Developing Competency & Confidence in Evidence-Informed Practice via Professional Development Experiences

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James Madison University

We invite you to recognize the written histories of the Shenandoah Valley, the city of Harrisonburg, and our university's namesake, James Madison, as fractured.

Let us acknowledge then that we are currently on the land of the Indigenous Siouan, Algonquian, and Haudenosaunee communities who lived here for many generations and who continue to be systematically erased by policies and practices that remove their histories from this place.

Let us honor the enslaved people who built the wealth and foundation of James Madison.

Let us recognize the histories of Virginia and the United States as complicit with the racism of white supremacy.

We recognize that these difficult histories persist in present-day racial realities and privileges at this university. We commit to dismantling racism in spaces of our work. **We invite you to work beside us to create change.**

Indigenous Land and Enslaved Peoples Acknowledgement

The Center for Faculty Innovation
JAMES MADISON UNIVERSITY

Background

WHAT IS EVIDENCE-INFORMED PRACTICE?

Evidence-Informed Practice in Healthcare

Evidence-informed medicine is “the conscientious, explicit, and judicious **use of current best evidence in making decisions** about the care of individual patients. The practice of evidence based medicine means **integrating individual clinical expertise with the best available external clinical evidence from systematic research**”

-Sackett et al., 1996, p. 71

Evidence-Informed Practice/Programming (EIP) in Student Affairs Professional Standards

CAS Standards	ACPA-NASPA Professional Competencies		ASK Professional Standards
Program	Student Learning & Development (SLD) Competency	Assessment, Evaluation & Research (AER) Competency	Standard 2: Articulating Learning & Development Outcomes
• **"Programs and services must be guided by theories and knowledge of learning and development."** • "Personnel must engage in continuing professional development activities to keep abreast of the research, theories, legislation, policies, and developments that affect their programs and services."	Foundational Level: • "Articulate theories and models that describe the development of college students and the conditions and practices that facilitate holistic development" • "Identify one's informal theories of student development ('theories in use') and how they can be informed by formal theories to enhance work with students." • "Assess learning outcomes from programs and services and use theory to improve practice." Intermediate Level: • **"Design programs and services to promote student learning and development that are based on current research on student learning and development theories."** • "Utilize theory-to-practice models to inform individual or unit practice." • "Justify using learning theory to create learning opportunities." Advanced Level: • "Utilize theory to inform divisional and institutional policy and practice." • "Translate theory to diverse audiences (e.g., colleagues, faculty, students, parents, policy-makers) and use it effectively to enhance understanding of the work of student affairs." • "Analyze and critique prevailing theory for improved unit, division, or campus practice."	Foundational Level: • "Design program and learning outcomes that are appropriately clear, specific, and measurable, that are informed by theoretical frameworks and that align with organizational outcomes, goals, and values." Intermediate Level: • **"Utilize formal student learning and development theories as well as scholarly literature to inform the content and design of individual and program level outcomes as well as assessment tools such as rubrics."**	• "Ability to articulate intentional student learning and development goals and their related outcomes. In establishing those goals, the ability to use cognitive and psychosocial development theories germane to the student populations (e.g., traditional age, cultural background, adult education, and so on) as well as an awareness that different subpopulations may have different patterns of development (Love and Guthrie, 1999)." • "Ability to identify the appropriate philosophical or research underpinnings (such as positivist, constructivist, critical theory, and so on) for the articulation of outcomes, dependent on the outcomes themselves."

- Without engaging in the literature, SA practice can become “simply random activity, bound by tradition and convention, maybe helpful, maybe not, probably suiting some students, almost certainly leaving others out” (p. 305).
- “Any student affairs professional not reading the literature, not becoming knowledgeable of research and theory, is not acting ethically. Students have a right to expect that student affairs professionals are knowledgeable of appropriate theories, current research, and proven best pratices” (p. 311).

Carpenter, S. (2001). Student affairs scholarship (re?)considered: Toward a scholarship of practice. *Journal of College Student Development*, 42, 301–318.

- “We need to argue for moral, sane, and appropriately complex assessment, research, and evaluation. We can argue the case most readily and convincingly if we are actively engaged in such and are using it to inform practice every day.” (p. 190).

Jablonski, M. A., Mena, S. B., Manning, K., Carpenter, S., & Siko, K. L. (2006). Scholarship in student affairs revisited: The summit on scholarship, March 2006. *NASPA Journal, 43*, 182–200.

- “senior administrators could help to make sure that decisions regarding policy and practice are not made, at any level, without a review of the literature related to the decision” (p. 391)
- “senior administrators should at least ensure that their professionals engage in reading the literature and discussing its relevance to current practice” (p. 391)

Sriram, R. & Oster, M. (2012). Reclaiming the “scholar" in scholar-practitioner. *Journal of Student Affairs Research and Practice*, *49*, 377-396.

The Need for EIP in Student Affairs

EIP Necessary for High-Quality Student Affairs Practice

- Programs informed by current evidence about what is effective are more likely to positively impact student learning and development

EIP Necessary for High-Quality Assessment

- Research suggests EIP is related to student affairs educators ability to use assessment results for improvement (Bresciani, 2010)

Why Conduct a Needs Assessment on EIP?

Understanding of EIP in Student Affairs Limited

- Some publications on assessment & research behaviors/values, but limited research on student affairs educators use of research to inform program development

- Difficult to meet the professional expectations of EIP without knowing the extent of EIP & the supports needed to engage in EIP

What do SA educators on your campus do?

Get out your phone & tell us if professionals on your campus do the following:

1. Search for **evidence** of "**what works**" to inform their programming
2. Distinguish between **high-quality & low-quality evidence** when making practice decisions
3. Use **existing resources** of "what works" to increase **efficiency** when infusing scholarship to practice
4. Consider whether their programming **should be effective** & **why** *before* implementation
5. Use evidence that they gather to **improve** program effectiveness

Needs Assessment Overview

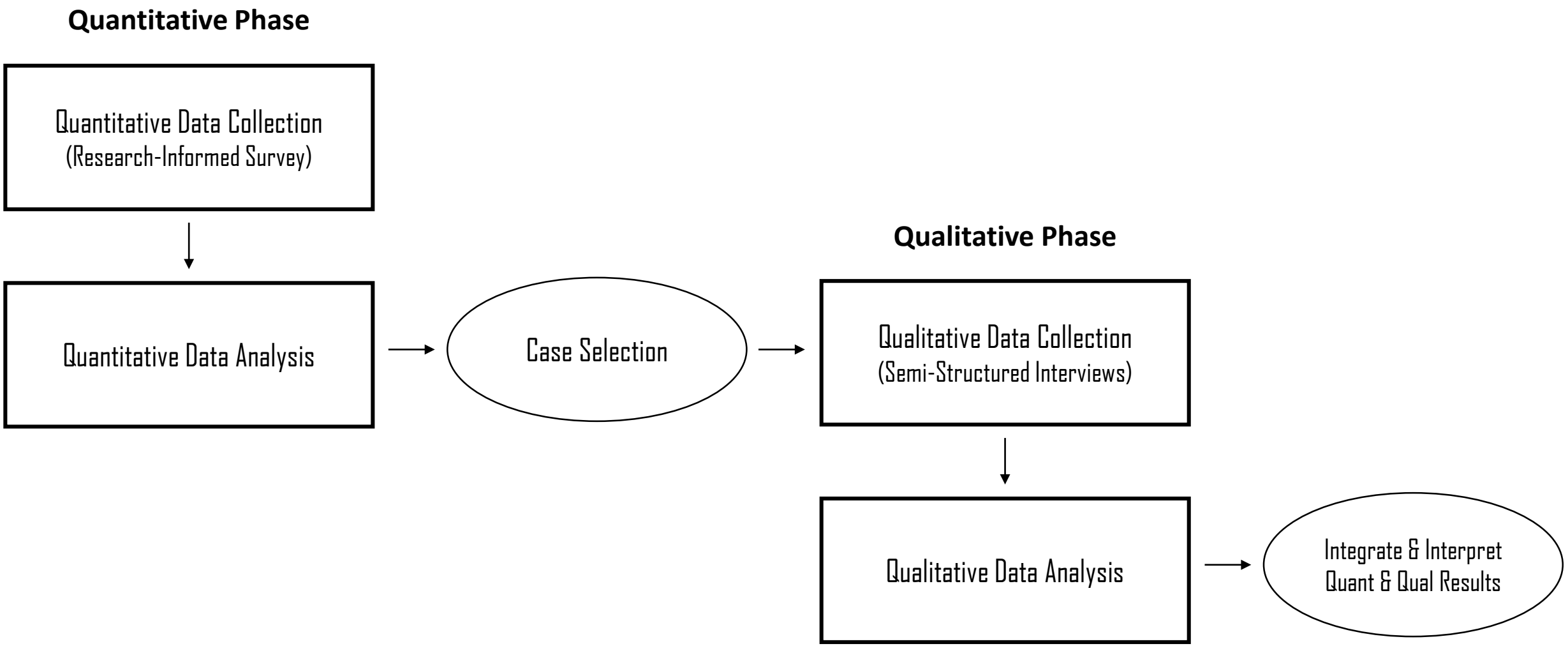
DESIGN & CONTEXT

Context for Needs Assessment

This work was situated within a larger initiative within the *Center for Assessment and Research Studies* at James Madison University to "improve higher education by inspiring and empowering faculty and staff to make evidence-based decisions to enhance student learning and development"

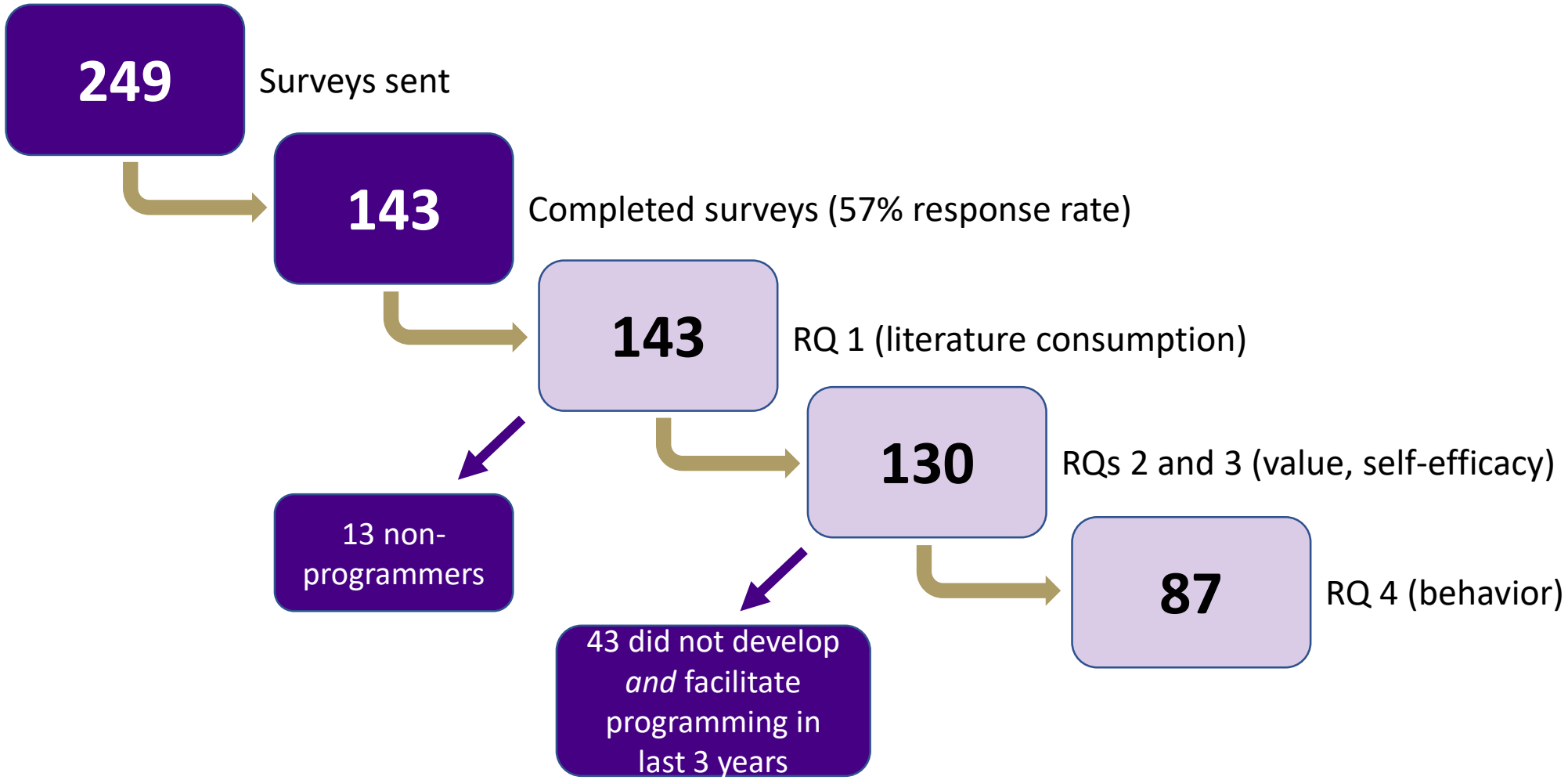
- Led in 2019 – 2020 by (now Dr.) Andrea Pope as part of her dissertation
- Results will be **used to inform future professional development opportunities** for student affairs professionals

Overview Of Needs Assessment



Research Questions	Items
Literature Consumption	
• RQ 1: How much time do student affairs educators spend consuming empirical research & other sources of evidence?	*Literature Consumption (4 items)* • Hours per month spent consuming various types of student affairs literature
Value	
• RQ 2: Do student affairs professionals at JMU value EIP?	*Value (14 items)* • Total score (α = .88)
Self-Efficacy	
• RQ 3: Do student affairs professionals at JMU believe they possess the knowledge, skills, and resources to engage in EIP?	*Self-Efficacy (10 items)* • Research self-efficacy (α = .90) • EIP self-efficacy (α = .94)
EIP Behavior	
• RQ 4: Do student affairs professionals at JMU engage in EIP?	*EIP Behavior (10 items)* • Program Facilitation Behaviors (α = .89) • Program Development Behaviors: Research (α = .87) • Program Development Behaviors: Student Development Theory (α=.89) • Program Development Behaviors: Other Literature Bases (α=.83)

Participants & Procedures



Quantitative Phase: Participants & Procedures

Demographics (*N* = 87)	
Office/Department (Percentage)	
CAP	13.8%
CSL	8.10%
ORL	13.8%
OSARP	6.90%
Health Center	8.10%
UREC	17.2%
Unions	13.8%
Other	18.4%
Position (Percentage)	
Graduate Student	5.75%
Entry-Level	36.78%
Mid-Level	49.43%
Upper-Level	8.05%

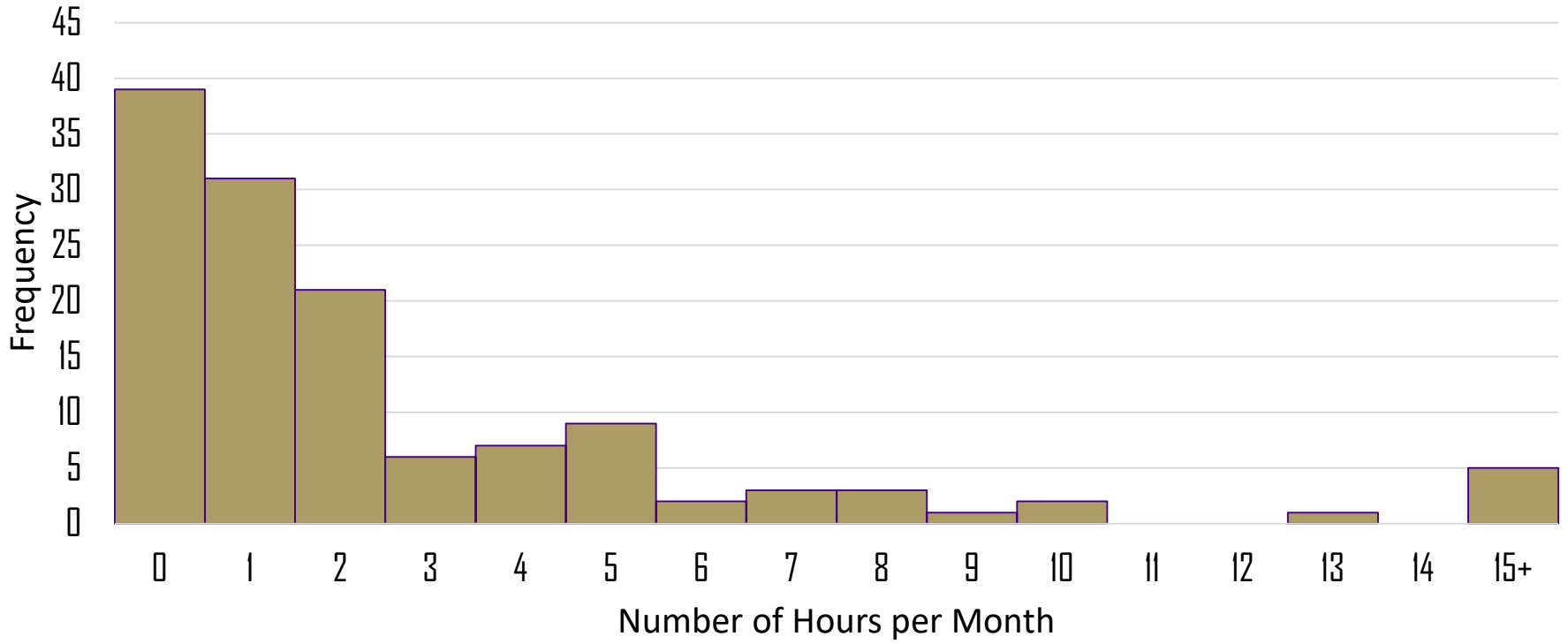
Demographics (*N* = 87)	
Experience (Median)	
Years in Student Affairs	5.00
Years at JMU	3.00
Education (%)	
Bachelor's	16.09%
Master’s	71.26%
Doctorate	8.05%
Other	4.60%
Student Affairs Degree? (%)	
Yes/In Progress	56.32%
No	43.68%

Results

QUANTITATIVE PHASE

RQ 1: Literature Consumption

Hours per **Month** Spent Reading Peer-Reviewed Empirical Research Studies (*M* = 3.03)



RQ 2: EIP Value

Item (1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Neither Agree or Disagree, 5=Slightly Agree, 6=Agree, 7=Strongly Agree)	Mean	SD	% Agree or Strongly Agree
EIP Values Scale Total Score (14 items)	**5.29**	**0.79**	--
• Engaging in evidence-informed programming is important for the credibility of the student affairs profession	6.06	0.99	80%
• Evidence-informed programming is necessary for high-quality student affairs practice	5.68	1.13	67%
• Current research and theory is useful when specifying student learning outcomes/objectives for programs intended to impact student learning and development	5.78	0.87	68%
• Current research and theory is useful when developing programming components (for example, activities, discussions, lectures) to impact student learning and development	5.71	0.93	65%
• Remaining current with research pertaining to higher education or student affairs is important to me	5.81	0.93	72%
• Evidence-informed programming does not take into account individual student needs and/or preferences (*Reverse-scored*)	3.47	1.48	30%
• Evidence-informed programming does not take into account the needs of marginalized or under-served student populations (*Reverse-scored*)	3.78	1.49	22%

RQ 3: Self-Efficacy

Item (1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Neither Agree or Disagree, 5=Slightly Agree, 6=Agree, 7=Strongly Agree)	Mean	SD	% Strongly Agree
Research Self-Efficacy Subscale Score	**5.26**	**1.02**	--
• interpret the findings of a research study	5.49	1.08	15%
• evaluate if a research study is high-quality	5.14	1.27	12%
• determine if a research study supports the use of a particular program or intervention	5.37	1.13	9%
EIP Self-Efficacy Subscale Score	**4.96**	**1.12**	--
• find peer-reviewed journal articles related to a broad student learning outcome of interest	5.32	1.51	19%
• find research to answer the question, “What knowledge, attitudes, and skills do students need to achieve broad outcome X”	4.75	1.50	9%
• use existing research to evaluate if existing programming at JMU should help students gain desired knowledge, attitudes, and skills	5.14	1.25	11%

RQ 4: EIP Behavior

Item (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always)	Mean	SD	% Never or Rarely
Program Facilitation Behaviors	**2.44**	**0.89**	--
• Contributed to changing pre-existing programming by integrating current empirical research	2.37	0.95	54%
Program Development Behaviors - Research	**2.82**	**0.92**	**--**
• Developed program components informed by current empirical research	2.83	0.95	40%
Program Development Behaviors – Student Development Theory	**2.98**	**1.05**	**--**
• Developed program components informed by foundational student development theories	2.94	1.08	36%
Program Development Behaviors – Other Theoretical Literature Bases	**3.27**	**0.90**	**--**
• Developed program components informed by other theoretical literature bases	3.25	0.96	21%

Developing Programs

Most Likely to Consult:

- Advice/perspectives from experts in the field (*M* = 6.44, SD = 0.74)
- Advice/perspectives from on-campus colleagues (*M* = 6.38, SD = 0.69)
- Own professional experience (M = 6.34, SD = 0.73)

Least Likely to Consult:

- Empirical research (*M* = 5.23, SD = 1.55)
- Unpublished program evaluations or assessment reports (*M* = 4.36, SD = 1.60)

1 (extremely unlikely) to 7 (extremely likely)

Organizational Culture

Item (1=Strongly Disagree, 2=Disagree, 3=Slightly Disagree, 4=Neither Agree or Disagree, 5=Slightly Agree, 6=Agree, 7=Strongly Agree)	Mean	SD	% Strongly Agree
EIP Organizational Culture Scale Total Score	**4.19**	**1.12**	**--**
My colleagues value the use of current research and theory to inform program development	4.92	1.42	10%
My direct supervisor asks me to explain the logic of why a particular program should be effective	4.54	1.90	15%
My direct supervisor asks me to use theory/research to justify my programming (or the programming I oversee)	3.86	1.77	9%
My office has forums/mediums for sharing current research and theory among staff	3.56	1.87	5%
Research is used to inform staff about strategies or programming that may be effective	4.00	1.69	3%
In my office, time is made available for reading current research and theory	3.40	1.71	1%

Training

Graduate School Curriculum

Least Coverage

- Building evidence-informed programs (only 38% indicated moderate or major coverage)
- Science of teaching and learning (only 8% indicated moderate or major coverage)

Professional Development

Least Attended

- Finding relevant research literature (40% attended PD on this topic)
- Evaluating the quality of research literature (only 33% attended PD on this topic)
- Science of teaching and learning (only 32% attended PD on this topic)

Recommendations for JMU

Address Lack of Knowledge/Skill & Lack of Time as Barriers

1. Training on how to most efficiently find & evaluate relevant research
2. Hands-on practice developing evidence-informed programs
   - Need leaders in each office
   - Potentially partner with the Library, Center for Faculty Innovation, and Center for Assessment & Research Studies
3. Hire part- or full-time EIP support staff

Addressing the Need

Building EIP Professional Development Resources

Advanced Organizer of EIP Learning Resources

Six learning resources were developed, of **varying competency levels** and **lengths,** to support SA educators' development of EIP, based on the needs identified by the assessment.

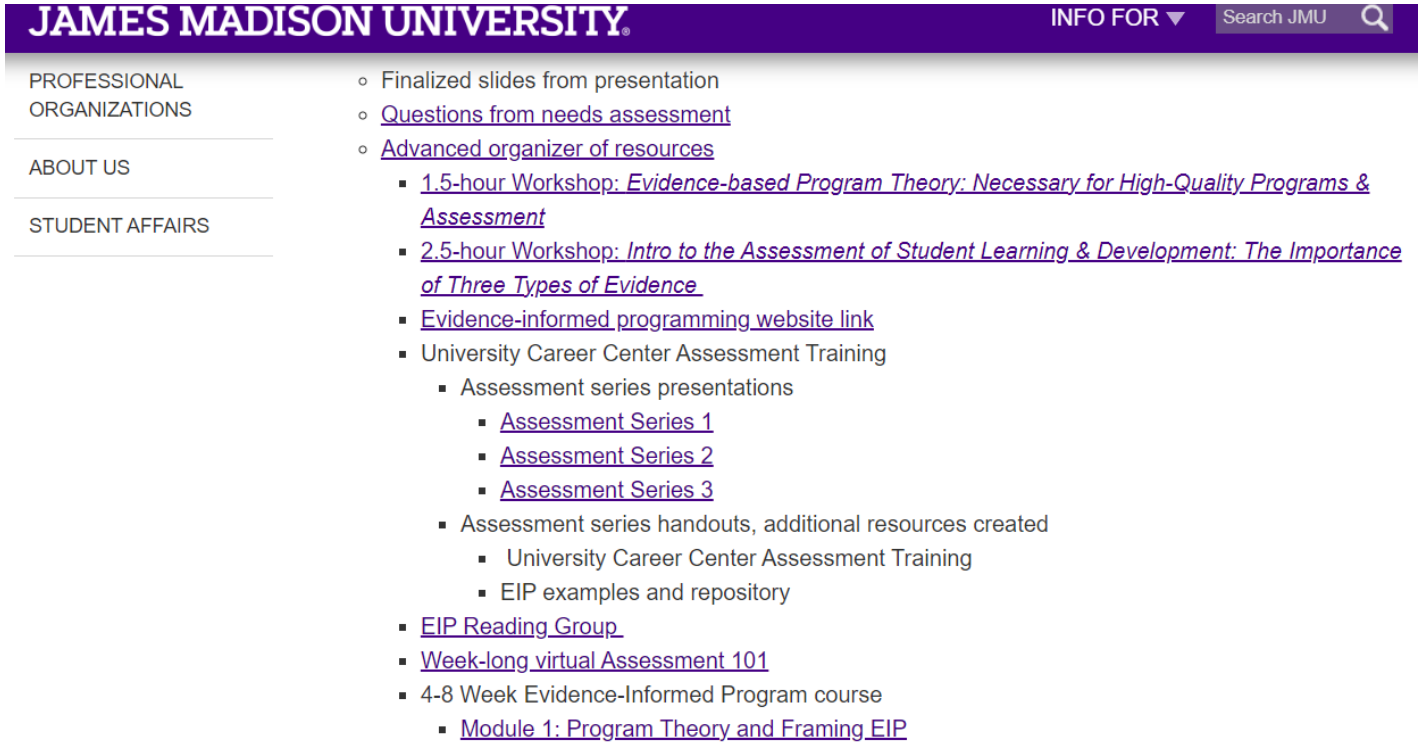
Professional Development Experiences in Evidence-Informed Practice						
Professional Development	**Description**	**Competency Level**	**Outcomes**	**Length**	**Audience**	**List of Resources**
Outcomes Assessment 101	Assessment focused workshops that center evidence informed programming. Workshops emphasize the process of creating and evaluating evidence informed programming in the context of outcomes assessment.	Novice	-Distinguish between different types of evidence (e.g., existing evidence, implementation fidelity evidence, outcomes evidence) -Discuss how using evidence to inform practice aligns with professional standards -Argue the importance of using preexisting evidence to engage in learning improvement efforts	1.5-hour Evidence -Based Program Theory: Necessary for High-Quality Programs & Assessment	Can be implemented in any office or for individual learning as needed	– Presentation
				2.5-hour Introduction to the Assessment of Student Learning & Development	Can be implemented in any office or for individual learning as needed	– Presentation
				Full week (9am-5pm). Online Synchronous learning	30 professionals who wants to engage in outcomes assessment based in evidence-informed practice	– Link to sign up
University Career Center Assessment Series	Three sessions, and individual or small group consultations in between, on evidence-informed practice at each stage of the assessment cycle in an office-specific context.	Novice	- Describe the levels of Bloom's taxonomy as they relate to student development -Identify aspects of a well-written learning outcome -Construct 1-3 learning outcomes relevant to their role. -List three common ways to assess learning -Describe the process of Weigh Pig, Feed Pig, Weigh Pig -List the 3 conclusions you can draw based on analysis of program data	Semester-long series, composed of three, 1.5-hour sessions and hour-long consultations in-between sessions.	Available to anyone within the University Career Center at JMU (most effective with between 5-20 attendees)	– Presentations with activities
Evidence-Based Programming Website	Webpage that helps student affairs professionals answer the following questions: "Where can we find high-quality information regarding effective programming? How can we determine	Advanced Beginner	-Articulate the characteristics of credible evidence -Locate best available evidence -Use repositories to evaluate sources of best available evidence	Asynchronous and can be completed in one week.	Available to anyone at our institution and beyond	– Link to website

Advanced Organizer is arranged by **competency level**, from **Novice** to **Expert**

Note: The needs assessment indicated that no one in the division considered themselves at expert level.

Website of EIP Learning Resources

- Organized in order of **ease of implementation**, from easiest to most difficult
  - Ease of implementation takes into consideration a number of factors, including time commitment & amount of self-led learning required



Addressing the Need

Our Journey

4 week EIP Course

- Four modules & a capstone project that align directly with results of needs assessment
  1. Introduction: Program Theory & Framing EIP
  2. The Value of EIP
  3. Finding Credible Evidence
  4. Evaluating Evidence
  5. Capstone Project: EIP Focused Cover Letter and Mock Interview
- Variety of readings with questions, PowerPoints, videos, & activities

- Canvas course made available to all SA employees
  - Limited asynchronous use from SA Professionals
  - Considering annual workshops using the materials
- Modules taught within CSPA course "Professional Issues in Higher Education"

EIP & Outcomes Assessment: Assessment 101

1.5 hour workshop on Program Theory

- *"Evidence-based Program Theory: Necessary for High-Quality Programs & Assessment"*
- Emphasis on using evidence for selection of outcomes (malleable, feasible) & programming, where to find credible evidence, how to address equity considerations

2.5 hour Intro to Assessment in SA with focus on EIP

- *"Intro to the Assessment of Student Learning & Development: Importance of Three Types of Evidence"*
- To engage in program improvement efforts efficiently & effectively 3 types of evidence are necessary: what has been ***shown*** to be effective, what programming did students ***experience*** & what were the ***outcomes*** in in this context with these students

Week-long Expert-Facilitated Bootcamp

- Assessment 101: intensive professional development workshop hosted by JMU's *Center for Assessment & Research Studies* that introduces faculty & staff to assessment process
- Learn about each step of assessment cycle in 5-day virtual format
- Designed to combine synchronous & asynchronous time to reinforce knowledge gained throughout the week while also imparting tangible skills

Introducing a Curricular Approach to Division

Student Affairs educators indicated need for better understanding of resources to support implementation of a “Curricular Approach” to student affairs programming & assessment

- ***Setting the Stage***
  - Reading & Discussion Group: read “The Curricular Approach to Student Affairs” book
    - Focus on EIP within the book when creating outcomes & programming
    - Available to all divisional staff & faculty; offered this experience 2 separate semesters
    - 5 weeks with 1 hour weekly discussions of assigned chapters: intentional discussion questions emphasizing program theory, pedagogy, & effective learning strategies
  - EIP Expert Consultation
    - "What, Why and How of a Curricular Approach" through consultation with Co-Author of “The Curricular Approach to Student Affairs”, Keith Edwards.
    - Consisted of 4 workshops open to members of the division. Workshops ranged from 1.5-3 hours in length. Open to Division of Student Affairs & key academic stakeholders.
  - Creation of a “Curricular Approach Task Force”: lead professional development opportunities that aid staff in understanding the importance of the Curricular Approach Process
- ***Getting the Buy-In***
  - Departmental consultations to support creation of departmental educational plans, programmatic sequencing, & research on best practice/pedagogy to support departmental programming
- ***Creating a Culture***
  - Offering monthly PD series introducing concepts within the Curricular Approach, Implementation of the Approach, & Meta-Assessment

Exposure to EIP via Structured Reading Groups

The Problem

- The University Career Center & Academic Advising Office both expressed interest in creating more effective programming on learning strategies in academic and career preparation settings

The Solution

- Semester-long reading group consisting of weekly readings, reading questions with discussion of takeaways, & practical applications for implementation

The Commitment

- Allocation of 1 hour a week for group meetings/discussion
- Additional 3-5 hours for reading & reflection of articles/book chapters related to student motivation, learning & retention of concepts, and strategies for effective teaching & optimal learning

The Results

- Academic Advising**:** Through participating in the reading group I developed a “strategies to implement” document that provides concrete and digestible strategies I learned from the reading group that I can then infuse into programs I create for students
- UCC**:** Utilized strategies gained from reading group to improve office & programmatic learning outcomes, making them clearer, better sequenced for student learning, and measurable

EVIDENCE-BASED PROGRAMMING WEBSITE

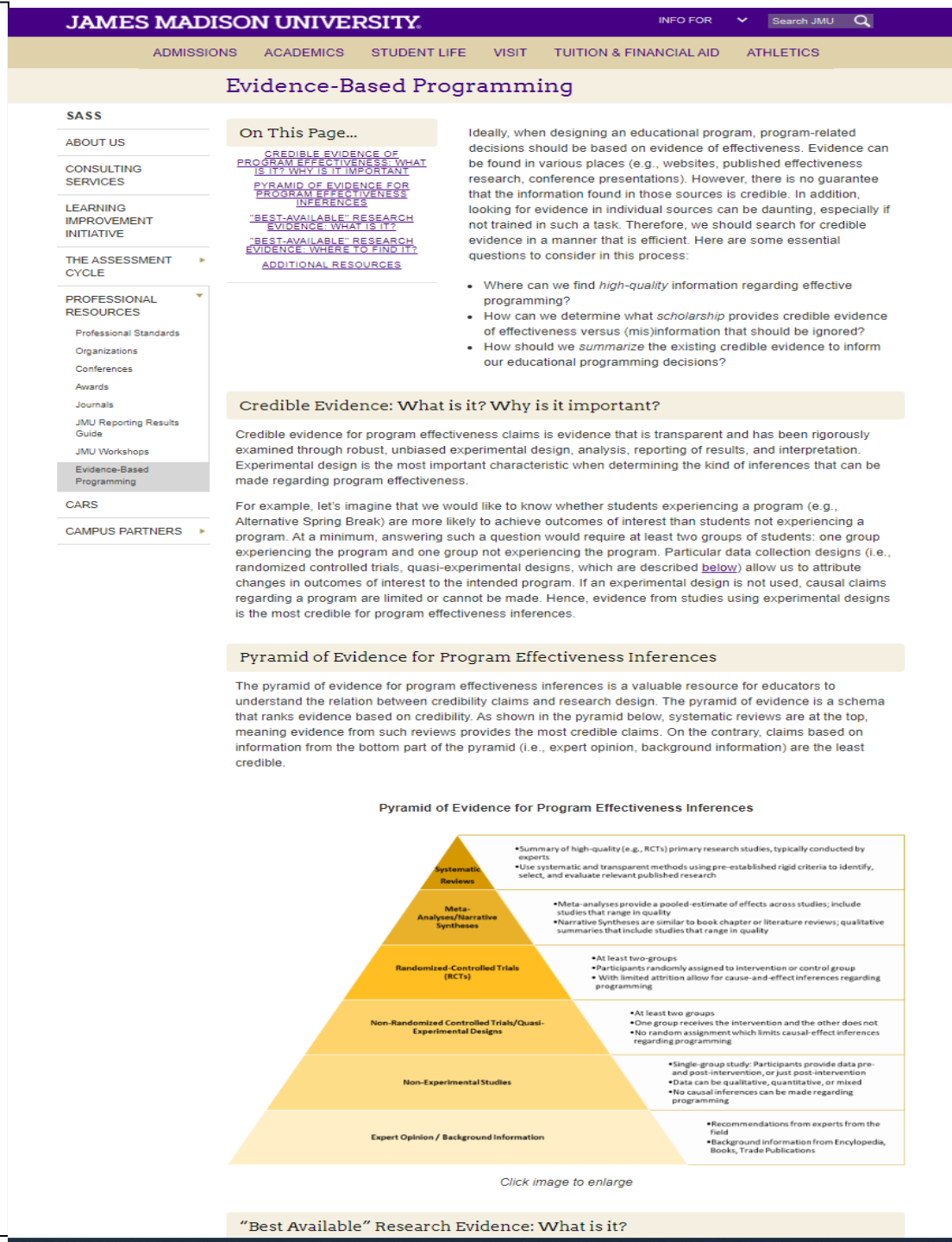
WHAT: Webpage helps student affairs educators answer following questions:

- *Where* can we find high-quality information regarding effective programming?
- *How* can we determine what scholarship provides credible evidence of effectiveness vs (mis)information that should be ignored?
- *How* should we summarize existing credible evidence to inform educational programming decisions?

WHY: Needs assessment indicated lack of competence & confidence to find, evaluate, & use evidence to inform practice; everyone can't engage in semester-long reading group

WHO: Available to anyone or any office

TIME: Can be completed in 1 week



Office Specific Training: University Career Center

- *University Career Center Assessment Series:* designed based on an office-specific needs assessment which indicated that UCC staff were generally unfamiliar with assessment, more knowledge about assessment would be useful for them, & they'd like to know how to better incorporate assessment into program planning

- *Series of 3 Presentations Developed*:
  - Followed order of assessment cycle, with office-specific information incorporated throughout
  - Presentations included:
    1. Integrating Assessment & Learning
    2. Survey Creation & Dissemination
    3. Analyzing Data, Reporting Results, & Making Changes
  - Presentations were designed to fit into professionals' lunch hours, with hour-long presentations & 30 minutes of Q&A / Activities

What came of all of this in the Career Center?

- Consultations about outcomes & measures
- Increased office buy-in for assessment
  - Integration of Program Theory & EIP into program planning
  - Development of the EIP repository for UCC

Title	Citation	Program Theory or EIP?	Overview	Notes and Quotes
Community college students' response to a financial literacy intervention: An exploratory study	Popovich et al., 2020	EIP	Online financial literacy intervention had a great impact on financial knowledge in community college students	If targeted to specific student sub-populations, intervention can affect financial attitude, intentions, and behavior as well. A number of studies have linked financial stress among students to depression, anxiety, poor academic performance, poor health, undesirable academic behaviors and habits, and poor degree persistence (Andrews and Wilding, 2004)(Northern et al., 2010). The effectiveness of this approach has been shown for students at 4-year institutions (Brugiavini et al., 2018; Heinberg et al., 2014).
Best Practices for Financial Literacy and Education at Institutions of Higher Education	U.S. Financial Literacy and Education Commission, 2019	EIP	Identification of best practices for evidence-based effective financial education programs, and specifc best practices for higher ed institutions	Recommendations from this report are based on input from higher ed institutions and associations, academics, nonprofits, financial firms, state/local governments, and the Department of Education as well as research, data and material from public and private sector sources Best Practices: 1. Know the individuals being served: methods should be tailored to the circumstances and needs of the user 2. Provide actionable, relevant, timely information (information in close time proximity with concrete steps) 3. Improve key financial *skills* (Effective approaches help consumers: know when/how to locate info for making decisions; understand how to interpret info for decision-making; and have skills/confidence to take action.) 4. Build on people's motivations (people driven by intrinsic values/desires/interests/aspirations are more likely to stay focused) 5. Make it easy to make good decisions and follow through (remove barriers, hassels, adding supports) 6. Develop standards for educators 7. Provide ongoing support 8. Evaluate for impact (ASSESS and use it to improve programming) 9. Provide clear, timely, and customized information 10. Effectively engagemetn students (peer education) 11. Target different populations (older, non-traditional, low-income, first-gen, and students of color are especially important) by use of national, instituional, and individual data 12. Communicate the importance of graduation and major on repayment of student loans 13. Preparing students to meet financial obligations upon graduation

Website of EIP Learning Resources

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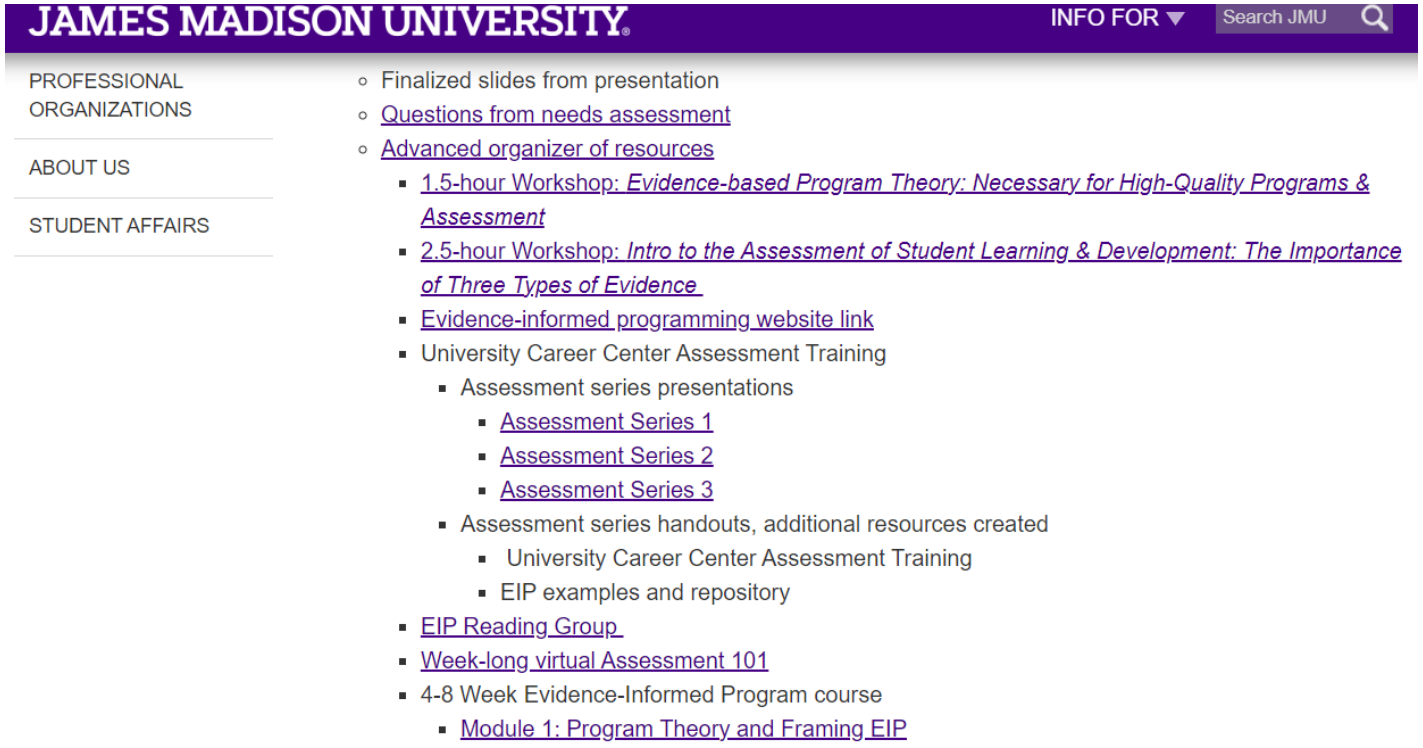


Thank You!
Questions?