Northern Kentucky University Foundation of Knowledge General Education Program

About the SLO and Rubric Revisions

The process for revising the student learning outcomes (SLOs) related to the Foundation of Knowledge program began in June 2016, when the new Vice Provost for Undergraduate Academic Affairs and a group of faculty attended the Association of American Colleges and University's (AAC&U) *Institute on General Education and Assessment*. The Foundation of Knowledge program had not been formally or holistically assessed since its implementation in 2009, in part because many of the existing SLOs were not assessable. While at the Institute, the group developed a plan for reviewing all of the existing SLOs and aligning them with the learning outcomes within the AAC&U Value Rubrics.

In 2017, NKU hired an Assistant Vice Provost for Assessment to lead the university in all manner of assessment, including the assessment of the Foundation of Knowledge program. Together, the AVP for Assessment, the General Education Committee, and many members of the faculty have refined and implemented the plan developed at the AAC&U *Institute*. More specifically, all changes to the SLOs resulted from a series of faculty assessment workshops, faculty scoring sessions, and General Education Committee and ad hoc General Education Committee sessions. All SLOs have been revised to facilitate the assessment of the program, new rubrics for each category of SLOs have been created, and each of the new SLOs has been assessed. All rubrics have been shared with the campus community, as have all subsequent assessment results and reports.

The final stage of this plan is to share the revised SLOs and associated rubrics with the entire campus community for final revision suggestions and approval. Once approved, all courses in the Foundation of Knowledge must reflect these changes.

Each of the rubrics associated with a category of SLOs is available below. Note that while one assignment may address multiple SLOs, it is not necessary to cover all FOK area SLOs in a single assignment. For example, an Individual & Society course need not assess A2, D3, and E3 in one assignment. Over the course of the semester, however, at least one assignment must assess each SLO in the FOK category.

	A SLOs—Critical Thinking									
	Capstone	Miles	tones	Benchmark						
	4	3	2	1						
A1: Students clearly define the issue/problems to be addressed.	Issue or problem to be considered is clearly identified and carefully defined.	Issue or problem is clearly identified and partially defined.	Issue or problem is partially identified and an attempt to define the problem is evident.	Issue or problem is minimally identified, result in an unclear definition.						
A2: Students consider multiple perspectives when addressing an issue/problem.	le perspectivesperspectives have beenaddressing ancomprehensively		Evidence and perspectives have been considered, but only partially	Evidence and/or perspectives have been minimally considered, resulting in little understanding						
A.3. Students develop evidence-based solutions and/or conclusions.	Solutions and/or conclusions are completely supported by appropriate evidence/data	Solutions and/or conclusions are mostly supported by appropriate evidence/data	Solutions and/or conclusions are somewhat supported by appropriate evidence/data	Arguments/conclusions are minimally supported by appropriate evidence/data						
A.4. Students apply and synthesize evidence to address an issue/problem.	Evidence/Experience is thoughtfully applied to provide a comprehensive analysis of implications and to generate ideas/questions for further inquiry about the problem as stated	Evidence is applied to provide an analysis or synthesis of the implications and to generate ideas/questions for further inquiry about problem or issue	Some evidence is offered to analyze the implications and to generate ideas/questions for further inquiry about problem or issue, but it is done adequately	Little evidence is applied; analysis or synthesis is partial or unconvincing, and does not address implications or generate ideas/questions						

B SLOs—Perspectives										
	Capstone 4	Miles 3	Benchmark 1							
B1: Students compare cultures from historical, local, national, or global perspectives. Demonstrates sophisticated comparative understanding of the complexities important to members of other cultures in relation to their own history, values, politics, communities, economy, government, beliefs, and/or practices.		Demonstrates accurate comparative understanding of the complexities important to members of other cultures in relation to their own history, values, politics, communities, economy, government, beliefs, and/or practices.	Demonstrates partial comparative understanding of the complexities important to members of other cultures in relation to their own history, values, politics, communities, economy, government, beliefs, and/or practices.	Demonstrates surface comparative understanding of the complexities important to members of other cultures in relation to their own history, values, politics, communities, economy, government, beliefs, and/or practices.						
B2: Students demonstrate how literature, the arts, and/or artifacts reflect and influence culture.	Demonstrates sophisticated understanding of the ways how literature, the arts, and/or artifacts reflect and influence culture.	Demonstrates adequate understanding of the ways how literature, the arts, and/or artifacts reflect and influence cultures.	Demonstrates partial understanding of the ways how literature, the arts, and/or artifacts reflect and influence cultures.	Demonstrates surface understanding of the ways how literature, the arts, and/or artifacts reflect and influence cultures.						

	C SLOs—Oral and Written Communication									
	Capstone		tones	Benchmark						
	4	3	2	1						
C1: Students consider context, audience, and purpose as appropriate with assigned tasks.	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).						
C2: Students use appropriate and relevant content to communicate ideas.	opriate and relevantrelevant, and well-ent to communicateorganized content to		Uses appropriate, relevant, and somewhat organized content to develop and explore ideas through the work.	Uses some appropriate and relevant content to develop simple ideas in some parts of the work.						
C3 (W): Students create and write coherent grammatical pieces.	Delivery techniques (syntax, mechanics, vocabulary, absence of errors) make the writing optimally effective.	Delivery techniques (syntax, mechanics, vocabulary, absence of errors) make the writing effective.	Delivery techniques (syntax, mechanics, vocabulary, absence of errors) make the writing somewhat effective.	Delivery techniques (syntax, mechanics, vocabulary, absence of errors) detract from the effectiveness.						
C3 (O): Students demonstrate the ability to express ideas using oral communication skills.	Delivery techniques (posture, gesture, eye contact, stage presence, and vocal expressiveness) make the presentation optimally effective.	Delivery techniques (posture, gesture, eye contact, stage presence, vocal expressiveness) make the presentation effective.	Delivery techniques (posture, gesture, eye contact, stage presence, and vocal expressiveness) make the presentation somewhat effective.	Delivery techniques (posture, gesture, eye contact, stage presence and vocal expressiveness) detract from the effectiveness.						

		entific and Quantitat		
	Capstone		tones	Benchmark
	4	3	2	1
D1A (SCI):	All elements of the	Critical elements of the	Critical elements of the	Inquiry demonstrates a
Methodology:	methodology or theoretical	methodology or theoretical	methodology or theoretical	misunderstanding of the
Students recognize	framework are skillfully	framework are	framework are missing,	methodology or theoretical
methods of inquiry that	developed. Appropriate	appropriately developed;	incorrectly developed, or	framework.
lead to scientific	methodology or theoretical	however, more subtle	unfocused.	
knowledge	frameworks may be	elements are ignored or		
	synthesized from across	unaccounted.		
	disciplines or from relevant			
	sub-disciplines.			
D1B (SCI):	Organizes and synthesizes	Organizes evidence to	Organizes evidence, but	Lists evidence, but it is not
Analysis:	evidence to reveal	reveal important patterns,	the organization is not	organized and/or is
Students demonstrate	insightful patterns,	differences, or similarities	effective in revealing	unrelated to focus.
reasoning by deduction,	differences, or similarities related to focus.	related to focus.	important patterns, differences, or similarities.	Demonstrates no ability to
induction, and analogy	Demonstrates elegant	Demonstrates appropriate ability to reason by	Demonstrates limited	reason by deduction, induction, and analogy.
	ability to reason by	deduction, induction, and	ability to reason by	induction, and analogy.
	deduction, induction, and	analogy.	deduction, induction, and	
	analogy.	analogy.	analogy.	
D1A (QUAN):	Procedures attempted are	Procedures attempted are	Procedures indicate a	Procedures indicate a
Calculation:	essentially all successful	essentially all successful	basic ability to solve	limited ability to solve
Students demonstrate	and sufficiently	and sufficiently	problems but are not	problems.
ability to calculate data	comprehensive to solve	comprehensive to solve	comprehensive.	
-	the problem; Procedures	the problem.		
	are also presented			
	elegantly (clearly,			
	concisely, etc.).			
D1B (QUAN):	Uses the quantitative	Uses the quantitative	Uses the quantitative	Uses the quantitative
Application/ Analysis	analysis of data as the	analysis of data as the	analysis of data as the	analysis of data as the
Students demonstrate an	basis for deep and	basis for competent	basis for rudimentary	basis for tentative, basic
ability to make judgments	thoughtful judgments,	judgments, drawing	(without inspiration or	judgments, although is
and draw appropriate	drawing insightful,	reasonable and	nuance, ordinary)	hesitant or uncertain abou
conclusions based on the	carefully qualified	appropriately qualified	judgments, drawing	drawing conclusions from
quantitative analysis of	conclusions from work.	conclusions from work.	plausible conclusions from this work.	this work.

data, while recognizing the limits of this analysis.				
D2: Students understand concepts and/or theories of the science behind applications or technological innovations.	Identify and explain scientific concepts and/or theories relevant to the discipline, making connections supported by pertinent examples	Identify and explain scientific concepts and/or theories relevant to the discipline, supported by pertinent examples	Identify and explain scientific concepts and/or theories relevant to the discipline	Identify scientific concepts and/or theories relevant to the discipline
D3: Students understand how empirical methodologies are used to examine human behavior.	Demonstrates how empirical methods can be used to (re)shape and/or challenge ideas and opinions	Demonstrates and awareness of how empirical methods can be used to (re)evaluate ideas and opinions	Demonstrates awareness of how empirical methods can be used to ground ideas and opinions	Determines whether ideas and opinions are empirically grounded

	E SLOs—Personal Responsibility and Community									
	Capstone	Miles	tones	Benchmark						
	4	3	2	1						
E1: Students demonstrate awareness of global issues.	Comprehensively explains the complexities of global issues using disciplinary perspectives (such as political, economic, cultural, historical, ecological, sociological).	Adequately explains global issues using disciplinary perspectives (such as political, economic, cultural, historical, ecological, sociological) to acknowledge challenges.	Partially explains global issues using disciplinary perspectives (such as political, economic, cultural, historical, ecological, sociological).	Minimally explains global issues using disciplinary perspectives (such as political, economic, cultural, historical, ecological, sociological).						
ecological, sociological).E2: Students demonstrate an understanding of the factors that influence global issues.Demonstrates a deep knowledge of the roles, multilevel interconnections, and differential effects of factors that influence		Demonstrates an adequate understanding of the interconnections and differential effects that influence global issues (such as actors, institutions, processes).	Demonstrates a partial understanding of the interconnections that influence global issues (such as actors, institutions, processes).	Demonstrates a surface understanding of factors that influence global issues (such as actors, institutions, processes).						
E3: Students explain how personal choices impact the world.	Comprehensively explains how personal choices connect the, to the world around them and show awareness of the impact of these choices.	Adequately explains how personal choices connect the, to the world around them and show some awareness of the impact of these choices.	Partially explains connections how individual personal choices impact the world around them.	Demonstrates an awareness of how individual personal choices connect them to the world around them.						

General Education: Student Learning Outcome Revisions Q & A

Why were the general education SLOs revised?

The SLO revisions stem from assessment of the Foundation of Knowledge program. A full assessment cycle of all the SLOs (A-E) was completed last spring. During the process, much feedback and discussion occurred, including concerns about rubrics and the ability to assess some of the SLOs. These conversations occurred at GEC and subcommittee meetings, at assessment workshops and summer scoring sessions, where all faculty members teaching the courses were invited to attend. The SLOs were modified as they were assessed, but have not been officially approved. Now that a complete assessment cycle has wrapped up, it makes sense to approve the revised SLOs, as they are written, before the committee continues with a new assessment cycle.

What if I think a SLO should be changed?

Please voice your ideas. Assessment is a continuous process. The GEC intends to resume assessment in the Fall. The committee expects a new assessment cycle will once again lead to new SLO revisions. We welcome participation during workshops and scoring sessions. These opportunities will be communicated to the entire campus.

Will I have to create new assignments?

Maybe, but many of these changes are likely not new to the faculty teaching these SLOs. Many assignments have already been adapted, through their work with the committee and participation in workshops. Much of the SLO revisions took place while that SLO was being assessed. This does present an opportunity to talk with others in your department about shared assignments used for general education courses. Further, no course will have a larger number of SLOs to assess than it did before, and some courses will have fewer.

How will the GEC communicate the new SLOs to all faculty teaching general education courses?

When the SLOs are approved, the GEC will work with the Office of Undergraduate Academic Affairs to update the website, checklist, and curriculog. Campus-wide communication will go out, as well as direct communication to department chairs and deans.

<u>SLO Revisions for College of Education – Concerning EDU 316 – Racism and Sexism in</u> <u>Educational Institutions</u>

Domain A of SLO's

In examining Part A, the original SLO for A2 encompassed one of the key components of EDU 316. The proposed amendment in blue is a way to integrate some of the important language into the new SLO's. The operative phrase being "**to distinguish between facts, assumptions, opinions, and theories.**" (See below).

A2 Original SLO (2009)- Students use appropriate modes of inquiry and logic to distinguish between facts, assumptions, opinions, and theories.

A2 Revised SLO (2020)- Students consider multiple perspectives when addressing an issue/problem.

A2 College of Education PROPOSED SLO (2020)- Students consider multiple perspectives when addressing an issue/problem, distinguishing between facts, assumptions, opinions, and theories.

Domain E of SLO's

The old E2 encapsulated what we do in EDU 316 as it relates to "the influence of cultural and socioeconomic background in shaping attitudes and opinions." Below is an attempt to adjust section E3 just a bit to fit our course more.

E2 Original SLO (2009)

Students understand the influence of cultural and socioeconomic background in shaping attitudes and opinions (in themselves and others).

E3 Original SLO (2009)

Students demonstrate an understanding of the variety of influences on human behavior, thought, or feeling.

E3 Revised SLO (2020) - Students explain how personal choices impact the world.

E3 College of Education PROPOSED SLO (2020)- Students explain how one's cultural and socioeconomic background can impact personal choices in society.

Provided by Senator Ryan Alverson, Ph.D. Assistant Professor College of Education

Northern Kentucky University Foundation of Knowledge General Education Program

SLO Revisions

Revisions to the Foundation of Knowledge SLOs were completed Fall 2019. Changes resulted from a series of faculty assessment workshops, faculty scoring sessions, and General Education Committee and ad hoc General Education Committee sessions. Many of the original SLOs were complex, containing several operations. This made it difficult to create a rubric and difficult for instructors to create assignments that accurately measured the outcomes. In other cases, the original SLO was too simple and deeper exploration was appropriate. Finally, some of the SLOs have been combined to reflect a broader outcome. Five outcomes were removed, and those justifications are at the end of this document.

Additionally, the matrix that aligns the outcomes to eight competency areas has been updated (below). The matrix reflects the removal of A2 and D3 from the Natural Science courses. These courses already had a comparatively high number of SLOs and through revisions and feedback, A2 and D3 did not directly align with the course content. Additionally C1 was added to the Written Communication courses, which previously had C4 (now removed).

	A SLOs-Critical Thinking							
	Original SLO (2009)		Revised SLO (2020)					
A1	Students effectively gather material relating to a focused topic, using a variety of tools, sources and search strategies.							
		A1	Students clearly define the issue/problems to be addressed.					
A2	Students use appropriate modes of inquiry and logic to distinguish between facts, assumptions, opinions, and theories.	A2	Students consider multiple perspectives when addressing an issue/problem.					
A3	Students develop evidence-based arguments.	A3	Students develop evidence-based solutions and/or conclusions.					
A4	Students use their initial conclusions to generate new ideas.	A4	Students apply and synthesize evidence to address an issue/problem.					

Beginning Fall 2020, all courses in the Foundation of Knowledge need to reflect these changes.

	B SLOs-Perspectives								
	Original SLO (2009)		Revised SLO (2020)						
B1	Students understand economic, political, and social legacies of imperialism and colonialism, with reference to linguistic or cultural diversity, for societies, groups, and individuals.								
B2	Students compare historical perspectives on the development of various cultures.	B1	Students compare cultures from historical, local, national, or global perspectives.						
B3	Students identify the connections between and differences among local, national and global communities.								
B4	Students demonstrate how literature and the arts reflect and influence cultures.	B2	Students demonstrate how literature, the arts, and/or artifacts reflect and influence culture.						

	C SLOs-Oral and W	ritten (Communication
	Original SLO (2009)		Revised SLO (2020)
C3	Students employ the principles of rhetorical communication	C1	Students consider context, audience, and purpose as appropriate with assigned tasks.
		C2	Students use appropriate and relevant content to communicate ideas.
C1	Students demonstrate the ability to express ideas using oral communication skills with appropriate attention to topic and audience	C3 (O)	Students demonstrate the ability to express ideas using oral communication skills.
C2	Students create and write coherent, grammatical pieces for a variety of topics and audiences.	C3 (W)	Students create and write coherent grammatical pieces.
C4	Students comprehend college-level readings in various settings and disciplines.		
C5	Students use information technologies appropriately and effectively in their written, spoken, and visual communication information.		

	D SLOs-Scientific & Quantitative Reasoning						
	Original SLO (2009)		Revised SLO (2020)				
D1	Students apply scientific reasoning by designing experiments and effectively communicating scientific results through written, graphical, visual, and numerical means.	D1	(SCI A) Students recognize methods of inquiry that lead to scientific knowledge.				
			(SCI B) Students demonstrate reasoning by deduction, induction, and analogy.				
			(QUAN A) Students demonstrate ability to solve problems using quantitative procedures.				
			(QUAN B) Students demonstrate an ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis.				
D2	Students identify major concepts of science behind technological innovations or applications in our daily lives.	D2	Students understand concepts and/or theories of the science behind applications or technological innovations.				
D3	Students distinguish between scientific and non-science explanations by employing scientific methods.	D3	Students understand how empirical methodologies are used to examine human behavior.				

	E SLOs-Personal Responsibility & Community					
	Original SLO (2009)		Revised SLO (2020)			
		E1	Students demonstrate awareness of			
			global issues.			
E2	Students understand the influence of	E2	Students demonstrate an understanding			
	cultural and socioeconomic		of the factors that influence global			
	background in shaping attitudes and		issues.			
	opinions (in themselves and others).					
E3	Students demonstrate an understanding					
	of the variety of influences on human					
	behavior, thought, or feeling.					
E1	Students comprehend the ethical	E3	Students explain how personal choices			
	perspectives and responsibilities of all		impact the world.			
	individuals.					
E2	Students understand the influence of					
	cultural and socioeconomic					
	background in shaping attitudes and					
	opinions (in themselves and others).					

	A1	A2	A3	A4	B1	B2	C1	C2	C3	D1	D2	D3	E1	E2	E3	
Category																Total
Oral Communication	Х						Х		Х							3
Written Communication							X	Х	Х							3
Natural Science			Х							Х	Х					3
Mathematics			Х							X						2
Culture & Creativity	Х			Х		Х										3
Cultural Pluralism					Х	Х								X		3
Individual & Society		Х							7			Х			Х	3
Global Viewpoints					Х	X							Х	X	X	2 or 3*
Total Areas Completing each SLO	2	1	2	1	2	3	3* *	2* *	3* *	2	1	1	1	2	2	

Student Learning Outcomes and the Areas of Certification Matrix

* Complete either Bs or Es for Global Viewpoints

** Number is higher than course count to reflect requirement of two written communication courses

The following SLOs have not been retained. Please find the SLO and a justification below.

A1: Students effectively gather material relating to a focused topic, using a variety of tools, sources and search strategies.

This SLO focuses on the research process rather than the critical thinking that attends it. The General Education Committee (GEC) felt that this outcome should be taught throughout the program, and is inherent to the revised outcomes, but that it should not be included in the Critical Thinking competency.

B1: Students understand economic, political, and social legacies of imperialism and colonialism, with reference to linguistic or cultural diversity, for societies, groups, and individuals.

This SLO was too specific and did not apply to a number of courses in the category that contained it. When the B SLOs were revised, the outcomes were embedded in B2, a more general SLO that gave instructors more freedom.

C4: Students comprehend college-level readings in various settings and disciplines.

The GEC agrees that this learning outcome is essential for student success. Teaching close and careful reading should be addressed in all Gen Ed courses, if not academic courses. The university does assess reading as part of admissions. Students who need support with reading comprehension are placed in RDG 110, a one-credit reading course.

C5: Students use information technologies appropriately and effectively in their written, spoken, and visual communication information.

The GEC felt that this SLO was appropriate in 2009, but is not necessary now.

E1: Students comprehend the ethical perspectives and responsibilities of all individuals. This SLO was embedded in E3, where students are asked to consider ethics as part of their personal choices.

Comparison of amended PCC version and EC version of the Scientific/Research Misconduct Policy

Amended PCC version

16.7.2.5. RESEARCH MISCONDUCT

The question of what constitutes research misconduct must be resolved by applying the standards and norms of the particular academic discipline at issue.

Research "misconduct," as used herein, is defined as:

- Fabrication, falsification, plagiarism, or other serious deviations from those accepted practices in proposing, performing, or reviewing research, or in reporting results from research.
 - A. Fabrication is making up data or results and recording or reporting them.
 - B. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
 - C. Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.
 - D. Substantial recycling of material in redundant or duplicate publications, if compounded by a failure to cite prior work, can constitute a serious deviation from accepted research practices.
 - a. "Redundant or duplicate publications" refers to publications in which a substantial portion of the work has already been published. It also includes the situation in which the work is either so similar to previously published material or so modest an extension of previously published work that it would not be viewed as significant were the previous publication acknowledged.
 - b. "Failure to cite prior work" refers to papers that are presented as if the material were new when in fact the authors have previously published much

of the body of the work before. An extension or recycling of previous work must be viewed as such, not as new and original publication.

- II. Material failure to comply with federal requirements that are uniquely related to the conducting of research.
- III. Failure to comply with federal requirements for protection of researchers, human subjects, or the public, or for insuring the welfare of laboratory animals or
- IV. Failure to meet other material legal requirements governing research.

Research misconduct does not include honest error or difference of opinion.

In cases of allegations involving activities submitted to or supported by a federal agency and definitions or procedures for research misconduct specified in the agency's regulations differ from those in this policy, the definitions and procedures in the agency's regulations will be used.

In cases of allegations involving activities <u>not</u> submitted to or supported by a federal agency, the definitions of research misconduct specified in this policy should be supplemented by (or interpreted in light of) applicable substantive standards of the relevant research community or the academic discipline at issue.

EC version

16.7.2.5. RESEARCH MISCONDUCT

Research misconduct is defined as fabrication, falsification, plagiarism, or other serious deviations from those accepted practices in proposing, performing, or reviewing research, or in reporting results from research.

- Fabrication is making up data or results and recording or reporting them.
- Falsification is manipulating research materials, equipment, or processes, or changing
 or omitting data or results such that the research is not accurately represented in the
 research record.
- Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Research misconduct does not include honest error or difference of opinion.

In cases of allegations involving activities submitted to or supported by a federal agency and definitions or procedures for research misconduct specified in the agency's regulations differ from those in this policy, the definitions and procedures in the agency's regulations will be used.

Current handbook version

16.7.2. DEFINITION OF RESEARCH MISCONDUCT

Research "misconduct," as used herein, is defined as:

- Fabrication, falsification, plagiarism, or other serious deviations from those accepted practices in proposing, carrying out, or reporting results from research;
- Material failure to comply with federal requirements that are uniquely related to the conducting of research;
- Failure to comply with federal requirements for protection of researchers, human subjects, or the public, or for insuring the welfare of laboratory animals; or
- · Failure to meet other material legal requirements governing research.

Comparison of amended PCC version and EC version of the Scientific/Research Misconduct Policy (continued)

Amended PCC version

EC version

16.7.3.4. STATUTE OF LIMITATION

There is no statute of limitation on investigations of research misconduct at Northern Kentucky University.

However, Federal agencies do not require assurance and reporting of research misconduct allegations made more than six (6) years after publication or submission of the final report on a project for which data was collected. Exceptions to the federal six (6) year limitation are as follows:

- Subsequent use by the respondent by continuation or renewal of any incident of alleged research misconduct that occurred before the six (6) year limitation through the citation, republication or other use for the potential benefit of the respondent of the research record that is alleged to have been fabricated, falsified or plagiarized.
- 2) If the appropriate funding agency or the University in consultation with the funding agency, determines that the alleged misconduct, if it occurred, would possibly have a substantial adverse effect on the health or safety of the public.

16.7.3.4. STATUTE OF LIMITATION

NKU will only investigate research misconduct that has occurred within six years of the date that the institution receives an allegation of research misconduct. This six-year limitation does not apply to the following circumstances:

- Subsequent use by the respondent by continuation or renewal of any incident of alleged research misconduct that occurred before the six (6) year limitation through the citation, republication or other use for the potential benefit of the respondent of the research record that is alleged to have been fabricated, falsified or plagiarized.
- 2) If the appropriate funding agency or the University in consultation with the funding agency, determines that the alleged misconduct, if it occurred, would possibly have a substantial adverse effect on the health or safety of the public.

Current handbook version

(not addressed)

Matthew Zacate

From: Sent: To: Cc: Subject: Attachments: Sue Ott Rowlands Thursday, February 13, 2020 12:01 PM Matthew Zacate Ashish Vaidya; Sue Ott Rowlands Scientific/Research Misconduct Policy Research Misconduct Policy Provost Approved.pdf

Dear Matthew,

President Vaidya designated me to represent him regarding changes that were being proposed to the Scientific/Research Misconduct Policy in section 16.7 of the Faculty Handbook. On January 10, 2020, I provided you the following reason why the changes that the Faculty Senate proposed were disagreeable:

"In response to your memo of December 12, 2019, I cannot approve the proposed policy appended to the memo that has updated the Scientific/Research Misconduct Policy in section 16.7 of the Faculty Handbook. After reviewing the General Counsel's memo of October 11, 2019, the version appended to your December 12 memo is not consistent with federal law nor is it in the best interest of the university."

I also attached a version of the policy that would be acceptable as that version addressed the concerns outlined in General Counsel's memorandum of October 11, 2019. It is my understanding that Faculty Senate, the Professional Concerns Committee and you were provided a copy of General Counsel's memorandum that details why the version Faculty Senate proposed was not consistent with federal law nor in the best interest of the university. As the President's designee regarding the Faculty Senate's proposed changes to section 16.7 of the Faculty Handbook, my decision relied on General Counsel's advice and guidance and my own research into the matter.

I respectfully request that the Faculty Senate consider approving the attached version of the policy (the Executive Committee's version).

Best regards,

Sue

Sue Ott Rowlands Provost and Executive Vice President for Academic Affairs Northern Kentucky University 859.572.5788 sottrowlands@nku.edu Note: this is the 12-AUG-2019 version recommended by the Executive Committee at the 26-AUG-2019 meeting. The copy is from the original distribution, which had the wrong date. It should be 12-AUG-2019.

EC's version 14-DEC-2018) of proposed Research Misconduct Policy

to replace Section 16.7 of the Faculty Handbook

16.7. SCIENTIFIC/RESEARCH MISCONDUCT

16.7.1. PREAMBLE AND POLICY STATEMENT

The preeminent principle in all research is the quest for truth. The credibility of such research must be above reproach if the public trust is to be maintained. Any compromise of the ethical standards required for conducting academic research cannot be condoned. While breaches in such standards are rare, these must be dealt with promptly and fairly by all parties in order to preserve the integrity of the research community.

A critical element of any policy on research misconduct is that it be a fair and effective process for distinguishing instances of genuine and serious misconduct from insignificant deviations from acceptable practices, technical violations of rules, or simple carelessness. The policy defined in this <u>Handbook</u> will allow such distinctions to be made in a manner that minimizes disruption and protects the honest researcher from false or mistaken accusations.

Research misconduct, as defined in Section 16.7.2., below, is not condoned at Northern Kentucky University and allegations of such misconduct will be investigated in accordance with the procedures described below. The policy and procedure discussed herein do not restrict or limit any legal options available to any of the parties through appropriate courts and/or administrative agencies. NKU must comply with federal regulations, and additional policies may apply to faculty engaged in federally sponsored research or submitting work to a federal agency.

16.7.2. DEFINITIONS

16.7.2.1. COMPLAINANT

Complainant means a person who in good faith makes an allegation of research misconduct.

16.7.2.2. GOOD FAITH

Good faith as applied to a complainant or witness, means having a belief in the truth of one's allegation or testimony that a reasonable person in the complainant's or witness's position could have based on the information known to the complainant or witness at the time. An allegation or cooperation with a research misconduct proceeding is not in good faith if made with knowing or reckless disregard for information that would negate the allegation or testimony. Good faith as applied to a committee member means cooperating with the research misconduct proceeding by carrying out the duties assigned impartially for the purpose of helping an institution meet its responsibilities under this part. A committee member does not act in good faith if his/her acts or omissions on the committee are dishonest or influenced by personal, professional, or financial conflicts of interest with those involved in the research misconduct proceeding.

16.7.2.3. INQUIRY

Inquiry means preliminary information-gathering and preliminary fact-finding.

EC's version (14-DEC-2018) of proposed Research Misconduct Policy to replace Section 16.7 of the Faculty Handbook

16.7.2.4. INVESTIGATION

Investigation means the formal collection, examination, and evaluation of all relevant facts to determine whether research misconduct has occurred.

16.7.2.5. RESEARCH MISCONDUCT

Research misconduct is defined as fabrication, falsification, plagiarism, or other serious deviations from those accepted practices in proposing, performing, or reviewing research, or in reporting results from research.

- · Fabrication is making up data or results and recording or reporting them.
- Falsification is manipulating research materials, equipment, or processes, or changing
 or omitting data or results such that the research is not accurately represented in the
 research record.
- Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Research misconduct does not include honest error or difference of opinion.

In cases of allegations involving activities submitted to or supported by a federal agency and definitions or procedures for research misconduct specified in the agency's regulations differ from those in this policy, the definitions and procedures in the agency's regulations will be used.

16.7.2.6. RESARCH RECORD

Research record means the record of data or results that embody the facts resulting from scientific inquiry, including but not limited to, research proposals, laboratory records, both physical and electronic, progress reports, abstracts, theses, oral presentations, internal reports, journal articles, and any documents and materials provided to federal agencies or institutional officials by a respondent in the course of the research misconduct proceeding.

16.7.2.7. RESPONDENT

Respondent means the person against whom an allegation of research misconduct is directed or who is the subject of a research misconduct proceeding.

16.7.2.8. RETALIATION

Retaliation for the purpose of this part means an adverse action taken against a complainant, witness, or committee member by an institution or one of its members in response to (a) a good faith allegation of research misconduct or (b) good faith cooperation with a research misconduct proceeding.

16.7.3. POLICIES

16.7.3.1. CONFIDENTIALITY

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All parties involved in the inquiry and investigation shall strive to maintain confidentiality of information, respondents, complainants, and research subjects that may be identified from research records or evidence.

16.7.3.2. INTERIM ADMINISTRATIVE ACTION

As provided by federal regulations, at any stage in the process of inquiry, investigation, formal finding and disposition, NKU may take interim administrative action to protect the welfare of human or animal subjects of research, to prevent the inappropriate use of funds, or to protect the interest of students, colleagues, or the University. A suspension or restriction of activities does not in any way imply that research misconduct has taken place. This action will be temporary and used as an interim measure prior to the conclusion of the formal investigation.

16.7.3.3. EXTRAMURAL ASSURANCE AND REPORTING REQUIREMENTS

If applicable, NKU will fully and continually cooperate with the appropriate federal agency during its oversight review or any subsequent administrative hearings or appeals. This may include providing research records and evidence under the institution's control, custody, or possession and access to all persons within its authority necessary to develop a complete record of relevant evidence. If required by a funding agency, the Institutional Official (IO) or designee shall submit written assurance that the institution is in compliance with the agency's requirements for handling allegations of misconduct. If the research is supported by an extramural funding agency, the IO or designee is responsible for ensuring compliance with the applicable funding agency's reporting requirements.

16.7.3.4. STATUTE OF LIMITATION

NKU will only investigate research misconduct that has occurred within six years of the date that the institution receives an allegation of research misconduct. This six-year limitation does not apply to the following circumstances:

- Subsequent use by the respondent by continuation or renewal of any incident of alleged research misconduct that occurred before the six (6) year limitation through the citation, republication or other use for the potential benefit of the respondent of the research record that is alleged to have been fabricated, falsified or plagiarized.
- 2) If the appropriate funding agency or the University in consultation with the funding agency, determines that the alleged misconduct, if it occurred, would possibly have a substantial adverse effect on the health or safety of the public.

16.7.3.5. CONFLICT OF INTEREST

Individuals responsible for carrying out any part of the research misconduct proceeding must not have any real or apparent unresolved, personal, professional, or financial conflicts of interest with the complainant, respondent, or witnesses. Any conflict of interest must be disclosed.

A conflict of interest may include, but is not limited to, co-authorship on a paper or book, a professional or personal relationship, professional or personal relationship or antagonism,

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financial ties, or contact regarding possible employment with either the respondent or the complainant.

16.7.3.6 ABSENCE OF THE RESPONDENT OF THE ALLEGATION

Should the respondent leave NKU before the case is resolved, the dean, on behalf of NKU, when possible, shall continue the examination of the allegation and reach a conclusion. NKU shall cooperate with the process of another institution to resolve such questions to the extent possible under state and federal law.

16.7.3.7. RESTORING REPUTATION

The dean, or designee, or Provost shall undertake all practical and reasonable efforts to protect and restore the reputation of the individual(s) alleged to have engaged in research misconduct but against whom no finding of research misconduct has been made, if requested by the individual(s) as appropriate. The dean, or designee, or Provost shall undertake reasonable and practical efforts to protect or restore the position and reputation of the individual(s) who in good faith, made an allegation of research misconduct, if requested by the individual(s) and as appropriate. The dean, or designee, or Provost shall undertake reasonable and practical efforts to protect or restore the position and reputation of any complainant, witness, or committee member and to counter potential or actual retaliation against these individuals.

16.7.3.8. FALSE ACCUSATIONS

Regardless of the outcome of an inquiry or investigation, it is the policy of the University that no individual who, in good faith, has reported apparent research misconduct shall be subject to retaliation by the University or by any member of the University community. However, if it is determined that the charges were brought against the respondent with malicious or dishonest intent such that the complainant had a clear understanding that they were probably untrue and that they were designed to harm the respondent, the dean may recommend to the provost that appropriate administrative action be taken against the complainant consistent with the University's governing and administrative regulations.

16.7.4. PROCEDURES

16.7.4.1. ALLEGATIONS OF RESEARCH MISCONDUCT

It is the policy of Northern Kentucky University to treat fairly both the complainant and the respondent. All allegations of research misconduct will be treated seriously and, to the extent possible, the confidentiality of those who submit allegations will be maintained.

Though allegations of research misconduct may be by any means of communication to an institutional or federal official, the allegation of misconduct shall initially be documented in writing by either the complainant or the person receiving the allegation. If the allegation is made through the Ethics and Compliance Helpline, the person receiving the allegation should document the allegation in writing. Any other person receiving an allegation of research misconduct should relay the information to the appropriate dean for preliminary inquiry. The Provost may receive reports of research misconduct in situations where the appropriate dean may have a conflict of interest.

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Either before or when the institution notifies the respondent of the allegation, inquiry or investigation, the institution must promptly take all reasonable and practical steps to obtain custody of all the research records and evidence needed to conduct the research misconduct proceeding, inventory the records and evidence, and sequester them in a secure manner, except that where the research records or evidence encompass scientific instruments shared by a number of users, custody may be limited to copies of the data or evidence on such instruments, so long as those copies are substantially equivalent to the evidentiary value of the instruments. Respondents may be given supervised access to the research records throughout the inquiry and/or investigation.

16.7.4.2. PRELIMINARY INQUIRY

The purpose of the preliminary inquiry is to conduct an initial review of evidence to determine if there are sufficient grounds to warrant a formal investigation of the charge of research misconduct. The preliminary inquiry will be conducted by the dean of the college in which the respondent faculty member is appointed. If the allegation of misconduct is brought against a dean, the provost will appoint another dean to conduct the preliminary inquiry. The dean will notify university legal counsel and the provost regarding the nature of the allegations. University counsel shall determine whether the research at issue is governed by any federal legal regulations, and shall instruct the dean to ensure that the preliminary inquiry is conducted in compliance with any applicable regulations. When deemed necessary, the dean may select one or two other individuals to assist in the preliminary inquiry. Any such individuals should have no real or apparent conflict of interest related to the case in question. A conflict of interest may include, but is not limited to, co-authorship on a paper or book, professional or personal relationship or antagonism, financial ties, or contact regarding possible employment with either the respondent or the complainant.

The preliminary inquiry should begin with an informal discussion with the complainant to verify that the allegation should be classified as possible research misconduct. Within ten (10) business days after this discussion with the complainant, the dean shall begin an informal discussion with the respondent regarding the allegations. If federal or state regulations so require, the dean shall also present the respondent with a letter that states: the nature of the allegations; the focus of the inquiry; an invitation to the respondent to provide comments and other relevant information to the dean; other relevant information; and a statement that the respondent has the right to be represented by an attorney.

The preliminary inquiry should be completed within sixty (60) days of receipt of the written allegation of misconduct. If the preliminary inquiry determines that there are not sufficient grounds within the context of the definition of misconduct for a formal investigation, the respondent and the complainant will be sent letters informing them of the results. All records will be sent to the office of the provost.

A formal investigation will found to be warranted if:

- a. A reasonable basis for concluding that the allegation falls within the definition of research misconduct; and
- b. Preliminary information-gathering and preliminary fact-finding from the inquiry indicates the allegation may have substance

If the preliminary inquiry determines that there are sufficient grounds for a formal investigation within the context of the definition of misconduct, the respondent and the complainant will be

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sent letters informing them of this decision. The letter to the respondent may include (or be deemed) the "draft preliminary inquiry report." The letter to the respondent (i.e., "the draft preliminary inquiry report") must include, but is not limited to, the following:

- The name and position of the respondent(s);
- · That a formal investigation is to be conducted;
- Information pertaining to federal agencies involved including funding numbers, grant applications, contracts, etc., if applicable;
- The nature of the allegation, including a summary of all evidence that currently exists and the right to review it;
- The basis for recommending that the alleged actions warrant an investigation;
- That the respondent will have an opportunity to respond to the charges; and
- That the respondent has the right to be represented by an attorney.

The respondent shall have the opportunity to respond to this letter, in writing, within thirty (30) calendar days of the date on which the respondent receives it. The draft preliminary inquiry report, combined with any comments received from the respondent, shall constitute the preliminary inquiry report.

In the event a formal investigation is deemed to be warranted, the dean shall inform the following individuals and/or organizations: university legal counsel, chairs of any departments that may be involved, the provost, and appropriate regulatory bodies. As required by law or regulation, University counsel shall notify appropriate government agencies when a formal investigation is convened.

If a formal investigation is judged to be unwarranted and it is determined that the charges were brought against the respondent with malicious or dishonest intent such that the complainant had a clear understanding that they were probably untrue and that they were designed to harm the respondent, the dean may recommend to the provost that appropriate administrative action be taken against the complainant. Such appropriate administrative action shall be consistent with the University's governing and administrative regulations.

Any records produced during the preliminary inquiry stage, including the preliminary inquiry report, must be maintained by University Counsel for at least seven (7) years and, upon request, be provided to the applicable government agencies.

16.7.4.3. FORMAL INVESTIGATION

Before any formal investigation commences, the respondent(s) and any involved collaborators must be notified by written statement of allegations that an investigation is to be conducted. The written statement shall:

- Include a copy of the preliminary inquiry report, which includes information on the nature of the allegations and the focus of the investigation, and inform those being investigated of the opportunity to provide comments and other relevant information to the dean
- Inform the respondent(s), prior to beginning the investigation, of his or her right to be represented by an attorney in preparing and/or giving his or her response in this and all subsequent phases of the investigation.

- Give the respondent a copy of or refer to the institution's policies and procedures related to research misconduct.
- Indicate there can be no actions that are, or could be perceived as, retaliatory against the investigation committee members, witnesses, or the person who raised an allegation or is thought to have raised an allegation.

The dean shall appoint an Investigative Body (IB) with three or more members to initiate an investigation thirty (30) calendar days after receipt of the preliminary inquiry report. IB members must be tenured faculty members with sufficient expertise in the area of investigation to insure a sound base from which to evaluate the nature of the charges. One member of the IB may be from outside the University if necessary to insure an accurate and knowledgeable evaluation of the evidence. All IB members must be free of real or apparent conflicts of interest regarding the investigation. The dean shall document the rationale for selecting IB members based on their expertise and impartiality. All IB members shall be required to sign a statement that they will maintain the confidentiality of the investigation, and that they have no interest that would conflict with those of the respondent, the complainant, the University, or the sponsoring agency for the research. Prior to the beginning of the formal investigation, the respondent shall be given the opportunity to object in writing to the appointment of any member of the IB, based on conflict of interest. If the member is appointed to the IB despite the respondent's objection, this fact shall be noted in the IB's final report.

The IB shall conduct a formal examination and evaluation of all relevant facts to determine if the allegations of misconduct are valid. In order to maintain the integrity of the review process and avoid any appearance of institutional influence over the panel's deliberations or decision-making, the IB shall be insulated from any administrative influence and any *ex parte* communications with the parties. The IB shall seek the advice of university counsel and may engage in, but is not limited to, the following investigative procedures:

- Interviewing witnesses;
- Sequestering and examining research data (both published and unpublished) and other evidence;
- Seeking expert counsel both inside and outside the University; and
- Conducting a hearing in which the respondent may respond to the charges, call witnesses, and question the complainant.

The IB shall pursue diligently all significant issues and leads discovered that are determined relevant to the investigation. A written summary or transcript of each interview conducted must be completed. A copy of the interview summary or transcript shall be provided to the interviewed party for comment.

The investigation must be completed within 120 days of beginning it, including conducting the investigation, preparing the report findings, providing the draft report for comment, and, if applicable, sending the final report to the appropriate federal agency. If a federal agency is to be involved, the IB must notify the Provost, who will facilitate arrangements for the report to be sent. If the IB is unable to complete the investigation in time, a written request for extension that includes an explanation for the delay shall be submitted to and approved by the Provost and be included in the investigation record. Except: if no federal or state regulation requires the investigation to be completed within 120 days, then the timeline for a particular

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investigation shall automatically be extended until the IB completes the investigation, without any need for written request of extension.

A finding of research misconduct requires that acts constitute research misconduct as defined above and that:

- There is a significant departure from accepted practices of the relevant research community;
- 2) The misconduct is committed intentionally, or knowingly, or recklessly; and
- 3) The allegation is proven by a preponderance of evidence.

The IB shall prepare a draft Investigation Report. The draft report will be sent to all respondents, and all respondents shall be afforded the opportunity to comment upon the draft report and have the comments included in the formal record of the investigation. Any comments shall be submitted in writing within thirty (30) calendar days of the date on which the respondents received the draft report. The IB shall review all respondents' comments prior to issuing the final Investigation Report.

At the completion of the investigation, the IB shall submit its findings, comments from the respondents, and recommend institutional actions (also known as the Investigation Report) in writing to the dean who shall provide a copy to the respondents of the investigation, the Provost, Legal Counsel, and chair(s) of the affected department(s). The dean shall ensure that publishers and editors of journals are informed if manuscripts emanating from fraudulent research have been submitted or published.

The Investigation Report will include the following:

- 1) Description of the nature of the allegations of research misconduct
- 2) Description and documentation of federal financial support, if applicable (e.g., grant numbers, grant applications, contracts, etc.)
- Institutional charge (e.g., description of specific allegations of research misconduct for consideration in the investigation)
- Copy of the institutional policies and procedures under which the investigation was conducted
- 5) Research records and evidence. Identify and summarize the research records and evidence reviewed, and identify any evidence taken into custody but not reviewed.
- 6) Statement of findings. For each separate allegation of research misconduct identified during the investigation, provide
 - a. A finding as to whether research misconduct did or did not occur as follows:
 - Identify whether research misconduct was falsification, fabrication, plagiarism, or other serious deviation from accepted practices and if it was intentional, knowing, or in reckless disregard;
 - ii. A finding that serious research irregularities have occurred, but that the irregularities are insufficient to constitute misconduct; or
 - iii. A finding that no research misconduct or research irregularities were committed.
 - A summary of the facts and the analysis that support the conclusion and consideration of the merits of any reasonable explanation by the respondent;
 - c. Information about the specific federal support affected, if applicable
 - d. Identification of any publications in need of correction or retraction;

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- e. Identification of the person(s) responsible for the misconduct; and
- f. Listing of any current support or known grant proposal applications that the respondent has pending with federal agencies.
- 7) Comments. Include and consider any comments made by the respondent and complainant on the draft investigation report.

The investigation must be thorough and sufficiently documented including examination of all research records and evidence relevant to reaching a decision on the merits of the allegations. The IB must ensure that it maintains and provides all records from the investigation to the Provost. This is necessary so that they can be provided to any applicable federal agencies, which may request all relevant research records and records of the institution's research misconduct proceeding, including results of all interviews and the transcripts or recordings of such interviews.

16.7.4.4. DOCUMENTATION

At the conclusion of an allegation assessment, inquiry, or investigation, the dean shall forward all documentation pertaining to the allegation assessment, inquiry, or investigation to the Provost who shall arrange that the documentation be maintained for seven (7) years and ensure that documentation is provided to the appropriate federal agency upon request, if appropriate. Documentation to be maintained for federal agencies must include the following, as applicable:

- 1) Allegation assessment statement
- 2) Preliminary Inquiry final report
- Formal Investigation Report, including a copy of the report, all attachments, and any appeals
- 4) Findings: statement whether or not the institution accepts the investigation's findings
- Final institutional action: statement if the institution found research misconduct, and if so, who committed the misconduct
- 6) Institutional administrative actions: description of any pending or completed administrative actions against the respondents

The institution must notify the relevant federal agency (if applicable), if the institution plans to close out a case at the inquiry, investigation, or appeal stage on the basis that the respondent has admitted guilt, a settlement with the respondent has been reached, or for any other reason, except the closing of a case at the inquiry stage on the basis that an investigation is not warranted.

16.7.4.5. DISCIPLINARY ACTION

If the findings of the investigation substantiate allegations of research misconduct, the Provost, in consultation with Legal Counsel, shall determine appropriate administrative action, consistent with the University's governing and administrative regulations.

16.7.4.6. APPEAL

The respondent may appeal the decision of the investigative committee in writing to the provost. The respondent shall have thirty (30) days to file an appeal. A reinvestigation of the case will be warranted if one or more of the following conditions are judged by the

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provost to exist:

- Significant omission of new evidence that was not known or reasonablyavailable at the time of the formal investigation;
- A member of the committee had a conflict of interest; or
- A member of the committee did not accurately interpret the evidence due tolack of expertise concerning the research topic.

The provost must rule within fifteen (15) days of receipt of the respondent's written appeal on whether or not an appeal is warranted. If the provost determines that an appeal is warranted, a new investigative committee will be appointed by the Provost to reexamine the case. The provost's ruling on the issue of appeal is final. The criteria for appointing members to the original investigative committee shall also apply to the qualifications of members of the new investigative committee. The procedures that applied to the original investigative committee will also apply to the new investigative committee. The new committee shall have one hundred twenty (120) days to complete the investigation. The decision of this review committee is final.