DESIGNING FOR IMPACT: RESEARCH INSIGHTS AT THE NEXUS OF EDUCATION AND EMPLOYMENT

Michelle Van Noy

Director and Associate Research Professor
Rutgers University School of Management and Labor Relations

Designing for Impact: Research Insights at the Nexus of Education and Employment

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Michelle Van Noy, Ph.D.

Education and Employment Research Center, Rutgers University

Rising Individual Interest in Short-term Workforce Credentials

- Individual preference in noncredit and NDCs
  - Post pandemic trends point to interest in NDCs...
    - Over 2/3 of adults considering education prefer nondegree, up from 1/2 pre-pandemic (Strada, 2020).
    - Among "great resigners", 72% were enrolling in programs that are 6 months or shorter (Cengage, 2022).
  - Decreased interest in college degrees
    - 29% of adults think that getting a four-year college degree is not worth it. (Fry, et al. 2024). https://www.pewresearch.org/social-trends/2024/05/23/is-college-worth-it-2/

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Increasing Public Investment in Short-term Workforce Credentials

- HCM report finds 59 state-led initiatives across 28 states, close to $3.8 million
- State funding investments
  - Examples: Get There FL, IN Next Level Jobs, NJ Pay It Forward, LA MJ Foster, VA Fast Forward, and others.

- Short-term Pell discussions continue

Proliferation of Short-term Options

Type	Definition	Est. #
Sub baccalaureate credit certificates	Credential awarded by an educational institution for completion of a subbaccalaureate credit educational program, usually less than one year in length (short-term and long-term credit)	50,000
Noncredit certificates	Credential awarded by an institution (educational or workplace) for completion of a noncredit educational program	58,000
Apprenticeship	Credential awarded after completion of structured educational and workplace program based on industry and occupational standards.	27,000
Industry certification	Credential awarded by an industry body or governmental agency for demonstration of skills typically via examination based on industry or occupational standards.	7,000
Occupational or professional license	Credential awarded by a governmental agency for demonstration of skills in a specific occupation and sometimes also completion of an educational program; often required to work in an occupation.	12,000
Badges	Credential awarded for completion of a short program of study or demonstration of a targeted set of skills; these are newly emerging and are still being developed.	430,000

Estimates are from Credential Engine (2022), https://credentialengine.org/resources/counting-u-s-secondary-and-postsecondary-credentials-report/

Evolving State Policy Discussions

- State policy discussions around quality credentials, skills-based hiring, LERs

- National Skills Coalition**,** Quality Postsecondary Credential Policy Academy
  - Develop quality definitions
  - Promote policy agendas to improve attainment levels, equity
  - Improve state noncredit data capacities

- State credential quality lists
  - Examples:
    - Alabama Committee on Credentialing and Career Pathways' Compendium of Valuable Credentials
    - Colorado's Quality and In-Demand Credentials Framework
    - NC Workforce Credentials Advisory Council's priority non-degree credentials
    - Tennessee Promoted Student Industry Credentials

Evolving College Practices

Focus of Noncredit Education
- Shift to prioritize workforce > comprehensive approach
- Reconsideration of target student population

Organization of Noncredit Education
- Dramatic variation and shifts in organizational location
- Increased partnerships to increase capacity and reach

Structure of Noncredit Education
- Decision to offer in noncredit driven by speed and flexibility, also skill and credential needs in the labor market
- Interest in developing pathways to credit, variability in progress
- Few supports for noncredit students

Source: EERC Landscape Scan of Community College Noncredit Education

Many questions about data and quality…

- **Defining Quality…** What is quality? How to define & promote quality?

- **Building the NDC Quality Ecosystem…** What systems exist to promote quality? How to build the quality ecosystem?

- **Building the Data Infrastructure…** What data are available? How to build the needed data infrastructure?

Defining Quality

What is quality?
How to define and promote quality?

Quality includes several conceptual areas

Quality Credential Design → Relevant Competencies → Outcomes of Value

Market processes
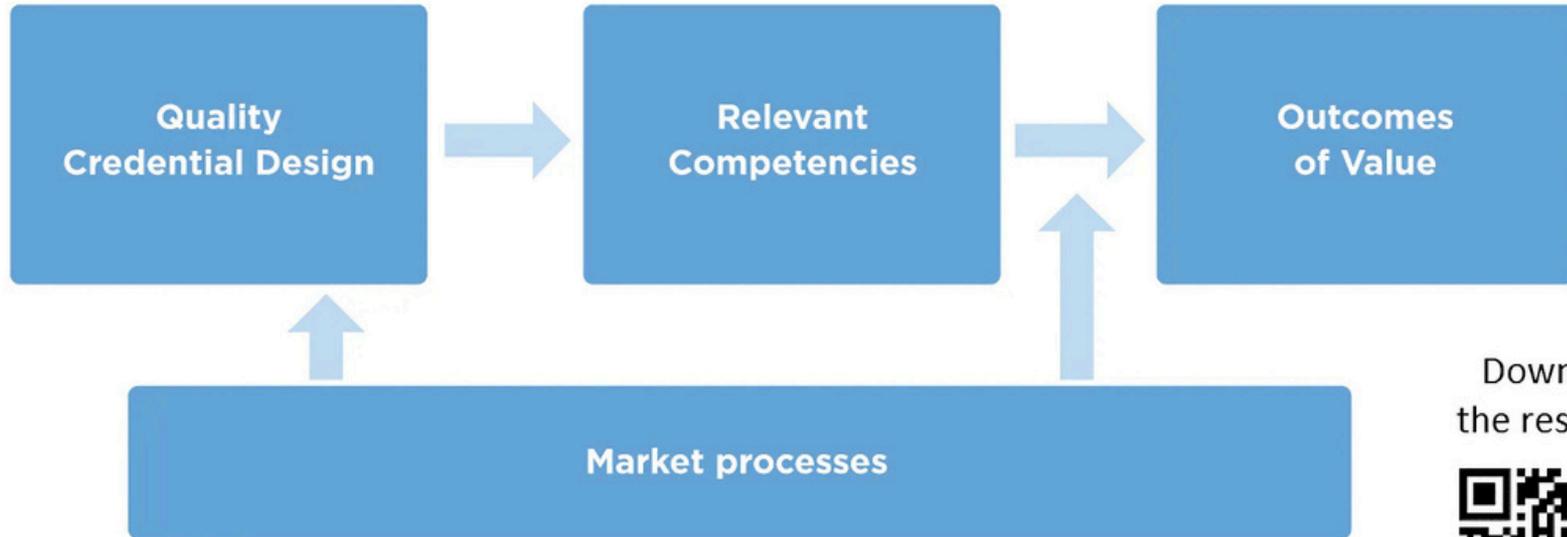
Download the research:

Based on EERC's conceptual model for non-degree credential quality:
https://go.rutgers.edu/NDCQualityFramework

Quality Definitions Relate to Stakeholder Goals

Stakeholder	Goal	Key Questions to Consider
Individuals	Informed decision making	How do we know as an individual whether it is a good investment of time and money to pursue an NDC?
Employer	Informed decision making	How do we know whether NDCs are a useful indicator of skill and competency to be used in hiring and advancement?
Policy Makers	Accountability	How do we know whether public funds should be used to support the attainment of NDCs?
Credential Providers	Program Improvement	How can NDCs be improved?

Elements of Quality Credential Design

Labor market relevance

Transparency

Stackability/articulation to cr

Accessibility

Instructional processes (esp delivery)

Student supports

Research on National Landscape of Noncredit Education

- Study provides a snapshot of essential issues and trends in community college noncredit workforce education

- Interviews of 29 community colleges across 22 states in spring 2021; topics included:
    - focus of noncredit
    - organizational structure
    - target student population
    - mechanisms for offering programs and ensuring quality
    - connections to credit-bearing programs

Trends in the Landscape of Noncredit Education

- Labor market analysis – most commonly-mentioned approach to ensure quality

- Reliance on industry certificates, alignment with external standards

- Involvement of faculty in program development

- State approval processes, particularly associated with FTE funding

- Student demand as an indicator

- Earnings outcomes, but little data are available

Research on Community College Noncredit Program Quality: Design

Interviews with administrators & faculty at 4 colleges (2022-23)

Examined two programs from each college

Download the research:

TABLE 1: SELECTED PROGRAMS AND CREDENTIALS BY COLLEGE

College/ Program	NDC Type	NDC Name
Harper College, IL (Harper)		
Real Estate	License	Illinois Real Estate Broker
Solar Photovoltaic Associate Certification Prep; Solar Business and Technical Sales	Certification; Digital badges	North American Board of Certified Energy Practitioners (NABCEP) Associate; NABCEP Solar Business and Technical Sales (the course provides approved training hours toward this certification)
LaGuardia Community College, NY (LaGuardia)		
Community Health Worker	Certificate	Community Health Worker
Medical Billing	Certificate	Medical Billing Specialist
Mt. San Antonio College, CA (Mt. SAC)		
Electronics	Certificate	Electronic Systems Technology Skills
Emergency Medical Technician	Certification; License	National Registry EMT; State EMT
Northern Virginia Community College, VA (NOVA)		
Medical Assistant	Certification	Certified Clinical Medical Assistant (CCMA)
CompTIA® Network+	Certification	CompTIA® Network+

Contextual Influences on Noncredit Programs

- Funding
  - Harper: Noncredit workforce courses categorized as "nontransferable credit" courses and receive some state reimbursement
  - LGA: No state formula funding; some state and city allocations, plus grants
  - Mt. SAC: CA provides funding for short-term vocational training/workforce prep programs that consist of 2+ courses that lead to a state-approved noncredit certificate
  - NOVA: Fast Forward, performance-based state funding established in 2016; focuses on industry-recognized credentials in high-demand fields

- College organization
  - Harper: Noncredit workforce programs are in the credit Career Technical Programs division
  - LGA: Division of Adult and Continuing Education
  - Mt. SAC: Continuing Education
  - NOVA: Continuing Education

Key Findings on Community College Noncredit Program Quality

Key markers of noncredit program quality emerged including:
- Local and regional labor market alignment
  - Examples: LGA's medical billing program; VA Fast Forward state approval

- Curricula/instruction that prepare students with test-taking, occupational, and employability skills
  - Example: NOVA's Medical assistant program

- Instructors with significant work experience using the credentials that they teach
  - Example: Harper's real estate program

- Sufficient funding and resources to make programs accessible
  - Example: Mt. SAC and NOVA

- Articulation varies by field and institution
  - Example: Mirrored courses- Mt. SAC and Harper; LGA medical billing and coding

Research Review of Outcomes: Design

- Focused on outcomes for occupational noncredit training and NDCs

- Based on a core group of 15 key articles on noncredit and NDC outcomes

- Data comes from two main sources: national surveys and state administrative data.
- Methodology
  - Comparisons: pre-post studies of the same individual, more or less education comparing between two different individuals
  - Analytic Approaches: descriptive statistics and multivariate analysis

- Data and methods are variable, making comparisons across studies challenging.

Download the research:

Research Review of Outcomes: Findings on Pathways Progression

Few noncredit students transition to credit pathways.

- In a five-state study, four states moved only 1 in 20 noncredit students into for-credit education (Bahr et al).

- Only one in four students seeking a noncredit credential earned one, and only 5% completed a stackable credential (McConville et al).

- Only 22% of credential-seeking noncredit students enrolled in for-credit courses for at least two semesters and passed at least one credit-bearing course (Xu & Ran).

Research Review of Outcomes: Findings on Labor Market Gains

Noncredit programs lead to modest but measurable gains
- Certificate holders earned more than the average high school graduate but less adults with at least one year of college (Baum et al)
- Average earnings of noncredit students in Texas were $6,000 higher one year after enrollment. (Bahr et al)

Wage premiums varied by program/occupation and gender
- Wages were 42% higher one year after certification in professional, scientific, and technical services, health care, manufacturing, and public administration, but dropped in education services, retail trade, and accommodation and food services (CDEP)
- Certificates and certifications in male-dominated fields provided a nearly $20,000 earnings boost compared to adults lacking any credential, while female-dominated fields had very little to no wage premium (Strada, Gallup, & Lumina).
- Students who reported their current job was closely related to their recent training programs reported wage 3x larger than students whose job was not related to their training (McConville et al).

More research is needed to make sense of the range of noncredit programs.

Discussion

- What is one noncredit practice used by your institution that you view as important to promoting quality?

Building the NDC Quality Ecosystem

What systems exist to promote quality? How to build the quality ecosystem? What is the role of data?

Research: Landscape scan of quality influences on non-degree credentials (microcredentials)

- Interviews with 36 leaders, 29 organizations

- Systematic web scan of recent publications

- Systematic web scan of key actors and their efforts

- NCSL Jan 2023 convening of key actors

- Organization summaries of 29 NDC quality influencers we interviewed & 30 potential NDC quality influencers identified through scan
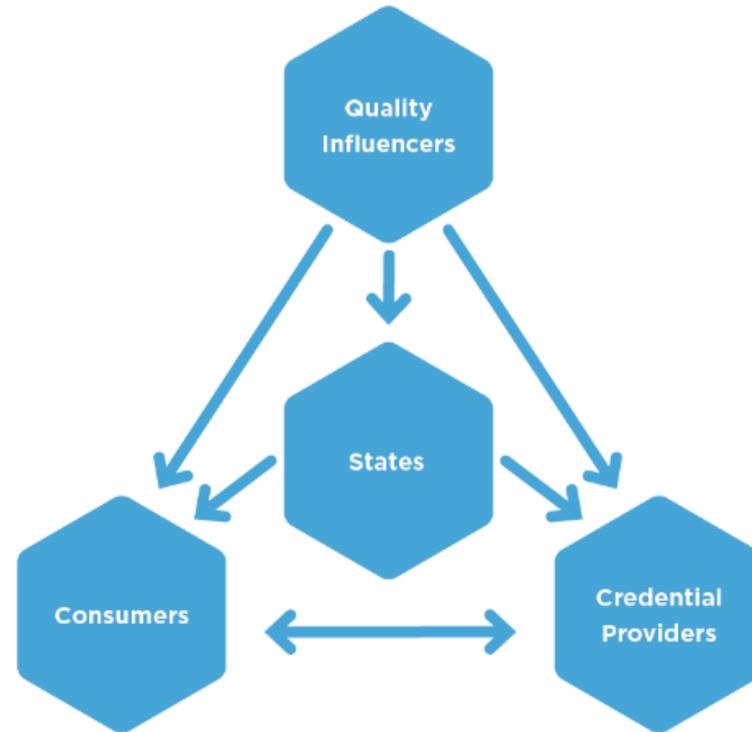
Download the research:

For more information on the quality ecosystem research:
https://go.rutgers.edu/MappingNDCMarket

Beginning Snapshot of the Emerging Quality Ecosystem

Credential Providers of NDCs

Educational Institutions - 4 year and 2 year, credit and noncredit

Private training providers, boot camps, online, and emerging providers

Private companies

Professional and industry associations

Joint training funds

State occupational licensing departments

Multiple Influences and Ecosystems for Quality

NDC Quality Ecosystem by NDC Type
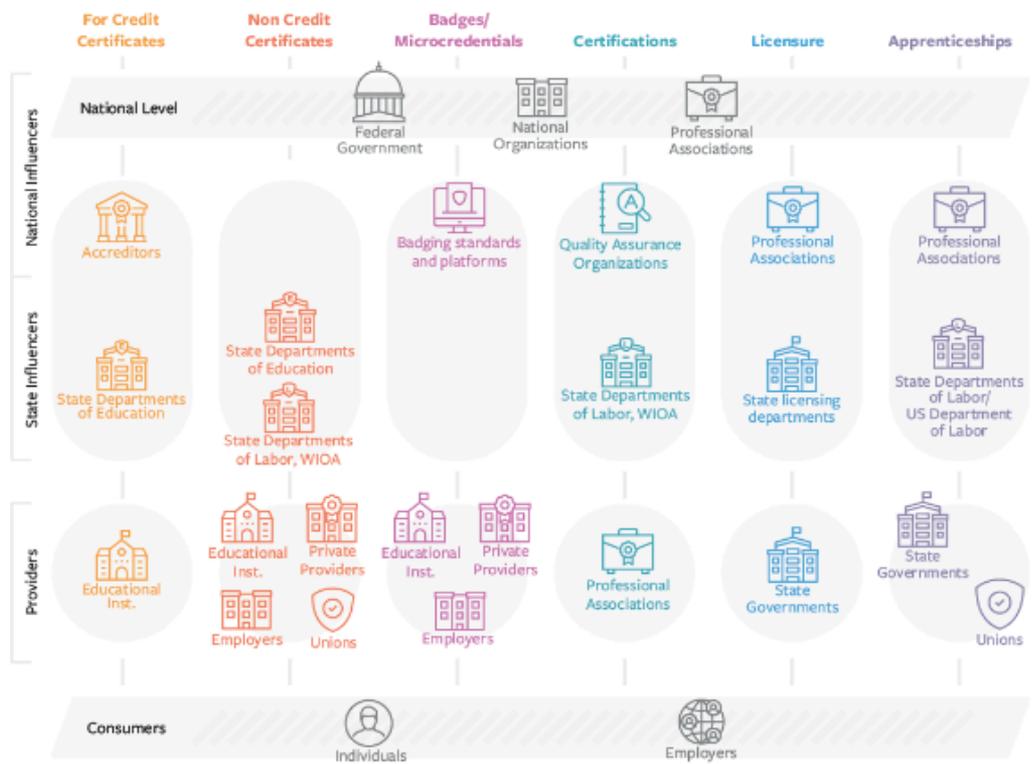
Informing Consumers

NDC Quality Influencers Focused on Consumers

Information for Individuals

- US DOL Career
- OneStop
- State ED
- State DOL ETPLs

Information for Employers

- Guild
- SHRM
- Chamber
- BHEF
- EQOS

Reforms Among Providers

NDC Quality Influencers Targeted at Providers

Program-Based Short-Term Occupational Credentials
Certificates, Badges

Industry-Based Occupational Credentials
Certificates, Licenses, Apprenticeship

Educational Institutions

Reforming practice: Education Strategy Group (ESG), League for Innovation, Education Design Lab (EDL), American Association of Community Colleges (AACC), New America, Business Higher Education Forum (BHEF)

Competency-based education/CPL: Council for Adult and Experiential Learning, American Council on Education (ACE), Competency-Based Education Network (C-BEN), Quality Assurance Commons

Standards: New England Commission on Higher Education (NECHE), Higher Learning Commission (HLC), University Professional and Continuing Education Association (UPCEA), Accrediting Commission of Career Schools and Colleges (ACCSC), Middle States

Private Providers

Middle States, CIRR

Online Providers

Quality Matters, Digital Promise

Professional Associations

Workcred, ANSI National Accreditation Board (ANAB), Institute for Credentialing Excellence (I.C.E.), National Commission for Certifying Agencies (NCCA), American Society for Testing and Materials (ATM), International Organization for Standardization and the International Electrotechnical CommissionISO/IEC

State Government Agencies

National Council on State Legislators (NCSL), Council on State Governments, Council on Licensing Enforcement and Regulation (CLEAR)

Badging (*across providers*)

Credly, Canvas Credentials (formerly Badgr), IMS Global, Open Badges, Digital Promise, other platforms

Guiding States

NDC Quality Influences Targeted at States

Standards: National Skills Coalition (NSC), New England Commission on Higher Education (NECHE), Quality Assurance Commons (QAC), Digital Promise (DP), Education Strategy Group (ESG)

Reforming Practice: Advance CTE, C-BEN, NGA, SHEEO

Quality Influencers: Higher Education Accreditors—Set Norms for Certificates

- Council of Higher Education Accreditation (CHEA)

- Accrediting Commission for Community and Junior Colleges

- Commission on Accreditation of Allied Health Education Programs (CAAHEP)

- EFMD Quality Improvement System (EQUIS)

- Accrediting Commission of Career Schools and Colleges

- The Middle States Association Commission on Elementary and Secondary Schools (MSA-CESS)

- Former Regional Higher Education Accreditation Agencies.
    - NECHE … noncredit accreditation
    - HLC… Credentials Lab

Building Data Infrastructure

- Credential Engine

- Education Quality Outcomes Standards (EQOS)

- Data infrastructure building
  - Coleridge
  - NASWA's NLX Research Hub
  - Rutgers EERC State Noncredit Data project
  - SHEEO/Education Strategy Group Noncredit Mobility Academy

Discussion

- What strategies have the most promise to support a system that ensures quality?

EERC's State Noncredit Data Project

Research partnerships to better understand noncredit including:

- Noncredit data inventories with established states: IA, LA, VA (Phase 1) and a mix of established and emerging states: MD, NJ, OR, SC, TN (Phase 2)
- Additional research focuses on data inventories with a range of state entities, promising practices, scan of state policy, and analysis of state governance.

Noncredit data taxonomy to guide data collection efforts across state, institutional, and federal levels.

Network dedicated to building the noncredit data infrastructure, including quarterly learning community meetings open to all interested stakeholders; and monthly specialized working groups for states only to share practices on data collection, policy and governance, and aligning program data with labor market information.

Noncredit Data Taxonomy 2.0

Based on Multi-Phase, Multi-State Noncredit Data Inventory

Based on inventory & analysis of 8 partner states (IA, LA, VA; NJ; SC; OR; MD; TN)

Addresses realities & aspirations

Data availability dependent on data systems, mandates, and partnerships

Full taxonomy includes complete list of data elements and operational definitions

*_New Components in updated 2.0 version_

Purpose and Design

- Field of Study
- Noncredit Type
- Program Length and **Admission**
- Delivery
- **Accessibility**
- **Provider Information**
- **Student Services**
- Associated Non-Degree Credentials

Outcomes

- Academic Outcomes
- Labor Market Outcomes
- Non-Degree Credential Outcomes

Enrollment & Demographics

- Enrollments
- Demographics
- Identifiers

Finance & **Policy**

- Tuition and **Student Costs**
- State and Federal Funding
- **WIOA Information**

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Learn more about the *State Noncredit Data Project*
https://sites.rutgers.edu/state-noncredit-data/

Noncredit Data Taxonomy 2.0 and Implementation Guide for States: Lessons Learned from Phase 2 of the State Noncredit Data Project
https://go.rutgers.edu/EERCnoncredittaxonomy

For interested states, contact Paula.Nissen@niacc.edu to sign up for a Specialized Working Group.

Discussion

- What noncredit data collection practices have worked well at your institution? What practices are challenges?

Recent Publications on Quality in Noncredit Education

Quality in Community College Non-Credit Education:

Noncredit Students at Two Community Colleges: Who Are They and What Are Their Experiences? https://go.rutgers.edu/btfb9aay

A Snapshot of the Shifting Landscape of Noncredit Community College Workforce Education: https://go.rutgers.edu/l8dzdzkm

Its Own Standard: Approaches to Quality in Community College Noncredit Workforce Education: https://go.rutgers.edu/tuy1h2o3

Career Decision Making and Community College Noncredit Students: https://go.rutgers.edu/pcqio9jf

To learn more about Quality in Noncredit Education project, scan the QR code or visit: https://go.rutgers.edu/4l15shwu

Review of the Evidence of Noncredit Education:

Review of Recent Research on Noncredit Outcomes: https://go.rutgers.edu/NCoutcomes

Mapping the Non-Degree Credential Market:

Landscape Scan of National Influences on NDC Quality https://go.rutgers.edu/LandscapeScan

Building a System for Non-Degree Credential Quality: A Landscape Scan of National Influences in NDC Quality https://go.rutgers.edu/buildingNDC

Making Sense of Quality in The NDC Marketplace – Implications for Policymakers and Practitioners https://go.rutgers.edu/QualityNDC

To learn more about Quality in Noncredit Education project, scan the QR code or visit: https://go.rutgers.edu/4l15shwu

To learn more about our *Review of the Evidence of Noncredit Education*, scan the QR code or visit https://go.rutgers.edu/dzlk1ljk

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NONCREDIT
RESEARCH COLLABORATIVE

The Noncredit Research Collaborative brings together leading researchers focused on noncredit education. We seek to:

- Work with states and colleges to conduct rigorous research to build core evidence about noncredit education.

- Help build data infrastructure and analytic capacity to inform policy and practice on noncredit education.

- Serve as a hub to disseminate research and information on noncredit education.

Our ultimate goal is to ensure that noncredit education benefits students and promotes economic opportunities.

Peter Bahr, University of Michigan

Mark D'Amico, UNC Charlotte

Michelle Van Noy, Rutgers

Di Xu, UC Irvine

Please visit our website for information in one place on our research on noncredit education:

https://noncreditresearch.org/

For More Information on EERC...

Contact Michelle Van Noy, mvannoy@rutgers.edu

Visit the EERC Website: http://smlr.rutgers.edu/eerc

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