance their learning. Per CAEP Standard 2.3: “Clinical experiences, including technology-enhanced learning opportunities, are structured to have multiple performance-based assessments” (p. 6). CAEP (2013) offers a valuable starting point for considering how educator preparation programs can utilize technology to prepare effective teacher candidates. Yet CAEP acknowledges that because “the essence of technology is rapid change,” accreditation standards need to be sufficiently flexible to allow educator preparation providers to exploit technological advances that can promote teacher candidates’ instructional effectiveness (p. 22).

**Technology as a Strategic Investment of Educator Preparation Programs**

In order to capitalize on technological innovations, exemplary teacher preparation programs strategically invest in technology and develop strategic plans for infusion in their program. Specifically, they move technology from “the margin into the core of the program” by

- Increasing clinical experiences that afford candidates opportunities to learn in technology-rich environments
- Providing professional development for teacher education faculty in technology uses
- Collaborating with communities and clinical partners to solve problems of technological access (Darling-Hammond, 2006, p. 303).

These strategies require educator preparation institutions to utilize their technological resources, including equipment and faculty with expertise in technology, to enhance the educator preparation program.

**CMU CURRENT PRACTICES**

Technology is prioritized in CMU teacher preparation as an outcome of the CLeaR Conceptual Framework: teacher candidates will “demonstrate the ability to use appropriate instructional technology for information management, communication, and instruction.” To support candidates in meeting this outcome, the B.S. in Education Program offers a course focused on educational technology, EDU 290: Technology in Education, which is typically taken prior to entry into the program. The bulletin describes this course as “students will learn to operate various technology-based equipment; select and assess instructional media materials,
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courseware, and software; and integrate technology and media into K-12 education” (Central Michigan University, 2013).

In addition to EDU 290, technology is intended to be interwoven throughout the program in content methods courses. Data gathered from an informal survey of Task Force members representing science, physical education, art, music, English, education, and social studies revealed a variety of responses to questions about the use of technologies to enhance teaching and learning in courses for aspiring teachers. For example, several departments implement the ISTE Standards for Professional Education courses, usually in the methods and subject matter preparation courses for secondary teachers. In addition, several faculty use Blackboard for course management; other software, such as Word, PowerPoint, and Prezi, for displaying student work and presentations; and equipment such as document cameras and data projectors. A few instructors use Wikis, video/audio production, Google Tools, and Mahara. While some faculty use specialized subject-specific software, such as Geographic Information Systems, Garage Band, Photoshop, Computer Algebra Systems, others do not make use of any discipline-specific tools.

This informal survey of Task Force members was illuminating. The Task Force viewed faculty’s varied and multiple uses of technology as a strength of the program, although more rigorous data collection is needed to determine with more reliability how technology is integrated throughout candidates’ coursework. The lack of consistency and pedagogical alignment around the use of technology represents an area for improvement. Notably, many Task Force members reported they do not coordinate use of technology in their methods and subject matter preparation courses with the technology-focused course, EDU 290, pointing to a greater need for vertical and horizontal coherence and greater coordination and collaboration among faculty.

Focus groups conducted with students in both the B. S. in Education-Elementary and Secondary programs in Spring 2013 show that the lack of coherence in technology integration impacts teacher candidates’ learning (Senter, 2013a). Focus group participants were unable to describe examples of how they have been trained in education and methods courses to use technology to enhance students’ learning. In a 2012 focus group (CMU Office of Research and Assessment, Professional Education Unit, & Center for Applied Research and Rural Studies, 2012), teacher candidates agreed that their preparation for using technology to enhance student learning in the classroom was a weakness of the program, and they recommended that EDU 290 come later in the program in order to be more relevant to classroom practice.

Internal assessment shows that at the time of graduation, teacher candidates perceive themselves prepared to teach with technology. Results from the MDE Teacher Exit Survey for three years (2009-2012) show that teacher candidates perceived themselves well-prepared to use technology to maximize student learning. Specifically, 91.4% of elementary teacher candidates and 92% of secondary teacher candidates mostly or strongly agreed that they were well-prepared to 1) integrate educational technology into classroom instruction, 2) have high ethical standards surrounding the use of technology, and (3) support students’ use of technology to enhance conceptual understanding (Professional Education Unit, 2013).
However, after graduation CMU alumni’s perceptions of their preparedness to teach with technology declines. In an Alumni Survey conducted in Spring 2013 with 348 graduates from 2009-2010 and 2011-2012, only 80% of alumni indicated they were well-prepared or adequately-prepared to integrate available technology into planning and teaching for differentiating instruction and 81% were prepared to use appropriate technology in carrying out professional responsibilities (Senter, 2013b). These internal assessments indicate a need to better prepare candidates for the technology they encounter in practice after graduation.

RECOMMENDATIONS

An exemplary educator preparation program will integrate the knowledge, skills, and use of technology into the curriculum. This can be achieved at CMU through the following activities:

13. Update CLeaR Conceptual Framework to include digital citizenship and technological pedagogical content knowledge
14. Collaborate to create curriculum maps that coherently integrate technology literacy, digital citizenship, and technology use into curriculum and coursework
15. Develop a professional development plan that supports faculty and clinical partners in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about technology and digitally-mediated learning environments and their ability to use technology for a variety of purposes
16. Embed the program with pathways to recognized competencies in online, flipped, and blended learning environments

RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Update CLeaR Conceptual Framework to include digital citizenship and technological pedagogical content knowledge

Currently, the CLeaR Conceptual Framework emphasizes the use of technology. In order to reflect the evolution of technology’s roles in learning and educator preparation, the Outcome should be revised to take digital citizenship and technological pedagogical content knowledge into consideration. Resources to support the revision of the CLeaR Outcome for technology include

- **International Society for Technology in Education (ISTE*T) Standards**
  Formerly known as the National Education Technology Standards (NETS), these standards specify that teachers should 1) facilitate and inspire student learning and creativity, 2) design and develop digital age learning experiences and assessments, 3) model digital age work and learning, 4) promote and model digital citizenship and responsibility, and 5) engage in professional growth and leadership.

- **The Handbook of Technological Pedagogical Content Knowledge for Educators AACTE**
  (2010) has developed this handbook for “TPCK,” which provides an effective framework for the integration of technologies in all content areas through educator preparation.
To begin this process, a shared understanding of digital citizenship is needed among faculty.

**Collaborate to create curriculum maps that coherently integrate technology literacy, digital citizenship, and technology use into curriculum and coursework**

It is critical that teacher candidates are continuously exposed to technology throughout the program and that coursework and assignments require the use of technology. This approach will address the CAEP (2013) standards, which call for the evaluation and appropriate use of technology throughout the program, in content and methods courses as well as in clinical experiences.

Collaboration across departments and colleges around curriculum mapping should be undertaken to convey how program outcomes and standards related to technology will be achieved. Through the mapping process, courses should focus on specific technology skills and knowledge, so that there is a systematic exposure to the use of technology, with learning being reinforced, but not redundant.

A significant question to be addressed through curricular mapping is how to best capitalize upon EDU 290. There are multiple options available when considering the current purpose of this course and possibilities for the future. Ultimately, the goal of this course is to function as a “technology internship” that guides and instructs teacher candidates on the use of technology to improve student learning in direct relation to course and field work. Options include the following:

- **Transform EDU 290 into three, one-credit courses so that teacher candidates would have focused learning experiences with technology at the three points during the program.** These courses would be taken in online or hybrid formats to provide teacher candidates learning experiences that would model online and blended learning. The first single-credit course would serve as an introduction to technology literacy and uses. The second course would allow teacher candidates to demonstrate their developing technological pedagogical content knowledge through practical application connected to a clinical, service-learning, or community-based experience. In the third single-credit course, teacher candidates would design an online or blended learning experience for P12 students. These courses would be conducted as professional learning communities. This option was recommended by the educational technology faculty.

- **Offer EDU 290 during an immersive pre-student teaching experience.** If taken in conjunction with content methods courses and closely linked to clinical experience, this technology focused course could foster teacher candidates’ technological pedagogical content knowledge, if horizontal coherence were to be achieved.

- **Methods and other courses could be revised to include more instruction on teaching with technology.** Faculty who are technology specialists could team teach with faculty to integrate technology into content and methods courses to foster teacher candidates’ technological pedagogical content knowledge.

A combination of these options could also be considered. What will be critical to infusing technology throughout the program will be collaboration across departments and colleges and professional development to support this collaboration.
Develop a professional development plan that supports faculty and clinical partners in aligning, modeling, and employing pedagogical approaches that promote candidates’ learning about technology and digitally-mediated learning environments and their ability to use technology for a variety of purposes

Increasing the amount of professional development opportunities both internally for our faculty and externally for clinical partners will strengthen the cross-cutting knowledge and use of technology. Specifically, we need to strengthen our abilities to:

- Model and use pedagogical technologies to support teacher candidates’ learning in all coursework and clinical experiences
- Offer courses in online and blended learning formats
- Use technologies in the assessment, evaluation, and feedback of candidates

Professional development on these three areas can be provided in a variety of ways, including traditional workshops, learning communities, guest speakers/demonstrations in the classroom, and tutorials on interactive technologies, such as SKYPE, video chats, and online learning platforms. The key is to have continuous, focused opportunities for faculty and clinical partners to investigate and use technology in their classrooms to improve learning as well as model appropriate technology use.

As a first step in this process, faculty and clinical partners could be surveyed to understand the current types and uses of technologies employed in their classrooms and the questions they have concerning the pedagogies and types of technologies available. This data could be used as a starting point to develop a comprehensive, marketable professional development series. The development of this series represents one way to align pedagogical uses of technology across coursework and clinical partnerships, and it would leverage our technological assets strategically to build mutually beneficial relationships with P-12 schools.

Providing professional development and technical support around the use of the Mahara ePortfolio to teachers and school districts is another possibility for sharing technological resources in mutually beneficial ways. Michigan school districts are transitioning to a new Educator Evaluation System that calls for practicing teachers to develop an evidence-based portfolio of their teaching performance that includes data demonstrating student learning. CMU has been guiding teacher candidates in the creation of an ePortfolio that does just that: provides evidence of teacher candidates’ growth and mastery of the state standards for teachers. Providing technical support on both the technological deployment of the Mahara software, which is free, along with professional development on the professional purposes of ePortfolios in documenting teachers’ effectiveness will serve teachers and schools, our educator preparation program, and teacher candidates on the job market.

By offering technical support and professional development to clinical partners, we are constructing a professional development school model in which P-12 teachers benefit from professional development, their P-12 students receive better instruction using technology, the school district receives technological support and consulting, and our teacher candidates get the immersive clinical experience they need to be successful educators in the 21st Century. This kind of configuration would represent a strategic use of technology and should be explored in the
implementation phase of our educator program transformation toward a clinically-based program.

A challenge we face in preparing teacher candidates for the wide range of technological access issues and environments they will encounter in classrooms is the rapidity with which educational technology evolves. Developing a plan that allows teacher candidates to stay current on emerging technologies may require a unique structure, such as learning communities that would include practicing teachers and enable collaboration around technological pedagogical content knowledge. These learning communities could be integrated into the Education and Human Services Learning Commons, which offers workshops on hardware, software, and services for the CMU community (College of Education, Central Michigan University, 2014). The Learning Commons is providing workshops on Google Services, Mahara’s EPortfolio, Library Research and Services, and Presentation Software. Learning Commons workshops could be incorporated into a flexible, but institutionalized Certificate Program that would recognize faculty, teachers and teacher candidates’ growing competencies with technology.

**Embed the program with pathways to recognized competencies in online, flipped, and blended learning environments**

Teacher candidates will be expected to have the knowledge of and experience with teaching in online, digital, flipped, and blended learning formats in the future. Given that the state of Michigan requires school districts to offer online courses, graduates will be more marketable if they hold some sort of recognition of their competency in technologically-mediated environments. In fact, because of the growing need for teachers with this competency, it is likely that the state will offer an endorsement in this area. Developing a Certificate in teaching in online, flipped, digitally-mediated, and/or blended learning environments would position CMU’s educator preparation program to capitalize on this opportunity. Market research should be done to determine what kind of competency would be most appealing to school administrators.

A pathway to a Certificate in teaching in online, flipped, digitally-mediated, and/or blended learning environments might include a “Technology Boot Camp” offered as early as Summer 2014. This Boot Camp would match educational technology faculty and content area experts to provide one-day workshops on teaching online. This course could be offer in conjunction with other courses at the master’s level in order to recognize technological competency. For example, a course offered as an intensive Boot Camp could be embedded within a Certificate program that includes courses in the Masters in Educational Technology and the Masters in Literacy, so that after 12 credits, students would receive a Certificate in online teaching with a specialization in literacy. Boot camp participation could lead to a Certificate.

Offering a Certificate in teaching in online, flipped, digitally-mediated, and/or blended learning environments would not only serve teacher candidates well, but also school districts seeking teachers to fill their online teaching needs. Such a Certificate program should be designed around the needs of teachers and schools so that clinical practices in technology-rich learning environments serve as the hub of teacher candidates’ learning.
DEVELOPING A CLINICALLY-BASED EDUCATOR PREPARATION PROGRAM

“Clearly, a key to dramatically successful preparation of teachers is finding ever more effective ways of connecting the knowledge of the university with the knowledge of the school. The more tightly integrated the learning experiences of novices, veteran teachers, and university faculty can become, the more powerful the influence on each other’s practices and capacity for constant improvement” (Darling-Hammond, 2006, p. 185).

VISION

Our vision for CMU’s educator preparation is a program that places clinical practice at the core of learning through coherently sequenced, increasingly complex, immersive clinical experiences in a variety of P-12 sites and learning environments.

In what follows, we illuminate opportunities to strengthen the integration of university and school-based knowledge through clinical experiences that meet the contextual demands of today’s P-12 profession and teacher preparation, draw from the practices of exemplary programs and comparable programs in Michigan, and capitalize on CMU’s distinguishing qualities.

CONTEXT

Envisioning a Clinically-Based Program

The Blue Ribbon Panel commissioned by NCATE (2010b) for the report “Transforming Teacher Education Through Clinical Practice: A National Strategy to Prepare Effective Teachers” advocates a clinically-based program in which clinical practice is at the core of the program, and coursework evolves around the practical, everyday work teachers and students do in P-12 schools. Such a clinically-based program “fully integrates content, pedagogy, and professional coursework around a core of clinical experiences” (p. 8). Configuring teacher candidates’ teaching and learning around clinical practice creates varied and extensive opportunities for candidates to connect what they learn in coursework with classroom practice while maintaining a continuing, reflective dialogue with skilled clinical educators.

The National Research Council (NRC) agrees that clinical experiences are the base of learning to teach. In “Preparing Teachers: Building Evidence for Sound Policy” (2010), the NRC identifies clinical preparation as one of the three aspects for teacher preparation programs that are likely to have the highest potential to effect learning outcomes for students.

Clinical Experiences in CAEP: Coherence, Depth, Breadth, Diversity, Variety, and Duration

Because teaching is a practiced profession, the Council for the Accreditation of Educator Preparation (CAEP) (2013) prioritizes clinical work in teacher candidates’ preparation. CAEP
specifies three standards related to partnerships, educators, and experiences (2.1, 2.2, 2.3). CAEP Standard 2.3 is related specifically to the design and function of clinical experiences:

The provider works with partners to design clinical experiences of sufficient depth, breadth, diversity, coherence, and duration to ensure that candidates demonstrate their developing effectiveness and positive impact on all students’ learning and development. Clinical experiences, including technology-enhanced learning opportunities, are structured to have multiple performance-based assessments at key points within the program to demonstrate candidates’ development of the knowledge, skills, and professional dispositions, as delineated in Standard 1, that are associated with a positive impact on the learning and development of all P-12 students (p. 6).

This standard offers a clear vision for clinical experiences in teacher preparation: it characterizes the quality of clinical experiences as “of sufficient depth, breadth, diversity, coherence, and duration”; it considers “technology-enhanced learning opportunities”; and it highlights that clinical experiences should be structured and include assessments of candidates’ development (CAEP, 2013, p. 6).

The InTASC Standards, which represent the content and pedagogical knowledge and skills candidates need to be effective as delineated in CAEP’s Standard 1, serve as learning outcomes of the clinical experiences and related coursework in the educator education program. Toward this end, “clinical preparation must create nurturing opportunities for aspiring candidates to develop, practice, and demonstrate the content and pedagogical knowledge and skills that promote learning for all students” (p. 7). The verbs “develop,” “practice,” and “demonstrate” serve as a useful framework for conceptualizing how clinical experiences might be vertically structured to promote candidates’ development as embedded within the CLeaR Conceptual Framework’s definition of a Reflective Practitioner (Appendix D: CLeaR Conceptual Framework and Outcomes):

A professional practice that is truly concept and knowledge-driven, learner-centered, and reflective is not readily acquired. Rather, it must be developed and refined through active reflection and inquiry over a lifetime. The professional education program becomes the foundation for a professional career that will continue to evolve and mature” (p. 7).

CAEP (2010) articulates a conception of clinical experiences in its glossary of terms as, “guided, hands-on, practical applications and demonstrations of professional knowledge of theory to practice, skills, and dispositions through collaborative and facilitated learning in field-based assignments, tasks, activities, and assessments across a variety of settings” (CAEP, 2013a). This definition points out that clinical experiences should be guided, collaborative, and facilitated; that candidates should gain experience in a variety of settings; and that applying theoretical knowledge to practice is at the heart of an educator preparation program.

While CAEP and others offer a vision of effective clinical experiences, Linda Darling-Hammond’s depictions of exemplary programs in her book Powerful Teacher Education (2006) provide real-world examples of how exemplary programs’ clinical experiences are coherently structured to support candidates’ learning and immerse them in clinical work.
Structuring Clinical Work for Vertical Coherence: Learning to Look and Gradually Increasing Responsibility

In exemplary programs, clinical experiences are carefully structured so that coursework is integrated with clinical work, and candidates are guided through learning opportunities that promote the connection between university and school-based knowledge. Powerful teacher education programs strategically structure their clinical experiences by developing candidates’ ability to “learn how to look” at the classroom and allow them to assume gradual responsibility. These programs have developed a theoretically-grounded structure that guides candidates in increasingly complex clinical experiences. Candidates often begin by tutoring, working with small groups in after-school programs, and volunteering for school or community activities.

Structuring Clinical Work for Horizontal Coherence: Deep, Immersive Experiences

Exemplary educator preparation programs structure clinical experiences in different ways, but all provide candidates with immersive clinical experiences around which coursework that engages candidates in deep study of teaching and learning is configured. What this means is that coursework is designed to help candidates make sense of and emulate the practices at the school site. Clinical experience is used as a point of departure for class discussions, and course assignments are derived from candidates’ clinical experiences.

Configuring coursework around a school site requires a close partnership with schools districts (Castle, 2008; Teitel, 2004) so that “preparation programs learn more directly what they need to know about what schools really need and they enable districts to hire new teachers who are prepared to be effective in their schools” (NCATE, 2010b, p. 8). NCATE (2010b) elaborates this position by explaining that clinically based approaches have numerous advantages over traditional practicums, one of which is that they “require school districts to take on shared responsibility for teacher education” (p. 8).

University-school clinical partnerships can take a variety of forms, but all are based on providing teacher candidates rich opportunities “to reflect upon and think about what they do, how they make decisions, how they ‘theorize’ their work, and how they integrate their content knowledge and pedagogical knowledge into what they do” (NCATE, 2010b, p. 9). Forms of clinical partnerships include Lab Schools, Partnership Schools, Professional Development Schools, and Immersion Programs or Residency Models (Berry, et al., 2008; Berry, Montgomery, & Snyder, 2008).

Lab Schools

A traditional lab school model operates as a site for preparing teachers housed in the same building as the college. The Bank Street School for Children’s daycare center (Darling-Hammond, 2006) is an exemplar of a traditional lab school that is part of a powerful teacher education program. The integration of university and school-based knowledge is accomplished through the use of shared space and resources and “reciprocal collaboration” that involves teams of adults, both clinical faculty and student teachers and interns. These teams respond to emerging needs of the children and include designing reading interventions for them. Because clinical experiences in this lab school are driven by children’s developmental learning needs, they are extremely valuable for candidates’ preparation.
Developing a Clinically-Based Educator Preparation Program

**Partnership Schools**

The lab school model has evolved to take the form of strong partnerships between teacher education programs and school sites staffed by program graduates whose practices align with the program’s philosophy. What distinguishes effective Partnership Schools is that they maintain the close connection between the school and university to mitigate the “reality shock” that new teachers experience upon entering a new school culture that can result in a disconnect between the philosophy of the university and the graduate’s practice. The partnership sustains the teachers’ practice while serving as an effective training ground for candidates, exemplifying “synergistic practice” and “mutual renewal.”

**Professional Development Schools (PDS)**

In Professional Development School models, university-based teacher education programs conduct professional development with cooperating teachers who then collaborate with university faculty to orchestrate the clinical experiences of teacher candidates. Cooperating teachers serve as guides, role models, and coaches who model professional practice for candidates and collaborate with them. University faculty and cooperating teachers collaborate to design discipline-specific methods courses, and often methods courses are provided at the school site.

**Immersion or Residency Programs**

To address perceived gaps in service provided by PDSs, an innovative approach to prepare teacher candidates has emerged: teacher residency programs, modeled after the kinds of immersive learning experiences used to prepare physicians in the medical profession (AACTE, 2010). Teacher candidates in residency programs typically serve in schools three or four days per week with at least one full day and evenings devoted to coursework that is configured around their clinical experience. In their first year, residents study how to design lesson plans, manage the classroom, grade student work, and assess students’ progress alongside their mentor. In following years, residents gradually take on increasingly more complex classroom responsibilities under the guidance of their mentor.

Initially created by urban school districts struggling to find and retain teachers equipped to teach in that environment, the concept of residencies has evolved to meet the needs of other types of school districts as well as provide a unique way for teacher preparation programs to better integrate coursework and clinical experiences for candidates. Effective residency programs do the following:

- Consistently bridge education theory and classroom practice
- Allow “residents” to learn alongside an experienced, trained mentor
- Group residents in cohorts to cultivate professional learning communities and collaboration
- Build strong partnerships with school districts and nonprofit organizations
- Serve school districts by recruiting and training teachers to meet their hiring needs
- Continue to support graduates once they are hired as teachers of record
Residency models are regarded as a way for exemplary educator programs to transform themselves into sites for preparing teachers to address and meet the needs of 21st Century learners.

**Clinical Experiences across a Variety of Settings**

In exemplary educator preparation programs, candidates are carefully assigned to field sites in response to their prior experiences and learning needs in order to expand their knowledge about people different from themselves. This approach is often coupled with place-based pedagogy (Azano, 2011; Petrone & Eckert, 2013; Eppley, 2009). When candidates are placed in community settings, such as community centers, after-school programs, and local youth programs that attract a diverse population, this “early immersion in an unfamiliar and personally challenging setting” can have a powerful impact on candidates’ preparation for diversity (Darling-Hammond, 2006). Through these community-based clinical experiences, candidates come to believe that they have a moral contract to be change agents, to be involved in the communities in which they work, to work with students’ families, and to stay engaged as part of a professional learning community and network. Candidates learn to see students as people with multiple strengths and view their culture and background as resources for teaching and learning. Clinical experiences in community-based and extra-curricular are an integral part of preparing teacher candidates with a commitment to diversity, inclusion, and equity (Carrington & Saggers, 2008; Novak, 2010; Santos, Ruppar & Jeans, 2012).

Guided reflection is especially important for clinical experiences in learning environments that are new to teacher candidates. The faculty or mentors who guide candidates’ learning experiences are well-acquainted with the cooperating teacher, learning environment, school, community, and/or geographic area (Darling-Hammond, 2006). As a result, they are able to employ a place-based pedagogical approach that would highlight the situated nature of the clinical experience.

The exemplary programs depicted in Darling-Hammond’s (2006) book are located in urban or highly populated areas and were selected, in part, because they effectively prepare teachers for working with culturally diverse students and respond to the needs of the schools and communities they serve. To achieve mutually beneficial partnerships, educator preparation programs need to prepare candidates for teaching in particular geographic locations or serving the needs of particular communities. Providing teacher candidates with guided clinical experiences in a variety of settings throughout the duration of the program develops their ability to respond to the needs of the local community, and then adapt their practice accordingly in new settings.

**Duration of Clinical Work**

All of the exemplary programs profiled in Darling-Hammond’s (2006) book are either graduate programs or five-year undergraduate programs that include a year-long internship period. As CAEP specifies, duration in the field is a criteria for effective clinical experiences. State institutions vary in terms of how they meet these requirements. For instance, Michigan State University’s (MSU) undergraduate program is a five-year program that includes a year-long
Developing a Clinically-Based Educator Preparation Program

An internship after candidates graduate from college. The internship is sequentially structured across two semesters. Wayne State University (WSU) offers a Master of Arts in Teaching (MAT) for prospective teachers who hold a bachelor’s degree in areas other than education and want to pursue teacher certification and a master’s degree at the same time. Certification may be completed in two years as a full-time student, and the MAT takes longer. At Grand Valley State University (GVSU), teacher candidates with a major in Integrated Science and a minor in Elementary Education take two field-based courses over the two semesters of their fifth year: EDI 330 Teacher Assisting: Elementary and EDI 430 Student Teaching: Elementary.

**CMU CURRENT PRACTICES**

**Structuring and Sequencing of Clinical Experiences**

CMU’s B.S. in Education Program offers a variety of clinical experiences that occur at different points in the program. Altogether, teacher candidates in the B.S. in Education-Elementary Program experience 165 hours in the field prior to student teaching, and teacher candidates in the B.S. in Education-Secondary Program experience 75 hours. Both elementary and secondary teacher candidates student teach for 14-17 weeks in one semester.

**Introductory Field Experiences**

Induction into professional practice begins when teacher candidates take their first education course prior to admission to the teacher education program: 10 hours of K-12 classroom experience are required in this introductory course. Additionally, applicants to the program must observe a total of 45 hours in a K-12 classroom prior to admission.

**Pre-Student Teaching in the B.S. in Education-Elementary Program**

Elementary candidates begin their three-semester professional sequence with a 20-hour field experience linked with art and music methods (ART 345 Art in the Elementary School and MUS 330 Music for Elementary Classroom Teachers), 60 hours in the second through the Pre-Student Teaching Office (EDU 361 Pre-Student Teaching Practicum), and 20 hours in the third as part of a 4-credit writing methods course (ENG 315 Teaching Writing in Elementary and Middle Schools). If linked to subject matter methods courses, these field experiences create opportunities for bridging theory and practice to promote candidates’ pedagogical content knowledge. In ENG 315, for example, faculty employ a range of pedagogies to facilitate teacher candidates’ reflection, including field journals, class discussions, and student work analyses.

For the Pre-Student Teaching field experience, the Pre-Student Teaching Office arranges approximately 225 practicum placements for the elementary program per semester. These placements are monitored by the Director of Pre-Student Teaching with weekly assignments that guide candidates’ observation at the field site. The Pre-Student Teaching Office sends out surveys and correspondence to both students and co-operating teachers to monitor for any difficulties, which are immediately addressed. During the semester two formal teaching observations, two Quick Check Surveys, and a final evaluation form give candidates written feedback from host teachers.
Pre-Student Teaching in the B.S. in Education-Secondary Program

Secondary candidates have only one guided field experience prior to student teaching: 30 hours in a field placement linked to their subject matter methods course. This field experience is designed to support candidates in developing pedagogical content knowledge and reflective study of classroom practice. However, the ways in which these field experiences and methods courses are structured and the degree to which candidates’ field experiences are addressed in methods courses varies across content area.

Student Teaching: Elementary and Secondary

All candidates finish their teacher preparation with a semester of student teaching in a principal-approved classroom with certified host teachers in their endorsement area. Student teaching is 16 weeks long and extends for one semester. In addition, candidates in the B. S. in Education-Secondary Program can choose to student teach in their major and minor subject area for eight weeks each, at two different sites. Candidates take two courses during student teaching: EDU 432 Student Teaching Seminar and EDU 438 Student Teaching. Student teachers are supervised by University Coordinators, who have a master’s degree, extensive K-12 teaching experience, and often, administrative experience as well. These coordinators support candidates’ employment applications, their composition of an ePortfolio, and understanding of how schools work. Coordinators conduct six observations that include written summaries of the lesson and individual conferences. Some coordinators require student teachers to video record, analyze, and reflect on their classroom practice.

Additional support of student teachers in the B. S. in Education-Secondary Program majoring in English is also provided through Subject Matter Supervision (SMS) that complements the work of University Coordinators, who may not be certified in the student teacher’s subject matter. Faculty who provide SMS observe each candidate at least twice, write up observation reports, and debrief with student teachers and sometimes host teachers. SMS used to be institutionalized as a component of the BS in Education-Secondary program, but currently support and feedback for student teachers’ pedagogical subject matter knowledge only remains for secondary English candidates, in part due to logistical challenges.

One distinguishing feature of CMU’s teacher education program is that candidates can choose to student teach in a variety of locations. Within the state of Michigan, our student teaching network is comprised of nine centers where candidates can choose to student teach: the Northern Center, Mid Michigan Center, Western Center, Capitol Center, Bay Center, Genesee (County) Center, Metro North, and Metro South in the Detroit area (see Appendix G: CMU Student Teaching Centers, 2013-2014). In addition to student teaching in Michigan, candidates can student teach in other U. S. states and even in other countries around the globe through Global Teaching Experiences.

Another distinguishing feature is the opportunity to teach around the globe (see Appendix E: CMU Global Experiences, 2010-2013). CMU’s global experiences allow students to teach in locations such as England; Ireland; Oaxaca, Mexico; Togo, Australia; and Immokalee, Florida. Students in both the Pre-Student or Student Teaching Experience explore new teaching
environments with diverse populations and unique learning opportunities as they develop their global and cultural competence. Although the particular coursework in these global experiences varies, faculty and students form a tight-knit social community that includes coursework to prepare candidates for teaching in the specific location by studying the site’s culture, history, and school environment. As part of additional coursework, candidates reflect on their experiences in journals, class discussions, and other assignments. The result is an immersive, rigorous global clinical experience in which candidates learn to adapt to different environments and cultural expectations.

Existing Relationships with Schools

CMU has relationships with schools that are configured in various ways: a learning lab, school districts that employ large numbers of CMU graduates, community partnerships, professional development projects, host schools, and a network of charter schools authorized by CMU. These partnerships represent relationships upon which CMU can build in order to establish mutually-beneficial university-school partnerships that could enrich candidates’ clinical experiences (see Appendix F: CMU Relationships with P-12 Schools and Community Partners).

Our recommendations for developing more effective clinical experiences involve capitalizing on CMU’s distinguishing features: global experiences and the state-wide network of Student Teaching Centers. We also recommend leveraging CMU’s existing infrastructure of partnerships with schools that allow us to offer clinical experiences in a variety of settings.

RECOMMENDATIONS

To align with CAEP’s vision for clinical experiences as a critical component of initial teacher preparation, we recommend the following:

17. Align and sequence clinical experiences for vertical coherence
18. Create immersive clinical experiences for horizontal coherence
19. Develop a strategic plan for faculty to guide clinical experiences
20. Maintain duration of clinical experience during student teaching
21. Increase the duration of clinical experience in the B.S. in Education-Secondary Program
22. Offer clinical experiences in a variety of sites and learning environments using culturally responsive and place-based pedagogy

RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Align and Sequence Clinical Experiences for Vertical Coherence

The way exemplary program vertically structure clinical experiences so that candidates gradually take on increasing responsibility for teaching offers insight into how clinical experiences in CMU’s teacher preparation might be vertically structured from year to year to culminate with nearly-full responsibility for the classroom during student teaching. Horizontal coherence is accomplished through assignments that enable candidates to bridge theory and practice, their coursework and clinical experiences.
For instance, at the University of Virginia, teacher candidates’ clinical experiences are vertically structured over four years (see Figure 3: UVA Clinical Work Sequence) (Darling-Hammond, 2006). The sequence begins with observations, then builds to tutoring, then grows to teaching, and culminates in a full year teaching apprenticeship and candidates assume full responsibility for a classroom and engage in an action research project on an issue that emerged in their teaching experience. This kind of research project cultivates candidates’ capacity for identifying and addressing problems of practice and an inquiry-based stance (Cochran-Smith & Lytle, 1991) they are expected to maintain throughout their career.

Figure 3: UVA Clinical Work Sequence

<table>
<thead>
<tr>
<th>Year</th>
<th>Structure of Experience</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Candidates observe with a focus on how schools function as organizations, interview members of the school community to learn about their roles, and assist in various aspects of the school’s operation.</td>
<td>Candidates design course assignments guide students’ observations as candidates “learn how to look” at the work of schooling.</td>
</tr>
<tr>
<td>2</td>
<td>Candidates spend 25-30 hours each semester in a variety of schools focusing on understanding individual learners</td>
<td>Candidates tutor students and then complete a child case study.</td>
</tr>
<tr>
<td>3</td>
<td>Candidates spend two hours per week in the fall and ten consecutive days in the spring studying teaching and learning in a classroom</td>
<td>Candidates observe and analyze practices, designing and implementing lessons, and ultimately create instructional units with the support of subject-specific methods courses.</td>
</tr>
<tr>
<td>4</td>
<td>Candidates engage in a year-long “teaching associateship”</td>
<td>Candidates are supported by a subject matter specific seminar and a seminar that addresses other professional and student-related issues.</td>
</tr>
<tr>
<td>4</td>
<td>Candidates gradually assume increasing responsibility for the classroom</td>
<td>As apprentices, candidates co-plan and co-teach lessons and units</td>
</tr>
<tr>
<td>4</td>
<td>Candidates return to the university</td>
<td>Candidates conduct an action research project on an issue that emerged in their teaching experience</td>
</tr>
</tbody>
</table>
At Trinity College (Darling-Hammond, 2006) “learning how to look” and gradual increase in responsibility is accomplished through carefully scaffolded clinical experiences over five years (see Figure 4: Trinity College Clinical Work Sequence).

Figure 4: Trinity College Clinical Work Sequence

<table>
<thead>
<tr>
<th>Year</th>
<th>Structure of Experience</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Candidates are introduced to Professional Development Schools (PDSs) through site visits</td>
<td>Candidates participate in class discussions</td>
</tr>
<tr>
<td>2</td>
<td>Candidates work in a PDS with a mentor for three hours per week focusing on school organization and roles</td>
<td>Candidates reflect on their knowledge and practice</td>
</tr>
<tr>
<td>3</td>
<td>Candidates focus on their mentors’ practice</td>
<td>Candidates begin observing, then take on one-on-one tutoring, then assume partial responsibility for teaching the class, then work up to full responsibility.</td>
</tr>
<tr>
<td>4</td>
<td>Candidates focus on the student, learn to respond to their needs</td>
<td>Candidates conduct a child case study.</td>
</tr>
<tr>
<td>5</td>
<td>Candidates student teach in a PDS for an entire school-year</td>
<td>Candidates take classes at the school site with mentors, debrief in cohorts, and attend courses at Trinity.</td>
</tr>
</tbody>
</table>

We recommend using curriculum mapping to map out clinical experiences, and we offer the following considerations for structuring the B.S. in Education program’s clinical experiences to strengthen the vertical coherence of CMU’s program:

- Elementary methods courses be structured to include field experiences
- Elementary clinical instruction draws on the principle of integration, which is the nature of elementary teachers’ clinical practice
- Some methods courses be offered at school and district sites
- Secondary subject matter methods faculty develop plans for strengthening the coherence of clinical experiences in the B. S. in Education-Secondary Program

Just as vertical structuring of clinical experiences is important for program coherence, so is horizontal structuring within a semester.

Create Immersive Clinical Experiences for Horizontal Coherence

To truly transform to a clinically-based teacher preparation program, university coursework must be configured around the everyday practice of teaching and learning in the clinical classroom. Creating immersive clinical experiences in which classroom practice serves as the core of teaching and learning achieves horizontal coherence and sufficient depth according to CAEP’s (2013) standards. At the University of Southern Maine (USM), teacher education coursework is structured around the clinical work and is gradually phased in, rather than used to set up, the clinical work (Darling-Hammond, 2006). “Learning how to look” begins with a two week immersion in the school site during which time site teachers guide candidates’ observations and
introductory work with children. University-based course work does not begin until after the two week immersion phase and the teacher education curriculum is aligned with the practices of the school site, such as the site’s assessment practices and reform efforts.

We recommend creating immersive clinical experiences prior to student teaching for the following reasons:

- Immersion in a school site allows for greater integration of theory and practice
- Candidates experience consistency and professionalism in a classroom prior to student teaching
- Increased time in a P-12 classroom will result in more lesson planning and confidence leading a class
- Immersion will allow for gradually increasing responsibility while providing a more realistic teaching experience
- Candidates build rapport with students, teachers, school, and community by spending sufficient time at the site or in the learning environment

As previously noted, aligning university-based coursework and school-based practices requires the university to establish close partnerships with schools. We recommend building on the existing relationships CMU has already established with schools around the projects, programs, and practices described above.

**Develop a Strategic Plan for Faculty to Guide Clinical Experiences**

If CMU is to establish mutually-beneficial partnerships that support immersive clinical experiences, the university needs to provide an infrastructure that affords faculty opportunities to work in the field. One of the most challenging aspects of transforming our teacher education program into a clinically-based program depends on a commitment to “structural, financial, programmatic, and policy changes for all partners and will require a change in policy, practice, and the culture and norms of preparation programs and districts” (NCATE, 2010b).

Notably, at Trinity College the nature of the work done by university-based teacher education faculty has evolved to include more clinical work (Darling-Hammond, 2006). All clinical faculty hold a doctorate and tenure-track positions, but half of their time is spent in their assigned PDS, allowing them to sync professional development with the cooperating teachers’ needs and building credibility and trust by becoming an integral member of the school community. Clinical faculty’s commitment to the university includes teaching courses and conducting research that often focuses on the work of the PDS, and publications resulting from this research are counted toward tenure and promotion.

At the University of Southern Maine, university teacher educators and classroom teachers coordinate teacher candidates’ placements in PDSs (Darling-Hammond, 2006). “Interns” are assigned to multiple sites within a regional school district. Most teacher education courses are held at the school site and are taught by university faculty and school-based teachers and administrators.
Once an infrastructure that allows faculty to devote time and resources to schools and classrooms is created, we offer the following considerations for implementation:

- University faculty should be in the field, resulting in stronger partnerships, increased guidance for candidates, and an enriched program of teaching and research for faculty
- Methods faculty and host teachers guide candidates’ clinical work and learning
- The cohort system be maintained so that methods instructors can “group teach” candidates at school sites

**Maintain Duration of Clinical Experience During Student Teaching**

In light of the emphasis on duration and intensiveness of clinical experiences at exemplary national and noteworthy state programs, we contemplated a full-year internship for student teaching. After deliberation, we are confident in our recommendations to preserve the existing student teaching structure. We further suggest to

- Keep the program an undergraduate degree and offer Certificates in specialized areas
  - Schools are not demanding teachers with master’s degrees, and with new pay structure systems in Michigan, a master’s degree does not result in an increase in compensation
  - Graduate level classes are more costly, so keeping the degree and Certificates at the undergraduate level makes the program more affordable
- Continue to offer 16 weeks of student teaching in one semester
  - The minimum prescribed by the state is 10 weeks. Our extended semester calendar allows us a unique advantage by providing a more extensive student teaching experience than other universities can offer in one semester.
  - Enriching the horizontal coherence of the Pre-Student Teaching experience will effectively yield a full year of an immersive clinical experience that is sufficiently intensive and consistent with the approach of gradually increasing responsibility
- Maintain the state-wide centers and placement network that allows student teachers to student teach across the state
  - CMU is the only university in the state with a state-wide placement program. This lowers the cost for teacher candidates if they move closer to home for their final semester
  - CMU establishes our presence state-wide so that we keep our thumb on the pulse of what’s going on in P-12 education across the state rather than just our limited geographic area
  - CMU expands possibilities for cultivating relationships with multiple school districts so that we can offer a variety of experiences for candidates
- Create Pre-Student Teaching experiences at centers
  - This would allow candidates to move home two semesters prior to graduation
  - CMU is geographically isolated, creating a larger burden on area schools to place students locally
  - CMU offers candidates the opportunity to pre-student and student teach in a region where they intend to seek employment
Increase the Duration of Clinical Experience in the B.S. in Education-Secondary Program

Currently, there is a great disparity between the B.S. in Education-Elementary Program and the Secondary Program: elementary teacher candidates have twice as much clinical experience as secondary candidates. We believe this disparity needs to be remedied, especially because teacher candidates in the B.S. in Education-Secondary Program may not have a Subject Matter Specialist to guide them in student teaching, it is especially important to provide them with a rigorous, immersive pre-student teaching experience where they cultivate their pedagogical content knowledge.

We offer the following considerations for implementation

- Increase opportunities for early field experiences
- Implement the cohort model for the B.S. in Education Secondary Program to create an immersive Pre-Student Teaching experience
- Add guided field experiences to the course EDU 310 Psychological Foundations of Education and other courses
- Reconfigure subject matter methods courses in B.S. in Education majors and minors around immersive field experiences

Offer Clinical Experience in a Variety of Sites and Learning Environments Using Culturally Responsive and Place-Based Pedagogy

Offering clinical experiences in a variety of sites and learning environments could define CMU’s teacher education program, as a premier educator preparation program. What this variety of sites affords for candidates’ learning is that it

- Builds the capacity for candidates to see schools reflectively and comparatively
- Prepares them for working in specific sites with particular populations of students
- Gives them experience in a variety of sites so that they can adapt to new sites they encounter
- Helps them see students who are different from them as people

However, in order to realize this learning, we need to employ a place-based pedagogy that illuminates not only the unique qualities, but also the common features of different kinds of learning environments and school settings.

In line with gradually increasing candidates’ responsibility, we recommend incorporating early field experiences in the following sites:

- Community programs
- Tutoring sites
- After-school programs
- Summer camps
We recommend offering clinical experiences for Pre-Student Teaching in a variety of learning environments:

- In online classrooms or virtual high schools
- In sites of blended learning
- Global experiences abroad
- Global experiences in the U.S.
- In rural schools
- In schools serving large percentages of children on free and reduced lunch
- In urban schools where we have centers, like Lansing and the Detroit area

We also restate our recommendation for immersive clinical experiences. While we realize that not every field site lends itself to fully institutionalized relationships, we recommend considering the feasibility of residency programs, particularly through partnerships with ISDs. Although conceived for urban areas and for graduate students, teacher residency programs have expanded into pre-service teacher education and initial teacher preparation, addressed other high needs geographic areas, targeted groups under-represented in the teaching force, and become more flexible. Examples of this include:

- At the University of North Dakota, the Special Education Resident Teacher Program is designed to attract and retain special education teachers in rural areas.
- The Ready2Teach Residency offered by the University of Memphis focuses on candidates having diverse clinical experiences.
- The New Mexico Land of Enchantment Teacher Quality Partnership prepares teacher candidates to serve schools in rural northern New Mexico.
- Texas A & M offers a Field Residency Pre-Service Teacher Program called Ready from Day One that immerses candidates in a residency program, but affords flexibility for candidates who are unable to fully participate. (U.S. Department of Education, 2010b)

Two of these are worth elaborating. According to the Teacher Preparation and Certification Center (2013) website:

- The New Mexico Land of Enchantment Partnership strategically recruits Native American and Hispanic students who live in rural New Mexico because they are more likely to be retained in the high-need partner school districts. Partnerships with universities serving high percentages of Native American and Hispanic students feed this pipeline of rural teachers.
- Texas A & M’s Field Residency Pre-Service Teacher Program
  - The regular program involves candidates
    - Being assigned to the same district, same campus and same mentor teacher for all three semesters of field residency including student teaching;
    - Learning from a mentor teacher who has been identified as a “best practice” or “master” teacher by the school district;
    - Moving through field residency courses and labs with a cohort of fellow students;
- Being assigned the same University supervisor for all three semesters and
- Attending designated courses in the school district instead of at the TAMU-SA campus.

  o The “Flex Program” involves the following criteria
    - Field-based residency assignments may be different each semester and would expose students to a variety teaching styles;
    - All courses are University based;
    - The University supervisor assigned may be different each semester;
    - A greater number of districts are available for field based placements;
    - Scheduling may have greater flexibility

Such flexibility would be incredibly useful for CMU as a geographically isolated teacher preparation institution and for our students, who have a variety of financial and logistical needs. In addition, such flexibility is vital if clinical experiences are to serve as the base of teacher education around which coursework is configured because configuring this coursework requires the educator preparation program and its faculty to respond to clinical partners’ needs.

**A VISION OF CLINICAL EXPERIENCES STRUCTURED FOR VERTICAL AND HORIZONTAL COHERENCE: POSSIBLE PATHWAYS IN A VARIETY OF LEARNING ENVIRONMENTS**

The following tables are suggestions by the Task Force and represent a vision of what coherently structured clinical experiences might look like (see Table 1: Jason’s Clinical Experience; Table 2: Susan’s Clinical Experience; Table 3: Stephanie’s Clinical Experiences, and Table 4: Sierra’s Clinical Experiences). They include experiences in a variety of settings and learning environments, including urban, rural, global, and technology-based, and illustrate possible pathways to Certificates proposed in this report.
Table 1: “Jason” (From Metro Detroit, Elementary Education Candidate, No Certificate)

<table>
<thead>
<tr>
<th>Gradually Increase Responsibility</th>
<th>Clinical Experience</th>
<th>Linked Coursework</th>
<th>Location</th>
<th>Activities</th>
<th>Clinical Skills</th>
<th>Kinds of partnerships needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Field Experience</td>
<td>EDU 107</td>
<td>Local</td>
<td>Videos of Practice Observations</td>
<td>Learn How to Look Professional Development Schools</td>
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<td></td>
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<tr>
<td>Gradually Increase Responsibility</td>
<td>Child Development</td>
<td>PEAK Program, Mount Pleasant</td>
<td>Child Case Study</td>
<td>Learn How to Look Develop Skills</td>
<td>Community Partnership</td>
<td></td>
</tr>
<tr>
<td>Lab/studio</td>
<td>ART MUS PES HSC</td>
<td>PEAK Program, Mount Pleasant</td>
<td>Art Project</td>
<td>Practice Skills</td>
<td>Community Partnership</td>
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<td>Professional Practicum</td>
<td>Reading Methods I Writing Methods Learning Theories</td>
<td>Clare, MI Rural</td>
<td>Literacy &amp; Language Arts Unit Plan</td>
<td>Learn to Look Development</td>
<td>Host Teacher Network</td>
<td></td>
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<td>Teaching Internship</td>
<td>Reading/Social Studies Methods Math/Science Methods Technology Inclusive Settings</td>
<td>Saginaw, MI Urban</td>
<td>Full School Immersion</td>
<td>Learn to Look Development</td>
<td>Urban Residency</td>
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<tr>
<td>Capstone Teaching Internship</td>
<td>EDU 432 EDU 458</td>
<td>Troy, MI Urban Metro</td>
<td>Full School Immersion</td>
<td>Development Demonstrate</td>
<td>Center Partnership Network</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: “Susan” (From Northern Michigan, Elementary Education Candidate, Science Major)

<table>
<thead>
<tr>
<th>Gradually Increase Responsibility</th>
<th>Clinical Experience</th>
<th>Linked Coursework</th>
<th>Location</th>
<th>Activities</th>
<th>Clinical Skills</th>
<th>Kinds of partnerships needed</th>
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</thead>
<tbody>
<tr>
<td>Introductory Field Experience</td>
<td>EDU 107</td>
<td>Local</td>
<td>Videos of practice Observations</td>
<td>Learn How to Look</td>
<td>Professional Development School</td>
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<tr>
<td>Gradually Increase Responsibility</td>
<td>Child Development</td>
<td>GEMS Center, Super Saturday Volunteer Mount Pleasant</td>
<td>Child Case Study</td>
<td>Learn How to Look Develop Skills</td>
<td>Title II Grant</td>
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<td>Community-based</td>
<td>ART MUS PES HSC</td>
<td>Odyssey Nature Project Shepherd, MI Rural</td>
<td>Lesson Design</td>
<td>Practice Skills</td>
<td>Community Partnership</td>
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<td>Professional Practicum</td>
<td>Reading Methods I Writing Methods Learning Theories</td>
<td>Pullen Mount Pleasant, MI Local: Racial and Ethnic Diversity</td>
<td>Literacy &amp; Language Arts</td>
<td>Learn to Look Development</td>
<td>Host Teacher Network</td>
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<tr>
<td>Teaching Internship</td>
<td>Reading/Social Studies Methods Math/Science Methods Technology Inclusive Settings</td>
<td>Clare Primary Clare, MI Rural</td>
<td>Full School Immersion</td>
<td>Learn to Look Development</td>
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<td>Capstone Teaching Internship</td>
<td>EDU 432 EDU 458</td>
<td>Farwell, MI Rural, Low Income</td>
<td>Full School Immersion</td>
<td>Development Demonstrate</td>
<td>Professional Development School</td>
<td></td>
</tr>
</tbody>
</table>


Table 3: “Stephanie” (From Grosse Pointe, Elementary Education Candidate, Cultural Competency Certificate)

<table>
<thead>
<tr>
<th>Gradually Increase Responsibility</th>
<th>Clinical Experience</th>
<th>Linked Coursework</th>
<th>Location</th>
<th>Activities</th>
<th>Clinical Skills</th>
<th>Kinds of partnerships needed</th>
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</thead>
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<tr>
<td>Introductory Field Experience</td>
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<td>Videos of Practice Observations</td>
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<td>English Language Institute Conversation Partnership Program</td>
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<td>Reflection on Global Cultures</td>
<td>Practice Skills</td>
<td>Cross-university partnership</td>
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<td>Literacy &amp; Language Arts</td>
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<td>Host Teacher Network</td>
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<td>Reading/Social Studies Methods Math/Science Methods Methods Technology Inclusive Settings</td>
<td>CRWP Writing Camp Volunteer</td>
<td>Reflection on Intercultural Communication</td>
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<td>Global Experience</td>
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<td>Capstone Teaching Internship</td>
<td>EDU 107</td>
<td>Dominican Republic</td>
<td></td>
<td>Full School Immersion</td>
<td>Development Demonstrate</td>
<td>Global Experience</td>
</tr>
</tbody>
</table>
### Table 4: “Sierra” (From Holland, MI, Middle Level/Elementary Education Candidate, Online and Blended Learning Certificate)

<table>
<thead>
<tr>
<th>Gradually Increase Responsibility</th>
<th>Clinical Experience</th>
<th>Linked Coursework</th>
<th>Location</th>
<th>Activities</th>
<th>Clinical Skills</th>
<th>Kinds of partnerships needed</th>
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<tbody>
<tr>
<td>Introductory Field Experience</td>
<td>EDU 107</td>
<td>Local</td>
<td>Videos of Practice Observations</td>
<td>Learn How to Look</td>
<td>Professional Development Schools</td>
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<tr>
<td>Gradually Increase Responsibility</td>
<td>Child Development</td>
<td>Local Alternative School</td>
<td>Child Case Study</td>
<td>Learn How to Look Develop Skills</td>
<td>Professional Development Schools</td>
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<td>Lab</td>
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<td>Digital Music Project</td>
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<td>Fancher Elementary with Online Writing Lab</td>
<td>Literacy &amp; Language Arts</td>
<td>Learn to Look Development</td>
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<tr>
<td></td>
<td>Writing Methods</td>
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<td>Reading/Social Studies Methods Math/Science Methods Technology Inclusive Settings</td>
<td>Warren, MI Technology-infused classroom</td>
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SELECTING AND ASSESSING 21st CENTURY TEACHERS

“If you don’t know where you are headed, you’ll probably end up someplace else.”

VISION

Our vision for CMU’s educator preparation program is to continually strive to improve our program through a sustained and evidence-based quality assurance program that evaluates the effectiveness of our candidates and informs our instructional practices.

In what follows, we explain how this vision was derived from relevant standards, practices of exemplary teacher education programs, and emerging knowledge of assessment practices.

CONTEXT

Program Assessment

Program assessment continues to be the central driver in most academic quality assurance programs. Teacher education programs are expected to have clear, measureable learning outcomes established and assessed to demonstrate the effectiveness of their programs to students, parents, and external entities (CAEP, 2013). In order to achieve this, programs need to expand “the knowledge base to identify what works and support continuous improvement” (NCATE, 2010b, p. iv). CAEP outlines clear expectations of an effective continuous improvement plan, including the use of multiple measures (5.1 and 5.2), which include “relevant, verifiable, representative, cumulative and actionable measures, and produces empirical evidence that interpretations of data [that] are valid and consistent” (p. 14).

The recent adoption by the State of Michigan of the Common Core State Standards (CSSS) as well as the new CAEP standards have directed teacher education programs to focus on specific areas within their program for assessment purposes. CAEP suggests that candidates should be assessed more frequently throughout the program as a program measure, but also as a method to help candidates determine if they are indeed a good fit for the teaching profession. At a minimum, candidates should be assessed

- **Before entering the program** based on requirements for higher standards for entering students,
- **During the program** in order to demonstrate competency to continue in program, and at the
- **Completion of the program** in order to show evidence of teaching competence to begin their work as 21st Century educators.

This increase in frequent assessments throughout the program reflects the best practices of exemplary programs (Darling-Hammond, 2006; NCATE, 2010b).
A strong continuous improvement system will also be flexible and robust enough to respond to the rapidly changing nature of teacher education programs and of candidates (Cochran-Smith, 2013). For instance, after adopting the Common Core State Standards (CCSS) in 2012, the state of Michigan was stymied as the governor issued a moratorium on funding allocated to the transition to those standards and to the standards-aligned test, Smarter Balanced. This moratorium halted work on the standards at the state level and created instability in K-12 schools, particularly because according to the state’s new Educator Evaluation systems, teacher’s performance ratings are tied to the results of standardized tests. In 2013 the state reaffirmed their adoption of the CCSS, and the transition moved forward. Yet the instability created by the state’s ambivalence has lingered and according to CMU’s Director of Pre-Student Teaching, several districts are resisting the move the CCSS and electing to develop their own internal assessments upon which to evaluate teachers’ performance.

In the State of California, for example, they have opted to use the Performance Assessment for California Teachers (PACT). This assessment consists of three “teaching event” tasks that are assessed in each of the core content areas (literacy, mathematics, history-social science, and science) taught in elementary schools. Other states have moved in the other direction, opting for shared measures such as the comprehensive evaluation systems offered in the EdTPA program. The EdTPA program uses outside faculty reviewers who assess candidates teaching portfolios as measures of their learning. The edTPA uses a candidate’s portfolio as a preservice assessment process designed by educators to answer the essential question: "Is a new teacher ready for the job?" edTPA includes a review of a teacher candidate's authentic teaching materials as the culmination of a teaching and learning process that documents and demonstrates each candidate's ability to effectively teach his/her subject matter to all students. (edTPA, 2014, http://edtpa.aacte.org/faq#17)

Deciding which direction we will choose and then incorporating the correct measures will be key to the quality of our program.

Selectivity, Admission, and Completion
CAEP (2013) standards have put an increasing emphasis on the selectivity (3.1, 3.2, 3.3), continual evaluation (3.4) and completion (3.5, 3.6) of candidates. CAEP believes that Educator preparation providers (EPP) have a critical responsibility to ensure the quality of their candidates. This responsibility continues from purposeful recruitment that helps fulfill the provider’s mission to admissions selectivity that builds an able and diverse pool of candidates, through monitoring of candidate progress and providing necessary support, to demonstrating that candidates are proficient at completion and that they are selected for employment opportunities that are available in areas served by the provider. (CAEP, 2013, p. 10).

As discussed in the CAEP standards, the increased focus on selectivity factors is in direct response to the low success teacher preparation programs have had in recruiting and retaining minority teachers who share the same racial, ethnic, and cultural backgrounds of diverse students (Gay, Dingus, & Jackson, 2003; Morrell, 2010). Students of color now represent 40% of the pre-K-12 population, while their teachers represent only 17% (Boser, 2011). In addition, the majority of school districts in the United States and in Michigan are rural. Rural schools face a number of
additional challenges including the recruitment and retention of quality teachers and a student population with high poverty (Allen & Malloy, 2007; Bryant, 2006; Green & Reid, 2004).

CAEP also suggests that selectivity criteria include dispositions that may indicate more successful teachers, such as those identified in the InTASC standards. Dispositions have been shown to have an effect on teaching style (Heimlich & Norland, 2002) and group interactions like those that occur between “teachers and students, between teachers and administrators, and between teachers within schools” (Wadlington & Wadlington, 2011, p. 325). In addition a candidates’ awareness of their dispositions can help them discover where they might be most effective in the teaching profession “(e.g., grade level fit, content specialist vs. generalist, regular vs. special education)” (Wadlington & Wadlington, 2011, p. 325; Sears & Kennedy, 2001). Candidates who are aware of their own dispositions are also more likely to be successful in diverse teaching positions and less likely to burn out (Kokkinos, 2007; Thornton, Peltier, & Hill, 2005).

The increased focus on admission standards is a response to attract more academically successful students into the teacher education field. This standard is based mostly on public consensus and some research (Ball, Hill, & Rowan, 2005; Floden & Maniketti, 2005; Wayne & Young, 2003; Whitehurst, 2002, cited in CAEP, 2013), that concludes high achieving candidates make more effective teachers. Standards such as these, however, have received criticism (Rose, 2013), because they actually work to exclude the diverse student populations we are trying to attract. Rose (2013) cautions that often the most passionate teachers come from low socio-economic backgrounds and may not have had the support in or outside of school to help them be academically successful; yet, he argues, these passionate teacher may be the most effective at teaching in high poverty areas. Raising standards to only include academically successful students might exclude exactly the type of candidates we are trying to attract.

CMU Current Practices
The CLeaR Conceptual Framework provides the program goals and outcomes for the overall direction and assessment of the CMU teacher education program (see Appendix D: CLeaR Conceptual Framework and Outcomes). The PEU has mapped the CAEP and InTASC standards to this framework and has a variety of program assessments to evaluate candidates along these standards.

Before entering program candidates must complete the Teacher Education Program Admission Checklist & Criteria (see Appendix Q: CMU Teacher Education Program Admission Checklist & Criteria) that outlines the current admission requirements at CMU and serves as the selection criteria for entering the program. The checklist includes:

- Completion of the Technical Standards Form
- Professional Readiness Exam #096 (Michigan Basic Skills Test)
- 45-hour Pre-Professional Experience
- 45 credits completed at the university level
- Completion of EDU 107
- Completion of ENG 101 or equivalent; completion of oral English and Mathematics competencies
• Minimum grade point average of 2.7
• Transcripts
• Confirmed admission on Student Information Sheet

In addition, the PEU has developed a set of professional dispositions that mirror the goals and outcomes defined in the CLeaR Conceptual Framework (see Appendix R: PEU Professional Dispositions). A process is also in place to help identify and support teacher education candidates who exhibit signs of consistently not meeting one or more of the dispositions.

During the program, candidate progress is assessed mainly through coursework. However, the Common Rubric for a Lesson Plan is currently in development and the validity of this tool is being determined before implementation throughout the PEU. The Common Rubric for a Lesson Plan is used to broadly measure student lesson plans and generate data on the extent teacher education candidates across the B.S. in Education can convert knowledge into compelling lessons for a wide range of pupils.

At the completion of the program many assessment tools are employed, including the

• **Michigan Test for Teacher Certification**: Licensure exam for teacher education graduates taken after completion of 90% of coursework. The purpose of the tests is to ensure that each certified teacher has the necessary professional readiness and content knowledge to serve in Michigan schools.
• **Michigan Department of Education Teacher Exit Survey**: Survey administered by the Michigan Department of Education. Filled out by exiting student teachers every semester.
• **Student Teaching Final Evaluation**: Rubric filled out by K12 host teachers on the performance of CMU’s student teachers.
• **Alumni Survey**: Surveys sent to one and three year out graduates asking questions about their teacher education preparation at CMU.
• **Principal Survey**: Surveys sent to Principals supervising one-year out graduates asking questions about CMU’s teacher education graduates.
• **Student Teaching Final Evaluations**: Rubric filled out by K12 host teachers on the performance of CMU’s student teachers.

In lieu of the changes to the CAEP standards, we will need to adjust and tighten our assessment program. For example, before admission, students are required to have 45 pre-profession hours of observation documented in a classroom; but we have no assessment or objectives for this, so we don’t know how this experience affects the students. In addition, we will need more data, analysis, and feedback on candidate growth over time and after exposure to diverse settings in order to meet the revised program outcomes that have been recommended in this report and to provide essential data to candidates to help them become truly reflective practitioners. Overall, the assessment plan should align with CAEP standards and evaluate and report on the assessment competencies of all students with respect to specific benchmarks of performance from entry to three years post degree. Such a plan can bring some greatly needed consistency to the content and methods of instruction and assessment among teacher education courses, provide students with valuable feedback regarding their understandings and skills related to assessment,
and provide faculty and administration with important data regarding the abilities and learning of students and the effectiveness of the teacher education program.

RECOMMENDATIONS

The following recommendations underscore the need for a more comprehensive approach to identifying and collecting data throughout the candidates’ experience in the educator preparation program. In addition to assessing student learning in our program, the data gathered can be used to inform instructional practice as well as guide and support candidates seeking to become teachers.

23. Develop and institute a program-wide assessment plan that includes a more comprehensive approach to assessing teacher candidates prior to entry into the program, during the program, and upon completion of the program

24. Create a “Pre-ED” experience that supports teacher candidates prior to entry into the program

RATIONALE FOR RECOMMENDATIONS AND CONSIDERATIONS FOR IMPLEMENTATION

Develop and Institute a Program-wide Assessment Plan

Key to enhancing program assessment is the ability to create a continuous improvement loop, building on the connection between newly revised program outcomes; increasing the use of formative assessments throughout the program; adjusting summative assessments for selectivity, admission, and completion; and using the data to drive instruction and advising of candidates in the program. Assessment tools and measures must be expanded to help us develop effective instructional practices and make programmatic decisions as well as to provide constructive feedback to our candidates to help them assess whether or not they are a good fit for the program at the beginning, middle, and completion of our program.

Update the CLeaR Conceptual Framework to include new knowledge areas.

In addition to aligning our program outcomes with the Common Core State Standards, we need to identify and review other key standards and guidelines such as CAEP, InTASC, cultural and diversity competencies, professional dispositions, the needs of 21st Century Learners, and other discipline specific standards such as NET*S. In this way, as we refocus our program and identify our niche, we are able to design the program with a comprehensive, systematic set of assessments that will inform our instruction and the direction of our program.

Include a more comprehensive approach to the use of formative and summative assessment measures before the beginning, during the continuation, and at the completion of the program.

Before the Program

We offer the following input on how to expand recruitment strategies and increase the number of prospective teachers from underrepresented groups. To start, we need to further define what we
mean when we talk about attracting diverse candidates as discussed in the Preparing Teachers for Globalization, Local Responsiveness, Diversity, and Inclusion section of this report. Based on our understanding of the type of student we are trying to attract, we can

- Develop a plan for recruitment of high quality teacher education candidates that includes:
  - Recruitment of students who represent more diversity of experiences
  - Recruitment of CMU Honors students
  - Recruitment of undecided students already at CMU

CMU signed an articulation agreement with the Michigan Department of Education’s Office of Career and Technical Education to recruit graduates of vocational programs in teacher education throughout Michigan (CMU Media Channel, 2014a). By completing the high school Career and Technical Education program, high school graduates can earn course credit for EDU 107 Introduction to Education. This articulation agreement represents the kind of innovative recruiting and outreach CMU in which CMU should engage.

During the Program
A growing number of education preparation programs and professional organizations (NCATE, AACTE) are moving toward the use of performance-based portfolios as assessments of candidates learning and as a way to help candidates assess their own performance and become truly reflective practitioners (Boyd, Grossman, Lankford, Loeb, & Wyckoff; Darling-Hammond, 2006). We have already made great strides in this area with the implementation of the ePortfolio. The ePortfolio is used by candidates to document their growth and performance in a wide variety of areas related to becoming a professional educator. This portfolio serves purposes related to the assessment of each candidate’s professional practice [knowledge, skills, and dispositions] and to provide a professional portfolio for a candidate’s job search (Teacher Education Student Handbook, 2009, p. 39).

Training is offered throughout each term to help students learn the ePortfolio technology.

The ePortfolio will need to be modified in response to new developments in the assessment of P-12 teachers and teacher candidates. For instance, it will be important to align the ePortfolio with the Michigan Educator Evaluation system that will evaluate practicing teachers (Michigan Council for Educator Effectiveness, 2014). In addition, we anticipate the need to consider the comprehensive evaluation systems for teacher candidates other states are using like edTPA (edTPA, 2014). The logic of edTPA could be easily incorporated into the existing ePortfolio process. Building on our expertise in portfolio development, we could also offer technical support to help teachers prepare their Evidence Binders, possibly using the Mahara platform, enhancing our mutually-beneficial partnerships.

At the Completion of the Program
CAEP outlines new completion criteria that should be folded into the existing assessment toolbox. These tools will need to take into context the ever-changing standards imposed by the State of Michigan on the ultimate evaluation of teachers in practice, particularly the tying of their student learning outcomes back to an assessment of their educator preparation program.
Create a PRE-ED Experience

In order to attract and retain viable teacher candidates before they formally enter the program, we could consider creating a “PRE-ED” tract much like the PRE-MED tract. This type of designation would help candidates identify earlier with the program as well provide them with a support system to develop their interest and skills in teaching before they officially enter the program. Elements of this experience would include:

- Expanding advising practices to include
  - opportunities and value of teaching as a profession
  - greater consistency of advising information given the transformed program and new opportunities, such as the Immersion Program (Residency)
  - Streamlined advising process in order to connect students with academic advising in teacher education earlier in their program and to collaborate with content area faculty in the advising process
  - Implement feedback systems and critical points of progress to help faculty and candidates who struggle to meet requirements. Identify and create support systems to help students overcome their challenges.

- Identifying those professional education courses that could also be offered earlier, and identify them as part of the PRE-ED Experience.

- Advocating for the revision of specific general education courses to provide applicants with the requisite reading, writing, and math skills required for entry and success in the program and profession, and identify them as being part of the PRE-ED Experience.
CONCLUSION

“You must be the change you wish to see in the world”
Mahatma Gandhi

Although we are nearly 15 years into the 21st Century, the novelty of the knowledge, skills, and literacies required to succeed in a global environment are enduring. Since September 2013, we have made considerable progress in articulating a vision of a 21st Century educator preparation program for CMU to embrace this new environment, per our charge. We have

- Consulted relevant standards that are shaping 21st Century educator preparation
- Considered developments in P-12 education, the nature of learning, and the world
- Identifying best practices in the initial preparation of teachers by examining the practices of exemplary programs
- Inventoried the distinguishing characteristics and areas for improvement of CMU’s current teacher education program
- Focused on how to maintain a high quality program within the shifting context of the 21st century
- Deliberated how to streamline the program in order to make it more efficient

This work yielded our vision of Central Michigan University’s educator preparation program:

CMU’s Education Preparation Program will be a 4.5 year, coherent, efficient, technology saturated clinically-based program committed to diversity, inclusion, and data-driven decision-making.

GRASPING THE VISION

In order for our vision to be realized, we must first create a shared understanding about our role as an educator preparation program and the purposeful selection of students to maintain our history of access. This vision requires building on our current program’s distinguishing features, such as the CLeaR Conceptual Framework, the Global Experiences in Education, our existing relationships with P-12 schools and community partners, our statewide network of Student Teaching Centers, and our ePortfolio as well as implementing our recommendations.

Recommended revisions to our program include streamlining and aligning curriculum and coursework, greater infusion of diversity issue and technology across the curriculum, and tighter coherence throughout the program. Innovative additions to our program will include Clinical Immersion Programs (Residencies), Certificates in competency areas, unprecedented faculty collaboration and development, a PRE-ED track to attract and retain quality candidates, and an increase in assessment-driven decision-making to guide teacher candidates and ourselves as teacher educators in being truly reflective practitioners.

We look forward to engaging in conversations with our colleagues and discovering additional
Conclusion

Ongoing efforts to improve our program. Implementation of these recommendations will challenge all of us to step out of our comfort zones and rethink how we currently operate. It will require reallocation of resources, making hard choices about our curriculum, building partnerships, developing a new support system for students, developing ourselves professionally, and building flexibility into administrative policies and procedures. We will need to transform and strengthen our own knowledge, literacies, skills, competencies and ways of working. We need to examine how best to support our faculty and administrators as they take on this incredible challenge. New incentives, funding models, organizational structures and professional development must be considered.

We need to work closely with our partners and communities to discover what needs they and their students will need in the future. We need to further investigate and research current trends in education, including the increased need for assessment and technology and acknowledge the changes in learning and the student population that will continue to transform the face of education in the future. As we move toward a clinically based program committed to data driven instructional decision-making, we will need to consider the role teacher inquiry, collaborative research, and action research can play in enriching our practice as clinical teacher educators and the practices of teachers in P-12 schools, including teachers who are clinical educators.

More specifically, exemplary programs support and invest in research conducted by clinical faculty (Darling-Hammond, 2006), and calls for “consequential” research that is relevant to practice are increasing (Gutierrez & Penuel, 2014). Such research focuses on persistent problems of practice experienced in P-12 schools and is understood as rigorous by its consequences, that is, whether and how the findings inform the decisions and work of local educators who sustain programs and practices of P-12 schools (Gutierrez & Penuel, 2014). This shift in focus to consequential research that emphasizes relevance to practice could not come at a more opportune time for our educator preparation institution as more research is needed in the areas of global teaching experiences, rural education, technology, assessment, and teaching and learning in online and blended learning environments.

The time has come not only to consider these changes, but to act on them: to transport our program into the 21st Century. Throughout the country, educator preparation programs have been criticized and held to increasingly higher standards. As experts in this area, it is our role to step up and help our community members, policy makers, students and other stakeholders understand the components that make an excellent educator preparation program, and we must use data and research to guide our decisions concerning implementation of this vision. To this end we offer some thoughts on implementation.

IMPLEMENTING THE VISION

While we have generated considerable momentum in defining a vision, we understand that the transformation of an entire program that affects so many faculty, departments, and colleges must be undertaken in a systematic, strategic manner. Implementing the vision, however, requires a comprehensive strategic plan, extending the conversations begun at the 2023 Teacher Preparation Summit, and
1. **DEVELOP STRATEGIC PLAN**: This plan should include an outline for how the Professional Education Unit’s existing infrastructure can support this work, changes in culture and infrastructure that will be required to implement the vision, a clear timeline, and a request for resources that will enable success. Developing this strategic plan will require further research and feasibility studies to vet the recommendations, identification of leaders, identification of resources, and creating a realistic timeline for completion.

2. **EXTEND THE CONVERSATION**: A crucial step for securing buy-in and support from stakeholders will entail conversation and collaboration to create a shared identity for the program based on the vision in the report, a vision of the teacher candidate we want to attract, identification of new knowledge areas, key features of the existing program, and updating the CLear Framework, which provides structure, coherence, and guidance to program design.

3. **DOCUMENT THE PROGRAM.** Making changes to the curriculum or to individual courses must be done in a systematic way to reflect the outcomes of the program. We need to map the entire program including program outcomes, standards, and new knowledge including diversity, technology and assessment and share this information with all stakeholders.

Once these key steps have been taken then work can begin to truly transform the program, including

4. **CURRICULUM REVISION.** Revise/create courses and support systems based on above knowledge. Create and implement new partnership models. Coordinate recruitment and advising to support PRE-ED designation

5. **PROFESSIONAL DEVELOPMENT.** Implement a thoughtfully designed professional development series to support the research needed to support a clinically-based program. Work with the EHS Faculty Mentoring Taskforce to develop a plan for all faculty to have experiences in the field and pursue lines of inquiry that will enrich their preparation of teacher candidates.

6. **ASSESSMENT.** Throughout the planning and implementation of the program assessment must be integrated. To become truly reflective practitioners and model appropriate behaviors, we need to continually reflect on what it means to be internally driven to provide a quality educational experience versus designing or assessing a program based on external factors and influences.

Lastly, given our time constraints and resources, we were unable to provide more recommendations on certain aspects of our program such as the B.S. in Education-Secondary Program or the B.S. in Education-Special Education Program. Although both areas will benefit from the recommendations offered in this report, more research could be done to further strengthen these programs. We also did not pursue an investigation into alternative routes for
certification because the vision and transformation of our historic role as an initial teacher education program was our greatest priority.

While we believe it would be impossible to envision what teaching and learning would look in 2023, we are committed to designing a program that can respond to the evolving nature of the political context, technological innovations, and the needs of the local community, while maintaining our commitment to promoting access to educational opportunities. We believe that in order to prepare teachers as leaders, we first need to assume a role of leadership as a premiere educator preparation institution within the state of Michigan and the nation by designing a coherent, efficient, technology-saturated, clinically-based program committed to diversity, inclusion, and data-driven decision-making.
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APPENDIX A

2023 Teacher Preparation Taskforce Members

Task Force Co-Chairs
Larry Corbett, Teacher Education and Professional Development, Chairperson
Denny St. John, Mathematics, Faculty Member

Task Force Members
Gary Arbogast, Physical Education and Sport, Faculty Member
Shane Cavanaugh, Teacher Education and Professional Development, Faculty Member
Kevin Cunningham, Teacher Education and Professional Development, Faculty Member
Kyle Dishaw, Student Representative
Amy Ford, English, Faculty Member
Megan Goodwin, Human Environmental Studies, Chairperson
Tim Hall, College of Humanities and Social and Behavioral Sciences, Associate Dean
Ren Hullender, Art and Design, Faculty Member
Barbara Klocko, Educational Leadership, Faculty Member
Renee Papelian, EHS Center for Student Services, Director of Professional Education Unit
John Scheide, Biology, Faculty Member
Jordan Shurr, Counseling and Special Education, Faculty Member
Dan Steele, School of Music, Faculty Member
APPENDIX B

2023 Teacher Preparation Taskforce Charge

Date: 9/19/2013
To: The Members of the 2023 Teacher Preparation Taskforce
From: Dale-Elizabeth Pehrsson, Professor and Dean, CEHS, Head, CMU Professional Education Unit
Re: 2023 Teacher Preparation Taskforce Charge

The Education Profession is changing. The need for current teachers to update their practices is evolving at warp speed. Traditional practices of preparing teacher educators are being challenged and there is good reason to believe that changes are indeed necessary. Best practices of today are not best practices of yesteryears and the best practices of today will not be best practices in future years. Change is a constant, the new normal. Our teacher preparation programs need to be examined and updated. Let us envisage the future (to the year 2023) of this profession and, based on our present strengths, make changes that are consistent with current research and best practices as evidenced by exemplary programs.

Charge:
Therefore the charge of the 2023 Teacher Preparation Task Force (2023 TPT) is to examine best practices in the initial preparation of educators who will work within the P-14 settings in the years 2014, 2017, 2023 and beyond. Further, we must maintain the highest quality and we must do it in efficient ways while reducing student debt and time to graduation.

This task force will examine research, trends and exemplary programs with a perspective toward the future and that meet international, national (AACTE, NCATE, TEAC, CAEP, ATE, NEA and other appropriate leadership groups), regional, state (MDE) and CMU mission priorities.

The 2023 TPT will examine the role CMU plays in developing future teachers as leaders and suggest seamless pathways that promote continuous professional development beyond initial preparation for entry into practice.

I recognize this is a demanding task and a formidable challenge but we have the expertise and the energy to meet these demands. To this end, the task force will have a budget to conduct this investigation. The task force has deadlines and meeting these deadlines is critical.

Outcomes:
1. The 2023 TPT will present its recommendations to the CEHS dean/PEU head and the PEU leaders by Friday, February 14, 2014.
2. The 2023 TPT will present its findings in the form of a public forum, held Friday, February 21, 2014. All PEU faculty and staff, students and invested stakeholders will be invited to attend.
3. The 2023 TPT will make recommendations for curricular changes, for degree changes and/or for new degrees, programs and/or units.
4. The CEHS dean/PEU head will use these recommendations to establish an implementation taskforce to put these recommendations into action.
APPENDIX C

What is the Professional Education Unit? Information Flyer

The Professional Education Unit is an entity comprised of faculty and staff who apply time and resources to oversee aspects of professional education programs. The PEU is recognized by Central Michigan University as one of the many components in the university structure.

How is the PEU relevant to me?
If you are a tenured or tenure-track faculty in an educator preparation program, you are part of the PEU. The PEU faculty meet at least once each semester for information sharing, discussion of current educational issues, and consideration of future directions of the education program.

How does the PEU work?
The professional education program is a planned sequence of courses and experiences for the purpose of preparing teachers and other school professionals to work in pre-kindergarten through twelfth-grade settings. Programs may lead to a degree, a recommendation for a state license, both, or neither. Professional Education Unit courses are defined as courses that are taken exclusively to prepare PK-12 practitioners.

How big is the PEU?
The PEU reaches far across campus and includes working relationships with 5 colleges and more than 20 departments. The PEU graduates more than 500 candidates annually in more than 40 undergraduate and graduate areas of concentration and utilizes more than 250 full and part-time faculty.

CMU Academic Senate Appointed Governance Structure for Educator Preparation

Each has a determined charge and structure. Each has a chair and chair-elect who then serve on PEEB. PEEB and CPPC are not recognized as Academic Senate Committees.
Conclusion

PEEB: Professional Education Executive Board
This board consists of the chairperson and the chairperson-elect of PEAC, PECC, CPPC, and PESAR. The Unit Head (EHS Dean) serves as the chairperson of the PEEB. Decisions or recommendations of the four committees that require additional approval are forwarded to the PEEB. After consultation with the PEEB, the Unit Head either agrees or does not agree with the decision or recommendation of a committee and then forwards it to the appropriate body for action.

PEAC: Professional Education Assessment Committee
This committee provides leadership and guidance in the evaluation of professional education undergraduate and graduate programs to ensure their compliance with standards of the Michigan Department of Education and Council for the Accreditation of Educator Preparation (CAEP). PEAC considers other issues including development and monitoring of the professional education program assessment system, advising the Unit Head on the reappointment of professional education faculty, and evaluate the criteria for appointment to professional education faculty status.

PECC: Professional Education Curriculum Committee
The Professional Education Curriculum Committee coordinates, reviews, and makes recommendations on curricular issues in Central Michigan University’s educational personnel preparation programs.

CPPC: Clinical Partnership and Practice Committee
(replacing the PK-16 partnership committee)
Established in October 2013, the CPPC is not a Senate Committee. The charge of the CPPC is to develop an overall facilitating document linking Central Michigan University’s (CMU) Bachelor of Science in Education degree program with partnering PK-12 schools which will guide decisions for the fulfillment and achievement of the standards for educator preparation as outlined by CAEP.

PESAR: Professional Education Selection, Admission, & Retention Committee
This committee recommends to the Senate, through PEEB, requirements, criteria, and procedures for selection, admission, and retention of professional education students. PESAR considers issues including diversity within the program, disciplinary needs, guidelines and procedures for dismissals from the program, and appeals and grievances regarding selection, admission and retention issues.

Need more information?
Visit the PEU web page at www.cmich.edu/colleges/ehs/unit/peu

Professional Education Unit Organization Chart
A pictorial view of the quality control system for the educator preparation degree programs.
Central Michigan University’s professional education programs are designed to provide students with a conceptual framework of professional practice that is concept- and knowledge-driven, learner-centered, and promotes reflective practice in diverse settings and roles. The programs also prepare students to establish a professional practice based on the conceptual framework and guided reflection and inquiry. A professional practice that is truly concept- and knowledge-driven, learner-centered, and relevant to diverse settings and roles is not readily acquired. Rather it must be developed and refined through reflection and inquiry over a lifetime. The professional education programs become the foundation for a professional career that will continue to evolve and mature.

**Tenet #1: Concept and Knowledge Driven**
A professional educational practice that is concept- and knowledge-driven has, as its foundation, content knowledge. This knowledge base is acquired through serious study and developed through research.

**Subject Matter outcome**
Demonstrate the integration of central concepts, principles, and processes of inquiry and structures of the discipline.

**Professionalism outcome**
Demonstrate competencies in the professional roles in which they plan to practice.

**Assessment outcome**
Evaluate the central concepts, principles and processes of inquiry and structure of the discipline that actually occur as a result of instructional efforts.

**Pedagogy outcome**
Design and implement instruction that demonstrates central concepts, principles and processes of inquiry and structures of the discipline.

**Technology outcome**
Use various technologies appropriate to content and context of the learning environment.

**Diversity outcome**
Accept and respect all individual differences.
Tenet #2: Learner - centered
A professional educational practice that is learner-centered focuses on the cognitive, affective, and physical needs and characteristics of each learner. It is based on the belief that all learners grow and develop throughout life and that all students can learn.

Subject Matter outcome
Demonstrate an understanding of individual differences in learning abilities and needs.

Professionalism outcome
Demonstrate the understanding that those who teach must be committed to learning from and with their students and colleagues.

Assessment outcome
Assess the relationship between instruction and student learning and adopt assessment practices that result in meaningful feedback and student accountability for learning.

Pedagogy outcome
Plan, structure, and implement effective instruction.

Technology outcome
Use various technologies that reflect an understanding of the cognitive, affective and physical needs and characteristics of each learner.

Diversity outcome
Design and deliver instruction to a diverse population of learners.

Tenet #3: Reflective practice in diverse roles and settings
Educators will work in diverse settings—from the large, urban high school to the small, rural school. Communities and schools are comprised of diverse people from a wide variety of cultural, ethnic, racial, and socioeconomic backgrounds. Best educational practice requires recognition of provisions for these differences.

Subject Matter outcome
Demonstrate understanding of reflective practices and diverse roles of an educator.

Professionalism outcome
Contribute to the good of the profession and engage in other roles related to education.

Assessment outcome
Demonstrate that curriculum and assessment are interrelated and that assessment must inform curricula and instructional decision-making if the learner is to be successful.

Pedagogy outcome
Develop positive school climates that reflect openness, mutual respect.

Technology outcome
Support, and encourage inquiry by using various technologies.

Diversity outcome
Open and appreciative of a wide variety of perspectives and ideas.
### APPENDIX E

#### CMU Global Field Experiences, 2010-2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Experience</th>
<th>Type of Experience</th>
<th>Number of Students</th>
<th>Courses</th>
<th>Gen Ed Equivalent</th>
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<tbody>
<tr>
<td>Fall 2013</td>
<td>Dominican Republic</td>
<td>Student Teaching</td>
<td>6</td>
<td>EDU 432 &amp; 458</td>
<td>None</td>
</tr>
<tr>
<td>Summer 2013</td>
<td>England</td>
<td>Pre-Student Teaching</td>
<td>14</td>
<td>EDU 361, 345 &amp; 433</td>
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<tr>
<td>Summer 2013</td>
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<td>11</td>
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<td>Spring 2013</td>
<td>Florida</td>
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<td>8</td>
<td>EDU 432 &amp; 458</td>
<td>None</td>
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<tr>
<td>Fall 2012</td>
<td>Dominican Republic</td>
<td>Student Teaching</td>
<td>8</td>
<td>EDU 432 &amp; 458</td>
<td>None</td>
</tr>
<tr>
<td>Summer 2012</td>
<td>England</td>
<td>Pre-Student Teaching</td>
<td>15</td>
<td>EDU 361, 345 &amp; 433</td>
<td>None</td>
</tr>
<tr>
<td>Summer 2012</td>
<td>Mexico</td>
<td>Pre-Student Teaching</td>
<td>13</td>
<td>EDU 361, 431 &amp; 433</td>
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<td>10</td>
<td>EDU 432 &amp; 458</td>
<td>None</td>
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<tr>
<td>Spring 2012</td>
<td>Florida</td>
<td>Student Teaching</td>
<td>9</td>
<td>EDU 432 &amp; 458</td>
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<tr>
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<td>8</td>
<td>EDU 432 &amp; 458</td>
<td>None</td>
</tr>
<tr>
<td>Summer 2011</td>
<td>England</td>
<td>Pre-Student Teaching</td>
<td>18</td>
<td>EDU 361, 345 &amp; 433</td>
<td>None</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>Australia</td>
<td>Student Teaching</td>
<td>14</td>
<td>EDU 432 &amp; 458</td>
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</tr>
</tbody>
</table>

EDU 433 is in the curriculum process to be the General Education equivalent to IVB.
APPENDIX F
CMU Relationships with Schools and Community Partnerships

A Learning Lab. The Early Childhood Learning Laboratory that is part of CMU’s Early Childhood Development Program is an example of a traditional lab school, and its practices are rooted in the program’s philosophy drawn from the Reggio approach to child development.

Partnership Schools. Given that the Mount Pleasant Public Schools employ a considerable number of CMU graduates, they have the potential to become partnership schools if we strengthened our professional development relationship to sustain candidates’ practice in alignment with our philosophy of teaching and learning.

Other Relationships

Title II Quality Grants

Project WRITE (Writing, Reading, Inquiry and Technology Education). Begun in October 2007, forty teachers have formed a learning community to closely examine student work with the intent of identifying pedagogies and materials that improve adolescent literacy and thoughtful integration of technology. Through professional development that models best practices in English language arts as well as uses of the read/write web such as blogs, wikis, and podcasts, our project-in-process takes an inquiry-based approach to teaching adolescent literacy that, we believe, can lead to greater literacy gains. This inquiry- and project-based, community-specific project is supported by a Title II professional development grant from the Michigan Department of Education. This project is orchestrated by Dr. Troy Hicks (Department of English Language & Literature) and colleagues in the Language and Literature Department and Teacher Education & Professional Development.

Michigan Geographic Alliance. These projects combine the resources of Central Michigan University, the Michigan Geographic Alliance, the Northern Michigan Consortium, and various high poverty school districts to help individual teachers improve social studies teaching by providing a range of services including support for parental involvement, targeted professional development, intensive teacher-training institutions, mentoring, and new technology-based instructional support. School districts include those in the Macomb, Newaygo, Muskegon, and Wayne Intermediate School Districts. These projects are co-directed by Michael Libbee (Geography) and Jennifer Wirz (Counseling & Special Education).

Integrating Technology, Engineering and Math Skills Into K-8 Science. This project involves 26 new and continuing, elementary and middle school teachers drawn from 10 Central Michigan schools. Participants attend workshops that focus on developing and assessing specific scientific/inquiry skills while integrating technology, engineering, and math skills into elementary science lessons tied to Michigan’s Grade Level Content Expectations and the Next Generation Science Standards. Project faculty and an instructional coach will be assist and guide teachers in their ongoing professional development. The project co-Directors are Kevin Cunningham, Ph.D. (Teacher Education & Professional Development) and Chris Tycner, Ph.D. (Physics). This project is an extension of an earlier project, Helping Elementary Students
Understand Physical Science Through Inquiry.

**GEMS Center Odyssey Nature Project.** Through a partnership between the GEMS Center and Odyssey School, an alternative middle school and high school in the Shepherd School District, CMU teacher candidates and outdoor education majors work with Odyssey students to conduct environmental education programs for visiting elementary students. Together, they create lesson plans and activity books for students who come for interpretative walks on the extensive trail system of the Odyssey Nature Project (ONP).

**PEAK.** PEAK allows candidates to volunteer or be employed in after-school programs serving K-12 students in Mount Pleasant. CMU has partnered with PEAK to provide candidates with real teaching experiences. For instance, as part of their ART 345 course, candidates have taught art lessons under the supervision of Dr. Ren Hullender.

**Chippewa River Writing Project (CRWP).** The CRWP is a site of the National Writing Project. The goal of the CRWP is to improve the teaching and learning of writing in Michigan’s schools and local communities by connecting CMU faculty and local teachers through outreach activities and professional development. The CRWP is co-directed by Drs. Troy Hicks and Elizabeth Brockman in the English Language & Literature Department.

**Classroom Connect.** This program brings CMU teacher education faculty together with local teachers for mutual professional development. The first university-local school partnership was forged with Marianne Smith, 4th grade teacher at Mary McGuire Elementary School, and Dr. Elizabeth VanDeusen-MacLeod, Assistant Professor in Teacher Education and Professional Development at CMU. This program is overseen by CMU Director of Professional Education Renee Papelian in partnership with local principals.

**Middle Level Program Host Schools.** Host teachers for student teachers in the middle-level program are hand selected by the Coordinator of the Middle Level Program, and careful attention is paid to placing candidates in middle schools that exemplify team teaching, which is considered a best practice in middle level education.

**ENG 315 Writing Methods Host Teacher Network.** Host teachers for candidates in the elementary education program are hand-selected by ENG 315 faculty. Relationships have been established over years, and there is considerable alignment between the pedagogies employed by host teachers and ENG 315 coursework. The course is a 4 credit course, and over the semester, candidates are placed in local teachers’ classrooms for 20 hours during writing time 2-3 times per week for 45 minutes – 1 hour each time. Teacher candidates complete reflective field journals, student work analyses, and lessons designed in response to students’ needs.

**Digital Writing Classrooms.** At least two host teachers in the English Education network offer candidates experiences in digital writing labs. When digital writing labs operate with writing workshop model, the pedagogy resembles blended learning whereby class time is spent in a workshop in which direct instruction is minimized and augmented with homework. This version of blended learning involves in one case, a high school English “paperless writing workshop” that is conducted entirely on Google Docs but in a face-to-face setting, and in the second case, a
6th grade writing workshop enhanced by EdModo, an interactive course module with a Facebook-like interface.

**Charter Schools.** “CMU is a state and national leader in charter school authorizing, with 19 years of experience launching, supporting and overseeing charter public schools. CMU currently authorizes 64 schools serving nearly 30,000 students in the state.” The Pre-Student Teaching Office has been building relationships with CMU’s charter network and has established partnerships with North Saginaw Charter Academy and West Michigan Environmental Academy so that candidates are placed in urban settings for field experiences.

**Lunch Buddies.** CMU Volunteer office has overseen the Lunch Buddies program and helped to recruit and match teacher candidates as well as other CMU students to mentor Mount Pleasant students during lunchtime. Many of the education-based Registered Student Organizations (RSOs) promote the Lunch Buddies program as a way to gain volunteer points.

**Upward Bound.** Since 2012, we have partnered with the Detroit based Upward Bound program to identify high school students, all of whom are from racially under-represented groups, with interest in pursuing a college career. Eighteen Upward Bound students attend multiple three-week summer courses on campus with an ongoing partnership with STEM teacher candidates. Partnership continues throughout the academic year with select candidates who travel to the Detroit area during Saturday volunteer sessions.
APPENDIX G

CMU Student Teaching Centers, 2013-2014

Student Teaching Centers throughout
Bay Area (Bay City, Midland, Saginaw, and Thumb Area)
Dr. Joe Garza,
Dr. Howard Parkhurst - Center Leader

Capitol Area (Greater Lansing and Jackson Area)
Dave Kiesel
Karen Kogut
Tim Young

Genesee Area (I-69 Corridor from Flint to Port Huron Area)
Dr. Bob Sunday
Rick VanHaaften

Mid-Michigan Area (Mount Pleasant and the surrounding school districts)
Rudy Godefroidt
Lynn Laskowsky - Center Leader
Al Strieter

Northwest Area (Greater Traverse City, East to Alpena, and South to Manistee)
Dr. Lorraine Berak - Center Leader
Jan Schneider
Jerry Sinkel
Glenn Solowiej

Metro North Area (Oakland/Macomb Counties)
Nancy Dodson - Center Leader
Jan Higland
Wayne Hewitt

Metro South Area (Wayne/Macomb Counties)
Joe Maki
Dr. Karen Paling - Center Leader

Upper Peninsula Area (Escanaba)
Terri Mileski

Western Michigan Area (Grand Rapids, South to Kalamazoo and West to Muskegon Areas)
Dr. Libby Knepper-Muller - Center Leader
Tom Popiel
Lynne Popiel
Steve Schaefer
## APPENDIX H

### Tools for Developing and Assessing Candidates’ Learning

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case Methods</strong></td>
<td>Students are asked to develop case studies on situations, which helps them learn from particular contexts as well as incorporate more generalized theory about teaching and learning. Requiring candidates to develop an extensive written study about an individual learner based on close observation and data collection and then tying that information to coursework helps them reflect and conceptualize on their process of teaching. Case work can also be used as a springboard for creating plans for future work.</td>
</tr>
<tr>
<td><strong>Close Analyses of Teaching and Learning</strong></td>
<td>Data collected through regular observation and evaluation of student work (including case studies above), is used by the student to “focus on numerous issues in the teaching and learning process, from challenges of student engagement, student understanding, and assessment to questions about the framing of subject matter concepts for students at particular developmental levels or with specific learning needs” (p. 105).</td>
</tr>
<tr>
<td><strong>Performance Assessments</strong></td>
<td>Assessments of performance happens most regularly during clinical experiences, however, this may not “ensure either the occasion to encounter certain kinds of teaching problems or the impetus to develop and demonstrate particular skills” (p. 105). Adding structured performance tasks, such as “planning and delivering a lesson, delivering a lecture, conducting a Socratic seminar, completing and teaching a curriculum unit” (p. 105) around which they organize coursework and practice, helps students to engage in specific behaviors and analyze them. These structured performances are usually public exhibitions of knowledge, where the candidate can receive measured feedback against established criteria for both teaching and planning skills.</td>
</tr>
<tr>
<td><strong>Portfolios</strong></td>
<td>Portfolios help make teaching stand still long enough to be examined, shared, and learned from” (p. 106). They serve as an assessment tool to help candidates look at the “various aspects of teaching--planning, instruction, assessment, curriculum design, and communication with peers and parents”(p. 16).</td>
</tr>
<tr>
<td><strong>Logs, Journals, and Reflective Essays</strong></td>
<td>These tools for candidate reflection and connection of course content to actual practice are only useful when accompanied by consistent and regular feedback from course instructors or supervisors. These tools are used to develop the habit of inquiry and observation tied to analysis and reflection.</td>
</tr>
<tr>
<td><strong>Research Inquiries.</strong></td>
<td>An understanding of the practitioner research process that involves reflective, inquiry-based, analytic thinking, or an inquiry stance (Cochran-Smith and Lytle, 1999), helps candidates learn reframe questions and revise pedagogical approaches. This inquiry stance is at the heart of reflective practice.</td>
</tr>
<tr>
<td><strong>Autobiography and Self-Reflection</strong></td>
<td>It is important that candidates understand and be able to articulate their own beliefs, values, cultural identities, learning strategies, as well as those of others. This helps candidates understand that there are “multiple perspectives on education that need to be negotiated in any school or classroom” (p. 108). It also helps candidates “develop a sense of that the individual brings to a learning situation” (p. 108), which helps candidates design instruction for students with diverse learning needs and from backgrounds similar to and different from their own.</td>
</tr>
<tr>
<td><strong>Action Research</strong></td>
<td>“In action research or problem-based inquires, teachers design and conduct investigations into concerns arising from their work with children and families” (p. 146).</td>
</tr>
</tbody>
</table>
# APPENDIX I

## CMU B.S. in Education - Elementary Program

### Elementary Education

<table>
<thead>
<tr>
<th>University Program</th>
<th>Degree Requirements</th>
<th>Pre-Requisites</th>
<th>Course</th>
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<tbody>
<tr>
<td>I-A</td>
<td></td>
<td></td>
<td>ENG 381 (3 CR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ENG 261</td>
</tr>
<tr>
<td>I-B</td>
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<td>GEO 120 (5 CR) or</td>
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<td></td>
<td></td>
<td>BIO 240 (12 CR)</td>
</tr>
<tr>
<td>II-A</td>
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<td></td>
<td>HST 112 (3 CR) or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GEO 395 (3 CR) or</td>
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</tr>
<tr>
<td>II-B</td>
<td></td>
<td></td>
<td>HST 111 (3 CR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HST 331 (3 CR) or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GEO 395 (3 CR) or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>GEO 395 requires</td>
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<td>III-A</td>
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<td>III-B</td>
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<td></td>
<td>PIC 105 (1 CR)</td>
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<td>IV-A</td>
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<td>AIT 113/114 (4 CR)</td>
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<td>IV-B</td>
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<td></td>
<td>CHM 103 (3 CR) or</td>
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<td>CHM 111 &amp; 127 (4 CR) or</td>
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<td>CHM 120 &amp; 127 (5 CR)</td>
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<td>IV-C</td>
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<td></td>
<td>GEO 101 (3 CR) or</td>
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<td></td>
<td>GEL 101 &amp; 102 (4 CR) or</td>
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<td>SPE 304 (3 CR)</td>
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### First Semester After TE Admission

**First Year Elementary Sequence**

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Requisites</th>
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<tr>
<td>EDU 151 (3 CR)</td>
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<tr>
<td>EDU 310 (3 CR)</td>
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<td>HST 350 (3 CR)</td>
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<td>CHM 103 (3 CR)</td>
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<td>MTH 105, 106, 107</td>
<td>131 or 132</td>
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### Second Semester After TE Admission

**Second Year Elementary Sequence**

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<td>EDU 330 (3 CR)</td>
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<tr>
<td>EDU 340 (3 CR)</td>
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<td>EDU 350 (3 CR)</td>
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<td>EDU 360 (3 CR)</td>
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### Third Semester After TE Admission

**Third Year Elementary Sequence**

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<th>Course</th>
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<tr>
<td>EDU 458 (3 CR)</td>
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<td>BSH 104 (4 CR)</td>
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### Student Teaching

**Final Semester**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>EDU 432 (3 CR)</td>
<td></td>
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<tr>
<td>EDU 459 (3 CR)</td>
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</tbody>
</table>

For major/minor, choose Option 1 or Option 2:

**Option 1 (Choose one)**

- Early Childhood Development & Learning
- Language Arts
- Mathematics
- Integrated Science
- Social Studies — History Concentration
- Social Studies — Geography Concentration

**Option 2 (Choose two)**

- Language Arts
- Mathematics
- Integrated Science
- Reading
  - Note: Language Arts & Reading cannot be selected together

### Additional Minor Option

- Middle Level Education
- Early Childhood Development & Learning
- English as a Second Language

### University Competencies

- ENG 101 (3 CR)
- ENG 201 (3 CR)
- MTH 105 or higher (3 CR)
- Oral English (3 CR)

### Professional Education Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Pre-Requisites</th>
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<td>EDU 101 (3 CR)</td>
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<tr>
<td>EDU 290 (3 CR)</td>
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<tr>
<td>MTH 105 (3 CR)</td>
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</tr>
<tr>
<td>MTH 151 (3 CR)</td>
<td>MTH 105, 106, 130 or 132</td>
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<tr>
<td>MTH 152 (3 CR)</td>
<td>MTH 151 (with C or better)</td>
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</table>

*Some courses have minimum grade requirements. Check the Center for Student Services website for more information.

**After 60 credits are completed and major/minor are signed, schedule a PRE-GRADUATION AUDIT with Undergraduate Academic Services in Warner 221, (906) 774-3504.**

### Major

- Faculty Advisor:

### Minor

- Faculty Advisor:

- Faculty Advisor:
## APPENDIX J
CMU B.S. in Education - Secondary Program

### University Program
- I-A
- I-B
- II-A
- II-B
- III-A
- III-B
- IV-A
- IV-B
- IV-C
- UP Elective

### University Competencies
- ENG 101 (3 CR)
- ENG 201 (3 CR)
- MTH 105 or higher (3 CR)
- Oral English (3 CR)

### Professional Education Courses

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<thead>
<tr>
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</thead>
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<tr>
<td>EDU 290 (3 CR)</td>
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<tr>
<td>HED 100 (3 CR)</td>
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</tr>
<tr>
<td>SPT 504 (3 CR)</td>
<td>Junior status</td>
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</tbody>
</table>

### First Semester After TE Admission
- First Secondary Sequence
  - EDU 318 (3 CR)
  - EDU 325 (3 CR)

### Second Semester After TE Admission
- Second Secondary Sequence
  - EDU 450 (3 CR)
  - EDU 451 (3 CR)

### Student Teaching
- Final Semester
  - EDU 432 (3 CR)
  - EDU 458 (10 CR)

### Major Options:
- Biology
- Chemistry
- Chemistry/Physics
- Earth Science
- English
- French
- Geography
- German
- History
- Integrated Science
- Math
- Music
- Physical Education
- Physics
- School Health Education
- Social Studies
- Spanish
- Speech
- Visual Arts Education

### Minor Options:
- Biology
- Chemistry
- Earth Science
- English
- French as a Second Language
- Geography
- History
- Math
- Physical Education
- Physics
- School Health Education
- Speech

### Additional Minor Options:
- Middle-Level Education

---

**After 60 credits are complete and major/minor are signed, schedule a PRE-GRADUATION AUDIT with Undergraduate Academic Services in Warriner 123, (888) 274-3304**
Appendix K: Attempt to Reduce Credits Required in the B.S. in Education-Elementary Program

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Courses</th>
<th>Proposal</th>
<th>Credit Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
<td>ENG 381 (3)</td>
<td>Petition to offer this course for UP Subgroup and remove pre-req of ENG 201</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>AST 111/112 (4) BIO 101 (3) PHS 151 (3) CHM 101 or CHM 111/127 or CHM 120/127 (3-5) GEO 105 or GEL 101/102 or GEL 100 or GEL 130 (3-4)</td>
<td>Petition Integrated Science faculty to redesign courses to meet standards and reduce from 15-18 credits to 12.</td>
<td>3 – 6</td>
</tr>
<tr>
<td>Math</td>
<td>MTH 151 (3) MTH 152</td>
<td>Leave as is at 6 credits</td>
<td>0</td>
</tr>
<tr>
<td>Social Studies</td>
<td>HST 111 PSC 105 BIO 240 or GEO 120 GEO 350 or HST 112 GEO 395 OR HST 333</td>
<td>Petition Social Studies faculty to reduce from 15 to 9 credits</td>
<td>6</td>
</tr>
<tr>
<td>Art</td>
<td>ART 345</td>
<td>Petition to 3 credits to 2 credits</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>PES 310</td>
<td>Reduce from 3 credits to 2 credits</td>
<td>1</td>
</tr>
<tr>
<td>Music</td>
<td>MUS 330</td>
<td>Reduce from 3 credits to 2 credits</td>
<td>1</td>
</tr>
<tr>
<td>Health</td>
<td>HSC 343</td>
<td>Reduce from 3 credits to 2 credits</td>
<td>1</td>
</tr>
<tr>
<td>Education</td>
<td>EDU 320 and EDU 345</td>
<td>Combine math and science methods to reduce from 6 credits to 3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDU 330 and EDU 343</td>
<td>Combine reading and social studies methods to reduce from 6 credits to 3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDU 495</td>
<td>Consolidate with EDU 432 and a UP course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>EDU 458</td>
<td>Reduce from 10 hours to 9</td>
<td>1</td>
</tr>
</tbody>
</table>

Total: 26-29 credits
APPENDIX L

Darling-Hammond and Bransford’s Figure for Conceptualizing the Knowledge Base for Teaching
APPENDIX M

Curriculum Maps Aligning B.S. in Education Elementary Program Coursework with Objectives for the MTTC in Elementary Education #103

“There are a whole bunch of policies—like getting students through more quickly—most of which don’t pay attention to what [students] are learning,” Humphreys says. “It could be making a bad situation worse if we don’t look at the impact of not only how many students get through, but what they learn.”

(Humphreys as quoted in Pratt, 2011)

While streamlining the elementary education program is of utmost importance if CMU’s teacher education program is going to be revitalized, doing so without considering candidates’ learning may not yield a high quality program.

These curriculum maps were started as part of the rationale for the changes to the elementary education program we have proposed. These maps represent contributions by Taskforce members, but are incomplete and require participation from multiple stakeholders in content areas across the university.

I. English Language Arts

<table>
<thead>
<tr>
<th>MTTC Objective</th>
<th>Curriculum Alignment</th>
<th>Gaps in Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understand the major concepts, principles, and instructional practices in the acquisition and learning of languages to create opportunities for communication in a multilingual global society.</td>
<td>Incorporate in LA Methods and courses in UP Subgroup IV-B, IV-C</td>
<td></td>
</tr>
<tr>
<td>2. Understand the foundations of emergent literacy, including the development of phonological and phonemic awareness skills.</td>
<td>EDU 330 (I) EDU 431 (R)</td>
<td></td>
</tr>
<tr>
<td>3. Understand the development of accurate, automatic word recognition, spelling, and fluency.</td>
<td>EDU 330 (I) EDU 431 (R) EDU 315 (R)</td>
<td></td>
</tr>
<tr>
<td>4. Understand the development of vocabulary and reading comprehension.</td>
<td>EDU 330 (I) EDU 431 (R)</td>
<td></td>
</tr>
<tr>
<td>5. Understand the characteristics of narrative and expository texts in written, oral, performance, and media forms.</td>
<td>ENG 381 (I) EDU 330 (R) ENG 315 (M)</td>
<td></td>
</tr>
<tr>
<td>MTTC Objective</td>
<td>Curriculum Alignment</td>
<td>Gaps in Curriculum</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>8. Apply historical thinking to understand the past in the local community, Michigan, and the United States.</td>
<td>HST 111/112 HST 333</td>
<td></td>
</tr>
<tr>
<td>9. Understand the fundamental principles and concepts of geography.</td>
<td>GEO 120 GEO 350 GEO 395</td>
<td></td>
</tr>
<tr>
<td>10. Understand the fundamental principles and concepts of civics and government.</td>
<td>PSC 105 HST 111</td>
<td></td>
</tr>
<tr>
<td>11. Understand the fundamental principles and concepts of economics.</td>
<td>HST 111 HST 333 EDU 343</td>
<td></td>
</tr>
<tr>
<td>12. Understand inquiry processes in social studies, and concepts and skills associated with public discourse, decision making, and citizen involvement.</td>
<td>HST 111 HST 333 PSC 105 EDU 343</td>
<td></td>
</tr>
</tbody>
</table>
### III. Visual and Performing Arts

<table>
<thead>
<tr>
<th>MTTC Objective</th>
<th>Curriculum Alignment</th>
<th>Gaps in Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Understand the functions, elements, principles, and styles of the arts, and artistic and creative processes and products.</td>
<td>MUS 330 (2) ART 345 (2)</td>
<td>Lab</td>
</tr>
<tr>
<td>14. Understand communication about and through the arts, and developmentally appropriate arts instruction.</td>
<td>MUS 330 (2) ART 345 (2)</td>
<td>Lab</td>
</tr>
</tbody>
</table>

### IV. Math

<table>
<thead>
<tr>
<th>MTTC Objective</th>
<th>Courses We Have</th>
<th>Gaps in Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Understand mathematical reasoning, representation, and problem solving; and the historical development of mathematics.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>16. Understand number sense and concepts of number, number theory, and number systems.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>17. Understand numerical computation and operations on numbers.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>18. Understand concepts and procedures of direct and indirect measurement.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>19. Understand concepts of Euclidean geometry.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>20. Understand concepts of algebra.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
<tr>
<td>21. Understand concepts of data analysis and probability.</td>
<td>MTH 151/152</td>
<td></td>
</tr>
</tbody>
</table>

### V. Science

<table>
<thead>
<tr>
<th>MTTC Objective</th>
<th>Curriculum Alignment</th>
<th>Gaps in Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Understand how new scientific knowledge is constructed, including the role of inquiry.</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conclusion 128</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>23. Understand the nature of scientific knowledge and the application of analysis and reflection in science.</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>24. Understand the fundamental concepts of life science.</td>
<td>BIO 101T Increase Lab Hours (GTAs)</td>
<td></td>
</tr>
<tr>
<td>25. Understand the fundamental concepts of earth/space science.</td>
<td>AST 111 &amp; 112 GEL 100 or 131 or GEO 105</td>
<td></td>
</tr>
<tr>
<td>26. Understand the fundamental concepts of physical science.</td>
<td>CHM 111/120 &amp; 127 PHS 151</td>
<td></td>
</tr>
</tbody>
</table>

### VI. Health Education and Physical Education

<table>
<thead>
<tr>
<th>MTTC Objective</th>
<th>Curriculum Alignment</th>
<th>Gaps in Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>27. Understand concepts and strategies of health education.</td>
<td>HSC 343 PES 310</td>
<td></td>
</tr>
<tr>
<td>28. Understand concepts and strategies of physical education.</td>
<td>HSC 343 PES 310</td>
<td></td>
</tr>
</tbody>
</table>

These curriculum maps should be referenced as further recommendations about the elementary education program’s course structure and requirements are made. Revisions to the Science and Social Studies courses will be addressed in the Implementation Phase of this work. When these curriculum maps are finalized, they will illustrate how the revised elementary education program we’ve recommended aligns with the Elementary Education MTTC Objectives.

In addition to the principle of alignment, the principles of integration and coherence are essential to designing a high quality teacher preparation program. The next document in this series describes why these principles are essential and elaborates them in a practical way for our future decision-making.
## APPENDIX N

CMU Office of Student Affairs Support for Diversity

<table>
<thead>
<tr>
<th>Program</th>
<th>How does it promote learning about diversity?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling Services</td>
<td>Students can get help with stress, depression, anxiety, etc., as well as many other struggles he/she may be going through. They also can schedule workshops for students. Provide resources for students that may need help on website as well.</td>
</tr>
<tr>
<td>MAP-Works</td>
<td>A survey for first year students which gives students resources for things they might be struggling with.</td>
</tr>
<tr>
<td>Leadership Institute</td>
<td>Promotes students volunteering and working to improve the quality of life for others</td>
</tr>
<tr>
<td>Leadership Safari</td>
<td>Promotes learning about diversity through various activities, speakers, and workshops</td>
</tr>
<tr>
<td>Residence Life</td>
<td>Programming philosophy: to build a community between staff and residents, to learn about one another to create a safe environment for everyone</td>
</tr>
<tr>
<td>PASSAGES (Res life)</td>
<td>Personal, Academic, Self-Awareness, Seasonal, Acceptance, Growth, Emotional, Send-off (types of programs)</td>
</tr>
<tr>
<td>SAPA (Sexual Aggression Peer Advocates)</td>
<td>Teaches students about sexual aggression, and provides them with a place to go/talk if they need it <em>Supports safe learning for those who have dealt with sexual aggression</em></td>
</tr>
<tr>
<td>Student Disability Services</td>
<td>Provides access to students who need it <em>Supports safe learning environment for those with disabilities</em></td>
</tr>
<tr>
<td>Volunteer Center</td>
<td>Provides students with multiple volunteer opportunities that will help increase their awareness of the world, like alternative breaks, adopt-a-grandparent, America Reads, etc.</td>
</tr>
<tr>
<td>Pathways</td>
<td>To increase retention of first generation college students, networking <em>Supports a safe learning environment for first generation college students</em></td>
</tr>
<tr>
<td>Office of Civil Rights and Institutional Equality</td>
<td>Assists departments in retention activities, and creating a safe environment for everyone at CMU <em>Supports safe learning for those from diverse backgrounds at CMU</em></td>
</tr>
<tr>
<td>Institutional Diversity Blog</td>
<td>Publishes diversity events going on throughout campus, publicizing opportunities for students to learn about other cultures</td>
</tr>
<tr>
<td>Soup and Substance</td>
<td>Talks about various issues in our society, promotes discussion</td>
</tr>
<tr>
<td>Office of LGBTQ Services</td>
<td>Various workshops, invitations to do panels in classrooms, groups for individuals to promote safe environments <em>Supports a safe learning environment for those from an LGBTQ background</em></td>
</tr>
<tr>
<td>Safe Zone Training</td>
<td>How to promote a safe campus for LGBTQ individuals, and the responsibility of students to create a safe zone</td>
</tr>
<tr>
<td>Office of Diversity Education</td>
<td>Cultural activities, stereotype workshops, holidays, exhibits, web links</td>
</tr>
<tr>
<td>Speak Up, Speak Out</td>
<td>Various panels surrounding different issues that are present within society</td>
</tr>
</tbody>
</table>
Appendix O: Educator Preparation Programs’ Diversity Statements

Some teacher education programs include diversity in their broad mission statement as a distinguishing feature of their university. For instance, WSU’s College of Education’s mission statement is, “to develop teachers who are effective, urban educators who are reflective, innovative and committed to diversity,” and this mission is amplified by the Elementary Education Department’s belief statement: “We believe that learning is central to a democratic society. For this reason we raise issues about equity and social justice, such as inviting our students to critique historical narratives, and analyzing who is privileged, marginalized and/or silenced in these accounts” (http://coe.wayne.edu/ted/elementary/).

Concepts related to diversity permeate MSU’s teacher education program’s mission:

The teacher preparation program at Michigan State University prepares critically reflective and responsive teachers who continue to learn throughout their careers. These teachers are well-prepared in their content areas and with the most recent research-based knowledge of instruction and curriculum. They work to improve schooling in a democratic society and build a more just, sustainable world. They strive to help all children and youth develop conceptual understandings and fluency in content, become active citizens, and make significant contributions to society.

Our field-based program is designed to prepare well-started beginning teachers who develop:

• A strong foundation in the subject matter, and an understanding of how children and youth learn and engage with subject matter.
• Equitable and inclusive teaching practices that are responsive to diverse learners, communities and a global society.
• The ability to work within and across a range of community and professional contexts.
• Disposition and skills to critically reflect on and learn from their practice.
• A strong sense of agency and the capacity to become leaders in their field.

Other educator preparation programs include diversity as an outcome. EMU’s faculty “prepare students to teach diverse learners”: “Students from EMU’s Teacher Education programs are prepared to teach students with a range of needs. These include differences in gender, culture, race, class, economic level, learning style, patterns of ability and handicapping conditions. Students are prepared to address diverse needs within a classroom that recognizes and builds on the strengths in both individuality and community” (http://www.emich.edu/coe/ted/vision.html).

Other universities emphasize diversity in their university vision statements. For instance, the University of Minnesota, Duluth’s vision of diversity is clearly articulated:

*UMD’s Proposed Vision for 2020 is to integrate equity, diversity, inclusion, and social justice into all aspects of campus life and learning through an intentional, clear, caring, and restorative manner. In doing so, we create a more just, integrated educational community that celebrates all human difference.*
Appendix P: A Streamlined Pathway to the Cultural Competency Certificate

<table>
<thead>
<tr>
<th>Required Courses I (6 credits)</th>
<th>Required Courses II (3 credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAR 145 Racism and Discrimination in America through Dialogue</td>
<td>SPE 550 Teaching Culturally Diverse Students</td>
</tr>
<tr>
<td>SOC 323 Racism and Inequality</td>
<td>ENG 582 Cultural Pluralism in Children’s Literature</td>
</tr>
<tr>
<td>A course focusing on diversity in a career-related field may be substituted with a Cultural and Global Studies advisor’s appeal.</td>
<td>MLE 383 Teaching Diverse Learners</td>
</tr>
</tbody>
</table>

Elective Courses Option B - without a Language Elective (7 credits that double-count with UP)

- Cultures within the U. S.
  - Choose 3-6 hours from UP IV-C.
- Global Cultures outside the U. S.
  - Choose 3-6 hours from UP IV-B on regions and topics outside the U. S.

- Global experiences in pre-student and student teaching
- Faculty-led study abroad
- New courses focused on education developed for the UP
- Independent Study

CMU Bulletin, p. 132 Students who receive credit for an approved study-abroad experience may satisfy their UP requirement with a minimum of 27 hours, thereby eliminating the UP Elective requirement.

CMU’s Certificate of Cultural Competency’s curriculum can support candidates in cultivating the proficiencies related to diversity outlined by CAEP. For instance, with its focus on intergroup dialogue, LAR 145 Racism and Discrimination in America through Dialogue (3 credits) can help candidates cultivate “Verbal and nonverbal communication skills that demonstrate respect for and responsiveness to the cultural backgrounds and differing perspectives learners and their families bring to the learning environments” (CAEP, p. 21). Furthermore, dialogue pedagogy draws on students’ experiences, emotions, and empathy in order to promote learning about difference (Ford Book Chapter). Such learning requires emotional engagement in order to affect candidates’ beliefs about those who are different (Bailey). Employing a more cognitive approach, the other required course, SOC 323 Racism and Inequality (3 credits) will support candidates’ in developing “An understanding of [...] the relationship of privilege and power in schools” (CAEP, p. 21). Such an understanding of the systemic power dynamics that contextualize teacher-student relationships is important for candidates preparing for cross-cultural teaching (Ford, 2014).

For Required Courses II, the Certificate program allows for a course focusing on diversity in a career-related field to be substituted with a Cultural and Global Studies advisor’s appeal. One such course could be SPE 550: Teaching Culturally Diverse Students (3 credits), which is described as a “Survey of sociocultural influences on the performance of students from varying background.” The final requirements include Elective courses drawn from UP Groups IV-B and IV-C (6 credits), which could double-count for UP and the teacher education program and if arranged as 4 credits, would consist of only two courses. To make the Certificate of Cultural
Competency more accessible and relevant for teacher candidates, we recommend creating new course offerings on issues of diversity in education for the University Program Groups IV-B and IV-C.
APPENDIX Q

CMU Teacher Education Program Admission Checklist & Criteria

Admission to the teacher education program qualifies the student to register for courses in the professional education sequence as well as certain professional education courses with the prerequisite of admission to Teacher Education.

Below is a list of requirements that must be completed in order to be considered for admission:

1. Completion of the Application Form. The $50 non-refundable one-time application fee will be charged to the student’s account once the completed application form has been processed. The application will activate the Student Information Sheet.

2. Completion of the Technical Standards Form.

3. Completion of the Professional Readiness Exam #096 (formerly known as the Michigan Basic Skills Test) Apply online at www.mttc.nesinc.com. Please note that a separate fee is required for the PRE. Test results must be received by the CSS before the admission deadline.

4. 45-Hour Pre-Professional Experience. The student must complete and document 45 hours of in-classroom experiences, with a State Certified Educator. Visit the Forms page for the appropriate documentation.

5. A minimum of 45 semester hours of university credit, including transfer credit, successfully completed.

6. Completion of EDU 107 – Introduction to Teaching, with a minimum grade of “B” (3.00) or one of its approved equivalencies.

7. Completion of English 101 (or one of its approved equivalencies) OR English 201, with a minimum grade of “B-” (2.70); and oral English and Mathematics competency with a minimum grade of “C” (2.00). See the CMU Undergraduate Bulletin for specific courses.

8. A minimum grade point average (GPA) of 2.70 is required for admission. The GPA will be calculated on the student’s cumulative CMU or at regionally accredited institutions. Effective January 1, 2014 the acceptance of a student using a minimum of the most recent 45 graded semester hours GPA will no longer be used for admission to teacher education.

9. Transcripts for all graded courses taken at other accredited colleges or universities must be on file with the Registrar’s Office. These do not need to be submitted to the CSS.

10. Students can confirm their admission status on the Student Information Sheet.