

# A College-Wide Project to Improve Student Writing

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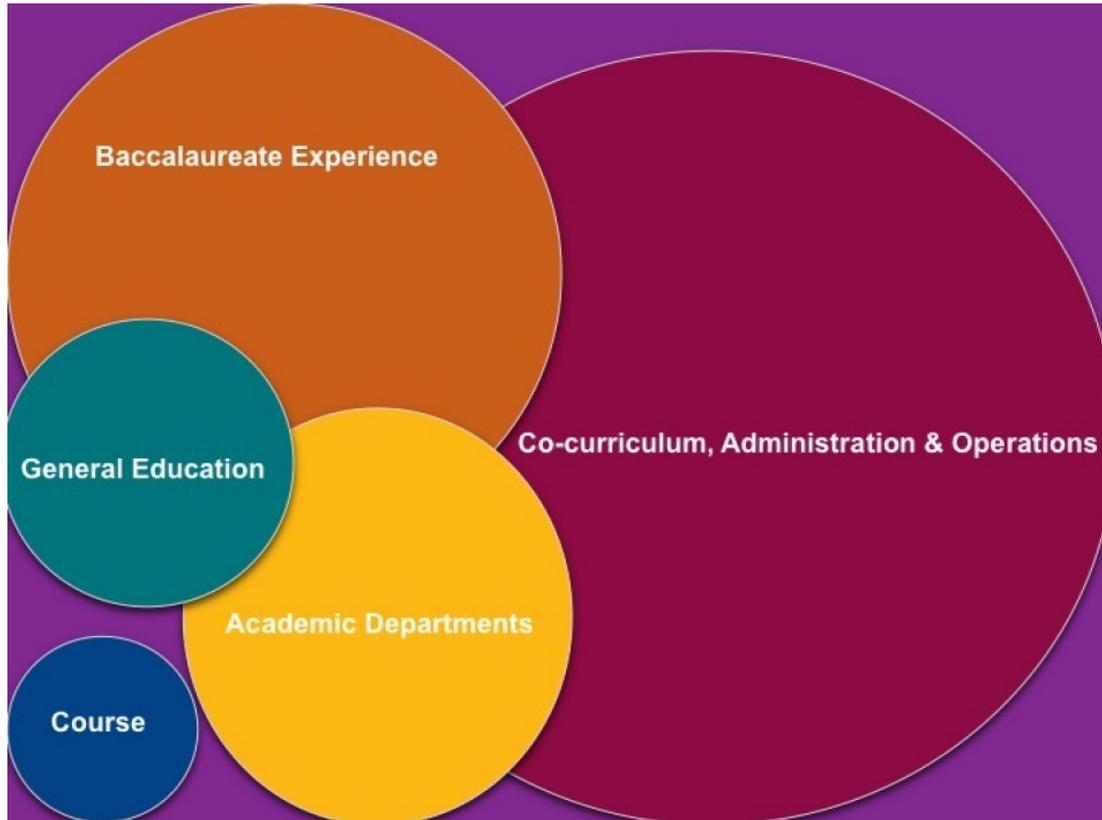
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# What Are the New Mexico State University (NMSU) Assessment Activities?



# New Mexico State University (NMSU) Quality Initiative

<http://assessment.nmsu.edu/quality-initiatives/>

- Concerns expressed by NMSU faculty across campus about the ability of undergraduate students to write both generally and in their disciplines



Quality Initiative

# NMSU Quality Initiative (Cont.)

- Writing Across the Curriculum
- Writing-to-Learn
- **Writing in the Disciplines**
  - Help students learn foundational concepts
  - Check students' understanding of material
  - Practice critical thinking, reading and writing
  - Practice writing conventions of the discipline

# College of Agricultural, Consumer and Environmental Sciences (ACES) Strategic Plan

<http://aces.nmsu.edu/strategicplan/welcome.html>

- College-Wide, Mission Supporting Initiatives
  - Improve the image and visibility of the College
  - Increase graduation rates and employer satisfaction with the relevance of our academic programs



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# 2014-2015 ACES Writing Project

- Developed a first draft of the Writing Assessment Rubric for ACES (Devall & Stoner, 2015a & 2015b)
- Recommendations on further development of the rubric for college-wide use
- Recommendations on establishing and training departmental writing assessment teams
- Recommendations on writing assignments
- Recommendations on reporting and drawing implications from results

**Writing Assessment Rubric for  
NMSU College of ACES**

<b>Criteria</b>	<b>Score</b>	<b>Excellent (4 points)</b>	<b>Good (3 points)</b>	<b>Fair (2 points)</b>	<b>Poor (1 point)</b>	<b>Missing (0 points)</b>	<b>Score</b>
<b>Purpose and Audience</b> Purpose clearly stated. Writing appropriate for a professional audience.		Purpose is extremely clear. Avoids colloquial language. Maintains a professional tone throughout.	Purpose is stated with minor ambiguities. Infrequent use of colloquial language. Generally maintains a professional tone.	Purpose is not clearly stated. Some use of colloquial language. Some inconsistencies in professional tone.	Purpose is confusing and may be misunderstood. Frequent use of colloquial language. Frequent inconsistencies in professional tone.	Purpose is not stated or not understandable. Extreme use of colloquial language. Total lack of a professional tone.	
<b>Content and Critical Thinking</b> Develops ideas through logic, evidence and analysis. Exemplifies critical thinking skills. Exhibits mastery of material. Appropriate use of vocabulary in discipline.		Thoroughly identifies and addresses key aspects of the issue and insightfully uses facts and relevant evidence from analysis to support and defend valid conclusions or solutions. Exceptional use of vocabulary from the discipline.	Identifies and addresses most aspects of the issue and uses facts and relevant evidence from analysis to develop valid conclusions or solutions. Solid use of vocabulary from the discipline.	Identifies and addresses some aspects of the issue. Develops possible conclusions or solutions but based on inappropriate opinions and irrelevant information. Some use of vocabulary from the discipline.	Identifies and addresses only one aspect of the issue. Develops invalid conclusions or solutions based on opinion or irrelevant information. Very limited use of vocabulary from the discipline.	Does not address the issue at all. Does not develop or defend conclusions or solutions. No use of vocabulary from the discipline.	
<b>Flow and Organization</b> Document flows smoothly from point to point. Uses headings to organize. Includes topic sentences and well-developed paragraphs. Uses transitions between paragraphs and sections.		Organization and flow of the document is excellent. Major points are clear and easy to grasp.	Organization and flow is generally good. Minor restructuring could make points clearer or easier to read. Reader may have to read portions more than once to understand major points.	Organization and flow is inconsistent. Substantial restructuring required to make points clearer or easier to read. Reader may have to read the document more than once to understand major points.	Organization and flow is poor. Major restructuring needed in most areas. Reader may have to read two or more times to understand major points.	Lack of organization and flow. Impossible to follow the sequence of thought.	
<b>Documentation</b> Cites sources where appropriate. Paraphrases without excessive quoting. Follows style guidelines. Citations match reference. References from current, relevant, credible sources.		Always documents sources of evidence and follows appropriate style guidelines. All sources are current, relevant and credible.	Consistently documents sources of evidence and follows appropriate style guidelines, with only one or two exceptions. Almost all sources are current, relevant and credible	Occasionally fails to document sources of evidence and to follow appropriate style guidelines. Some sources are outdated, irrelevant, or not credible	Often fails to document sources of evidence and to follow appropriate style guidelines. Many sources are outdated, irrelevant, or not credible.	Completely fails to document sources of evidence and to follow appropriate style guidelines. Almost all sources are outdated, irrelevant, or not credible.	
<b>Mechanics</b> Proper punctuation and spelling. Correct sentence structure, subject/verb agreement, homonym use, and capitalization.		There are no obvious errors.	There are 1-2 errors per page.	There are 3-4 errors per page.	There are 5-6 errors per page.	There are 7 or more errors per page.	
<b>Total Score</b>							



# 2015-2016 ACES Writing Project

- Use the draft rubric to assess samples of student writing brought to the 2015 NMHEAA Summer Retreat (four faculty participants)
- Use this activity to critically review and make improvements to the rubric
- Design and present a norming workshop for departmental assessors on the rubric
- Use writing assessment and workshop evaluation data to make final changes to the rubric

# Activities/Results from the NMHEAA Summer Retreat

- Assessed student writing samples with the rubric
- Reviewed assessment results from a FWCE pilot with the rubric
- Hybridized the rubric with the NMSU Writing Assessment Scoring Rubric used to assess writing for general education
  - Went from five to four assessment levels per assessment item
  - Adopted this instrument's level descriptors



# Norming Workshop

- Purpose
  - To evaluate, discuss, and improve the Writing Assessment Rubric for ACES using ACES collected writing samples
- 14 assessors from 7 of 8 ACES academic departments



# Results

- The rubric was acceptably reliable if two or more faculty assessed the same writing sample.
- The “Content and Critical Thinking” dimension of the rubric yielded the greatest inconsistency, lowering the overall reliability of the rubric. The other dimensions yielded acceptable consistency between assessors.

## Reliabilities of the Rubric Subscales and the Total Rubric by Number of Assessors

Rubric Subscales	One Assessor	Two Assessors	Three Assessors	Five Assessors	All (14) Assessors
Purpose and Audience	0.45	0.62	0.71	0.80	0.92
Content and Critical Thinking	0.21	0.35	0.44	0.57	0.79
Flow and Organization	0.40	0.57	0.66	0.77	0.90
Documentation	0.65	0.79	0.85	0.90	0.96
Mechanics	0.40	0.57	0.66	0.77	0.90
Total Rubric	0.67	0.80	0.86	0.91	0.97

?

# Results (Cont.)

- Residual variances between assessors' scores on the same writing sample did not decline for the whole rubric or any of its dimensions between the three rounds of assessment
- Surprisingly, residual variances for the rubric dimension “Documentation” were significantly lower in the first than the other two assessment rounds

## Variance Components Estimates for Determining if Residual Variances Declined From the First to Third Rounds of Assessment

Covariate Parameter	Purpose and Audience	Content and Critical Thinking	Flow and Organization	Documentation	Mechanics	Total Rubric
Assessor	0.03	0.05	0.10	0.02	0.10	0.84
Assignment	0.34	0.09	0.22	0.65	0.24	7.82
Round 1 Residual	0.46	0.40	0.34	0.17	0.32	3.26
Round 2 Residual	0.55	0.36	0.26	0.43	0.46	4.59
Round 3 Residual	0.29	0.28	0.38	0.44	0.34	4.01
P-values	0.15	0.59	0.50	0.05*	0.57	0.76

?

# Results (Cont.)

- Workshop participants felt that their time was well spent
- Participants (83%) felt they were likely to make changes in their practices based on the workshop

# Recommendations

- Divide the “Content and Critical Thinking” dimension of the rubric into two separate sections
- For norming purposes with a multidisciplinary audience, utilize writing samples that have content all assessors can understand
- Conduct norming discussions on 6 papers before allowing assessors to work independently



# Recommendations (Cont.)

- Assess word-processed rather than hand-written writing samples
- Improvement of the rubric and training in its use should on-going in ACES
- The NMHEAA Summer Retreat in Ruidoso, NM was a good setting for team-building and critical discussion of assessment strategies

**Writing Assessment Rubric for the  
NMSU College of ACES (FINAL DRAFT)**

	<b>Exemplary (3 points)</b>	<b>Competent (2 points)</b>	<b>Emerging (1 point)</b>	<b>Not evident (0 points)</b>	<b>Score</b>
<b>Purpose and Audience</b> Purpose clearly stated. Writing appropriate for a professional audience.	Purpose is extremely clear. Avoids informal language. Maintains a professional tone throughout.	Purpose is stated with some ambiguities. Infrequent use of informal language. Generally maintains a professional tone.	Purpose is confusing and may be misunderstood. Frequent use of informal language. Frequent inconsistencies in professional tone.	Purpose is not stated or not understandable. Extreme use of informal language. No professional tone evident.	
<b>Content</b> Exhibits mastery of material. Appropriate use of vocabulary in discipline.	Thoroughly identifies and addresses all key aspects of the assignment. Exceptional use of vocabulary from the discipline.	Identifies and addresses most key aspects of the assignment. Competent use of vocabulary from the discipline.	Identifies and addresses only a few key aspect of the assignment. Very limited use of vocabulary from the discipline.	Does not address any key aspect of the assignment. No use of vocabulary from the discipline.	
<b>Critical Thinking</b> Develops and defends ideas through logic, evidence and analysis.	Insightfully uses facts and relevant evidence to develop and defend valid conclusions or solutions.	Uses facts and relevant evidence to develop generally valid conclusions or solutions. Defense of conclusions could be clearer.	Develops invalid conclusions or solutions based on opinion or irrelevant information.	Does not develop or defend any conclusions or solutions.	
<b>Flow and Organization</b> Document flows smoothly from point to point. Uses headings to organize. Includes topic sentences and well-developed paragraphs. Uses transitions between paragraphs and sections.	Organization and flow of the document is excellent. Major points are clear and easy to grasp.	Organization and flow is competent. Some restructuring required to make points clearer or easier to read. Reader may have to read the document twice to understand major points.	Organization and flow is poor. Major restructuring needed in most areas. Evaluator may have to read more than two times to understand major points.	Lack of organization and flow. Impossible to follow the sequence of thought.	
<b>Documentation</b> Cites sources where appropriate. Paraphrases without excessive quoting. Follows style guidelines. Citations match reference. References from current, relevant, credible sources.	Always documents sources of evidence and follows appropriate style guidelines. All sources are current, relevant and credible.	Consistently documents sources of evidence and follows appropriate style guidelines, with only one or two exceptions. Most sources are current, relevant and credible.	Often fails to document sources of evidence and to follow appropriate style guidelines. Many sources are outdated, irrelevant, or not credible. Citations appear in the text, but there is no bibliography or there is a bibliography, but no citations in text.	Completely fails to document sources of evidence and to follow appropriate style guidelines. Almost all sources are outdated, irrelevant, or not credible.	
<b>Mechanics</b> Employs writing processes using correct grammar, spelling and punctuation.	Up to two errors per page.	There are 3 to 4 errors per page.	There are 5 to 6 errors per page.	There are 7 or more errors per page.	
<b>Total Score</b>					



# Bibliography

College of Agricultural, Consumer and Environmental Sciences (2015). Strategic plan. Retrieved from <http://aces.nmsu.edu/strategicplan/welcome.html>

Devall, E. & Stoner, K. (2015a, March 13). Assessing student writing in the College of ACES. Poster presented at the NMSU Conference on Assessment, Las Cruces, NM.

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# Thank You



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