#### **Institutional & Flexible Core Learning Outcomes Assessment Report**

Hunter College, CUNY Office of Assessment 2018-2019 Assessments

Draft: May 8, 2020

#### **Introduction & Process**

During the 2018-2019 academic year, Hunter College conducted assessments of two Institutional Learning Outcomes (ILOs) and the three learning outcomes required by CUNY in the General Education Flexible Core. In the interest of efficiency, we used a single rubric with multiple parts to assess both sets of outcomes, as part of our five-year assessment plan for General Education approved by the Faculty Senate on February 29<sup>th</sup>, 2018.<sup>1</sup>

A representative sample of courses from across the College was selected by the General Education Requirements (GER) and Academic Assessment & Evaluation (AAE) Committees, and departments were notified of these selections during the Spring 2018 semester for the Fall assessments, and the Fall 2018 semester for the Spring 2019 assessments. Departments were also provided with information about the process and the rubrics to be used. Departments were then given the option of selecting alternative courses that they felt were more appropriate for the assessment. Sampled courses were representative of programs in the social sciences, physical sciences, mathematics and statistics, and the humanities.

During both the Spring and Fall Semesters, two informational sessions were held for participating faculty to help familiarize them with the process and the rubrics; these were hosted by Hunter's Director of Assessment, and the Chair of the AAE Committee, and were well-attended by faculty from numerous departments.

Table 1 shows how the Institutional Learning Outcomes and Flexible Core Outcomes line up, and the subjects of the rubric rows used to assess them. The rubrics referred to in the table are attached as an appendix to this report.

Table 1: Institutional & Flexible Core Outcomes and Rubric Topics Assessed in 2018-2019

C	Institutional Learning Outcome (ILO)	Flexible Core Outcomes	Corresponding Rubric Row (from "Rubrics" table below)	
	Research & Communicate Effectively	Produce well-reasoned written or oral arguments using evidence to support conclusions.	1a. Writing: Focus and thesis	
1.			1b. Research: Engagement with Sources	
		Gather, interpret, and assess information from a variety of sources and points of view.	1c. Research: Choice of sources	
		nom a variety of sources and points of view.	1d. Research: Integration and attribution of sources	
2.	Think Critically and Creatively	Evaluate evidence and arguments critically	2a. Critical Thinking: Argumentation and evidence	
		or analytically.	2b. Creative Thinking	

<sup>&</sup>lt;sup>1</sup> An additional Institutional Learning Outcome (ILO), "Acquire broad and specialized knowledge" is assessed through the other ILOs and Flexible Core outcomes taken altogether (breadth), and assessment of program learning outcomes (PLOs) within the majors (specialization), and therefore is not discussed in this report.

### **Participation Summary**

<u>Fall 2018 Participation</u>. All ten sections sampled in the fall were 100- and 200-level courses; all sections sampled participated in the assessment. Instructors were asked to randomly sample 10 students' work, but in several cases, they used larger samples. A total of 312 students' work was assessed.

<u>Spring 2019 Participation</u>. In the spring, we selected a larger sample of courses, and courses from all levels were included in the assessment. Overall, 16 of 17 sakmpled academic departments completed assessment reports. A total of 458 students' work was assessed in a way that was usable for inclusion in this report. Thirteen sections were assessed using the rubrics provided. Another six were assessed using other means that were determined to be close enough to the rubrics to be included in our report. One assessment was not conducted in a way that allowed it to be included in this report.

#### **Summary of Results**

ILO: Research & Communicate Effectively, Measured by:

1a. Written Communication: Focus and Thesis

1b. Research: Engagement with Sources

1c. Research: Choice of Sources

1d. Integration and Attribution of Sources

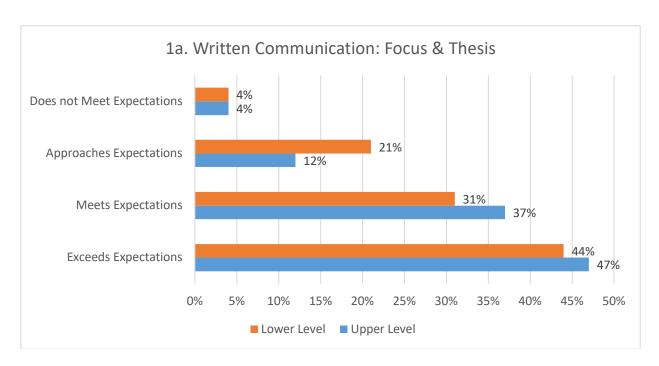
<u>1a. Written Communication: Focus & Thesis.</u> The ILO for "Research and Communicate Effectively" was associated with the Flexible Core Outcomes "Produce well-reasoned written or oral arguments using evidence to support conclusions" and "Gather, interpret, and assess information from a variety of sources and points of view." The rubric area associated with these outcomes was "Focus and Thesis" (1a) and then three related to use of source materials in research (1b through 1d).

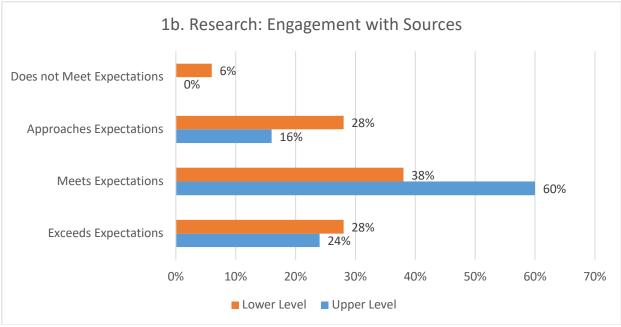
The outcome on "Focus and Thesis" was assessed in ten lower-level sections with a total of 286 students and four upper-level sections with a total of 49 students, for a combined total of 335 students. Complete results for all outcomes can be found in Appendix 2 at the end of this report; summary results are shown in the charts below. Results are broken down by lower- and upper-division courses.

In this outcome, only 4% of students in both lower- and upper-division courses were in the "did not meet expectations" category; another 12% of upper-division students, but 21% of lower-division students, only approached expectations. 31% of lower-division and 37% of upper-division students met expectations, and 44% of lower-division and 47% of upper-division students exceeded expectations. Combining the top two categories, a total of 75% of lower-division students and 84% of upper-division students combined met or exceeded expectations – among the highest of any category assessed.

<u>1b.</u> Research: Engagement with Sources. Related to the research part of the ILO was the Flexible Core outcome: "Gather, interpret, and assess information from a variety of sources and points of view." For this assessment, we specifically focused on students' use of sources in their research.

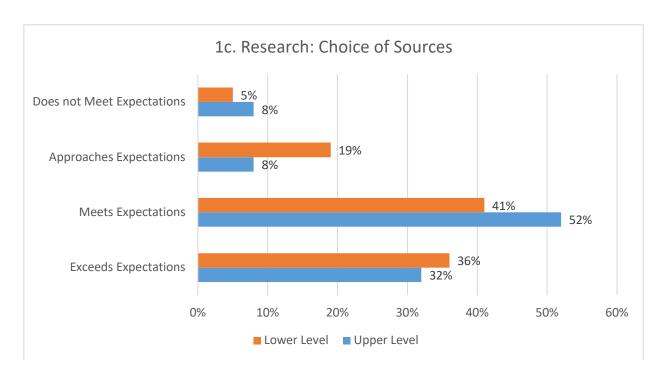
The first specific topic we assessed for this outcome was "engagement with sources." Eight lower-level sections with 309 students and two upper-level sections with 25 students (for a total of 334 students) assessed engagement with sources. In these sections, no upper-level students and only 6% of lower-level students failed to meet expectations, but another 16% of upper-level and 28% of lower-level students only approached expectations. 38% of lower-level, and 60% of upper-level students met expectations, and 28% of lower-level and 24% of upper-level students exceeded expectations, for a total of 66% of lower-level students and 84% of upper-level students meeting or exceeding expectations.





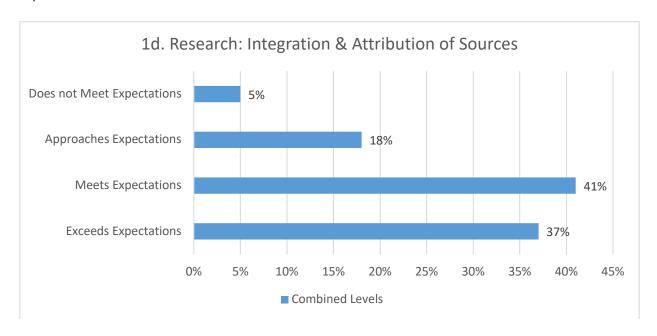
<u>3b. Research: Choice of Sources.</u> In the next research area, "Choice of Sources," the sample included six lower-division courses with a total of 169 students and two upper-division courses with 25 students, for an overall total of 194 students.

For this outcome, only 5% of lower-level students, and 8% of upper-level students assessed failed to meet expectations; another 19% of lower-level students and 8% of upper-level students only approached expectations. On the other end of the spectrum, 41% of lower-level students and 52% of upper-level students met expectations while 36% of lower-level and 32% of upper-level students exceeded expectations, for a total of 76% of lower-level students (after rounding) and 84% of upper-level students meeting or exceeding expectations.



<u>3c. Research: Integration/Attribution of Sources</u>. The final area in which we assessed students' research skills was with regard to integration and attribution of sources. This area was assessed in eight lower-division sections with a total of 285 students and one upper-division section with 10 students; because of the small number of upper-level students assessed, the results are combined here.

The results here are close to those for the other two research areas – only 5% of students failed to meet expectations, with another 18% only approaching expectations. On the other end, 41% of students met expectations and another 37% exceeded expectations, for a total of 78% meeting or exceeding expectations.

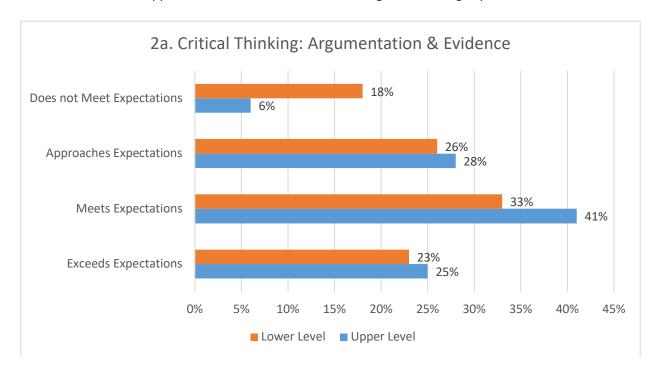


### ILO: 2. Think Critically and Creatively, Measured by:

- 2a. Critical Thinking: Argumentation and evidence
- 2b. Creative Thinking: Connecting, Synthesizing, Transforming

<u>2a. Critical Thinking: Argumentation and Evidence</u>. For this assessment, we separated out the "Critical and Creative Thinking" from our ILO into its component parts. The Critical Thinking assessment is aligned with our Flexible Core Outcome "Evaluate evidence and arguments critically or analytically," and was measured using a rubric on "Argumentation and Evidence." Thirteen lower-level sections with 358 students and six upper-level sections with 68 students assessed Argumentation and Evidence, including for a total of 426 students.

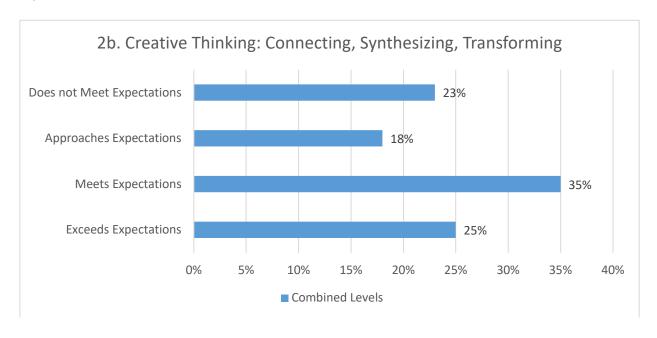
Here, we see results notably less positive than for Focus and Thesis: 6% of upper-level students, but 18% of lower-level students were in the "did not meet expectations" category; another 28% of upper-level students and 26% of lower-level students only approached expectations. At the other end of the spectrum, 41% of upper-level students, but only 33% of lower-level students met expectations, and 25% of upper-level, and 23% of lower-level students exceeded expectations, for a total of 56% of lower-level students and 66% of upper-level students combined meeting or exceeding expectations.



<u>2b. Creative Thinking: Connecting, Synthesizing, Transforming</u>. For our assessment of Creative Thinking, we used a rubric created by the two Senate Committees; the rubric was a modified version of the VALUE Rubric for Creative Thinking. While our rubric included five areas to be assessed, only one of these areas – Connecting, Synthesizing, and Transforming – was assessed in more than two sections. As a result, only the results for that area will be included in this report. This assessment, conducted only in the spring term, included five lower-level sections with 127 students, and one upper-level section with 14 students, for a total of 141 students. As a result, this report shows combined results.

Across the Creative Thinking areas assessed (including those not shown here because of small sample sizes), we see poorer results than in the other categories assessed, with substantially larger percentages

of students failing to meet expectations than in other areas. For this area, fully 23% of students were in the "did not meet expectations"; another 18% only approached expectations, for a total of 40% not meeting or approaching expectations after rounding error. At the other end of the spectrum, 35% met expectations, and 25% exceeded expectations, for a total of 60% combined meeting or exceeding expectations.



#### **Reflections on the Process**

With 10 of 10 sections participating in the Fall, with a total of 312 students, and 16 of 17 programs participating in the spring with a total of 458 students, from a broadly representative sample of classes in the Humanities, Social Sciences, Life and Physical Sciences, Mathematics and Statistics, the 2018-2019 assessments were certainly a success from a quantitative perspective.

From a qualitative perspective, most participating instructors did a very good job of selecting tests, assignments, or other types of student work to match the outcomes being assessed, and skillfully utilized the rubrics provided. Furthermore, most instructors completed the "reflections" and "lessons learned" portions of the report templates thoughtfully, and many learned valuable lessons they can apply when teaching the same course in the future.

One notable gap in the spring was with regard to the fairly large number of instructors who did not use the rubrics provided (including one assessment that did not produce usable data as a result). Much of this is likely due to understandable confusion related to the number of disparate learning outcomes being assessed, using multiple rubrics, in the same semester, and sometimes in the same course. Thus, despite frequent discussion of the process at workshops, Assessment Council meetings, individual meetings, and email communications, some departments and some faculty members clearly did not properly receive the information we were attempting to send.

Recommendation 1: Simplify communication process – we should not attempt to assess more
than one outcome or use more than one rubric for any course. This is consistent with the 20192020 procedures we are using for the Life and Physical Sciences; we should make sure for the
three optional Flexible Core Outcomes we assess in Fall 2020, and the two we assess in Spring
2021 that we only assess one outcome, using one rubric, per course.

The charts above all show that the instructors who conducted the assessments did a very good job of differentiating among different levels of student work – every category used the full spectrum from "does not meet expectations" to "exceeds expectations." The one concern is that there might be some over-use of the "exceeds expectation" category, which ranges from a low of 24% for "Engagement with Sources" among upper-division students to a high of 47% for "Focus and Thesis" among upper-division students. The "exceeds expectations" category is meant to represent extraordinary quality work, not something you'd see in one out of two students, or even one out of four.

• Recommendation 2: Both in the design of future rubrics, and the directions and training we do with faculty who will be using them for assessments, we need to stress more clearly that the "exceeds expectations" category should represent exceptional quality work, not routine work.

At the same time, the percentages of students in the Creative Thinking part of our Critical & Creative Thinking outcome who do not meet expectations or only approached expectations, are problematically high – a total of 40% not meeting, or only approaching our expectations.

- Recommendation 3: For Creative Thinking, the GER and AAE Committees, or an ad-hoc Joint Committee, should look more carefully at reports in this category to determine whether the rubric was used properly, or whether the rubric will need modification in the future, or simply better explanation or training. Or perhaps, Creative Thinking represents a higher order skill set, and we wouldn't expect it to be higher. Some possible actions could include:
  - 1. Collect and place on the assessment website materials that address the teaching of creative thinking;
  - 2. Collaborate with ACERT on a workshop on best practices in creative thinking pedagogy;
  - 3. Invite a speaker for lectures and workshops on creative thinking pedagory;
  - 4. Take other measures to create and maintain an ongoing discussion on creative thinking pedagogy.
- Recommendation 4: Related to Recommendation 3, the Committees should think about what would be appropriate goal or benchmark levels for each of our Institutional and Flexible Core learning outcomes. We should probably set a minimum acceptable level of combined "meets" and "exceeds expectation" for each outcome, as well as a maximum acceptable level of "does not meet expectations." These benchmarks need not be quantitatively rigid, but are nonetheless worth discussing here and for other outcomes.

One interesting observation throughout this assessment comes from our separate assessments of student work in lower-division and upper-division courses. One might hypothesize that, all else being equal, students in upper-division courses would be more likely than those in lower-division courses to be able to demonstrate that they have met or exceeded our expectations for our institutional learning outcomes; this was, in fact, the case, and very consistently so. Of the four assessments for which we were able to split up upper- and lower-division sections, all of them had higher percentages meeting or exceeding expectations at the upper level than the lower level sections: 9% higher for "Focus and

Thesis," 10% higher for "Argumentation and Evidence," 18% higher for "Engagement with Sources," and 8% higher for "Choice of Sources."

• Recommendation 5: While our analysis found a consistent difference between lower-division and upper-division assessment results – and in the expected direction, in most cases the number of assessments conducted in upper-division courses was much smaller than those in lower-division courses. The next time we conduct these assessments, more upper-level student work should be assessed to ensure that this result is not simply an artifact of the sections that participated.

**APPENDIX 1: 2018-2019 Hunter College Flexible Core Outcomes and Rubrics** 

Institutional Learning Outcome (ILO)		Flexible Core Outcomes	Corresponding Rubric Row (from "Rubrics" table below)		
	Research & Communicate Effectively	Produce well-reasoned written or oral arguments using evidence to support conclusions.	1a. Writing: Focus and thesis		
3.			1b. Research: Engagement with Sources		
		Gather, interpret, and assess information from a variety of sources and points of view.	1c. Research: Choice of sources		
		from a variety of sources and points of view.	1d. Research: Integration and attribution of sources		
4.	Think Critically and Creatively	Evaluate evidence and arguments critically	2a. Critical Thinking: Argumentation and evidence		
		or analytically.	2b. Creative Thinking		

## Rubric

Rubric Row  1a. Writing: Focus and Thesis: Responds to the assignment with a clear, specific central	Exceeds Expectations Identifies a focused and manageable topic and responds to the topic with a clear, specific, and	Meets Expectations Identifies a manageable topic and responds to the topic with a thesis or question but focus may be	Approaches Expectations Identifies a topic that is far too general or too specific to be manageable and responds with a	Does Not Meet Expectations Identifies a topic that is far too general or too specific to be manageable and responds with a	
focus and thesis.	relevant thesis or question, though it may slightly rely on the obvious or vague.	somewhat broad, general, or vague or might rely on the obvious.	thesis or question that is too broad, vague, or obvious	thesis or question that is too obvious or it lacks a thesis or focus	
1b. Research: Engagement with Sources: Draws from a variety of sources to support, deepen, extend, qualify, and/or question the argument or inquiry.	Uses sources in several ways, but may rely too much on use of sources as support only. Engages in a conversation with the ideas of others though some places may not fully engage with the source.	Uses sources mostly as support with some engagement with the ideas of others.	Uses sources only as support with minimal engagement with the ideas of others. May take the ideas of others as fact, without question.	Demonstrates a lack of understanding of effective use of sources. Does not engage with the ideas of others.	

1c. Research: Choice of Sources: Chooses the most effective sources for the topic and purpose that show variety in approach/point of view	Cites a variety of sources, but relies too much on certain views or types of sources, though they are appropriate for the topic and purpose.	Cites too many similar type of sources in terms of point of view and type of source. Relies too much on certain kinds of sources and may not use the best sources for the topic and purpose.	Cites sources that meet the minimum requirements of the assignment. Sources chosen are not the best for the topic and purpose.	Does not meet the minimum requirements of a research paper in terms of sources chosen.
1d. Research: Integration and Attribution of Sources: Demonstrates knowledge of when and how to incorporate quotation, paraphrase, and summary, and uses proper attribution.	Varies between quotation, paraphrase, and summary. There may be places where a source could be better integrated or explained. Uses proper attribution according to disciplinary conventions	Relies too much on quotation. Sources not always integrated effectively. Effort is made at proper attribution according to disciplinary conventions.	May use long, irrelevant quotations or fail to integrate quotations effectively. Attribution is confusing. There may be places where it is unclear what material came from what source, though it is clear the paper is not intentionally plagiarizing.	Does not show understanding of integration of sources. Quotations dropped-in, unexplained, or unclear. Unclear attribution may be bordering on plagiarism.
2a. Critical Thinking: Argumentation and Evidence: Explores the focus through well- reasoned arguments and evidence and methods appropriate to the topic, context, purpose, and audience. Displays critical thinking about the topic.	Mostly explores and develops the thesis or question with well-reasoned arguments and a range of appropriate evidence, but may rely too much on one type of evidence or method. Mostly fully evaluates, explains, and analyzes all evidence.	Provides some development, with reasoning and supporting evidence, but may rely too much on one type of evidence or method or may not be the most appropriate or effective evidence and methods. Some evaluation, explanation, and analysis of evidence.	Provides some development but contains too much generality and reasoning could have some flaws or may rely on inappropriate evidence that is not always evaluated, explained, or analyzed. Thinking and argumentation may be too simplistic.	Does not provide sufficient development of the focus. Offers either no reasoning or flawed reasoning and inappropriate or no engagement with evidence that is not evaluated, explained, and analyzed.

# **CREATIVE THINKING RUBRIC**

## Adapted from the AAC&U VALUE Rubric for use at Hunter College, CUNY

#### **Definition**

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking.

## Framing Language

Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as, for example, the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of boundaries. Creative thinking in higher education can only be expressed productively within a particular domain. The student must have a strong foundation in the strategies and skills of the domain in order to make connections and synthesize. While demonstrating solid knowledge of the domain's parameters, the creative thinker, at the highest levels of performance, pushes beyond those boundaries in new, unique, or atypical recombinations, uncovering or critically perceiving new syntheses and using or recognizing creative risk-taking to achieve a solution.

The Creative Thinking Rubric is intended to help faculty assess creative thinking in a broad range of transdisciplinary or interdisciplinary work samples or collections of work. The rubric is made up of a set of attributes that are common to creative thinking across disciplines. Examples of work samples or collections of work that could be assessed for creative thinking may include research papers, lab reports, musical compositions, a mathematical equation that solves a problem, a prototype design, a reflective piece about the final product of an assignment, or other academic works. The work samples or collections of work may be completed by an individual student or a group of students.

### Glossary

The definitions that follow were developed to clarify terms and concepts used in this rubric only.

- Exemplar: A model or pattern to be copied or imitated (quoted from www.dictionary.reference.com/browse/exemplar).
- Domain: Field of study or activity and a sphere of knowledge and influence.

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# Evaluators should leave blank any rows associated with outcomes not applicable to the assignment being assessed.

Wording of ILO: As critical thinkers, Hunter graduates will evaluate different types and sources of claims using appropriate evidence, and as creative thinkers, they will use novel ideas to better understand and shape the world around them.

Outcome ↓	4	3	2	1	
Level →	Level → Exceeds Expectations		Approaches Expectations	Does not meet expectations	
Taking Risks  May include personal risk (fear of embarrassment or rejection) or risk of failure, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.	Incorporates new directions or approaches in ways that might go beyond the parameters of the assignment.	Introduces some new directions or approaches.	Completes the assignment without introducing any new directions or approaches.	Fails to adequately complete the assignment.	
Solving Problems	Clearly presents multiple logical ways of solving the problem.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Only a single approach is considered and is used to solve the problem; other alternatives not discussed or considered.	Does not employ any clear approach to solving problem.	
Embracing Complexity	Incorporates alternate, divergent, or contradictory perspectives or ideas in a complex, exploratory way.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a limited way.	Acknowledges alternate, divergent, or contradictory perspectives or ideas, but does not incorporate them.	Does not acknowledge alternative, divergent, or contradictory perspectives.	
Innovative Thinking  Novelty or uniqueness (of idea, claim, question, form, etc.)  Creates and/or applies an idea, question, format, or product that is novel to the student.		Explores a novel or unique idea, question, format, or product, but does not fully explicate it.	Is able to describe a collection of available ideas.	Is not able to describe available ideas.	
Connecting, Synthesizing, Transforming	Synthesizes or makes new connections among ideas or solutions.	Recognizes and understands existing connections among ideas or solutions.	Recognizes and understands some existing connections among ideas or solutions.	Does not connect or synthesize presented ideas.	

Appendix 2: Hunter College 2018-2019 Flexible Core Student Learning Outcomes Assessment Results

		# of	# of	Does Not Meet	Approaches	Meets	Exceeds
Student Learning Outcome & Rubric Row		Sections	Students	Expectations	Expectations	Expectations	Expectations
1. Research & Communicate Effectively I	Lower-Level	10	286	4%	21%	31%	44%
(1a. Writing: Focus & Thesis)	Upper-Level	4	49	4%	12%	37%	47%
	Combined	15	335	4%	20%	32%	44%
	Lower-Level	8	309	6%	28%	38%	28%
(1b. Res.: Engagement with Sources)	Upper-Level	2	25	0%	16%	60%	24%
	Combined	10	334	6%	27%	39%	28%
	Lower-Level	6	169	5%	19%	41%	36%
(1c. Research: Choice of Sources)	Upper-Level	2	25	8%	8%	52%	32%
	Combined	8	194	5%	18%	42%	35%
(1d. Res: Integ. & Attrib. of Sources)	Combined	9	295	5%	18%	41%	37%
2. Critical and Creative Thinking	Lower Level	13	358	18%	26%	33%	23%
(2a. Argumentation & Evidence)	Upper-Level	6	68	6%	28%	41%	25%
	Combined	19	426	16%	26%	34%	23%
(2b. Creative Thinking )	Combined	6	141	23%	18%	35%	25%

Student Learning Outcome & Rubric Row		# of Sections	# of Students	Does Not Meet or Approaches Expectations	Meets or Exceeds Expectations
1. Research & Communicate Effectively	Lower-Level	10	286	25%	75%
(1a. Writing: Focus & Thesis)	Upper-Level	4	49	16%	84%
	Combined	15	335	24%	76%
	Lower-Level	8	309	34%	66%
(1b. Res.: Engagement with Sources)	Upper-Level	2	25	16%	84%
	Combined	10	334	33%	67%
	Lower-Level	6	169	24%	76%
(1c. Research: Choice of Sources)	Upper-Level	2	25	16%	84%
	Combined	8	194	23%	77%
(1d. Res: Integ. & Attrib. of Sources)	Combined	9	295	22%	78%
2. Critical and Creative Thinking	Lower Level	13	358	44%	56%
(2a. Argumentation & Evidence)	Upper-Level	6	68	34%	66%
	Combined	19	426	42%	58%
(2b. Creative Thinking )	Combined	6	141	40%	60%