

**(a) Apply knowledge of math, science, and engineering**

**Previous Curriculum Action Review Summary**

- There were no 2005 Curriculum Actions stated for 2006.

**Curriculum Review Summary**

- Outcome (a) scores decreased from 2005 to 2006.
- Outcome (a) score variation among the three metrics increased from 2005 to 2006
- The decrease in student performance may be within the statistical variation for measuring Outcome (a); however, curriculum improvements are beneficial. To this end an improved and expanded textbook authored by the course instructor for MATH 373 will be introduced in 2007.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
A	New Textbook for MATH 373	A new textbook for MATH 373 that addresses all the topics covered in the course, unlike current textbooks, will be written and introduced.

**Previous Assessment Process Action Review Summary**

A need for improved Assessment Process for Outcome (c ) in the form of a Senior Exit Exam is an ongoing process improvement. Dr Howard will assume responsibility for coordinating this effort.

**Assessment Process Review Summary**

- The current cadre of instruments appears to be good tools for assessing Outcome (a). The faculty are again asked to continually seek better measures of student performance.
- The current Assessment Processes should be continued to assess Outcome (a), but other objective assessment data are needed.
- A Senior Exam should be developed as was recommended last year.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
A	Local Senior Exit Exam	Develop a Senior Exit Exam to be administered to seniors as they near graduation so as to gain objective assessment results specifically covering as many metrics as possible.

**(b) Design and conduct experiments analyze and interpret data and information**

**Previous Curriculum Action Review Summary**

- Curriculum Actions from previous period called for introduction of SPC assignments.

**Curriculum Review Summary**

- Student performance remains satisfactory.
- SPC assignments were added to MET 440 course.
- It is suggested to add questions to Senior Survey related to Outcome (b).

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
A	Add questions to MET 465 Survey	Add questions to MET 465 Senior Survey related to Outcome (b) - Design of Experiments.

**Previous Assessment Process Action Review Summary**

- It was suggested to include more instruments for Outcome (b) in MET 440.

**Assessment Process Review Summary**

- Instruments were added in MET 440 in the form of QC lab.
- Student performance seems satisfactory.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
N		

**(c) Optimally select material and design materials treatment and production processes**

**Previous Curriculum Action Review Summary**

There were no Curriculum Actions for Outcome (c ) in 2006.

**Curriculum Review Summary**

No Curriculum Action is needed for Outcome (c ) in 2006.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
N		

**Previous Assessment Process Action Review Summary**

A need for improved Assessment Process for Outcome (c ) in the form of a Senior Exit Exam is an ongoing process improvement. Dr Howard will assume responsibility for coordinating this effort.

**Assessment Process Review Summary**

- Development of a Senior Exit Exam would improve the assessment of Outcome ( c ).

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
A	Local Senior Exit Exam	Develop a Senior Exit Exam to be administered to seniors as they near graduation so as to gain objective assessment results specifically covering as many metrics as possible.

**(d) Function well on teams**

**Previous Curriculum Action Review Summary**

- There were no 2006 Curriculum Actions stated for 2007.

**Curriculum Review Summary**

- Student performance improved slightly but likely within the range of expected uncertainty in performance measurement for Outcome (d).
- No Curriculum Action is needed.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
N		

**Previous Assessment Process Action Review Summary**

A need for an improved Assessment Process for Outcome (d) in the form of a Senior Exit Exam is an ongoing process improvement. Dr Howard will assume responsibility for coordinating this effort.

**Assessment Process Review Summary**

- The current cadre of instruments appears to be good tools for assessing Outcome (d). The faculty are again asked to continually seek better measures of student performance.
- The current Assessment Processes should be continued to assess Outcome (d), but other objective assessment data are needed.
- A Senior Exam should be developed as was recommended last year.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
A	Local Senior Exit Exam	Develop a Senior Exit Exam to be administered to seniors as they near graduation so as to gain objective assessment results specifically covering as many metrics as possible.

**(e) Identify, formulate, and solve engineering problems**

**Previous Curriculum Action Review Summary**

- No Curriculum Actions were identified for Outcome (e) for 2006.

**Curriculum Review Summary**

- Students continue to perform well.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
N		

**Previous Assessment Process Action Review Summary**

- No Assessment Process Action was needed for Outcome (e) for 2006.

**Assessment Process Review Summary**

- Process is adequate with good agreement between instruments.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
N		

**(f) Know professional and ethical responsibilities and practices**

**Previous Curriculum Action Review Summary**

No items specific to Curriculum Action Review for ABET criterion (f) were noted.

**Curriculum Review Summary**

The students scores were high again in 2006 and an increase in total number of assessments was noted.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
N		

**Previous Assessment Process Action Review Summary**

No items specific to Assessment Process Action Review for ABET criterion (f) were noted.

**Assessment Process Review Summary**

The number of assessments were significantly increased.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
N		

**(g) Communicate effectively**

**Previous Curriculum Action Review Summary**

•No actions were identified, curriculum assessment process appears to be performing adequately.

**Curriculum Review Summary**

•The curriculum is performing adequately. Generally lower scores were reported for the senior level instruments that were utilized compared to the Jr/Sr and Soph instruments that were used.

**Code Curriculum Action Title Curriculum Action Brief Description**

N	No action required	
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**Previous Assessment Process Action Review Summary**

• No action was required of the assessment process for this metric.

**Assessment Process Review Summary**

•This Outcome utilized six different instruments, and thus, is very robust in terms of the amount of data collected. The data is consistent with previous years' data for this outcome, and the assessment process is performing adequately.

**Code Assessment Process Action Title Assessment Process Action Brief Description**

N	No action required.	
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**(h) Know engineering's global societal context**

**Previous Curriculum Action Review Summary**

No Curriculum Action Review actions were suggested for outcome (h).

• A Curriculum Action Review watch item was given in 2004 and continued to 2005.

**Curriculum Review Summary**

Student performance was similar to that in 2005, but is somewhat lower than desired. The number of assessments was good this year, indicating that the curriculum shift is working

**Code Curriculum Action Title Curriculum Action Brief Description**

W	Student Performance	Student performance has not been at the desired level for consecutive years, if this continues action will be required.
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**Previous Assessment Process Action Review Summary**

From 2005, a watch and an action were seen as needed for Assessment Process Action concerning Outcome (h).

•The watch related to the shift in Outcome (h) assessments between courses.

• The action related to collecting questions for an exit examination.

**Assessment Process Review Summary**

The instruments used for assessment provided a large increase in the number of assessments, indicating that the watch can be lifted.

• The question collecting action is in progress as the exit examination was not ready for implementation in 2006.

**Code Assessment Process Action Title Assessment Process Action Brief Description**

**(i) Engage in life-long learning**

**Previous Curriculum Action Review Summary**

No action needed. The assessment results derive from Dr. Stu Kellogg's professional assessments. We are going to continue to ask him for this service but need to recognize/reward his service to us.

**Curriculum Review Summary**

The outcome score continue to remain very high with a low range.

**Code Curriculum Action Title Curriculum Action Brief Description**

N		
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**Previous Assessment Process Action Review Summary**

Recognize/reward Dr. Stu Kellogg's professional assessments service. Our program is highly dependent on him for his assessment service for outcome (i).

**Assessment Process Review Summary**

No additional action.

**Code Assessment Process Action Title Assessment Process Action Brief Description**

N		
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**(j) Know contemporary issues**

**Previous Curriculum Action Review Summary**

• The FC modules on contemporary issues remain in MET 321 but should be moved elsewhere in the curriculum.

**Curriculum Review Summary**

•The lack of data to assess (only one data set) clearly indicates that this outcome assessment process needs to be reviewed and modified.

- The instrument inventory needs to be reevaluated.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
A	Lack of data to assess outcome	This is a continuing action that needs careful attention to the number and quality of instruments to assess this outcome.

***Previous Assessment Process Action Review Summary***

- Move FC module on contemporary issues.

***Assessment Process Review Summary***

- The FC modules on contemporary issues remain in MET 321 but should be moved elsewhere in the curriculum. Since MET 321 is taught in alternate year sequence this provides for a lack of data, as is the case in this assessment cycle.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
A	Location and use of FC modules	FC modules and their utilization needs to determined.

**(k) Use engineering techniques, skills, and tools**

***Previous Curriculum Action Review Summary***

No action needed

***Curriculum Review Summary***

The outcome review score remained almost unchanged.

<i>Code</i>	<i>Curriculum Action Title</i>	<i>Curriculum Action Brief Description</i>
N		

***Previous Assessment Process Action Review Summary***

No actions are needed.

***Assessment Process Review Summary***

No actions were needed.

<i>Code</i>	<i>Assessment Process Action Title</i>	<i>Assessment Process Action Brief Description</i>
N		