

REL Northwest Toolkit Efficacy Evaluation

SUPPORTING STATEMENT
FOR PAPERWORK REDUCTION ACT SUBMISSION

PART A: Justification

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Submitted to:
Institute of Education Sciences
U.S. Department of Education

Submitted by:
WestEd and Community College Research Center

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Overview

The U.S. Department of Education (ED), through its Institute of Education Sciences (IES), requests clearance for the recruitment materials and data collection protocols under the OMB clearance agreement (OMB Number 1850-XXXX) for activities related to the Regional Educational Laboratory Northwest Program (REL NW).

Community colleges are increasingly using technology to improve the quality of student learning, to make active and engaging learning more accessible, and to help students become more successful learners. Instructors need professional development about incorporating technology into their teaching to support students. The REL NW toolkit development team has developed a toolkit to support instructors in implementing evidence-based instructional strategies to improve student success. The toolkit is based on the *Using Technology to Support Postsecondary Student Learning* What Works Clearinghouse (WWC) Practice Guide. The toolkit will comprise a set of professional learning resources, organized as the eAcademy: Professional Learning for Using Technology to Support Postsecondary Student Learning.

The Toolkit will address the five recommendations from the WWC Practice Guide:

1. Use communication and collaboration tools to increase interaction among students and between students and instructors.
2. Use varied, personalized, and readily available digital resources to design and deliver instructional content.
3. Incorporate technology that models and fosters self-regulated learning strategies.
4. Use technology to provide timely and targeted feedback on student performance.
5. Use simulation technologies that help students engage in complex problem-solving (Dabbagh et al., 2019, p. 1).

The Toolkit is completely manualized and contains all of the information needed to implement the toolkit and the eAcademy training. The toolkit has three main components:

- **Diagnostic and ongoing monitoring instruments.** The instruments will include an Instructor Technology Use Survey and an Institutional Instructional Technology Readiness and Support Survey that will assess baseline capacity and enable progress monitoring at both the individual-instructor level and the institutional level.
- **Professional learning resources.** The professional learning resources will address all five Practice Guide recommendations. They will be available both as freestanding learning resources and organized into an online professional learning series (the eAcademy), accompanied by resources supporting facilitation of the series.
- **Institutional guidance on supporting implementation of the recommendations.** The guidance will include a self-assessment that institutions can use to support instructors' implementation of the recommendations, as well as resources that provide guidance on how to implement the steps.

The eAcademy professional learning will involve both short synchronous sessions, which will allow a cohort of instructors from a single community college to engage collaboratively in authentic activities relevant to the Practice Guide recommendations, and asynchronous sessions, which will support independent learning opportunities that give participants agency to focus on specific areas of improvement that are of interest to them. The eAcademy will consist of four modules that together address the five recommendations from the Practice Guide:

Module 1: Course overview and Practice Guide recommendations 1 (collaboration tools) and 5 (simulation technologies)

Module 2: Practice Guide recommendation 2 (varied, personalized, and available digital resources)

Module 3: Practice Guide recommendation 3 (self-regulated learning strategies)

Module 4: Practice Guide recommendation 4 (timely and targeted feedback)

Each module follows a similar format and leverages a variety of resources created for the Toolkit, including videos, PDFs, and slide decks. The eAcademy is designed to be facilitated by instructional support staff from community colleges who will use a facilitator guide that provides recommendations for organizing the eAcademy and establishing the culture of inquiry that is required for this type of professional learning. The guide will also provide step-by-step instructions needed to execute the logistics of the eAcademy and recommendations for how to facilitate instructor engagement in both the synchronous and asynchronous sessions.

The REL NW toolkit evaluation team is requesting clearance to conduct an independent evaluation that will assess the efficacy and implementation of the eAcademy professional learning resources included in the toolkit. First, using a random assignment design, researchers will examine the impact of the eAcademy on instructor knowledge, teaching practices, and student outcomes. Second, researchers will collect implementation data to understand fidelity of implementation, treatment contrast, and how the eAcademy influences instructor and student outcomes. The evaluation will take place in up to 4 community colleges in Oregon. Community College Research Center (CCRC) will conduct the program evaluation on behalf of REL NW.

A1. Purpose of Information Collection

As part of the REL solicitation request (Solicitation #91990020R0032), IES required each applicant to develop at least one research-based toolkit to support educators' use of evidence-based practices, and to conduct an independent efficacy and implementation evaluation of the toolkit. Per the solicitation:

“IES is invested in developing practitioner-friendly toolkits to help educators use evidence-based practices in classrooms – from preschool through postsecondary settings. Some of the best evidence available is consolidated in the WWC Practice Guides, in which researchers and practitioners review the evidence from the most rigorous studies available, develop recommendations for practice, and create action steps for how to use the recommended practices. To help get this evidence into the hands of stakeholders, RELs shall partner with educators and postsecondary instructors (if relevant) to develop one toolkit based on an assigned WWC Practice Guide, which shall include all materials necessary for effective implementation.”

REL NW was assigned the Using Technology to Support Postsecondary Student Learning practice guide. The toolkit entitled *Professional Learning for Using Technology to Support Postsecondary Study Learning* contains the following three parts: 1) Initial Diagnostic and On-going Monitoring Instruments, 2) Professional Development Resources, and 3) Steps for Institutionalizing Supports for Evidence-Based Practice. The performance work statement also states that RELs must evaluate the efficacy and implementation of the professional development resources in the finished toolkit. According to the solicitation, “(t)he evaluation shall examine changes in teacher practice and may also include measures of teacher knowledge and/or teacher self-efficacy.”

The study team will produce a report about the effect of the eAcademy on instructors’ use of technology in their courses, on students’ outcomes in those courses, and toolkit implementation.

In addition, the data collection will enable the research team to glean insights about how the toolkit can be improved. Even if the toolkit is shown to have a positive impact on instructor and students, there may be additional ways to promote evidence-based practices. An important goal of the study is to identify ways to improve the professional learning experience for instructors so they become more comfortable with adapting the evidence-based practices and understand how to incorporate them into their teaching.

A1.1. Data Collection Authorization

ESRA, Part D, section 174(f)

A1.2. Data Collection Review Type

This is a new information collection request.

A2. Indicate how, by whom, and for what purpose will the information be used?

The purpose of the study addressed by this clearance request is to measure the efficacy and implementation of the REL NW toolkit’s professional development resources (referred to as the eAcademy). The eAcademy is designed to improve instructor use of technology to support student success in community colleges.

The efficacy study will address the following research questions:

- What is the impact of the eAcademy on instructors’ awareness of technology tools for learning, knowledge of how to use technology for learning, and comfort using education technologies to support student learning?
- What is the impact of the eAcademy on instructors’ use of technology to support student learning?
- What is the effect of the eAcademy on student engagement, interaction, course completion, and persistence to the next quarter?

To interpret the impact findings accurately and ensure that the study provides useful information for policymakers and practitioners, the evaluation team will also conduct an implementation study that addresses the following research questions:

- How is the eAcademy structured and delivered? Was the eAcademy implemented with

fidelity? For how many hours do instructors participate, and how many instructors complete the training?

- What implementation challenges do facilitators and treatment instructors identify? How might the toolkit be improved to address implementation challenges?
- How and why do instructors in the early start (treatment) and late start (control) groups select and implement technology? What do instructors in the early start (treatment) group learn in the eAcademy?
- How does the eAcademy differ from other professional learning programs that instructors in the early start (treatment) and late start (control) groups access?

To address these research questions, the evaluation team will collect data from a combination of primary and secondary data sources. Primary data include:

- Instructor survey data
- Student survey data
- Interviews and focus groups that will be audio recorded with participants' permission
- Fieldnotes taken during observations of professional development activities

Secondary data include:

- Electronic participation records for instructors engaging in online professional development
- Course design documentation, including syllabi, assignments, and assessments
- Administrative student and instructor data from community colleges

The study will use an instructor survey about teaching with technology that has been validated in a pilot of the eAcademy. The Instructor Technology Use Survey (ITUS) was administered three times to the sample of eight instructors participating in the pilot of the Toolkit's eAcademy professional learning. The pre-pretest was administered three weeks before engagement with the eAcademy. The second time point (pre) was administered at the end of the first session of the eAcademy. The third time point was administered at the completion of the eAcademy training. A total of eight participants responded to the survey at each time point. Moderate to good reliability was demonstrated for most subscales and timepoints. Overall, the measure was able to index an increase in technology use post eAcademy training.

In addition, the student survey uses scales that have been validated previously, including the Student Course Engagement Questionnaire and the Higher Education Student Engagement Scale. The Cronbach's Alpha for all of the student survey items demonstrate a high level of reliability (over .7 which is considered reliable by What Works Clearinghouse).

The information collected from the toolkit efficacy and implementation evaluation will be used by REL NW to fulfill the IES performance work statement requirement for toolkit evaluation, and to ensure that the toolkit meets the intended purpose. The program evaluation team will analyze the data collected from these sources to address the research questions. This information can be used to make improvements to the Toolkit.

The primary goal of the evaluation is to estimate the effect of the eAcademy relative to the business-as-usual condition with regard to instructor technology use and student achievement.

The study will allow the team to investigate the impact of the eAcademy on several short- and medium-term instructor- and student-level outcomes. The research questions, data sources, and outcomes are summarized in Table 1.

This is a one-time set of data collection activities and there are no plans for follow-up studies or other recurring data collections outside of what is being proposed in this package.

A3. Use of automated, electronic, mechanical, or other technological data collection techniques.

The program evaluation study team will utilize several data collection tools and measures as described in Table 1.

Table 1 - Data Collection Sources

Data source	Description	Automated, Electronic, Mechanical	Measures	Research Question (s) (see list above)
Instructor Application and Follow-up Technology Use Survey	20-minute survey administered online via Qualtrics two times, approximately 6 months apart	Electronic	Instructor knowledge and comfort with using educational tech tools. Perceived student engagement. Professional learning experiences.	RQs 1, 2, 3, 6, 7
Student Survey	10-minute survey administered once online via Qualtrics	Electronic	Student course engagement.	RQ 3
Instructor Focus Groups	60-minute focus groups using password secured videoconferencing technology.	Electronic	Instructor knowledge and comfort with using educational tech tools. Factors influencing use of technology. Perceived student engagement. Professional learning experiences.	RQs 5, 6, 7
Structured Course Reviews	Online review of course design documentation in 30 randomly selected courses. Using	Electronic	Instructor use of technology tools.	RQ 6

Data source	Description	Automated, Electronic, Mechanical	Measures	Research Question (s) (see list above)
	LMS course sites to document the presence of technological tools and resources aligned with practice guide recommendations			
Administrator Interviews	60-minute interviews (in person or via password secured videoconferencing)		Professional learning experiences.	RQ 7
Facilitator Interviews	60-minute interviews (in person or via password secured videoconferencing)		eAcademy content, structure, implementation. Fidelity of implementation. Professional learning experiences.	RQs 4, 5, 7
eAcademy participation records	Online review of back-end data from the college's Learning Management System (LMS)	Electronic	Number of hours participants spend on the eAcademy participants' completion of assignments and activities	RQ 4
Administrative data	Extant data on instructors and students routinely collected as part of the college's existing recordkeeping processes	Electronic	Instructor and student email addresses, baseline characteristics (instructor- and student-level), and academic outcomes (student-level)	RQs 1, 2, 3

The evaluation team will work to ensure that data collection is carried out efficiently and does not impose excessive demands on study participants and college personnel. Instructor and student study participants will be able to complete the brief study surveys online using a smartphone, computer or tablet at a time and in a place of their choosing.

To minimize burden for participants, the evaluation team will use existing records for three data sources: structured course reviews, eAcademy participation records, and administrative data. To access course design documentation (syllabi, course assignments and assessments) for the structured course reviews, the research team will work with a college staff member to gain *guest student access* to the Learning Management System course shells for 30 randomly selected courses. This will allow researchers to view course expectations and materials with no burden on instructors (note, researchers will NOT have any access to students' grades or personal information). To track instructor participation in the eAcademy, the research team will work with a college staff member to gain *guest instructor access* to each institution's Learning Management System course shell that will house the eAcademy. With instructor access, researchers can document the number of hours each instructor participant spends in the modules and whether each instructor completes the module assignments. Finally, the evaluation team will work with an institutional data liaison at each institution to provide extant administrative data to capture lists of eligible instructors, baseline characteristics of instructors and students, as well as students' academic outcomes.

CCRC will use Qualtrics to collect instructor and student survey data. Documentation of Qualtrics' accessibility can be found at this link: <https://www.qualtrics.com/support/survey-platform/survey-module/survey-tools/check-survey-accessibility/>. Only Qualtrics question types that are 508 compliant will be used. Additionally, individual surveys that are developed on Qualtrics also go through an automated Section 508 accessibility review before they are released for use to ensure accessibility. Reports are provided to the system owner to correct if findings are identified. IES will ensure all findings are resolved before release.

Faculty focus groups will be conducted via a secure, password required video conferencing system. The research team will visit each participating college in-person to conduct interviews with administrators and eAcademy facilitators. In-person interviews have a stronger response rate, can facilitate and simplify scheduling, and afford researchers an opportunity to observe the college infrastructure available to support online teaching and professional development as well as college culture. Part of the research team is local in Oregon which will make travel less expensive. In the event that a participant is unable to participate in an in-person interview, the research team will conduct the interview via a secure, password protected, video conferencing platform.

A4. Efforts to Avoid Duplication in Data Collection

Given that the toolkit and eAcademy are newly developed, no similar information exists on its implementation or efficacy. The primary data collection that is part of this study only includes information that is not available from other sources and has not been collected previously. For three data sources described above, the research team will use existing records; all information available in these records (e.g., student characteristics) will not be re-collected through other means (i.e., surveys).

A5. Methods to minimize burden on small entities (community colleges)

The data collection plan is designed to obtain information in an efficient way that minimizes respondent burden as described in Table 1. The use of administrative records will reduce the burden on participating community colleges, which may be small entities, by ensuring that

existing data is used when possible. The research team will first work with college administrators to gain access to selected course shells within each institution's Learning Management System. Once researchers have access to these course shells, they can track instructors' participation in the eAcademy and can view course design materials for selected course sections with no burden to research participants. Secondly, the research team will work with institutional researchers to obtain centrally managed administrative records on faculty and students. The research team will provide a clear request that explains the precise data elements needed.

A6. Describe the consequences to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

The Education Science Reform Act of 2002 states that the central mission and primary function of the Regional Education Laboratories is to support applied research and provide technical assistance to state and local education agencies within their region (ESRA, Part D, section 174[f]). If the proposed data were not collected, REL NW would not be fulfilling its central mission to serve the states in the region and provide support for evidence-based research. The systematic collection and analysis of the data described above is required to accomplish the goals of the research project approved by IES. Participation in all data collection activities is voluntary. This is a one-time study (i.e., not recurring) and therefore periodicity is not addressed.

A7.1. Explain any special circumstances that would cause an information collection to be conducted in a manner:

There are no special circumstances associated with this program evaluation that would cause any of the conditions listed in A7.2-7.9.

A8.1. As applicable, state that the Department has published the 60 and 30 Federal Register notices as required by 5 CFR 1320.8(d), soliciting comments on the information collection prior to submission to OMB.

A 60-day Federal Register Notice was published on June 28, 2023 (88 FR 41951). One public comment was received. A response to the comment is provided. A 30-day notice will be published.

A8.2. Include a citation for the 60-day comment period (e.g., Vol. 84 FR ##### and the date of publication). Summarize public comments received in response to the 60-day notice and describe actions taken by the agency in response to these comments. Specifically address comments received on cost and hour burden. If only non-substantive comments are provided, please provide a statement to that effect and that it did not relate or warrant any changes to this information collection request. In your comments, please also indicate the number of public comments received.

A8.3. For the 30-day notice, indicate that a notice will be published. Describe efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instruction and record keeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A8.4. Consultation with representatives of those from whom information is to be obtained or those who must compile records should occur at least once every 3 years – even if the collection of information activity is the same as in prior periods. There may be circumstances that may preclude consultation in a specific situation. These circumstances should be explained.

All Regional Educational Laboratory (REL) applied research and development products are required to undergo rigorous external peer review. This ensures that all applied research and development products meet the Institute of Education Sciences (IES) standards for scientifically valid research before being published as online applied research and development products on the REL website at <http://ies.ed.gov/ncee/rel>. In this way, policymakers and practitioners, the primary users of REL applied research and development products, can be assured that these applied research and development products have met high standards for scientific quality, and that the information in the applied research and development products is valid and reliable, and therefore can be trusted. In addition, throughout the course of this study, we will draw on the experience and expertise of Dr. Herb Turner, President and Principal Scientist at Analytica, and Dr. Lindsay C. Page, Annenberg Associate Professor of Education Policy at Brown University and Faculty research fellow of the National Bureau of Economic Research.

Prior to implementation and before the 60-day comment period is complete, the study and all related data collection instruments will undergo review by the Teachers College Institutional Review Board (IRB). This review will ensure that the study is properly designed to protect human subjects.

The 60-day notice was published in the Federal Register on June 28, 2023 (88 FR 41951). One public comment was received. A response to the comment is provided. A 30-day notice will be published.

A9. Payments to Respondents

The evaluation team proposes to provide the following incentives to institutions, instructors, and students who participate in the study:

Table 2 - Incentives for Study Participants

Participants	Data Collection Activity	Estimated Time	Conditions	Amount
Instructors	Participation in eAcademy and completion of a pre-term application with survey and an end of term survey	40 minutes	\$250 after participating in pre-term study activities	\$500
			\$250 after participating in end of term study activities	
	Send reminders to students regarding student survey at end of term.	10 minutes		\$50
Students	Participation in end	10 minutes	Lottery opportunity	\$100

	of term student survey		to win a \$100 gift card. 15 cards available; approximately 1 out of every 200 students will receive a gift card.	
Institutions	Providing access to LMS course shells and preparation and transfer of administrative data	20 hours	Provided after receipt of complete data set	\$5000 per institution

These amounts were set based on several factors. The hourly wage rate of postsecondary instructors in the state of Oregon (\$47/hour) which informs their incentive for participation in the research study (which includes the time they will spend engaged in the eAcademy and other data collection activities). Given the responsibilities and challenges that educators and administrators face daily, their time is extremely valuable. To encourage participation in the study of the REL toolkit, IES has consulted the [Bureau of Labor Statistics \(BLS\) Occupational Outlook Handbook](#) to identify the most current information (currently from 2021) about educator wages to calculate reasonable incentive amounts.

To identify an appropriate incentive for students who complete the survey, the team consulted previous research on survey administration with similar student populations. The literature suggests that, generally, incentives of higher monetary value are more effective than those of lower monetary value (DeCamp & Manierre, 2016; Dykema et al., 2011). Additionally, Bosnjak & Tuten (2003) found that higher cash value lottery incentives drew higher response rates than lower cash value guaranteed incentives. Based on available literature and available financial resources, the research team has opted to provide lottery incentives of higher financial value (i.e., 15 gift cards worth \$100 each).

The incentive for institutions will encourage institutions to participate in the study considering that they will play a role in data collection activities, including the preparation and transferring of data.

In addition, the project budget includes stipends for eAcademy facilitators for their work in leading the professional learning program. The facilitators will receive \$900 for facilitating the summer 2024 eAcademy for the early start (treatment) cohort of instructors, and \$900 for facilitating the eAcademy in 2025 for the late start (business as usual) cohort of instructors. Facilitators are likely to be instructors, so the same wage rate was used to calculate their payment for facilitating the eAcademy.

A10.1. Assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy. If personally identifiable information (PII) is being collected, a Privacy Act statement should be included on the instrument. Please provide a citation for the Systems of Record Notice and the date a Privacy Impact Assessment was

completed as indicated on the IC Data Form. A confidentiality statement with a legal citation that authorizes the pledge of confidentiality should be provided. If the collection is subject to the Privacy Act, the Privacy Act statement is deemed sufficient with respect to confidentiality. If there is no expectation of confidentiality, simply state that the Department makes no pledge about the confidentiality of the data. If no PII will be collected, state that no assurance of confidentiality is provided to respondents. If the Paperwork Burden Statement is not included physically on a form, you may include it here. Please ensure that your response per respondent matches the estimate provided in number 12.

The data collection efforts that are the focus of this clearance package will be conducted in accordance with all relevant federal regulations and requirements. REL NW will be following the policies and procedures required by the Education Sciences Reform Act of 2002, Title I, Part E, Section 183 that requires “All collection, maintenance, use, and wide dissemination of data by the Institute” to “conform with the requirements of section 552 of title 5, United States Code, the confidentiality standards of subsection (c) of this section, and sections 444 and 445 of the General Education Provision Act (20 U.S.C. 1232g, 1232h).” These citations refer to the Privacy Act, the Family Educational Rights and Privacy Act, and the Protection of Pupil Rights Amendment.

All electronic survey responses will be password protected and kept strictly confidential and will only be used for the purpose of the study. No one other than the researchers will have access to survey responses that include respondents’ names or other information that could potentially be used to identify individuals or schools.

In addition, the study will be submitted for approval by the Teachers College, Columbia University Institutional Review Board that reviews research involving human subjects prior to the completion of the 60-day comment period. As a major professional and research institution, Teachers College engages in a vast number of research activities.

Teachers College IRB abides by the federal regulations that define a human subject as a living individual about whom a researcher conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information. 45 CFR 46.102(f)(1), (2). Teachers College’s agreement with the Federal Government that allows it to conduct research involving human subjects is known as a Federal Wide Assurance (FWA). In that agreement, Teachers College agrees to abide by the Department of Health and Human Services’ (DHHS) regulations for the protection of human research subjects, 45 CFR Part 46. Those regulations are based largely on the Belmont Report, a statement of ethical principles in human subjects protections published in 1979. The terms of the FWA at Teachers College apply to all research conducted by its instructors, staff, and students, funded or unfunded. Teachers College provides comprehensive, ongoing training in human subjects protections for all investigators and research staff.

A10.2. Personally Identifiable Information

For student information, the data collection efforts will ensure that all individually identifiable information about students, their academic achievements, their families and information with respect to individual schools, shall remain confidential in accordance with section 552a of Title 5, United States Code, the confidentiality standards of subsection (c) of this section, and sections 444 and 445 of the General Education Provision Act. The study will also adhere to requirements of subsection (d) of section 183 prohibiting disclosure of individually identifiable information as well as making the publishing or inappropriate communication of individually identifiable information by employees or staff a felony.

The evaluation team will protect the confidentiality of all information collected for the study and will use it for research purposes only. No information that identifies any study participant will be released publicly. Information from participating institutions and respondents will be presented at aggregate levels in reports. No individually identifiable information will be maintained by the study team upon study completion.

All members of the study team have obtained their certification on the use of human subjects in research. Moreover, CCRC's research computing infrastructure consists of secure physical servers designed for researchers and affiliates to store, access, and analyze confidential data via remote sessions, and robust security protocols to prevent unauthorized access and/or inadvertent disclosures. Specifically, the following safeguards will ensure confidentiality of research participants.

A10.3. Physical Security

CCRC's research servers are located in secure computing facilities at Teachers College, Columbia University. The research servers are housed in an on-site location that limits access to authorized personnel only, and have controlled physical access, security cameras, and University police presence.

Research staff commit in writing to access the data only from CCRC's premises or via Teachers College's secure Virtual Private Network (VPN) from a secure private location. They further commit to enable a password-protected screensaver, to lock their screen when stepping away from my computer during a period of active use, and to log out of the secure server immediately when a period of active use ends.

A10.4. Server security

Research servers are updated and patched overnight and are rebooted monthly to pick up kernel changes and protect against software vulnerabilities. Only authorized users are allowed access to the research servers, either using the on-campus network or using a secure Virtual Private Network (VPN) connection with dual-factor authentication.

A10.5 Network security

The servers are protected by a firewall that restricts traffic by allowing connections only to certain ports. Files are uploaded to the research servers using the Secure File Transfer Protocol (SFTP), which is encrypted and secure.

A10.4. Data security

Access to files stored on the server is based on least privilege principles. Users only have access to data files for projects where they are part of the research team and are listed as an approved user on the relevant data use agreements. Access is restricted by group permissions. All data files are stored on the research server and are encrypted at rest, and all data processing is done on the research server. Backups of user home directories and project data are performed nightly and stored in a physically secure location at Teachers College.

All confidential data, regardless of storage location, will be retained only as long as necessary and permitted by data use agreements, research project duration, or legal, regulatory, or business requirements. Data will be deleted from the research server and backup servers as mandated by data agreements. Any individual-level data that contains directly or indirectly Personally Identifiable Information (PII), or any other kind of data which is considered restricted under a data agreement is stored on a separate network drive that will only be available to a select group of researchers approved under all relevant data-sharing and IRB agreements for working with such data.

Any files containing direct PII, first and/or last names, are further restricted to only those research staff with a clear and specific need to access such PII for a limited period, such as implementing a file merge that is permitted under all relevant data-sharing and IRB agreements. These research staff must be specified to the Senior Operations Strategist in advance of such access. In addition to being stored in a separate folder on the server accessible only to the specified staff, such files shall be password-protected with a password known only to the specified staff. Staff will declare and record the date and purpose of each instance of access, and access will also be logged automatically by the server. These logs will be inspected quarterly by the Senior Operations Strategist. Direct PII will be removed and replaced with pseudo identifiers for any data files under regular use by the full research team. Direct PII will be permanently destroyed as soon as they are no longer required for the purpose(s) specified by all relevant data-sharing and IRB agreements.

A10.6. User security

User access to the research servers and to specific project folders are controlled by CCRCs IT managers. Only users who have been identified in the data use agreement, are included in relevant IRB agreements, have received training, and signed the appropriate documentation for confidential data use are granted access to CCRC research servers. The Senior Operations Strategist maintains all user access documentation. User access is audited yearly to maintain compliance.

A10.7. Disclosure Standards

Approved research staff commit to process the restricted data and any records created from such data in a manner which protects confidentiality by direct or indirect means, and in such a way that unauthorized persons cannot retrieve the information by any means.

Any derivative products such as tables, figures, regression output, log files, or other reports that are created with information from the secure environment must also remain within the secure environment, unless such products contain only summary, aggregate data (cell size of 10 or more). Any derivative output containing descriptions of individual records or small cell sizes

(<10 observations) are considered as sensitive as the underlying data and as such, will remain within restricted project folders on the secure server.

Derivative products containing only summary, aggregate data may be shared outside the research team only after review and approval from one of the Principal Investigators, and by the data provider if required by the relevant data agreement, to ensure such materials are related to an approved use and contain no inadvertent disclosures.

Also, the REL study team has submitted to the IES/ED security officer a list of the names of all people who will have access to respondents and data. The REL NW contractor, on behalf of ED, will track new staff and staff who have left the study and ensure that signatures will be obtained, or clearances revoked, as necessary.

A11. Questions of a Sensitive Nature

To measure whether the study sample is well balanced across treatment groups, the research team will collect data on observable demographic and academic characteristics, as recommended by What Works Clearinghouse. Specific student- and instructor-level characteristics to be measured through extant administrative records which can be considered of a sensitive nature include gender, race/ethnicity, and age. Other questions on the data collection instruments will not be of a sensitive nature, for example, instructors completing the survey will be asked questions to measure their pedagogical content knowledge in teaching using technology, about the eAcademy Toolkit type of professional development activities they are enrolled in, their opinion about the quality of the professional development activities offered by the institution, and information about their background characteristics. Students completing the survey will be asked about engagement including emotional, self-discipline, interactive, and social engagement with peers and teachers.

A12. Estimates of Hour Burden

There are three components for which the evaluation team has calculated hours of burden for this clearance package: recruitment activities, extant data provided by the institutions, and primary data collected from study participants. Table 2 shows the hourly burden overall and for all three components. The total burden associated with this study across one study year is 1,351 hours, with an annualized burden of 1,351 hours. The recruitment burden is 119.90 hours, the extant data collection burden is 128 hours, and the data collection burden is 1,103 hours. The annualized number of responses is 14,313.

Table 3 - Estimated Annual Burden and Respondent Costs Table

	Sample Size (if applicable)	Respondent Response Rate (if applicable)	Number of Respondents	Number of Responses	Average Burden Hours per Response	Total Annual Burden Hours	Estimated Respondent Average Hourly Wage	Total Annual Costs (hourly wage x total burden hours)
<i>Recruitment (Sites, Instructor participants, Facilitators, Students)</i>								
College Recruitment - President (initial email)**	7	100%	7	7	0.15	1.05	\$53.49	\$56.16
College Recruitment - President (follow-up email)	7	100%	7	7	0.05	0.35	\$53.49	\$18.72
College informational webinar - Executive level staff	21	80%	17	17	0.50	8.50	\$53.49	\$454.67
Instructor Recruitment (2 emails)	345	100%	345	690	0.15	103.50	\$61.25	\$6,339.38
Instructor Study Group Assignment Notification(email)	130	100%	130	130	0.05	6.50	\$61.25	\$398.13
Subtotal	510		506	851	0.90	119.90	\$282.97	\$7,267.05
<i>Extant Data Collection Administrative Data on Instructors and Students</i>								

	Sample Size (if applicable)	Respondent Response Rate (if applicable)	Number of Respondents	Number of Responses	Average Burden Hours per Response	Total Annual Burden Hours	Estimated Respondent Average Hourly Wage	Total Annual Costs (hourly wage x total burden hours)
Contact information for eligible instructors	4	100%	4	4	2.00	8.00	\$53.49	\$427.92
Administrative data on instructors and students, (2 requests for data)	4	100%	4	8	16.00	128.00	\$53.49	\$6,846.72
Grant access to Learning Management System shells	4	100%	4	4	2.00	8.00	\$53.49	\$427.92
Subtotal	12		12	16	20	144	\$160.47	\$ 7,702.56
<i>Data Collection (Administrators, Facilitators, Instructors, Students)</i>								
Instructor Survey #1 – w/application	120	100%	120	120	0.33	39.60	\$61.25	\$2,425.50
Instructor Survey #2 - Request to take survey (3 emails)	120	100%	120	360	0.05	18	\$61.25	\$1,102.50
Instructor Survey #2	120	90%	120	120	0.33	36.90	\$61.25	\$2,425.50
Student Survey - Remind instructors to circulate survey (2 emails)***	120	100%	120	240	0.05	12	\$61.25	\$735

	Sample Size (if applicable)	Respondent Response Rate (if applicable)	Number of Respondents	Number of Responses	Average Burden Hours per Response	Total Annual Burden Hours	Estimated Respondent Average Hourly Wage	Total Annual Costs (hourly wage x total burden hours)
Student Survey - Recruitment and follow- up (2 emails sent by instructors)	120	100%	120	240	0.08	19.99	\$61.25	\$1,224.51
Student Survey - Request to take survey (3 emails)	2880	100%	2880	8640	0.05	432	\$30.00	\$12,960
Student survey	2880	85%	2448	2448	0.17	407.84	\$30.00	\$12,235.10
Focus Group Recruitment - Instructors (2 emails)	36	100%	36	72	0.05	3.60	\$61.25	\$220.50
Instructor Focus Groups	30	100%	30	30	1.00	30.00	\$61.25	\$1,837.50
Interview Recruitment - Administrator (2 emails)	8	100%	8	16	0.05	0.90	\$53.49	\$48.14
Administrator Interviews	8	100%	8	8	1.00	6.00	\$53.49	\$320.94
Interview Recruitment - Facilitator (2 emails)	8	100%	8	8	0.05	0.30	\$61.25	\$18.38
Facilitator Interviews	8	100%	8	8	1.00	6.00	\$61.25	\$367.50

	Sample Size (if applicable)	Respondent Response Rate (if applicable)	Number of Respondents	Number of Responses	Average Burden Hours per Response	Total Annual Burden Hours	Estimated Respondent Average Hourly Wage	Total Annual Costs (hourly wage x total burden hours)
Subtotal	6458		6026	12,310	4.21	1015.83	\$718.23	\$35,921.07
Totals	6980		6544	13,177	25.11	1279.73	\$1,161.67	\$50,890.68

*Bureau of Labor Statistics, U.S. Department of Labor Statistics, May 2021 National Occupational Employment and Wage Estimates (https://www.bls.gov/oes/current/oes_nat.htm#25-0000); accessed on February 24, 2023.

** The hourly rate of \$53.49 for college presidents was obtained using estimates reported for Occupational Code 11-9033 Education Administrators, Postsecondary (<https://www.bls.gov/oes/current/oes119033.htm>).

*** The hourly rate of \$30 for students was obtained by averaging the median weekly earnings of full-time wage and salary workers among high school graduates with no college and individuals a bachelor's degree (<http://www.bls.gov/news.release/pdf/wkyeng.pdf>); accessed on February 24, 2023.

Please ensure the annual total burden, respondents and response match those entered in IC Data Parts 1 and 2, and the response per respondent matches the Paperwork Burden Statement that must be included on all forms.

A13. Estimate of the total annual cost burden to respondents or record keepers resulting from the collection of information. Do not include the cost of any hour burden shown in Items 12 and 14.)

There is no capital or startup costs for this project. The total respondent cost associated with this study is approximately \$50,890.68. The annualized cost is \$50,890.68. The recruitment cost is \$7,267.05, the extant data collection cost is \$7,702.56, and the respondent cost for the data collection is \$35,921.07.

A14. Provide estimates of annualized cost to the Federal government.

The total cost to the federal government for work conducted over all five years is \$1,983,789 and the estimated annualized cost to the federal government for each year of the study is \$396,757.80. Funding includes staff time for independent evaluators to recruit participants, collect, clean, and analyze data from the study. Also included are costs incurred by the independent evaluator and REL NW staff related to study preparation and submission of the study information to IES (from proposed research design through reporting of results).

A15. Explain the reasons for any program changes or adjustments.

This is a new study. Therefore, all burden is new. This results in a program change increase in burden and responses of 1,280 hours and 13,177 responses.

A16. For collections of information whose results will be published, outline plans for tabulation and publication.

A16.1. Data Analysis Plan

To determine treatment effects of the eAcademy on instructor-level outcomes, the evaluation team will rely on a null-hypothesis framework wherein the researchers compare average outcomes measured by the Instructor Technology Use Survey for instructors assigned to the early start (treatment) group and instructors assigned to the late start (business-as-usual) group, with adjustments for baseline covariates, clustering, and differential probabilities of treatment assignment when needed. Primary outcomes of interest include instructors' awareness of technology tools, knowledge of how to use technology, and comfort using education technologies to support student learning.

To determine the relationship between instructor participation in the eAcademy and student-level outcomes, data will be analyzed using a two-level model specification, which accounts for the nesting of students within instructors and instructors within disciplines with random assignment occurring at the instructor level. Primary student-level outcomes of interest include course completion and withdrawal, persistence into the winter 2025 quarter, and student engagement and interaction.

A16.2. Tabulation Plans

All results for REL rigorous studies will be made available to the public through peer-reviewed evaluation reports that are published by IES. The datasets from these rigorous studies will be turned over to the REL's IES project officer. After the study report is finalized, the evaluation team will prepare restricted-use data files in accordance with NCES standards. These files will

contain all the primary survey data collected for the study with all personal identifiers removed. Thorough documentation will be provided for each data file, including a detailed codebook and explanations of the unit of observation, weights, and methods for handling missing data. These data will become IES restricted-use data sets requiring a user’s license that is applied for through the same process as NCES restricted-use data sets. Even the evaluation team would be required to obtain a restricted-use license to conduct any work with the data beyond the original evaluation.

In addition, all restricted use files are required to be reviewed by IES’ Disclosure Review Board. The Disclosure Review Board (DRB) comprised of members from each NCES Division, representatives from IES’ Statistical Standards Program, and a member from each of the Institute of Education Sciences (IES) Centers. The DRB will review disclosure risk analyses conducted by the REL contractor to ensure that data released do not disclose the identity of any individual respondent. The DRB approves the procedures used to remove direct identifiers from restricted-use data files.

A16.3. Publication Plans

All results for REL studies are made available to the public through peer-reviewed reports that are published by IES so other researchers can replicate the REL’s research or answer additional research questions. The de-identified data sets from these studies will be turned over to the REL’s IES project officer. These data may become IES restricted-use data sets requiring a user’s license that is applied for through the same process as National Center for Education Statistics restricted-use data sets (see <http://nces.ed.gov/pubs96/96860rev.pdf> for procedures related to obtaining and using restricted-use data sets). No responses or data will be reported for individual instructors, staff, or students. The surveys and notification letters will display the expiration date for OMB approval.

A16.4. Project Time Schedule

Activity/milestone	1	2	3	4	5	6	7	8	9	10	11	12
2024												
Recruit community colleges for evaluation	X	X										
Recruit instructors for evaluation	X	X	X									
Instructors complete application; conduct random assignment			X	X	X							
Facilitate eAcademy for Toolkit evaluation						X	X	X				
Interview college administrators					X	X						
Interview eAcademy facilitators								X	X			

Activity/milestone	1	2	3	4	5	6	7	8	9	10	11	12
Conduct instructor focus groups and course reviews										X	X	X
Administer instructor survey											X	X
Administer student engagement survey											X	X
2025												
Collect extant data from colleges	X	X										
Data cleaning and analysis	X	X	X	X	X							
Draft evaluation report					X	X	X	X				
SME review of evaluation report							X					
IES & RPR review of evaluation report									X	X	X	X
2026												
Activity/milestone	1	2	3	4	5	6	7	8	9	10	11	12
IES & RPR review of evaluation report	X	X	X	X	X	X	X	X	X			

A17. Explain each exception to the certification statement identified in the Certification of Paperwork Reduction Act.

The Institute of Education Sciences is not requesting a waiver for the display of the OMB approval number and expiration date. The surveys and notification letters will display the expiration date for OMB approval.

A18. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

This submission does not require an exception to the Certificate for Paperwork Reduction Act (5 CFR 1320.9).