



**Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program**

Institution Submitting Proposal	
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Each action below requires a separate proposal and cover sheet.

- | | |
|-----------------------------|---|
| New Academic Program | Substantial Change to a Degree Program |
| New Area of Concentration | Substantial Change to an Area of Concentration |
| New Degree Level Approval | Substantial Change to a Certificate Program |
| New Stand-Alone Certificate | Cooperative Degree Program |
| Off Campus Program | Offer Program at Regional Higher Education Center |

Payment Submitted:	Yes	Payment Type:	R*STARS # Check #	Payment Amount:	Date Submitted:
Department Proposing Program					
Degree Level and Degree Type					
Title of Proposed Program					
Total Number of Credits					
Suggested Codes			HEGIS:	CIP:	
Program Modality			On-campus	Distance Education (<i>fully online</i>)	Both
Program Resources			Using Existing Resources	Requiring New Resources	
Projected Implementation Date			Fall	Spring	Summer Year:
Provide Link to Most Recent Academic Catalog			URL:		

Preferred Contact for this Proposal	Name:
	Title:
	Phone:
	Email:

President/Chief Executive	Type Name:
	Signature: <i>Ray Jagwardhona</i> Date:
Date of Approval/Endorsement by Governing Board:	



May 1, 2024

Sanjay Rai, PhD
Secretary
Maryland Higher Education Commission
6 N. Liberty Street, 10thFloor
Baltimore, MD 21201

Dear Secretary Rai,

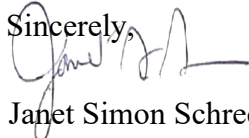
On behalf of Provost Jayawardhana, I write to request your review and endorsement of the enclosed proposal. The university proposes a new **Master of Education in Learning, Design, and Technology**.

The Johns Hopkins School of Education proposes a new, 36-credit Master of Education (M.Ed.) program in *Learning Design and Technology* (LDT) to prepare practitioners and researchers in the field of educational technology. The curriculum will be rooted in three foundational areas of knowledge learning sciences, human and equity centered design, and assessment and evaluation. LDT students will specialize in one of three concentrations: learning experience design (emphasis on instructional design), learning engineering (emphasis on data science and learning analytics), and artificial intelligence leadership in education (emphasis on organizational change and management).

The proposed program is consistent with the Johns Hopkins mission and the State of Maryland's Plan for Postsecondary Education. The proposal is endorsed by The Johns Hopkins University.

Should you have any questions or need further information, please contact Westley Forsythe at (410) 516-0188 or wforsythe@jhu.edu.

Thank you for your support of Johns Hopkins University.

Sincerely,


Janet Simon Schreck, PhD
Senior Associate Vice Provost for Academic Affairs

cc: Dr. Ray Jayawardhana

Dr. Westley Forsythe

Enclosures



MHEC Proposal for a New Academic Program Master of Education (M.Ed.) in Learning Design and Technology

A. Centrality to Institutional Mission and Planning Priorities:

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution's approved mission.

The Johns Hopkins School of Education (SOE) proposes to create a new, 36-credit Master of Education (M.Ed.) graduate program in *Learning Design and Technology* (LDT) to prepare practitioners and researchers in the field of educational technology. The curriculum will be rooted in three foundational areas of knowledge: learning sciences, human- and equity-centered design, and assessment and evaluation. Building from their understanding and competencies in these areas, LDT students will specialize in one of three concentrations: learning experience design (emphasis on instructional design), learning engineering (emphasis on data science and learning analytics), and artificial intelligence leadership in education (emphasis on organizational change and management).

This proposal is in response to trends in the field of educational technology and research on learning. First, regional, national, and international demand from multiple sectors for instructional designers, digital curriculum developers, training and development specialists and managers, and learning analysts in the field of educational communication and technology is growing. These occupations all have in common the creation and implementation of digital technologies and technology-supported curricula to support human development and learning. The new program will prepare our graduates to be highly knowledgeable, discerning, imaginative, ethical, and intentional analysts, designers, educators, entrepreneurs, and researchers who create, implement, and study digital technology-supported curricula and learning tools and environments.

Second, developments in the past year in the fields of artificial intelligence and machine learning have spurred significant interest and investments in the use of and research on artificial intelligence to support teaching and learning. Johns Hopkins has announced a major cross-university initiative to fund research and teaching in the areas of data science and artificial intelligence and has included it as one of its 10 goals for the next decade: "Create the leading academic hub for data science and artificial intelligence to drive research and teaching in every corner of the university and magnify our impact in every corner of the world."¹ This initiative coincides with the U.S. Department of Commerce's Economic Development Administration's (EDA) recent announcement of the Baltimore

¹ <https://president.jhu.edu/ten-for-one/data/>

Tech Hub, which will develop AI-supported biotechnologies and contribute toward the ongoing growth of the Baltimore area as a global innovation center. Additionally, the White House recently issued an executive order on artificial intelligence, which includes a commitment to expanded grantmaking from federal agencies for research on artificial intelligence. Together, these developments portend a thriving research and development community that will create jobs in our region. LDT will be part of that community, as a program of educators who prepare professionals for work in these areas and scholars who contribute translational research to inform how practitioners use these technologies.

The SOE's approved mission is "to generate knowledge to inform policy and practice and educate society to address the most important challenges faced by individuals, schools, and communities" (<https://education.jhu.edu/about-us/fact-sheet/>). The new LDT program will support this mission by preparing aspiring and practicing educational technology professionals and entrepreneurs to design, implement, and evaluate digital technology-supported tools and practices for learning across the lifespan in a variety of formal and informal settings, including pre-K–12, higher education, industry, government, and museums. Relatedly, the SOE's mission is aligned to that of Johns Hopkins University, which is to "to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world" (<https://www.jhu.edu/about/history/>). The curriculum of the LDT program will be designed to support each of these important goals.

Educational technology comprises a wide area of scholarly and professional activity. The Association for Educational Communication and Technology (AECT), a professional organization of instructional designers, educators, and other professionals in teaching and learning, defines the field of educational technology as "the study and ethical practice of facilitating learning and improving performance by creating, using, and managing appropriate technological processes and resources."² Accordingly, while maintaining the school's commitment to preparing practitioners for technology integration in K–12 education, the LDT curriculum will train graduates for a broader range of career pathways in educational technology and related fields, as reflected by our areas of concentration. With the demand for specialized professionals in this field comes the necessity for graduate-level education programs that outfit learners with knowledge, skills, and dispositions toward designing, implementing, and evaluating imaginative and evidence-supported learning environments that center equity and that meet the needs of all learners. Additionally, each year two or three of our graduates typically pursue doctoral work in educational technology in other institutions. With the addition of the new concentrations, we expect that we will also increase the number of graduates who go on to do research in this field.

Through new concentrations and a new curriculum, expanded student services, and, in time, additional faculty members with new research agendas, we will expand the school's

² https://aect.org/news_manager.php?page=17578

capacity to prepare practitioners, scholars, and leaders to play constructive roles in understanding and shaping how digital technologies influence learning and communication across many settings. Governments and industries will continue to develop and deploy digital technologies that profoundly influence how people learn, create, communicate, and live together into the foreseeable future. The LDT program will graduate designers, educators, and scholars throughout the world who are ready to shape, implement, study, and critically evaluate digital technologies for education and communication in the 21st century.

The program of study will consist of 12 courses: four 3-credit foundation courses; three 3-credit concentration core courses (specific to each area of concentration); **three 3-credit elective courses; and two 3-credit capstone courses.** Master's degree candidates who elect to write a thesis for their capstone project will be required to take at least one research methods course as an elective option (in addition to the foundation research and evaluation course).

The four foundation courses are: 1) *How People Learn*, 2) *Humanistic Technology Design*, 3) *Critical Approaches to Technology*, and 4) *Assessment, Evaluation, and Research*. These courses will introduce students to a wide range of theories of learning and motivation, familiarize them with human- and social justice-centered approaches to learning design, prepare them to investigate the role of power and enactments of (in)justice in the design and implementation of educational technologies, and enable them to apply basic assessment, evaluation, and research methods in their work. Full-time students will be required to take the first two courses in residence on the JHU campus for two weeks in their summer term; part-time students will have the option to take those courses in residence, but it will not be required.

The three concentration courses will be specific to a student's area of concentration and deepen their knowledge in relevant theoretical frameworks and build their skills to design, implement, and evaluate technology-supported tools and environments (all courses are described in Appendix A, p. 33). **Students will also take three elective courses in the School of Education**, and other divisions of Johns Hopkins University where possible, in consultation with their academic advisors.

Lastly, students will take the two capstone courses in their final two semesters of enrollment. The topic of a student's capstone will depend on the area of concentration, but all final capstones will be either a project (developing, piloting, and evaluating an edtech solution in a professional context), a lesson study (an inquiry-based collaboration among teachers or trainers to improve instruction), or a thesis (a scholarly paper intended for peer-reviewed publication). Additionally, all students will be required to maintain and submit before graduating a non-credit bearing digital portfolio that curates the products of their course assignments and includes their reflections on their learning in the program. Students working on projects or lesson studies will have the option to work individually or in teams for their capstone projects. Finally, all students will present their capstones at

a hybrid (attendance online and in-person) expo at the end of the spring term each academic year.

The program will also include an experiential education component by allowing students to take up to six elective credits (two courses, when approved by an advisor and when specific criteria are met) for professional internships in their concentration area. The internships will be performed at organizations within the program's approved internship network. Each organization within the network will have an on-site internship supervisor who manages the student's work. Interns will work between 10–15 hours per week and contribute meaningfully to a project or projects, based on agreed-upon criteria between the organization and the LDT program.

LDT will follow a cohort model in which students are admitted once per academic year (summer term). Given historical student enrollment patterns, we expect that most master's degree students will take courses part time and complete their programs in six semesters. The program will also offer a full-time option based on a hybrid model. Full-time students will take four courses per term for three terms and begin the program with a two-week residency on the JHU campus. Appendix B (p.39) illustrates representative progressions for the program.

The three concentrations are described briefly below.

- a. *Learning Experience Design (LXD)*: This concentration prepares graduates to design, deliver, and evaluate technology-supported online and in-person learning experiences in a range of settings, including K–12, higher education, corporate training, and museums, among others. Students will learn foundational instructional design frameworks and theories of learning and motivation. They will also develop skills with tools to create and manage eLearning environments.
- b. *Learning Engineering (LEN)*: This concentration prepares graduates to collect, analyze, and use data to improve instructional strategies, personalize learning experiences, and identify opportunities for continuous improvement in educational settings to use data and digital technology in educational settings. Students explore the principles of data collection, analysis, and interpretation, enabling them to make data-driven decisions to enhance educational outcomes. Students are also familiarized with instructional design principles and methods.
- c. *Artificial Intelligence Leadership in Education (AILE)*: This concentration prepares graduates to integrate artificial intelligence-supported learning tools in diverse educational contexts. Students gain skills to oversee educational AI and machine learning development teams, formulate strategic AI visions for learning environments, and manage organizational transitions accompanying AI implementation. Students build competencies in AI project management, ethical considerations, and educational innovation, and are prepared to lead AI initiatives in various educational settings, set visions for implementation, and manage the human and technological aspects of AI integration in educational settings.

2. Explain how the proposed program supports the institution’s strategic goals and provide evidence that affirms it is an institutional priority.

In addition to supporting the university’s and school’s institutional missions outlined above, the new program will support SOE’s three priority areas (or “pillars”) for research and academic programs (as described in the SOE’s strategic vision: <https://education.jhu.edu/about-us/our-vision/our-pillars/>):

- *Priority Area 1:* Addressing the social determinants of education;
- *Priority Area 2:* Advancing equity and social justice; and
- *Priority Area 3:* Supporting diverse learners and educators.

In the context of academic programming, *addressing the social determinants of education* concerns the preparation of educators (including instructional designers and technologists) to understand, and plan for, how many social factors contribute to learner success. Among these factors are access to high-quality educational technology, ability to use technology, and dispositions toward using technology to achieve individual needs and goals. *Advancing equity and social justice* includes preparing educators with knowledge, skills, and dispositions to improve outcomes for underserved students and organizations. Lastly, *supporting diverse learners and educators* entails understanding the needs and interests of diverse learners in a wide range of settings and circumstances, as well as the needs of the educators who teach and support them.

SOE’s three priority areas are supported directly by three of the new program’s six learning goals:

- *Learning Goal 4:* Assess technology’s sociocultural impact;
- *Learning Goal 5:* Implement ethical and human-centered learning designs; and
- *Learning Goal 6:* Use data to inform learning design and implementation evaluation.

By addressing these three goals, the content and activities of multiple LDT courses will enable our graduates to create, implement, and evaluate technology-supported learning experiences that meet the needs and goals of diverse learners (SOE priority 3) with an understanding of the specific environmental and social conditions in which they are learning (priority 1), thereby advancing equity and social justice in education (priority 2). The complete list of program learning goals begins on page 17.

Finally, in October 2022 Dr. Christopher Morphew, SOE Dean, asked Dr. James Diamond to present possible steps for a new program at the annual meeting of the school’s National Advisory Committee. Ideas from that presentation and meeting spurred the framework of this current proposal. Most committee advisors agreed that this initiative is a high priority for the school, leading to the Dean’s request, with the agreement of the Vice Dean for Academic Affairs and the department chair, for an MHEC proposal.

3. Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation. (Additional related information is required in section L.)

The School of Education's leadership is committed to the proposed program and is prepared to devote the necessary resources during the planning and development stage to ensure its success. This support includes allocating a dedicated marketing budget line for student recruitment purposes and staff resources to assist faculty in developing the new coursework. While administrative/staffing resources have been allocated to support the program, no additional faculty appointments are necessary to implement the program until the program launches in summer 2025. All course development activities, teaching, program administration, etc., undertaken by full-time faculty will be covered under existing faculty budget lines. If a new program finds that its instructional costs are greater than the tuition revenue, funds are allocated from elsewhere in the School of Education to cover the startup program's expenses during the first five years. Appendix H (in support of section L) provides a fuller explanation of the projected expenditures necessary to support program implementation.

4. Provide a description of the institution's commitment to:

a. ongoing administrative, financial, and technical support of the proposed program

Unlike many new programmatic initiatives, in which the recruitment of faculty with expertise in the subject area runs parallel with the development of a new degree program, SOE already has the necessary faculty expertise and administrative personnel in place to support the program during its development phase (Year 1). The program lead will work with two other full-time faculty members, and select adjunct faculty, on course design. Following the program's launch in summer 2025, and as the program grows, SOE will hire additional full-time faculty, adjunct faculty, and administrative support as needed.

b. continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

The School of Education is committed to providing all enrolled students the opportunity to complete the degree program, including under circumstances of low demand. While the school is confident that the proposed program will be a success, should the program be suspended or discontinued, SOE will "teach out" the program and provide the necessary courses and resources so students can graduate on schedule. The school has prior experience in teaching out programs, and will follow the same approach as previously adopted, including developing plans for each remaining student to complete the degree and modifying course schedules to allow for on-time graduation, even if that means running courses with low enrollments.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

- 1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general based on one or more of the following: a) The need for the advancement and evolution of knowledge; b) Societal needs, including expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education; and c) The need to strengthen and expand the capacity of historically black institutions to provide high quality and unique educational programs**

The proposed program will help Maryland to meet its need for the advancement and evolution of knowledge in the field of educational technology. The education sector is one of the largest employers in Maryland, as well as regionally and nationally, and this sector will greatly influence the present and future needs of the region and the state. The role of digital educational technologies in all segments of education (PreK–12, higher education, and other sectors) is predicted to keep growing through the end of this decade, and beyond.³ Thus, there is a compelling need for professionals who are prepared to develop, implement, and study high-quality technology-supported tools and curricula as the use of these technologies continues to expand over time. The quality of these technology-supported experiences will affect the ability of learners in the state and region to address societal concerns and meet employment needs.

- 2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.**

The new LDT program is aligned with the three primary goals outlined in the 2022 Maryland State Plan for Higher Education. These goals, in turn, accord fully with the mission of the School of Education. If the program, through the performance of its graduates, is successful, it will contribute to improvements in all segments of Maryland’s education system, thereby helping to “promote and implement practices and policies that will ensure student success” (the “Student Success” goal articulated in the Maryland State Plan) at all levels. The goal of the master’s program (and SOE as a whole) is to produce highly trained educational professionals who, through their work, can effect meaningful educational change in Maryland, and the rest of the country. This approach aligns with the Maryland State Plan’s “Innovation” goal, which seeks to “foster innovation in all aspects of Maryland higher education to improve access and student success.”

In addition, the LDT program will also address at least five of the State Plan’s “Priority 8: Promote culture of risk taking” action items. These items are listed in Table 1, alongside how we intend to act as the program launches.

³ <https://www.globenewswire.com/en/news-release/2023/05/26/2676850/0/en/EdTech-Market-Primed-to-Reach-USD-421-Billion-by-2032-with-12-9-CAGR-Rise-in-K-12-and-Higher-Education-By-Sector-Segment-Market-us.html>

Table 1: *LDT Activities for State Plan Priority 8*

State Plan action item	How we will act
Identify innovative and emerging fields of study	In time, through its Learning Experience Design and Learning Engineering concentrations and partnerships with other JHU divisions (Engineering and the Applied Physics Lab), the LDT program will allow students to prepare for emerging careers in learning engineering (a hybrid field that entails work in instructional design and learning analytics) and artificial intelligence in education.
Consider specializing as opposed to expanding academic programs	SOE is creating three specializations for the LDT degree such that it is not a one-size-fits-all educational technology program. This will enable students to specialize based on their long-term professional interests.
Increase paid real-world experiences (such as internships, externships, work-study opportunities) as a part of new curricula	The LDT program will launch with an internship network. Though these internships will not be paid, students will receive credit for these experiences, while having opportunities to explore new career pathways and build professional networks.
Consider alternatives to the traditional academic credentials, such as stackable credentials	Within two academic years of the program launch, the program will undertake two pilots with stackable credentials. First, at least one of the concentrations will also become a standalone certificate. Students who complete the certificate will be able to apply those credits to the completion of a graduate degree, at a discounted tuition rate (TBD). Further, the program plans to develop at least one course in each concentration area that can be taken modularly: that is, as one-credit modules that can be combined (again, at a discounted rate) into a 3-credit course. Students may “mix and match” these modules to create their own elective course or stack the modules to become the full course for which they were designed.
Expand lifelong learning opportunities to the general public, including re-skilling and up-skilling educational programs	In time, the LDT program will offer courses (some as 1-credit modules) to SOE alumnae and the public that enable re-skilling and up-skilling. Upon the completion of these modules, students will receive micro-credentials that can be displayed in their digital portfolios.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (ex: mid-level management) for graduates of the proposed program.

More jobs in a wide range of fields in the U.S. and abroad will come with the expansion of the educational technology (edtech) industry worldwide, along with an increased demand for professionals with graduate degrees. There are three major product categories in the edtech sector: hardware, software, and content. The hardware segment has led the market in recent years, but content is expected to undergo significant growth until at least 2030.⁴ Apart from the multiple occupations associated with teaching, content, which includes the design and development of instructional materials and activities for early childhood, K–12, and adult education, is the segment to which the re-launched LDT program learning goals are most closely aligned.

The U.S. Bureau of Labor Statistics' (BLS) Instructional Coordinator occupation encompasses many jobs that require competency with the program's learning objectives, including Curriculum and Instruction Director, Curriculum Director, Curriculum Specialist, Instructional Designer, Instructional Systems Specialist, Instructional Technologist, and Learning Development Specialist, among others. O-Net characterizes the Instructional Coordinator occupation as follows: "Develop instructional material, coordinate educational content, and incorporate current technology into instruction to provide guidelines to educators and instructors for developing curricula and conducting courses. May train and coach teachers. Includes educational consultants and specialists, and instructional material directors."⁵

According to the BLS, the industries with the highest levels of employment in Instructional Coordinators are Elementary and Secondary Schools; Colleges, Universities, and Professional Schools; Educational Support Services; Junior Colleges; and State Government (excluding schools and hospitals). The top paying industry for instructional coordinators is the Federal Executive Branch, with an annual mean wage salary of \$102,940.00. Maryland is the third-highest paying state for instructional coordinators, with an annual mean wage of \$85,170.00. (The District of Columbia is the highest paying, with an annual mean wage of \$98,930.00). Finally, the Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan area is ranked fifth in the country for highest employment levels of instructional coordinators with an annual mean wage of \$93,030.00.⁶

⁴ <https://www.grandviewresearch.com/industry-analysis/education-technology-market>

⁵ <https://www.onetonline.org/link/summary/25-9031.00>

⁶ <https://www.bls.gov/oes/current/oes259031.htm#ind>

The 2021 median annual pay for all instructional coordinators was \$63,740.00 and the typical entry-level education is a master’s degree.⁷ **Between 2021–2031, employment of instructional coordinators is projected to grow by seven percent, two percentage points higher than the projected growth for all occupations.**⁸

Two other BLS-classified occupations that are relevant to the program are Training and Development Specialist and Training and Development Manager. According to O-Net, specialists “design or conduct work-related training and development programs to improve individual skills or organizational performance. May analyze organizational training needs or evaluate training effectiveness.”⁹ Job titles associated with the training and development specialist occupation in O-Net include Computer Training Specialist, Corporate Trainer, E-Learning Developer, and Training Specialist. Training and development managers “Plan, direct, or coordinate the training and development activities and staff of an organization.”¹⁰ Job titles associated with the training and development manager occupation include Education Director, Learning and Development Director, Learning Manager, and Training and Development Director. O-Net currently designates the specialist and manager occupations as “Bright Outlook” occupations, meaning that they are expected to grow rapidly in the next several years, will have large numbers of job openings, or involve new and emerging occupations.¹¹

According to the BLS, the industries with the highest levels of employment in training and development specialists are Management of Companies and Enterprises, Restaurants and Other Eating Places, Computer Systems Design and Related Services, Business Schools and Computer and Management Training, and General Medical and Surgical Hospitals. The top-paying industry for training and development specialists is Other Heavy and Civil Engineering Construction, with an annual mean wage of \$145,760.00. The Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan area is ranked fourth in the country for highest employment levels of instructional coordinators, with an annual mean wage of \$84,340.00.¹²

The 2021 median annual pay for all training and development specialists was \$61,570.00. The typical entry-level education is a bachelor’s degree. **Employment of training and development specialists is projected to grow eight percent between 2021–2031, three percentage points higher than the average for all occupations.**¹³

The industries with the highest levels of employment in training and development managers are Management of Companies and Enterprises; Computer Systems Design and Related Services; Colleges, Universities, and Professional Schools; General Medical and

⁷ <https://www.bls.gov/ooh/education-training-and-library/instructional-coordinators.htm#tab-1>

⁸ <https://www.bls.gov/ooh/education-training-and-library/instructional-coordinators.htm#tab-6>

⁹ <https://www.onetonline.org/link/summary/13-1151.00>

¹⁰ <https://www.onetonline.org/link/summary/11-3131.00>

¹¹ <https://www.onetonline.org/find/bright?b=0&g=Go>

¹² <https://www.bls.gov/oes/current/oes131151.htm#st>

¹³ <https://www.bls.gov/ooh/business-and-financial/training-and-development-specialists.htm#tab-1>

Surgical Hospitals; and Management, Scientific, and Technical Consulting Services. The top-paying industry for training and development managers is Legal Services, with an annual mean wage of \$198,340.00. Maryland is the state with the highest concentration of jobs and location quotient (the ratio of the area concentration of occupational employment to the national average concentration) for training and development managers, with an annual median wage of \$137,990.00. The Washington-Arlington-Alexandria, DC-VA-MD-WV metropolitan area is ranked seventh in the country for highest employment levels of training and development managers, with an annual median wage of \$152,550.00. Additionally, the same metropolitan area is eighth in the country for top pay among training and development managers.¹⁴

The 2021 median annual pay for all training and development managers was \$120,130.00. The typical entry-level education is a bachelor's degree. **Employment of training and development managers is projected to grow seven percent between 2021–2031, two percentage points higher than the average for all occupations.**¹⁵

In all cases, we expect that LDT graduates will enter or be promoted into low- to mid-level management positions in their workplaces.

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

The three occupations discussed above are classified as “Hot Jobs” by the Maryland Department of Labor.¹⁶ Four hundred twenty-five new instructional coordinator jobs (~11% increase) are expected in MD between 2020–2030, with 544 job openings annually. One thousand one hundred fifty-three new training and development specialist positions (14% increase) are expected during the same period, with 1150 openings annually. Lastly, 216 new training and development manager positions (~14.5% increase) are projected by 2030, with 171 openings annually. Additional MD-specific data on each occupation are available in Appendix C (p. 40).¹⁷

Table 2 includes national-level summary information from the BLS on job outlook for the three occupations discussed above—Instructional Coordinator, Training and Development Specialist, and Training and Development Manager. Additional information from the BLS is provided in Appendix D (p. 43). Each of the three occupations, which are closely aligned to the LDT program's learning objectives, are projected to grow more rapidly than the national average for all occupations through 2031. The BLS projects approximately 15,000 new instructional coordinator jobs nationally by 2031, with approximately 21,000 job openings every year (as people retire

¹⁴ <https://www.bls.gov/oes/current/oes113131.htm#st>

¹⁵ <https://www.bls.gov/ooh/management/training-and-development-managers.htm#tab-1>

¹⁶ <https://www.dllr.state.md.us/lmi/hotjobs/>

¹⁷ Data on MD long-term occupational projections are available at <https://www.dllr.state.md.us/lmi/iandoproj/maryland.shtml>.

or move into different occupations).¹⁸ The BLS also projects approximately 29,000 new training and development specialist positions in the same timeframe, with about 36,500 opening each year.¹⁹ Lastly, the BLS projects approximately 2,900 new training and development manager jobs by the end of the decade, with about 3,700 openings annually.²⁰

Table 2: *BLS Employment Projections by Relevant Occupation*

Occupation	Employment, 2021	Projected employment, 2031	Percent change	Percent change as compared to national average
Instructional Coordinator	205,700	220,800	7%	+2%
Training and Development Specialist	354,800	383,700	8%	+3%
Training and Development Manager	38,100	40,900	7%	+2%

Finally, the Bureau of Labor Statistics does not include an occupation for “Learning Engineer” or “Learning Analyst,” though the description for the Instructional Coordinator occupation includes “Analyze students' test data” among the duties. The Society for Learning Analytics (SOLAR) defines learning analytics as:

the measurement, collection, analysis, and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs...As a research and teaching field, Learning Analytics sits at the convergence of Learning (e.g., educational research, learning and assessment sciences, educational technology), Analytics (e.g., statistics, visualization, computer/data sciences, artificial intelligence), and Human-Centered Design (e.g., usability, participatory design, sociotechnical systems thinking).²¹

It is reasonable to use the BLS description for Data Scientist as a proxy for the work of learning analysts: “Apply data mining, data modeling, natural language processing, and machine learning to extract and analyze information from large structured and unstructured datasets. Visualize, interpret, and report data findings.”

¹⁸ <https://www.bls.gov/ooh/education-training-and-library/instructional-coordinators.htm#tab-6>

¹⁹ <https://www.bls.gov/ooh/business-and-financial/training-and-development-specialists.htm#tab-6>

²⁰ <https://www.bls.gov/ooh/management/training-and-development-managers.htm#tab-6>

²¹ <https://www.solaresearch.org/about/what-is-learning-analytics/>

The BLS reported the May 2022 mean annual wage for data scientists as \$115,240.00.²² The 2022 EDUCAUSE Horizon Report: Teaching and Learning Edition includes “AI for Learning Analytics” as an important trend in educational technology, which will require the skills of trained learning analysts.²³ The learning analytics industry is projected to grow at a compound annual growth rate (CAGR) of 17.4% until 2025.²⁴

3. Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

In July 2022 the SOE engaged Hanover Research to conduct an independent market analysis. Excerpts from their labor market analysis are included in Appendix E (p. 45). At the time of the report, Hanover identified over 4000 position postings that related to the future LDT program. Approximately 12% of the recently advertised positions required a master’s degree or higher.

The first image below illustrates Hanover’s 2021–2031 employment projections for the three occupations, based on a third-party software tool (JobsEQ). The second image depicts aggregate employment growth for the same period by geographic region. Hanover projected that the three occupations in Maryland will grow by 4.1% from 2021–2031, while they will grow by 1.6% in the DE-DC-MD-NJ-NY-PA region.

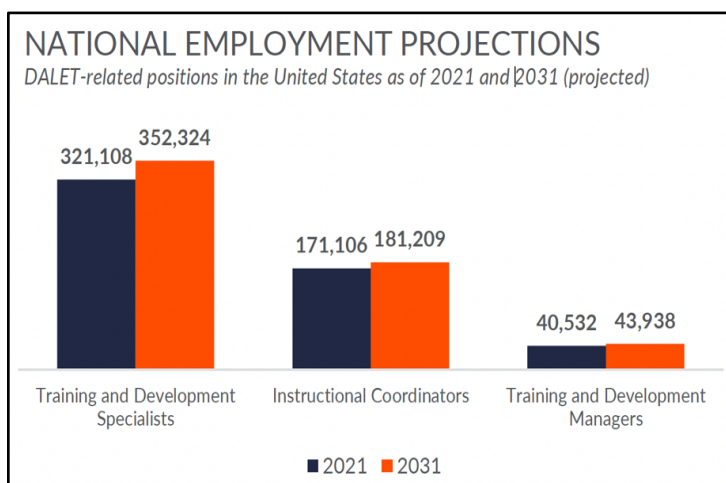


Figure 1: Hanover’s National Employment Projections for Relevant Occupations

²² <https://www.bls.gov/oes/current/oes152051.htm>

²³ <https://library.educause.edu/-/media/files/library/2022/4/2022hrteachinglearning.pdf?la=en&hash=6F6B51D>

²⁴ <https://www.grandviewresearch.com/industry-analysis/education-learning-analytics-market>

TOTAL LABOR MARKET			
Aggregate projected employment growth by geographic level			
	Maryland	Mideast	United States
Estimated Employment (2021)	11,089	87,882	532,746
Projected Employment (2031)	11,541	89,270	577,471
Total Annual Openings, Observed Occupations	1,184	8,992	60,301
Employment Growth, Observed Occupations	4.1%	1.6%	8.4%
Employment Growth, All Occupations	-0.4%	-2.4%	4.3%

Source: [JobsEQ](#)
Note: The Mideast region comprises DE, DC, MD, NJ, NY, and PA.

Figure 2: *Hanover's Employment Projections by Region*

4. Provide data showing the current and projected supply of prospective graduates.

There are no Maryland schools that offer a direct match and comparison to the proposed LDT program, so there is no past data to reference. Through SOE's own market analysis and budget projections, SOE anticipates recruiting 30 students (10 full-time, 20 part-time) for the first cohort to launch in summer 2025 and then 40-45 new students in subsequent years. If the LDT program and its concentrations prove to be successful, then enrollment projections may be revised upwards.

D. Reasonableness of Program Duplication:

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

We have identified six similar graduate programs in Maryland, listed in the table below. Our peer programs all offer degrees or certificates in the field of educational technology. The LDT program explicitly does not lead to any teacher certification through the Maryland State Department of Education and has no linkage to the K-12 education system. Except for the University of Maryland College Park, which offers an in-person M.A., all programs are also fully online. While the new SOE program shares similar characteristics and goals to these existing programs, we believe that at least three features set our program apart from the others: 1) LDT will allow students to choose an area of focus (concentration) within the degree program—the concentrations allow students to choose from a wider range of professional specializations than do other programs; 2) LDT will follow a cohort model (as does the College Park program), which we believe will allow students more opportunities to expand their professional networks and, particularly in an online learning environment, to collaborate more effectively with their

peers; and 3) LDT will allow students to concentrate in the use of artificial intelligence to support educational enterprises.

Table 3: *Maryland Institutions with Similar Programs*

Institution	Program	Degree(s) and certificates granted	Program URL
Loyola University Maryland	Learning Design and Technology (online)	M.Ed.	https://www.loyola.edu/school-education/academics/graduate/educational-technology/med
Towson University	Instructional Technology (online)	M.S.	https://www.towson.edu/college/departments/learning-technologies/grad/instructiontechms/
University of MD Baltimore County	Learning and Performance Technology (online)	1) M.A.; 2) Grad Certificate in Instructional Systems Development; 3) Grad Certificate in eLearning; 4) Grad Certificate in Learning and Performance Technology	https://professionalprograms.umbc.edu/learning-and-performance-technology/
University of Maryland College Park	Teaching and Learning, Policy and Leadership, Master of Arts: Technology, Learning, and Leadership Specialization (in-person)	1) M.A.; 2) Integrated Technology in Education—Post-Baccalaureate Certificate (online)	https://education.umd.edu/academics/programs/teaching-and-learning-policy-and-leadership-master-arts-master-technology-learning
University of Maryland Global Campus	Instructional Technology (online)	M.Ed.	https://www.umgc.edu/online-degrees/masters/med-instructional-technology

Institution	Program	Degree(s) and certificates granted	Program URL
University of Maryland Global Campus	Learning Design & Technology (online)	M.S.	https://www.umgc.edu/online-degrees/masters/learning-design-technology

2. Provide justification for the proposed program.

The field of educational technology is projected to continue growing for at least the next decade and the growth of occupations in this area exceeds the national average. JHU is highly regarded as having expertise in the emerging field of artificial intelligence, and no current program in the state represents these focus areas with this strategic program model of coursework and cohorts. Given the projected demand for professionals in the field of educational technology regionally and nationally, we believe that permitting growth of new programs in Maryland is reasonable.

E. Relevance to High-demand Programs at Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the implementation or maintenance of high-demand programs at HBI's.

There are no comparable graduate degree programs offered at any of Maryland's four Historically Black Institutions, and thus there should be no impact on the implementation or maintenance of high-demand HBI programs.

F. Relevance to the identity of Historically Black Institutions (HBIs)

1. Discuss the program's potential impact on the uniqueness and institutional identities and missions of HBIs.

As indicated above, there are no comparable graduate degree programs offered at any of Maryland's Historically Black Institutions. Thus, the proposed program should not affect the implementation, maintenance, uniqueness, identity, or mission of any HBI.

G. Adequacy of Curriculum Design, Program Modality, and Related Learning Outcomes (as outlined in COMAR 13B.02.03.10):

1. Describe how the proposed program was established, and also describe the faculty who will oversee the program.

The worldwide shift toward online education because of the COVID pandemic, and the ongoing expansion of the edtech industry, convinced SOE faculty in the area of educational technology of the need to ensure that our school could contribute to the education of highly qualified professionals who can meet industry demands and who can center equity and social justice in their work. Dr. James Diamond, Assistant Professor, began to discuss a potential program with SOE Dean Christopher Morpew in spring 2022. Dean Morpew authorized a market analysis by Hanover Research, as discussed above. Following additional discussions about the Hanover analysis, the dean requested that Dr. Diamond present ideas for the new program in fall 2022, and then tasked Dr. Diamond with drafting the MHEC proposal.

Dr. Diamond has led the development of this proposal, with input from Dr. Christopher Devers and Dr. Joshua Schuschke, the two other full-time SOE faculty members in the field of educational technology. Dr. Christina Harnett, Counseling and Educational Studies department chair, and Kelly Cooney, SOE senior instructional designer, have also provided input to the proposal development. At the Dean's pleasure, Dr. Diamond will oversee the program development for the foreseeable future.

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth, and (modality) of the program.

The primary educational goal of the LDT program will be to prepare designers, educators, and other professionals in the field of educational technology to conceptualize, design, implement, evaluate, and research innovative, effective, and equitable applications of technologies for learning in K–12, out-of-school, higher education, corporate, and entrepreneurial environments. Our vision is one of intentional, meaningful, and contextually aware design, implementation, and evaluation of technologies in all formal and informal educational settings to support individual learner creativity and development and to foster equity, social justice, and flourishing communities of learners.

Upon successful completion of the LDT program, graduates will be able to:

1. Apply Theory and Evidence to Digital Curriculum and Environment Design

- Ideate and implement digital education solutions.
- Integrate evidence and ideas from learning sciences, theories of motivation, and critical theory of technology into designs and instructional plans.
- Implement digital learning environments and pedagogies based on clearly articulated educational philosophies.

2. Collaborate and Lead in Educational Technology Solutions

- Work with diverse stakeholders constructively, professionally, and effectively.

- Produce quality technology-supported learning designs.
- Lead and provide vision for technology-supported implementations.
- Manage ongoing evaluation of educational technologies.

3. **Effectively Communicate Technology-Supported Designs**

- Articulate technology-supported learning designs clearly and professionally.
- Utilize diverse media and tools for communication tailored to various audiences.
- Ensure clarity in conveying ideas and designs to different stakeholder groups.

4. **Assess Technology's Sociocultural Impact**

- Examine power dynamics and privilege affecting educational technology designs and implementations.
- Analyze how socioeconomic systems influence technology adoption and evaluation.
- Develop solutions to address and prevent injustices through educational technology.
- Focus on equitable and inclusive technology-supported learning environments and tools.

5. **Implement Ethical and Human-Centered Learning Designs**

- Apply systematic models to create ethical, learner-focused digital tools and curricula.
- Design and execute technology-supported educational programs prioritizing diverse learner needs.
- Evaluate digital tools and curricula to ensure they advance equity across varied contexts.
- Focus on meeting lifelong learning goals and addressing diverse learners' aspirations.

6. **Use Data to Inform Learning Design and Implementation Evaluation**

- Employ various evaluation and research methods to gain insights into learner needs and tool effectiveness.
- Analyze educational data using qualitative, quantitative, and mixed methods.
- Inform design and decision-making processes with data-driven insights.

- Continuously improve practices and outcomes based on evaluation data.

The six goals delineated above will guide all aspects of curriculum development. In addition, our curriculum will be aligned to the AECT (Association for Educational Communications and Technology) Standards; there are six standards (target areas) and 11 indicators (observable measures of progress). All course activities and assignments will be aligned to at least one of these standards. Before graduating, students will be required to demonstrate their competencies in each of these standards in their digital portfolios. Students will curate at least three work products for each standard and display them in their portfolio. The AECT Standards are included in Appendix F (p.47).

3. Explain how the institution will:

a. provide for assessment of student achievement of learning outcomes in the program.

Aligned with SOE's vision, mission, and dispositions, the school's Comprehensive Assessment System (CAS) guides learning assessment practices and addresses all SOE program goals, professional and national standards, and state standards that are appropriate to each program. Developed through collaboration with faculty, staff, and key stakeholders from the community, the CAS promotes reflective practice, critical thinking, and inquiry-based learning through a robust review of performance-based assessment measures, which ultimately drive program and unit-level improvements and aim to increase student learning outcomes, satisfaction, and impact on their community.

At the core of the CAS is the course-based assessment focusing on knowledge, skills, and behaviors in courses within a program. The LDT program faculty will collaborate with staff from the SOE Office of Innovative Learning, Design, and Assessment (OILDA) to ensure that our program learning goals and objectives are mapped to a well-rounded curriculum. All course learning outcomes are aligned with appropriate program learning goals and objectives.

Building upon this foundation, program faculty will work closely with instructional designers and the OILDA assessment specialist to design and develop courses with well-constructed learning outcomes, identify key assessments from courses that are suitable in the program curriculum, create robust assessment rubrics, facilitate learning assessment data collection, analyze/review assessment data, and consistently engage in continuous curricular improvement activities. It is the SOE's goal to ensure that all academic programs include an integrated, evidence-based, and data-driven assessment culture.

b. document student achievement of learning outcomes in the program.

Beginning in fall 2022, SOE and all other JHU divisions moved to the Canvas learning management system (LMS). Additionally, the university implemented a

new learning assessment management system, HelioCampus (formerly AEFIS: Assessment, Evaluation, Feedback, and Intervention System), to support and manage the school's learning assessment effort. As an industry leader, HelioCampus provides a comprehensive set of solutions to strengthen and facilitate SOE's assessment culture.

To achieve this goal, OILDA has dedicated experts in program development, learning assessment, data analytics, and data visualization who collaborate with program faculty and provide ongoing training and support. Course-based learning assessment data are collected, analyzed, and reported each semester. At the end of each assessment cycle or academic year, OILDA staff will prepare an assessment report, create an assessment data dashboard powered by Microsoft Power BI, and review the results with the program lead faculty and the department chair at a working session. Working collaboratively, academic programs and OILDA staff identify areas of improvement formulate actions plans. The action plan is then implemented and incorporated into the next assessment cycle.

In addition to course-based assessment data, data from student course evaluations, annual alumni survey, and annual employer surveys data are collected and analyzed to provide indirect data sources to measure program effectiveness and student achievement of learning outcomes, as well as insights on continuous program improvements.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

At minimum, to be eligible for admission to the proposed LDT program, candidates must: 1) hold a bachelor's degree in an appropriate discipline (for example, education, English, psychology, or computer science) from an accredited college or university, and 2) have earned a minimum cumulative grade point average (GPA) of 3.0 (on a 4.0 scale) in all previous undergraduate and graduate studies.

Students will be required to complete a minimum of 36 credits to earn the master's degree. Students must maintain a cumulative grade point average of at least 3.0 (on a 4.0 scale) to receive approval for graduation.

Although some courses will draw on existing SOE curricular content, many courses in the program will be new. As noted above, all courses will be fully online (except for the first two foundation courses, which will be taught in hybrid format to allow for residential students to take the courses with online students). A full course listing with course titles, descriptors, and credit hours is provided in Appendix A (p. 33) and a sample course plan is provided in Appendix B (p.39).

5. Discuss how general education requirements will be met, if applicable.

Not applicable.

- 6. Identify any specialized accreditation or graduate certification requirements for this program and its students.**

Not applicable.

- 7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.**

Not applicable.

- 8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

The School of Education will provide students enrolled in the proposed M.S.Ed. program with clear, complete, and timely information. New candidates entering the program will participate in the two-credit orientation course that provides a program overview detailing the curriculum and program requirements. In addition, SOE offers self-paced online modules that provide guidance on the use of all technologies involved with Canvas and the University's student information system, and information about the entire range of student services available to students, including registration, financial aid, and student accounts. The school also offers online training modules for students on conducting library searches, formatting papers and references, and understanding and avoiding plagiarism, among other topics.

Additionally, all essential course-related information (for example, course learning outcomes and requirements, assignments, deadlines, technology requirements, etc.) will be detailed in the syllabus for each course, which will be posted on the Canvas course site prior to the course start date. Program-related information (for example, degree requirements, learning management system information, availability of academic support services, financial aid resources, and tuition and cost payment policies, etc.) can be found both on the SOE website (<https://education.jhu.edu/>) and the School's Academic Catalog (<https://education.jhu.edu/academics/academic-catalog/>).

- 9. Provide assurance and any appropriate evidence that advertising, recruiting, and admissions materials will clearly and accurately represent the proposed program and the services available.**

The School of Education regularly reviews its advertising, recruiting, and admissions materials to ensure that: 1) they clearly and accurately represent the program and services available, and 2) there is content alignment across different modes of communication: the SOE website, the School's Academic Catalog, print and other forms of marketing materials, etc. The school affirms that these materials represent a good faith effort to be

totally clear and transparent in all communications with current and prospective students, and that the proposed program will be held to the same standards as other SOE programs.

H. Adequacy of Articulation (as outlined in COMAR 13B.02.03.19)

Not applicable.

I. Adequacy of Faculty Resources (as outlined in COMAR 13B.02.03.11).

- 1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, adjunct) and the course(s) each faculty member will teach in the proposed program.**

The School of Education currently has three full-time faculty members working in the field of educational technology: Dr. James Diamond (Assistant Professor), Dr. Christopher Devers (Assistant Professor), and Dr. Joshua Schuschke (Assistant Professor). All three have extensive experience working in the area K–12 technology integration and with investigating pedagogies for technology-supported curricula in multiple settings. The three full-time faculty members will be responsible for teaching the foundation courses, as well as several concentration courses and electives.

Dr. Diamond has been a member of the SOE faculty since 2018. He received his Ph.D. in Educational Communication and Technology from New York University in 2012. Diamond is a researcher in the field of digital media and learning and his research has been funded by the National Science Foundation, the MacArthur Foundation’s HASTAC Digital Media and Learning Initiative, the Gates Foundation, and the Robin Hood Learning + Technology Fund. Diamond has taught courses in instructional design, games and simulations for learning, and evaluation.

Dr. Devers has also been a member of the SOE faculty since 2018. He received his Ph.D. in Curriculum and Instruction from the University of Illinois at Urbana-Champaign in 2009. Dr. Devers’ research is on the use of videos, mobile devices, and online environments to support teaching and learning. Dr. Devers has taught courses in the learning sciences, research methods, and creativity.

Dr. Schuschke has been a member of the SOE faculty since 2021. He received his Ph.D. in Urban Education Policy from the University of Southern California in 2019. His research examines the role of popular and social media as educational technology tools and spaces for Black academic identity constructions. His work also leverages the cultural strengths and practices of Black youth and communities with media and technologies to advocate for inclusive pedagogical practices. Schuschke has taught classes in technology leadership, research methods, culturally relevant pedagogies, and social media and identity.

The school expects to hire at least one additional full-time faculty member, at the Associate or Professor level, with expertise in learning analytics and data science. As noted above, Johns Hopkins University is undertaking a major investment in data science and artificial intelligence that will engage all the university's divisions, including SOE. The school plans to treat the Learning Engineering (LEN) concentration in the proposed program as its initial academic program offering in data science. We also expect this concentration to lead to inter-divisional collaboration with the JHU Whiting School of Engineering and the JHU Applied Physics Lab, two divisions in which there is already considerable faculty expertise in data science, artificial intelligence, and computer programming. Faculty and adjunct instructors in those divisions will be able to teach the SOE concentration courses.

In addition, the school has recently appointed Dr. Ebony McGee as Professor of Innovation and Inclusion in the STEM Ecosystem. Dr. McGee is a Bloomberg Distinguished Professor at Johns Hopkins University, with appointments at the School of Education and the School of Public Health. She studies how racialized biases in science, technology, engineering, and mathematics impact graduate and career pathways for high-achieving, historically marginalized students. Additionally, Dr. McGee cofounded the Explorations in Diversifying Engineering Faculty Initiative, as well as the Institute in Critical Quantitative and Mixed Methodologies Training for Underrepresented Scholars. Dr. McGee will advise the program as it builds a partnership with the JHU Whiting School of Engineering to support the three concentrations and may teach one concentration course.

Given the extensive expertise available to SOE, the School is confident that it possesses the requisite faculty resources of experienced professionals and clinical researchers to successfully deliver the program. See Appendix G (p.51) for a representative list of faculty who will teach in the program.

2. Demonstrate how the institution will provide ongoing pedagogy training for faculty in evidenced-based best practices, including training in:

a. Pedagogy that meets the needs of the students.

The SOE Office of Diversity and Faculty Development (ODFD) provides professional development support for full-time and adjunct faculty. ODFD administers annual onboarding orientations for new instructors, online and in person workshops on best practices in teaching and assessment, faculty and staff book clubs, and individual coaching sessions. Faculty are evaluated annually by department chairs and referred to ODFD for coaching when needed.

b. The learning management system.

The school requires instructors to undertake training in how to use the Canvas LMS as well as how to teach an online course prior to teaching one. Through its

Office of Innovative Learning, Design, and Assessment, SOE offers a self-paced, online training course (Teaching and Learning @ SOE), which trains faculty on best practices in teaching online, and how to effectively manage the course—for example, how to oversee an online discussion—as well as how to use the technology involved with the LMS. In addition, the school also develops and offers ongoing training sessions for faculty on specific technologies and processes—on everything from grading in the LMS to effective use of technologies including Panopto, VoiceThread, and Zoom. Faculty have access to a growing online bank of resources related to online instruction, including policies, forms, tutorials, library resources, and technology resources.

c. Evidenced-based best practices for distance education, if distance education is offered.

In addition to the services described above, the team of instructional designers in OILDA uses best practices established by the Online Learning Consortium when designing online courses.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12).

1. Describe the library resources available and/or the measures to be taken to ensure resources are adequate to support the proposed program.

The Johns Hopkins Sheridan Libraries have a history of strong and continued support for the School of Education, especially in distance education, where SOE has greatly expanded its online program offerings in the past decade. Significant resources are allocated to build collections and provide academic liaison services that support the research and teaching of the faculty and help students with the knowledge they need to become effective educators. In addition to more than 3.7 million books, 211,000 maps, 15,000 DVDs, the libraries provide 24/7 access to a rich collection of electronic resources, including over 171,000 print and e-journals, and more than 900,000 e-books. Included in the Libraries' special collections are rare books, manuscripts, digital collections, and archival materials. The library's materials and services reflect the development and increasing diversification of resources used for teaching, research, and scholarship.

Additionally, the School is served by dedicated academic liaison librarians with subject area expertise who provide research consultation and instructional services to faculty and students, and who help build electronic and print collections to support the teaching and research needs of the university.

Distance education students have online access to the Milton S. Eisenhower Library on the Homewood campus, ranked as one of the nation's foremost facilities for research and scholarship. The interlibrary loan department allows students access to resources at any

other university in the nation. The library also provides easy access to a wide selection of electronic information resources, including the library's online catalog, and numerous electronic abstracting and indexing tools. Many of the databases are accessible remotely. Librarians are available to assist students remotely and the library maintains an extensive web site to take visitors through all its services and materials.

K. Adequacy of Physical Facilities, Infrastructure, and Instructional Equipment (as outlined in COMAR 13B.02.03.13)

- 1. Provide an assurance that physical facilities, infrastructure, and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences.**

The new program will be delivered wholly online and therefore should not impact SOE's physical facilities and infrastructure. With respect to technology infrastructure, the program will use the Canvas LMS. The university's central IT office provides technical maintenance and system-wide updates for the LMS. The school's OILDA also has a dedicated team to support the LMS and many other instructional technology needs. SOE has successfully delivered hundreds of online, blended, and web-enhanced courses annually using different learning management system platforms over the years. As part of the program's development, the School's OILDA and Office of Finance and Operations have determined that SOE possesses the necessary technology infrastructure and instructional equipment in place to support successful delivery of the proposed program.

- 2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to:**

- a. An institutional electronic mailing system, and**

All SOE students and faculty have access to an Office 365 account that includes email capabilities (built on Outlook Live), which is managed and supported by a central University IT office. The email account is accessible from a variety of browsers on both PC and Mac systems.

- b. A learning management system that provides the necessary technological support for distance education.**

As noted, the proposed program will launch in a blended/hybrid format. For all instructional delivery modes, SOE uses Canvas as its LMS. Canvas is one of the world's leading providers of e-learning systems for higher education institutions. The system's software focuses on educational outcomes and provides a highly flexible learning environment for students. Both the university, which supports the LMS centrally, and SOE are outfitted with suitable technical and professional staff to provide technical assistance to students taking online and blended/hybrid courses. Additionally, all participants have full access (both in-person and remotely) to counseling and student support services, IT support services, and other administrative resources.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

Please see Appendix H.

M. Adequacy of Provisions for Evaluation of Program (as outlined in COMAR 13B.02.03.15).

1. Discuss procedures for evaluating courses, faculty, and student learning outcomes.

At the individual course level, SOE conducts end-of-semester summative evaluations of every course. The course evaluation focuses on three primary areas: quality of course design, quality of instructor, and quality of student experience. The results of every course evaluation are analyzed to determine if changes to the course content or course delivery mechanisms are necessary, and results are also shared with department chairs and program leads. Department chairs then conduct a second review to determine whether any improvements are needed in course design and implementation. Findings from these reviews are shared with the faculty member and program leads.

As part of an annual performance review process, SOE faculty are evaluated, among other things, on both the effectiveness of their teaching; their service to the school, community, and the intellectual field; and their scholarship in their areas of expertise.

As outlined under G.3.a, the School of Education houses the Office of Innovative Learning Design and Assessment (OILDA), which is staffed by personnel with expertise in curriculum development, instructional design, technology integration, learning assessment, program evaluation, data analysis and visualization, and learning analytics. Program faculty will: 1) work with OILDA's instructional designers to ensure that program curriculum and courses are designed and developed to align closely with program learning outcomes; 2) collaborate with OILDA staff including learning assessment specialists to develop a robust assessment plan with key assessments mapped onto every program learning outcomes; 3) construct rigorous assessment rubrics that are directly and closely connected to the corresponding target program learning outcomes to be measured; 4) support OILDA assessment staff on learning assessment data collection; and 5) annually review assessment results, identify areas of improvement, and develop and implement an action plan, in collaboration with OILDA staff.

Through this iterative and continuous improvement cycle, the program director and faculty will systematically and methodically evaluate how well the program learning outcomes are achieved and how the program curriculum can be improved for more optimal student learning outcomes.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost-effectiveness.

Evaluation of the program's educational effectiveness will be guided by SOE's Comprehensive Assessment System (CAS). As elaborated in G.3.a., the school aims to promote reflective practice, critical thinking, and inquired-based learning through a robust review of performance-based assessment measures to drive program improvement and increase student learning outcomes, satisfaction, and impact on their community.

The effectiveness of the program will primarily be determined by benchmarking how well student learning outcomes are achieved, drawing from a variety of assessments and data sources, both direct and indirect.

Through semester and/or annual review of both direct and indirect assessment data (e.g., course-based assessment results, course evaluation results, alumni and exit survey responses, feedback from faculty and instructors, etc.), the program lead will collaborate with OILDA's assessment team to identify areas of improvement, develop an action plan to address those areas of improvement, and implement the action plan.

Regarding student retention, SOE can run regular reports detailing student retention data for its programs. More importantly, faculty advisors will serve as the first point-of-contact for students should any problems (whether academic or non-academic) arise and can direct their advisees to appropriate student support services as needed.

As part of the program's development, SOE has determined (as outlined in Appendix H) that the proposed program will be cost effective. The program's revenues and expenses will be monitored closely in the future to ensure that the program is being delivered in a cost-effective manner. For example, should newer, cheaper, and more effective technologies emerge in the online space that would enhance program quality, they will be adopted.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR 13B.02.03.05).

1. Discuss how the proposed program addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

The Johns Hopkins University follows all stipulations of Title VI, Title IX, and Section 504. Accordingly, race and ethnicity are not considered in the administration of the school's academic programs. Nonetheless, in accordance with both the Johns Hopkins University's and School of Education's stated commitment to diversity, and the program's commitment to producing graduates who will seek to promote educational opportunity in education policy, the program will employ recruitment strategies and offer student support services to attract and sustain a diverse student body. Any graduate of an HBI that has completed an appropriate undergraduate degree—for example, a Bachelor of Arts or Bachelor of Science degree in such fields as education, political science, sociology, or economics—would be eligible, and indeed encouraged, to apply SOE's

program. The program will work to help all admitted students improve their professional goals, an aim consistent with the State’s minority student achievement goals.

O. Relationship to Low Productivity Programs Identified by the Commission:

Not applicable.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

The School of Education affirms that the Johns Hopkins University is fully eligible to provide distance education. The University, and SOE in particular, have a long history of successfully delivering high-quality distance education programs. The school currently offers more than a dozen fully online programs at the post-baccalaureate certificate, master’s degree, and doctoral degree level, all of which have been reviewed and approved by MHEC.

2. Provide assurance and any appropriate evidence that the institution complies with the C-RAC guidelines, particularly as it relates to the proposed program.

a. Online learning is appropriate to the institution’s mission and purposes.

As articulated previously, the mission of the Johns Hopkins University is “to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world.” In fulfilling the final part of the institution’s mission—bringing the benefits of discovery to the world—an online delivery format is not only appropriate, but also an essential component to disseminating knowledge to students who are unable to travel to one of the University’s campus locations.

c. The institution’s plans for developing, sustaining, and, if appropriate, expanding online learning offerings are integrated into its regular planning and evaluation processes.

Online learning is fully incorporated into SOE’s systems of governance and academic oversight. The School’s Curriculum and Policy Committee (CPC), which reports to SOE’s Faculty Senate and is a representative faculty committee, is responsible for ensuring academic quality control for all SOE programs, whether face-to-face or distance education. All online course and program proposals are vetted by the CPC. In turn, the committee makes academic policy and programmatic recommendations to SOE’s Academic Council, which is the

overarching governance body for the school, and which comprises elective faculty representatives and the school's senior administrative leadership.

Additionally, the university reviews new online program proposals using the same systems of governance and academic oversight as that for new on-site programs, and all new program proposals are shared with the deans of all the other academic divisions within the institution.

d. Online learning is incorporated into the institution's systems of governance and academic oversight.

The curriculum for the revised program is coherent, cohesive, and comparable in academic rigor to other master's degree programs that SOE offers in traditional instructional formats. As indicated above, all online offerings are held to the same academic standards as traditional face-to-face programs and, under SOE's governance structure, go through the same review and approval process.

e. Curricula for the institution's online learning offerings are coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.

As outlined above, evaluation of the program's educational effectiveness will be guided by SOE's comprehensive reiterative assessment process. The effectiveness of the program, as with all of the school's programs (whether online or face-to-face), will primarily be determined by evaluating student learning against the learning outcomes defined at both the overarching program level and individual course level. These outcomes will be assessed using a range of assessment types, such as individual course exams, projects, papers, discussions, and collaborative work.

Following a reiterative assessment approach, every semester, the program lead and OILDA team will: 1) review student performance on assessments to gauge student achievement of learning outcomes, and 2) analyze feedback from students and faculty (via, for example, course evaluations) and other stakeholders to measure student and faculty satisfaction and to determine if the program is meeting its goals and objectives. Based on this data, and where necessary, the program director, in conjunction with the design team, will make modifications to the program in relation to the assessments used to measure student learning outcomes, the curriculum, the technology used to deliver the course content, and so on.

f. Faculty responsible for delivering the online learning curricula and evaluating the students' success in achieving the online learning goals are appropriately qualified and effectively supported.

As indicated above, the full-time and adjunct faculty involved in the proposed revised program are highly qualified. Furthermore, as noted, SOE provides comprehensive support to its faculty. The school requires instructors to undertake training in how to teach an online course prior to teaching one. Through OILDA, SOE offers a three-week, facilitated, online training course (How to Teach Online), which is customized as needed for specific programs, trains faculty on how to teach online and how to effectively manage the course—for example, how to oversee an online discussion—as well as learn how to use the technology involved with the learning management system (Canvas). In addition, the school also develops and offers ongoing training sessions for faculty on specific technologies and processes, on everything from grading on Blackboard to effective use of technologies including Panopto, VoiceThread, and Zoom. Faculty have access to a growing online bank of resources related to online instruction, including policies, forms, tutorials, library resources, and technology resources.

During the online course development process, program faculty will receive direct support and guidance from their assigned OILDA instructional designer(s). This could take the form of course design guidance based on best practices in online learning, course production support, audio and video recording support, and so on. Once the course is built, instructional design support staff will continue to aid instructors, offering best practices in course instruction and help desk support. After a course has been taught, program faculty will continue to consult with the OILDA design team to make updates and improvements to the course based on student feedback, other stakeholder input, and other data.

g. The institution provides effective student and academic services to support students enrolled in online learning offerings.

The School of Education provides a full range of student services to students in distance education programs. Many of these services are accessible to all students (whether enrolled in a face-to-face or online academic program) via SOE's website. This online resource contains information on all the student services available to students, including registration, financial aid, tuition and billing, student affairs, and disability services. More specifically:

- i. Academic Advising.** Students are assigned a faculty advisor when accepted into a program. Students work individually with the advisor to develop a course of study that meets the requirements of the program and the career goals of the student. The advisor regularly contacts the students to check on progress and answer questions.
- ii. Library Services.** Students have online access to the Milton S. Eisenhower Library on the Homewood campus, ranked as one of the nation's foremost facilities for research and scholarship. The interlibrary

loan department allows students access to resources at any other university in the nation. The library also provides easy access to a wide selection of electronic information resources, including the library's online catalog, and numerous electronic abstracting and indexing tools. Many of the databases are accessible remotely. Librarians are available to assist students remotely and the library maintains an extensive web site to take visitors through all its services and materials.

- iii. **Services for Students with Disabilities.** The Johns Hopkins University is committed to making all academic programs, support services, and facilities accessible to qualified individuals. Students with disabilities who require reasonable accommodations can contact JHSOE's disabilities services coordinator.
- iv. **Johns Hopkins Student Assistance Program.** The Johns Hopkins Student Assistance Program (JHSAP) is a professional counseling service that can assist students with managing problems of daily living. Stress, personal problems, family conflict, and life challenges can affect the academic progress of students. JHSAP focuses on problem solving through short-term counseling. Accessing the service is a simple matter of a phone call to arrange an appointment with a counselor. Online students may call a phone number for consultation and will be directed to the appropriate resource or office. JHSAP services are completely confidential. The program operates under State and Federal confidentiality legislation and is HIPAA compliant.
- v. **Transcript Access.** Official transcripts will be mailed by JHSOE's Registrar's Office upon written request of the student at no charge.
- vi. **Student ID JCard.** The JCard serves as the student's University identification card. This card is mailed to the home address of every registered student. The JCard acts as the university library card, which enables students to check out books from the Homewood Eisenhower Library or at any of the campus center libraries and provides access to many computer laboratories.
- vii. **The institution provides sufficient resources to support and, if appropriate, expand its online learning offerings.** The school of Education has a long history of delivering online learning offerings, and in the past decade has expanded its distance education footprint substantially so that most of the school's courses are now delivered online and the majority of the school's students are also now enrolled in distance education programs. As such, the school is well positioned to provide the

resources necessary to support the proposed program and, if necessary, allow for expansion. SOE is committed to providing ongoing financial and technical resource support to ensure the program's success.

- viii. **The institution assures the integrity of its online offerings.** The Higher Education Opportunity Act (HEOA) enacted in 2008 addresses academic integrity. This act requires that an academic institution that offers distance education opportunities to students has a process established: 1) to verify that the student who registers is the same student who participates in and completes the offering and receives academic credit for it, 2) to verify that student privacy rights are protected, and 3) that notifies the student about any additional costs or charges that are associated with verification of student identity.

To ensure compliance with the act, SOE has implemented the following actions in relation to its distance education offerings: 1) students may only enter the Canvas learning management system by providing their unique student ID and password assigned upon admission, 2) all FERPA privacy rights are preserved by limiting access to systems such as the University's student information system to only those permitted by law to have access to restricted student information, and 3) there are no additional costs imposed on students for the measures used to verify student identity.

Additionally, the school offers self-paced online training and orientation modules to all students in distance education programs. The mandatory orientation module can be customized (as needed) for specific programs. All online orientation modules include a program overview detailing the curriculum and program requirements, orientation on the use of all technologies involved, information about the entire range of student services available to students, and information about the school's and university's conduct policy, including academic misconduct. In addition, SOE offers online training modules for students on conducting library searches, formatting papers and references, and understanding and avoiding plagiarism, among other topics. Finally, SOE faculty have access to plagiarism detection tools that identify unoriginal content in work submitted by students.

Appendix A Course Listing

New courses to be developed for the program (pending faculty curriculum committee approval) are indicated by an ED.XXX.XXX prefix. Courses with numeric prefixes already exist, though many will be modified for the new program.

I. FOUNDATION COURSES

ED.XXX.XXX, *Foundation 1: How People Learn* (3 cr.)

In this course, students are introduced to behavioral, cognitive, cultural, and social theoretical perspectives on learning across the lifespan, as well as theories of motivation. Readings focus on empirical and conceptual literature in the learning sciences, and students are familiarized with design-based research as the primary research method in this field. Course activities emphasize the application of these theoretical perspectives to analyses and critiques of existing technology-supported learning environments.

ED.XXX.XXX, *Foundation 2: Humanistic Technology Design* (3 cr.)

In this course, students are familiarized with design frameworks to help them create educational technologies that support learning and prioritize human values, foster humane experiences, and embrace inclusivity. As digital technologies continue to shape education, the course equips students with the knowledge and skills to apply value-sensitive design, humane design, and inclusive design frameworks to create technology-enhanced learning environments that prioritize learners' well-being, ethical considerations, and diverse needs. Students collaborate to complete the course with two paper prototypes for technology-supported learning interventions. (Prerequisite: Foundation 1)

ED.XXX.XXX, *Foundation 3: Critical Approaches to Technology* (3 cr.)

Students analyze educational technologies through the lenses of critical theory and critical theory of technology. The course empowers students to critically examine the multifaceted impact of technology on education, while scrutinizing the intersections of power, privilege, and societal structures in the design and deployment of learning technologies. Students deconstruct prevailing narratives surrounding educational technologies to discuss the underlying power dynamics that shape their development and utilization. Drawing from critical theory frameworks, they will investigate the ways in which digital tools mediate educational experiences and contribute to shaping social norms, equity, and access. Students will gain the skills to dissect and challenge assumptions, fostering a nuanced understanding of the ethical, cultural, and political dimensions inherent in technology-infused education. (Prerequisite: Foundation 1 and 2)

ED.XXX.XXX, *Foundation 4: Assessment, Evaluation, and Research* (3 cr.)

Assessment, Evaluation, and Research equips students with fundamental skills in educational technology assessment and research methodologies. The course provides students with a comprehensive understanding of distinct approaches to assessment and evaluation, emphasizing their applications within the context of educational technology. Through interactive sessions and

hands-on projects, students will grasp the nuances between assessment and evaluation, while gaining proficiency in research design, data collection, and analysis techniques specific to the field. By the course's end, students will be adept at critically interpreting research findings, making informed decisions, and contributing meaningfully to the advancement of educational technology through evidence-based practices. (Prerequisite: Foundation 1–3)

II. CONCENTRATION COURSES

ED.XXX.XXX, *LXD Concentration 1: Foundations and Applications of Learning Experience Design (3 cr.)*

This course serves as a comprehensive introduction and practical exploration into the field of Learning Experience Design (LXD). In the first segment, students delve into the foundational principles of design and learning theories, with an emphasis on adult learning environments. This includes evidence-based instructional strategies and a deep dive into the professional practices of LXD. Students will develop essential user experience research skills, enhancing their understanding of learner needs and behaviors. The second half of the course transitions into hands-on application. Here, students use a variety of eLearning development tools and software such as Articulate Storyline 360, Adobe Illustrator, iSpring Suite, and front-end web development technologies like HTML, CSS, and JavaScript. The course culminates in the creation of a technology-supported learning prototype, synthesizing theoretical knowledge with practical application.

ED.XXX.XXX, *LXD Concentration 2: Advanced User Experience and Interaction Design for Learning Environments (3 cr.)*

This course offers students an advanced exploration into user experience (UX) and interaction design within the context of learning environments. Initially focusing on UX, students will learn about usability, information architecture, interaction design, and user research methodologies. The course then extends into the strategic aspects of learning design, covering the planning and execution stages. Students will engage in defining precise learning objectives, strategies, and assessments, all while crafting user-centric interfaces. The emphasis is on developing skills to empathize with users and apply these insights to design intuitive and effective learning interfaces. (Prerequisite: LXD Conc 1)

ED.XXX.XXX, *LXD Concentration 3: Strategic Development, Evaluation, and Advanced Practices in Learning Experience Design (3 cr.)*

In this final concentration core course, students will immerse themselves in the strategic aspects of learning design, focusing on the planning, development, and evaluation stages of LXD projects. The course covers a comprehensive range of topics, including needs analysis, alignment of learning objectives with strategies and assessments, and the development of digital resources. Students will also explore various delivery methods, implementation strategies, and evaluation planning. The goal is to equip students with the skills to create authentic, effective learning solutions tailored to specific problems and learning environments. Utilizing instructional design models and integrating insights from previous courses, students will ensure their learning

solutions are adaptable and effective for a diverse range of learners and contexts. (Prerequisite: LXD Conc 1 and 2)

ED.XXX.XXX, *LEN Concentration 1: Foundations and Applications of Learning Experience Design* (3 cr.)

This is the same course as LXD Concentration 1, described above.

ED.820.601, *LEN Concentration 2: Comprehensive Learning Analytics and Instructional Design* (3 cr.)

In this course, students learn the core elements of learning analytics and integrate them with instructional design principles. Students will begin with an introduction to the fundamentals of learning analytics, including statistical analysis using R, interactive data visualization with Tableau, and data manipulation using Python and SQL. The course then progresses to more advanced topics, incorporating sophisticated data analysis techniques, predictive modeling using tools such as SPSS or SAS, and machine learning frameworks like TensorFlow. Project-based learning is a key component, where students apply these tools to real-world educational data sets and case studies. This course not only focuses on the technical aspects of data analytics but also emphasizes its strategic application in designing effective, data-informed instructional strategies. Students will gain hands-on experience in integrating analytics into the instructional design process, preparing them for the multifaceted challenges of learning engineering. (Prerequisite: LEN Conc 1)

ED.XXX.XXX, *LEN Concentration 3: Learning Engineering—Integrating Advanced Analytics and Design Solutions* (3 cr.)

This final course in the concentration is an immersive experience that synthesizes aspects of learning analytics and instructional design students learned in previous courses. Students undertake a comprehensive project focused on data-informed decision-making in a real-world context. The project involves designing, implementing, and evaluating a learning solution for an authentic educational challenge, using advanced data analytics to guide and justify design decisions. This course provides an opportunity for students to demonstrate their mastery of integrating learning analytics with instructional design and technology. The comprehensive nature of the project prepares students for impactful roles in various industries, equipping them with the skills to create effective learning solutions based on robust data analysis and thoughtful instructional strategies. (Prerequisite: LEN Conc 1 and 2)

ED.XXX.XXX, *AILE Concentration 1: Foundations and Applications of Artificial Intelligence Leadership in Education* (3 cr.)

This course provides an extensive introduction to the uses of artificial intelligence (AI) in education, blending foundational concepts in AI and machine learning with practical applications. Students will explore the transformative potential of AI in educational settings, understanding key AI concepts, tools, and technologies. The course demystifies AI and machine learning, focusing on their applications in learning and teaching across various educational contexts. Students will learn to construct effective AI prompts for AI chatbots, ensuring efficient

interactions with the technology, and will examine case studies highlighting AI's role in personalized learning, assessment automation, and content development. Additionally, the course introduces machine learning and adaptive learning systems, emphasizing their ability to create personalized and responsive educational experiences without delving into technical programming.

ED.XXX.XXX, *AILE Concentration 2: Strategic Leadership and Ethical Considerations in AI for Education* (3 cr.)

This course focuses on the strategic implementation and ethical considerations of AI in educational settings. Students will learn to set visionary goals and develop strategic plans for AI integration, covering aspects of leadership, change management, and stakeholder engagement. The course emphasizes the importance of ethical AI strategy, exploring responsible AI use, data privacy, and bias mitigation. Students will engage in comprehensive projects, applying their accumulated knowledge to design AI-driven educational solutions or strategies. These projects will challenge students to integrate AI technology thoughtfully and ethically, showcasing their skills in AI leadership and strategic planning.

ED.XXX.XXX, *AILE Concentration 3: Visionary Leadership and Adaptive Systems in AI-Driven Education* (3 cr.)

The final course in the AILE concentration synthesizes the concepts of visionary leadership and adaptive systems in the context of AI-driven education. Building on the principles of machine learning and strategic AI implementation, students will critically analyze and develop adaptive and responsive educational tools. The course covers the management and ethical deployment of AI in educational institutions, focusing on agile policy development, ethical AI strategy, and the challenges and opportunities of AI in educational leadership. Through project-based learning and case studies, students will gain insights into effective leadership practices for AI integration, preparing them to become innovative leaders in the evolving landscape of educational technology.

III. ELECTIVE COURSES

ED.893.632, *Data-Driven Decision Making for Schools and Organizations* (3 cr.)

The increasing impact of a knowledge economy and globalization has been a catalyst to the fields of knowledge management and organizational decision-making. This course introduces knowledge management concepts into an educational context and provides an in-depth focus on data-driven decision making in educational organizations and institutions. Students investigate how decisions and strategies are developed and how tacit or explicit knowledge can be identified, captured, structured, valued and shared for effective use. Course topics include leadership and strategic management relative to organizational decision-making, managerial and organizational structures, organizational learning, and decision support systems. A related intent is to develop an understanding of data mining metrics that can be used to create predictive models that support systemic change in schools. Opportunities are provided for participants to use online and electronic tools that can assist in facilitating meaningful conversations about instruction and learning among their organization's educators and other staff.

ED.893.645, *Explorations in Blended and Hybrid Learning* (3 cr.)

In this course, students will become familiar with different models of blended learning, discuss how blended learning differs from “technology integration,” and examine the potential for blended learning instructional models to provide learners with more personalized learning experiences. Students will evaluate and compare different blended learning models to justify their rationale for selecting models appropriate for their teaching and learning contexts. They will describe instructional strategies and technologies that can be used to increase learner engagement in blended learning environments. Through course readings and their own analyses, students will also examine challenges associated with the implementation of blended learning activities and the impact that implementation has on students, teachers, schools, or stakeholders in other workplace contexts. While exploring these topics, students will choose a path for their learning based on their teaching and learning context. The course will culminate with students designing their own blended learning initiative that is authentic to their teaching and learning context.

ED.893.628, *Gaming and Simulations for Learning* (3 cr.)

This course provides an overview of game-based learning theories and best practices for incorporating educational games and simulations into a range of learning environments. Students will learn to apply analytic frameworks to commercial and educational games to evaluate a game’s potential as a learning tool or environment for K–20, business, and government settings. Students integrate games with lessons and other learning activities, as well as produce prototypes for their own educational games and plan to use gameplay data for assessment.

ED.880.623, *Instructional Design for Online Learning* (3 cr.)

This course guides participants through a process of designing online instruction for adult learners, applicable for a variety of content areas and settings. Building upon a research-based instructional design model, participants will plan online learning experiences that combine pedagogy, organization, design, and technology. Students will be able to design media-enhanced, engaging online activities and assess learning.

ED.893.600, *Maker Education: Cultivating Curiosity, Creativity, and Problem Solving in Theory and Practice* (3 cr.)

Maker Education is an educational approach and culture that emphasizes collaboration and community-mindedness, and uses hands-on, project-based learning methods to demonstrate student learning. Well-designed and implemented maker activities and curricula promote creativity, problem-solving, experimentation, and collaboration, as well as content learning, and they are often connected to STEM and STEAM initiatives. In this course, students will learn and apply theoretical principles for Maker Education and the culture of making. They will investigate tools and strategies that hold promise for engaging and empowering learners of all ages in maker-related activities. Students will develop authentic learning experiences that support inclusive and equitable access to technology and maker education for diverse learners in a range of learning environments. Students will also become familiar with critiques of maker education,

formulate plans to integrate maker activities with “traditional” learning activities, and develop rubrics to assess student learning with maker activities.

ED.893.546, *Technology for Learner Variability* (3 cr.)

This course provides an overview of the historical foundations and the advancements in the learning sciences related to learner variability. Students will learn to apply the Universal Design for Learning framework in understanding and addressing learner variability. Students will develop the knowledge and skills necessary to anticipate and plan for the systematic differences in learners and apply technology to that end. Students will investigate existing and emerging technologies to determine how these may support all learners in becoming purposeful and motivated, resourceful and knowledgeable, and strategic and goal directed.

ED.893.545, *Technology Integration for the 21st Century Learner* (3 cr.)

This course prepares educators in K–12 and adult education settings to implement instruction and assessment that targets four essential digital-age learning objectives: critical thinking, creativity, communication, and collaboration. Students will learn about and apply the TPACK framework, which describes three forms of knowledge educators need to integrate educational technologies into instruction effectively: technological knowledge, pedagogical knowledge, and content knowledge. Alongside the TPACK framework, students will learn about and apply the SAMR Model, which describes four different types of educational technology integration: Substitution, Augmentation, Modification, and Redefinition. Applying their understanding of TPACK, SAMR, and other concepts and practices from course readings and activities, students will design technology-rich learning activities/learning units for use in their own professional settings.

Appendix B

Sample Student Program Progression

Table 4: *Course Plan for a Part-Time Master's Degree Student.*

Semester 1 (Summer)	Semester 2 (Fall)	Semester 3 (Spring)	Semester 4 (Summer)	Semester 5 (Fall)	Semester 6 (Spring)
Foundation 1 Foundation 2	Foundation 3 Concentration 1	Concentration 2 Elective 1	Concentration 3 Elective 2	Foundation 4 Capstone 1	Elective 3 Capstone 2

Table 5: *Course Plan for a Full-Time Master's Degree Student.*

Semester 1 (Summer)	Semester 2 (Fall)	Semester 3 (Spring)
Foundation 1 Foundation 2 Concentration 1 Elective 1	Foundation 3 Foundation 4 Concentration 2 Elective 2	Concentration 3 Elective 3 Capstone 1 Capstone 2

Note: Students pursuing the degree full time will be required to be in residence for two weeks on the JHU campus in the summer term. Students will attend the two foundation courses in person. Part-time students will have the option to attend the residency, but it will not be required.

Appendix C MD Dept. of Labor Occupation Details

Maryland jobs - 708 occupations currently shown

Occupation	Education required	Job prep needed	Score	Wage	Jobs
Industrial Truck and Tractor Operators	High school degree	Some	91	\$35,000	955
Information and Record Clerks, All Other	High school degree	Unknown	88	\$31,900	599
Information Security Analysts	Bachelor's degree	Considerable	97	\$76,700	365
Inspectors, Testers, Sorters, Samplers, and Weighers	High school degree	Some	84	\$33,100	576
Installation, Maintenance, and Repair Workers, All Other	High school degree	Some	90	\$32,900	832
Instructional Coordinators	Master's degree +	Extensive	92	\$52,200	544
Insulation Workers, Floor, Ceiling, and Wall	High school degree	Some	81	\$36,600	100
Insulation Workers, Mechanical	No degree	Some	88	\$42,800	92

Details for: Instructional Coordinators

Requirements	Extensive <small>Job prep needed</small>	5 years or more <small>Experience required</small>	Master's degree + <small>Education required</small>
Pay	\$52,169 <small>Entry-level wage</small>	\$77,292 <small>Median wage</small>	\$93,120 <small>Experienced wage</small>
Positions	2,640 <small>Current Employment</small>	544 <small>Job openings, annually</small>	1,211 <small>Job postings last year</small>
Misc.	17.9% <small>Churn (turnover) rate</small>	0% <small>Injury rate</small>	<small>Job titles: Career Technical Supervisor, Certified Performance Technologist (CPT), Course Developer, Courseware Developer, Curriculum and Assessment Director, Curriculum and Instruction Director, Curriculum Coordinator, Curriculum Designer, Curriculum</small>

Maryland jobs - 708 occupations currently shown

Occupation	Education required	Job prep needed	Score	Wage	Jobs
Searchers	degree				
Tool and Die Makers	High school degree	Medium	80	\$48,200	14
Traffic Technicians	High school degree	Medium	85	\$35,900	28
Training and Development Managers	Bachelor's degree	Considerable	92	\$84,900	171
Training and Development Specialists	Bachelor's degree	Considerable	93	\$40,400	1,150
Transit and Railroad Police	Bachelor's degree	Medium	85	\$57,700	13
Transportation Inspectors	High school degree	Medium	81	\$25,800	45
Transportation Security Screeners	High school degree	Some	85	\$41,200	74

Job title:

Education req...: (All) ▼

Job prep needed: (All) ▼

Occupation gr...: (All) ▼

Entry wage (a...): 24,440 - 90,000

Job demand (...): 3 - 15,873

Details for: Training and Development Specialists

Requirements	Considerable Job prep needed	Less than 5 years Experience required	Bachelor's degree Education required
Pay	\$40,410 Entry-level wage	\$73,581 Median wage	\$88,629 Experienced wage
Positions	5,970 Current Employment	1,150 Job openings, annually	1,106 Job postings last year
Misc.	17.0% Churn (turnover) rate	0% Injury rate	Job titles: Applications Trainer, Apprenticeship and Training Representative, Auxiliary Personnel Inservice Coordinator, Bilingual Trainer, Certified EPIC Trainer (Certified Electronic Privacy Information Center Trainer), Computer Software Training Specialist, Computer

Maryland jobs - 708 occupations currently shown

Job title

Education req...

Job prep needed

Occupation gr...

Entry wage (a...

Job demand (...

Occupation	Education required	Job prep needed	Score	Wage	Jobs
Searchers	degree				
Tool and Die Makers	High school degree	Medium	80	\$48,200	14
Traffic Technicians	High school degree	Medium	85	\$35,900	28
Training and Development Managers	Bachelor's degree	Considerable	92	\$84,900	171
Training and Development Specialists	Bachelor's degree	Considerable	93	\$40,400	1,150
Transit and Railroad Police	Bachelor's degree	Medium	85	\$57,700	13
Transportation Inspectors	High school degree	Medium	81	\$25,800	45
Transportation Security Screeners	High school degree	Some	85	\$41,200	74

Details for: Training and Development Managers

Requirements	Considerable <small>Job prep needed</small>	5 years or more <small>Experience required</small>	Bachelor's degree <small>Education required</small>
Pay	\$84,878 <small>Entry-level wage</small>	\$126,219 <small>Median wage</small>	\$152,634 <small>Experienced wage</small>
Positions	1,050 <small>Current Employment</small>	171 <small>Job openings, annually</small>	276 <small>Job postings last year</small>
Misc.	14.6% <small>Churn (turnover) rate</small>	1% <small>Injury rate</small>	Job titles: Development Coordinator, Development Director, Development Manager, E-Learning Manager, Education and Development Manager, Education and Training Manager, Education Director, Employee Development Director, Employee Development

Appendix D U.S. Bureau of Labor Statistics Job Outlook Summaries

Job Outlook About this section [?](#)

Employment of instructional coordinators is projected to grow 7 percent from 2021 to 2031, about as fast as the average for all occupations.

About 20,900 openings for instructional coordinators are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

States and school districts will continue to be held accountable for test scores and graduation rates, putting more of an emphasis on student achievement data. Schools may increasingly turn to instructional coordinators to develop better curriculums and improve teachers' effectiveness. The training that instructional coordinators provide for teachers in curriculum changes and teaching techniques should help schools meet their standards in student achievement. As schools seek additional training for teachers, demand for instructional coordinators is projected to grow.

Instructional Coordinators

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program

Employment projections data for instructional coordinators, 2021-31

Occupational Title	SOC Code	Employment, 2021	Projected Employment, 2031	Change, 2021-31		Employment by Industry
				Percent	Numeric	
Instructional coordinators	25-9031	205,700	220,800	7	15,000	Get data

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

Job Outlook About this section [?](#)

Employment of training and development specialists is projected to grow 8 percent from 2021 to 2031, faster than the average for all occupations.

About 36,500 openings for training and development specialists are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

Employees in many occupations are required to take continuing education and skill development courses throughout their careers, creating demand for workers who lead training activities.

Employment of training and development specialists is projected to grow in many industries as companies develop and introduce new media and technology into their training programs. Innovations in training methods and learning technology should continue throughout the next decade.

In addition, some organizations meet their employees' needs by outsourcing instruction to firms that specialize in training and development.

Training and Development Specialists

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program

Employment projections data for training and development specialists, 2021-31

Occupational Title	SOC Code	Employment, 2021	Projected Employment, 2031	Change, 2021-31		Employment by Industry
				Percent	Numeric	
Training and development specialists	13-1151	354,800	383,700	8	28,900	Get data

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

Job Outlook

Employment of training and development managers is projected to grow 7 percent from 2021 to 2031, about as fast as the average for all occupations.

About 3,700 openings for training and development managers are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire.

Employment

In many occupations, employees are required to take continuing education and skill development courses throughout their careers, creating demand for workers who develop and provide training materials.

Innovations in training methods and learning technology are expected to continue throughout the decade, particularly for organizations with remote workers.

Organizations use social media, visual simulations, mobile learning, and social networks in their training programs. Training and development managers need to continue modifying training programs, allocating budgets, and integrating these features into training programs and curriculums.

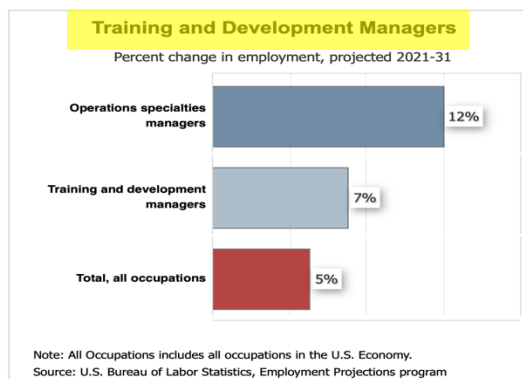
In addition, as companies seek to reduce costs, training and development managers may be required to structure programs to enlist available experts, take advantage of existing resources, and facilitate positive relationships among staff. Training and development managers may use informal collaborative learning and social media to engage and train employees in the most cost-effective way.

Employment projections data for training and development managers, 2021-31

Occupational Title	SOC Code	Employment, 2021	Projected Employment, 2031	Change, 2021-31		Employment by Industry
				Percent	Numeric	
Training and development managers	11-3131	38,100	40,900	7	2,900	Get data

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

About this section ?

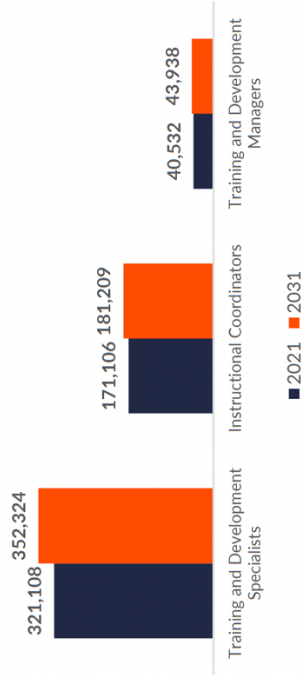


Appendix E Hanover Research Labor Market Analysis

LABOR MARKET ANALYSIS

NATIONAL EMPLOYMENT PROJECTIONS

DALET-related positions in the United States as of 2021 and 2031 (projected)



ANALYSIS

Employment projections anticipate strong labor market demand for experienced trainers and instructional program developers through 2031. The Bureau of Labor Statistics (BLS) reports that the demand for [Instructional Coordinators](#) is likely to increase over the next ten years, as education providers seek to “develop better curriculums and improve teachers’ effectiveness” and schools aim to “meet their standards in student achievement.” Even more strikingly, the need for [Training and Development Specialists](#) is likely to rise “as companies develop and introduce new media and technology into their training programs,” with “innovations in training methods and learning technology [expected to] continue throughout the next decade”.

The continuing automation of jobs is necessitating advancements in training and education that are favorable to educational technology roles. As the [Future of Jobs Report](#) explains, “[t]he education system will need to adapt to prepare individuals for the changing labor market.” Concurrently, recent IT advances “offer new and potentially more widely accessible ways to access education” to help people stay employable in the labor force of the future.

As online and distance learning continues to grow in popularity, the demand for instructional designers will likewise expand. For example, in an [Online Learning Consortium](#) report, Beirne et al. state that “an increasing number of colleges employ teams of instructional designers to support teaching and learning practices on their campuses.” While “[technological advancements](#) mean that institutions can offer students more blended and distance learning opportunities,” even traditional learning environments are “being enhanced by the integration of tools such as learning management systems, lecture capture systems, and collaborative platforms.” Instructional designers will benefit from these changes, “[designing](#), managing, training, and providing support” and getting “more [involved](#) in teaching and learning research.”

TOTAL LABOR MARKET

Aggregate projected employment growth by geographic level

	Maryland	Mideast	United States
Estimated Employment (2021)	11,089	87,882	532,746
Projected Employment (2031)	11,541	89,270	577,471
Total Annual Openings, Observed Occupations	1,184	8,992	60,301
Employment Growth, Observed Occupations	4.1%	1.6%	8.4%
Employment Growth, All Occupations	-0.4%	-2.4%	4.3%

Source: [JobsEQ](#)
Note: The Mideast region comprises DE, DC, MD, NJ, NY, and PA.

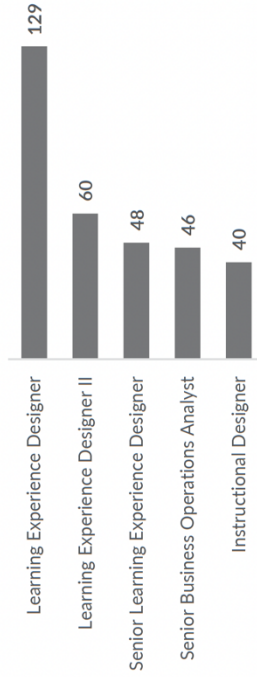


HIGHER EDUCATION

REAL-TIME JOB POSTINGS INTELLIGENCE

TOP DALET-RELATED JOB TITLES

DALET-related positions in the United States by job title



ANALYSIS

Employers in the United States advertised more than 4,000 DALET-related positions over the last six months as of September 2022. Top national employers include a mix of public school districts, corporations with robust learning and development departments, and online learning providers. Although a bachelor's degree is sufficient for entry into most DALET-related positions, 11.8 percent of recently-advised jobs require a master's degree or higher. Based on the top-requested hard skills and exemplary job postings, JHU SOE should consider developing a course that focuses on the application of the Agile methodology in education.

EXEMPLARY NATIONAL JOB POSTINGS

Position	Employer	Location	Skills and Requirements
Learning Design Excellence Manager	Truist	Winston-Salem, NC	<ul style="list-style-type: none"> Master's degree in adult learning, instructional design, or a related field Expert knowledge of instructional design methodologies Experience with design thinking and Agile preferred
Instructional Designer, Inclusive Pedagogy	Bentley University	Waltham, MA	<ul style="list-style-type: none"> Master's degree in curriculum & instruction, adult education, learning design, or a related field preferred Experience in creating inclusive classroom climates and culturally responsive pedagogies

Note: For this analysis, Hanover retrieved job postings data for DALET-related positions in the United States from [JobsEQ](#), a proprietary database providing real-time job postings aggregated from thousands of websites. All data reflect the prior six-month period as of September 2022.



HIGHER EDUCATION

TOP CERTIFICATIONS AND HARD SKILLS

Top Certifications

- Certified Professional in Learning and Performance (51)
- Certified Public Accountant (31)
- Project Management Professional (166)
- Teaching English as a Foreign Language (9)
- Certified Internal Auditor (8)

Top Hard Skills

- Instructional Design (1,177)
- Teaching/Training, School (846)
- Microsoft Excel (564)
- JavaScript (497)
- Microsoft PowerPoint (391)
- TechSmith Camtasia (374)
- Agile (348)
- Presentation (319)

TOP NATIONAL EMPLOYERS

- Clear Creek Independent School District (501)
- Portland Public Schools (126)
- Udemy (109)
- Meta (105)
- Amazon (89)
- Pearson (70)
- Deloitte (68)
- UKG (64)
- Ingevity (63)

Appendix F AECT Standards and Indicators

AECT Standard 1 (Content Knowledge): Candidates demonstrate the knowledge necessary to create, use, assess, and manage theoretical and practical applications of educational technologies and processes.

Indicators:

- *Creating:* Candidates demonstrate the ability to create instructional materials and learning environments using a variety of systems approaches.
- *Using:* Candidates demonstrate the ability to select and use technological resources and processes to support student learning and to enhance their pedagogy
- *Assessing/Evaluating:* Candidates demonstrate the ability to assess and evaluate the effective integration of appropriate technologies and instructional materials.
- *Managing:* Candidates demonstrate the ability to effectively manage people, processes, physical infrastructures, and financial resources to achieve predetermined goals.
- *Ethics:* Candidates demonstrate the contemporary professional ethics of the field as defined and developed by the Association for Educational Communications and Technology.

AECT Standard 2 (Content Pedagogy): Candidates develop as reflective practitioners able to demonstrate effective implementation of educational technologies and processes based on contemporary content and pedagogy.

Indicators:

- *Creating:* Candidates apply content pedagogy to create appropriate applications of processes and technologies to improve learning and performance outcomes.
- *Using:* Candidates implement appropriate educational technologies and processes based on appropriate content pedagogy.
- *Assessing/Evaluating:* Candidates demonstrate an inquiry process that assesses the adequacy of learning and evaluates the instruction and implementation of educational technologies and processes grounded in reflective practice.
- *Managing:* Candidates manage appropriate technological processes and resources to provide supportive learning communities, create flexible and diverse learning environments, and develop and demonstrate appropriate content pedagogy.
- *Ethics:* Candidates design and select media, technology, and processes that emphasize the diversity of our society as a multicultural community.

AECT Standard 3 (Learning Environments): Candidates facilitate learning by creating, using, evaluating, and managing effective learning environments.

Indicators:

- *Creating:* Candidates create instructional design products based on learning principles and research-based best practices.
- *Using:* Candidates make professionally sound decisions in selecting appropriate processes and resources to provide optimal conditions for learning based on principles, theories, and effective practices.
- *Assessing/Evaluating:* Candidates use multiple assessment strategies to collect data for informing decisions to improve instructional practice, learner outcomes, and the learning environment.
- *Managing:* Candidates establish mechanisms for maintaining the technology infrastructure to improve learning and performance.
- *Ethics:* Candidates foster a learning environment in which ethics guide practice that promotes health, safety, best practice, and respect for copyright, Fair Use, and appropriate open access to resources.
- *Diversity of Learners:* Candidates foster a learning community that empowers learners with diverse backgrounds, characteristics, and abilities.

AECT Standard 4 (Professional Knowledge and Skills): Candidates design, develop, implement, and evaluate technology-rich learning environments within a supportive community of practice.

Indicators:

- *Collaborative Practice:* Candidates collaborate with their peers and subject matter experts to analyze learners, develop and design instruction, and evaluate its impact on learners.
- *Leadership:* Candidates lead their peers in designing and implementing technology-supported learning.
- *Reflection on Practice:* Candidates analyze and interpret data and artifacts and reflect on the effectiveness of the design, development and implementation of technology-supported instruction and learning to enhance their professional growth.
- *Assessing/Evaluating:* Candidates design and implement assessment and evaluation plans that align with learning goals and instructional activities.
- *Ethics:* Candidates demonstrate ethical behavior within the applicable cultural context during all aspects of their work and with respect for the diversity of learners in each setting.

AECT Standard 5 (Research): Candidates explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance (pp. 4, 6-7).

Indicators:

- *Theoretical Foundations:* Candidates demonstrate foundational knowledge of the contribution of research to the past and current theory of educational communications and technology.
- *Method:* Candidates apply research methodologies to solve problems and enhance practice.
- *Assessing/Evaluating:* Candidates apply formal inquiry strategies in assessing and evaluating processes and resources for learning and performance.
- *Ethics:* Candidates conduct research and practice using accepted professional and institutional guidelines and procedures.

Table 6: *AECT Standards and Indicators Matrix*

	Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
Creating	✓	✓	✓		
Using	✓	✓	✓		
Assessing / Evaluating	✓	✓	✓	✓	✓
Managing	✓	✓	✓		
Ethics	✓	✓	✓	✓	✓
Diversity of Learners			✓		
Collaborative Practice				✓	
Leadership				✓	
Reflection on Practice				✓	
Theoretical Foundations					✓
Method					✓

Appendix G Faculty Listing

The following Johns Hopkins School of Education faculty will contribute to the program:

Faculty Name	Academic Rank/ Title	Status	Highest Degree	Terminal Degree Field	Course Assignments
Christopher Devers	Assistant Professor	Full-time	Ph.D.	Curriculum and Instruction	<i>Foundation 1, 4</i>
James Diamond	Assistant Professor	Full-time	Ph.D.	Educational Communication and Technology	<i>Foundation 1, 2; LXD Concentration 1/LEN Concentration 1</i>
Douglas Elmendorf	Adjunct Instructor	Adjunct	Ed.D.	Instructional Technology	<i>Maker Education</i>
Jeffrey Fink	Adjunct Instructor	Adjunct	Ed.D.	Educational Leadership	<i>AILE Concentration 3</i>
Tamara Galoyan	Adjunct Instructor	Adjunct	Ph.D.	Educational Leadership and Learning Technologies	<i>AILE Concentration 1</i>
Eulho Jung	Adjunct Instructor	Adjunct	Ph.D.	Instructional Systems Technology	<i>LEN Concentration 2; Instructional Design for Online Learning</i>
Olysha Magruder	Adjunct Instructor	Adjunct	Ph.D.	Educational Technology	<i>AILE Concentration 2; LXD Concentration 3</i>
Ebony McGee	Professor	Full-time	Ph.D.	Mathematics	<i>LEN Concentration 3</i>
Paul Miller	Adjunct Instructor	Adjunct	Ed.D.	Instructional Design for Online Teaching and Learning	<i>Technology Integration for the 21st Century Learner</i>
Stefani Pautz Stephenson	Adjunct Instructor	Adjunct	Ed.D.	Instructional Technology	<i>Technology for Learner Variability</i>
Donna Schnupp	Adjunct Instructor	Adjunct	M.A.	Educational Technology	<i>LXD Concentration 2; Explorations in Blended and Hybrid Learning</i>
Joshua Schuschke	Assistant Professor	Full-time	Ph.D.	Urban Education Policy	<i>Foundation 3, 4</i>
Anu Sharma	Adjunct Instructor	Adjunct	Ph.D.	Curriculum and Instruction	<i>Gaming and Simulations for Learning</i>
Richard Smart	Adjunct Instructor	Adjunct	MSt.Ed.	Leadership & Supervision/Data-	<i>Data-Driven Decision Making for Schools and Organizations</i>

Faculty Name	Academic Rank/ Title	Status	Highest Degree	Terminal Degree Field	Course Assignments
				Driven Decision Making	

Appendix H Budget

TABLE 1: PROGRAM RESOURCES					
Resource Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Reallocated Funds	0	0	0	0	0
2. Tuition/Fee Revenue (c + g below)	0	\$ 813,600	\$ 1,281,960	\$ 1,665,900	\$2,080,080
a. Number of F/T Students	0	10	10	15	20
b. Annual Tuition/Fee Rate	0	\$ 40,680	\$42,732	\$44,424	\$46,224
c. Total F/T Revenue (a x b)	0	\$ 406,800	\$427,320	\$ 666,360	\$ 924,480
d. Number of P/T Students	0	20	40	45	50
e. Credit Hour Rate	0	\$ 1,130	\$ 1,187	\$ 1,234	\$ 1,284
f. Annual Credit Hour Rate	0	18	18	18	18
g. Total P/T Revenue (d x e x f)	0	\$406,800	\$854,640	\$999,540	\$ 1,155,600
3. Grants, Contracts & Other External Sources	0	0	0	0	0
4. Other Sources	0	0	0	0	0
TOTAL (Add 1 – 4)	0	\$ 813,600	\$1,281,960	\$1,665,900	\$2,080,080

Program Resources and Narrative Rationale

Reallocated Funds

No funds will be reallocated from existing campus resources so there will be no impact on the School of Education's existing programs and departments.

Tuition and Fee Revenue

Year 1 is a planning year and generates no revenue.

In Year 2, the program will launch with a cohort of 30 students (10 full-time, 20 part-time) with projections to increase to 45 students (20 full-time, 25 new part-time) by year 5. The projected tuition is expected to increase consistently each year; the School will explore appropriate marketing to companies and organizations that may subsidize the tuition costs for an employee to enroll in the program.

Grants, Contracts, and Other External Sources

At this time, SOE does not have any grant, contracts, or other external sources identified for this program.

Other Sources

At this time, SOE does not have any other sources of income.

Total Year

No additional explanation or comments.

TABLE 2: PROGRAM EXPENDITURES					
Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b + c below)	0	\$228,875	\$234,971	\$242,601	\$249,069
a. Number of FTE	0	1.65	1.65	1.65	1.65
b. Total Salary	0	\$176,551	\$181,135	\$187,106	\$191,969
c. Total Benefits	0	\$52,234	\$53,836.89	\$55,495.00	\$57,099.85
2. Admin. Staff (b + c below)	0	\$16,535	\$17,361	\$18,230	\$19,141
a. Number of FTE	0	0.15	0.15	0.15	0.15
b. Total Salary	0	\$12,432	\$13,054	\$13,706	\$14,392
c. Total Benefits	0	\$4,103	\$4,308	\$4,523	\$4,749
3. Support Staff (b + c below)	\$168,079	0	0	0	0
a. Number of FTE	1.50	0	0	0	0
b. Total Salary	\$126,375	0	0	0	0
c. Total Benefits	\$41,704	0	0	0	0
4. Technical Support and Equipment	0	\$30,952.50	\$51,587.50	\$61,905	\$72,222.50
5. Library	0	0	0	0	0

6. New or Renovated Space	0	0	0	0	0
7. Other Expenses	\$34,654	\$594,489	\$856,575	\$1,085,412	\$1,321,659
TOTAL (Add 1 – 7)	\$202,733	\$854,316	\$1,143,134	\$1,389,918	\$1,642,950

Program Expenditures and Narrative Rationale

Year 1 is designated as a planning year for developing the program. Year 2 will be the first year that students enroll in the program, with a launch date of summer 2025.

Faculty

There are four-time faculty members affiliated with the LDT program who will share teaching duties in other graduate programs. There are five adjunct faculty members that will be teaching in the program.

In Year 2-5, funds allocated to the faculty line will support current full- and part-time faculty in the management and delivery of the program.

Administrative Staff

In Year 2-5, funds allocated to the administrative line will support a dedicated professional who will work at the department-level to assist the full- and part-time faculty in the management and delivery of the program.

Support Staff

In Year 1, funds are allocated to the OILDA support required for instructional designers and instructional technologists to prepare for the curricular and assessment components of the program.

Equipment

To complete learning assignments, every student in the program will need the following subscriptions: Adobe Creative Cloud, Camtasia, SnagIt, Articulate Storyline, and Domain of One's Own.

Library

No library expenditures beyond those currently provided to the School of Education are requested at this time.

New/Renovated Space

There are no anticipated new or renovated special facilities needs at this time.

Other Expenses

In Year 1, the planning year, funding will be allocated as follows to support the implementation of the program through marketing, advertising-branding, admissions support, and course development.

The expenditures allocated for Years 2-5 also include a 10 percent contingency, admissions, and overhead costs for all years, with dedicated marketing costs for years 1-2.

Total Expenses

No additional information.