

ACADEMIC ACHIEVEMENT

A Report on the 2011-2012 Assessment Cycle

Submitted to the
Northland Pioneer College Instructional Council

by the
Assessment of Student Knowledge (ASK)
Sub-committee:

Eric Bishop, Director of Information Services*

Eric Henderson , Dean of Arts and Sciences*

Dana Jolly, Faculty in Nursing

Tom Nagle, Faculty in Business

Shannon Newman, (Chair) Faculty in Developmental Services*

Michael Solomonson, Faculty in Speech Theatre*

Debra Thompson, Academic Advisor

Leslie Wasson, Director of Institutional Effectiveness

*Academy Team Member

September 2012

FIGURES and TABLES:

FIGURE 1:	NPC's General Assessment Model with 2011-12 cycle	4
TABLE 1:	Departmental Reports Received by ASK	5

APPENDICES

APPENDIX 1	The Assessment of Student of Knowledge (ASK) Subcommittee
APPENDIX 2	The Assessment of Student of Knowledge (ASK) Subcommittee revised 5-12
APPENDIX 2	General Education Student Learning Outcomes
APPENDIX 3	PLANNING DAY: Memorandum
APPENDIX 4	READING DAY Memorandum
APPENDIX 5	DIALOG DAY: Agenda and Minutes

DEPARTMENTAL REPORTS (ON ASK WEBSITE [HTTP://CIS.NPC.EDU/ASK/](http://cis.npc.edu/ask/))

Administrative Information Systems/Business
Biology
Community Education
Computer Information Systems
Cosmetology
Early Childhood Development
English
Fire Science
General Education
Humanities
Industrial Maintenance and Operations
Mathematics
Nursing
Social & Behavioral Science
The Learning Cornerstone
WACH (formerly WLD, ATO, BOC, & HQO)

During the 2011 academic year, the subcommittee met regularly via teleconference meetings, continued development of the assessment website, facilitated progress in growing the assessment of the six general education outcomes, maintained the annual departmental assessment cycle, completed two required updates of its Assessment Academy project, and revised the ASK committee configuration.

After discussion by ASK and consultation with the VP of Learning the committee decided to exit the Assessment Academy with plans to participate in the Results Forum June 2013. The project for the HLC Assessment Academy is to establish the assessment of the General Education Program. The subcommittee's proposed student learning outcomes (SLO) for the General Education (GE) program were adopted by IC in December 2008 (appendix 2). ASK has continued to expand assessment of the six learning outcomes of general education. Assessment of effective communication and critical thinking continued by the English, Humanities, and Social and Behavioral Sciences departments. Social and Behavioral Sciences piloted a pre/post test quantitative reasoning quiz. Mathematics further defined components of quantitative reasoning and developed a specific plan to begin assessing Fall 2012. Mathematics also piloted an assessment of Diversity and Information Literacy. Biology developed a plan to assess Scientific Inquiry through student lab reports. Humanities and English are exploring future assessments of Information Literacy and Social and Behavioral Sciences is exploring assessment of Diversity option. ASK is very appreciative of those departments assisting with the General Education Assessment for the HLC Assessment Academy Project.

The assessment process at NPC begins with the development of assessment tools. Each department is asked to discuss & plan an Assessment of Student Learning project during October on "Planning Day." ASK decided to again request each department to meet, review their report from the previous cycle, discuss, and develop a plan. ASK requested each department to submit a brief summary of their plan. Assessment instruments are collected according to their plan. Departmental members evaluate the student work collected during following spring semester. Most of the evaluation takes place on "Reading Day," when departmental members collectively read and discuss student work. Departments have about a month to then write and submit a report to ASK. This is followed by "Dialog Day." On Dialog Day faculty and other interested members of the college community meet to discuss the results derived from the individual departments and to share ideas about revising assessment tools and implementing curricular changes.

Figure 1 displays the general model for assessment along with the 2010-2011 dates for Reading Day and Dialog Day. This information was included in the Planning Day memo produced in Appendix 3. Materials related to Reading Day are in Appendix 4.

Each assessment report was read by at least two members of the ASK subcommittee (Table 1). In addition, copies of the report were posted on the ASK website so that those attending Dialog Day could review any or all submitted

Dialog Day was well attended and resulted in productive discussion of learning outcomes with faculty members from across the college. ASK decided to direct discussion toward “closing the loop” asking participants to reflect on the impact assessment is having in classrooms and programs. The Dialog Day agenda and a report on the Dialog Day conversations are included in Appendix 5.

The ASK subcommittee notes that Northland Pioneer College continues to make progress in assessment. Departmental reports are generally focused and substantive, providing a baseline for developing strategies to improve student learning. Additional Departments submitted reports this year and contact was made with several departments not submitting this year to begin plans for the 2112-12 cycle.

The ASK subcommittee met in September and set the calendar for assessment activities for the next academic year. The assessment cycle will continue according to the following schedule:

Planning Day – September scheduled individually by departments with plan outlines due to ASK chair by October 15th.

Reading Day – February 10, 2012

Departmental Reports due by March 23, 2012

Dialogue Day – April 13, 2012 9:30 – 12:00 at SCC

¹ There are five levels:

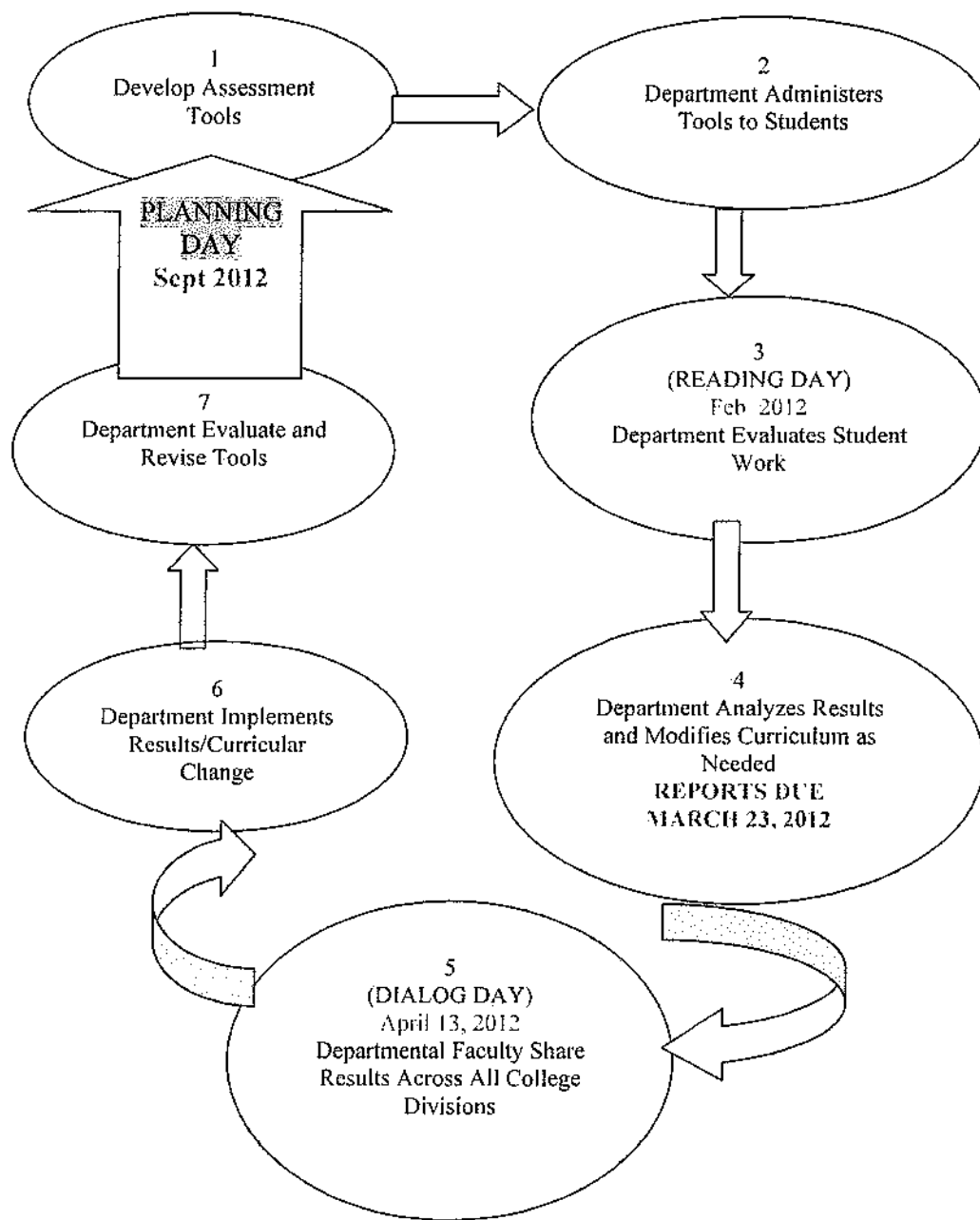
Level I: The department assessment processes have been detailed and developed for use by faculty.

Level II: Data collection has been implemented.

Level III: Faculty, instructional leaders, and deans have analyzed the data.

Level IV: Faculty, instructional leaders, and deans have used the data to improve student academic achievement.

Level V: Data has been used to improve the assessment process.



Department reports:	Department Chair	Planning Day Report	Reading Day Scheduled	Departmental Report Received
AIS/BUS	Hunter, Janet	x	x	x
BIO	Smith, David	2/10 11-12:30 x7479	x	x
Chemistry	Hodgkins, Tom			
CIS	Seely, Doug	x	x	x
Community Education	Aceves, Loylin			x
Cosmetology	Robins, Charlotte	x	X – regrouping	Planning for next year
ECD	Endfield, Claude	x	x	x
EDU	Henderson, Eric			
EMT	Browne-Wagner, Lynn			
ENL	Goulet, Ron		x	x
FRS	Bishop, Stuart			Checked in & learning the process
General Education	Henderson, Eric			Will be done summer 12
Geology	Porch, Randy	response re Gen Ed, but no plan		
Humanities	Solomonson, Mike	x	X	x
IMO/[ITP]	Keith, Kenny	x	x	x
MAT	Mack, Gary		x	X Gen Ed plan submitted
Med Assistant	Hanson, Karen			
NUR	Erdman, Peg Hodgson, Ordina	X	X	x
Soc/ Behavioral Sciences	Hassard, Andrew	In progress	X	X part I submitted – pre/post sci & math reasoning Waiting on crit thinking & communication results from reading papers
TLC	Jackson, Rickey	X	X	x
WACH (WLD ATO BOC, HQO)	Casey, Curtis	X (WLD)	X	x

April 17, 2008 - Revised

The Assessment of Student of Knowledge (ASK) Subcommittee

The Assessment of Student of Knowledge (ASK) Subcommittee shall review, monitor and recommend improvements in the assessment of student learning and student knowledge to the Instructional Council.

Meetings: The ASK Subcommittee shall meet at least twice a semester, electing its chair at the beginning of the fall academic term.

Membership:

The Committee shall be comprised of

- the five members of NPC's Higher Learning Commission Assessment Academy Team, appointed by the President
- a faculty member from each division that is not represented on the academy team, appointed by the faculty association
- an academic advisor appointed by the Vice President for Student Services
- a student appointed by the Student Government Association

Committee Service Length:

Members of the assessment academy team shall serve for four years (the duration of assessment academy). Other members shall serve two year terms.

Responsibilities:

1. Review general education and other curricular outcomes;
2. Review the procedures and plans used to assess of student knowledge by all departments and programs in the college;
3. Coordinate and support the annual assessment of student knowledge by departments and programs;
4. Develop and implement assessments of student knowledge that involve multiple departments and programs, especially in the area of general education and the modality of instruction.
5. Undertake, as directed by the Instructional Council, other projects related to the assessment of student knowledge;
6. Report to the Instructional Council at least once every semester
7. Provide an annual report to the Instructional Council on recommendations and findings related to the assessment of student learning and knowledge.

The Assessment of Student of Knowledge (ASK) Subcommittee

The Assessment of Student of Knowledge (ASK) Subcommittee shall review, monitor and recommend improvements in the assessment of student learning and student knowledge to the Instructional Council.

Meetings:

The ASK Subcommittee shall meet at least twice a semester. Approved committee meeting minutes and reports will be submitted to the NPC archives.

Membership:

The Committee shall be comprised of

- the chair, appointed by the Vice President of Learning and Student Services and ratified by a vote of Instructional Council, to serve a 2 year term. The chair may be re-appointed for an additional term. The chair will receive a 3 load reduction per semester.
- a vice-chair, appointed by the Vice President of Learning and Student Services and ratified by a vote of Instructional Council, to serve a 2 year term.
- three faculty members from the Division of Arts and Sciences appointed by the Committee Chair.
- Two faculty members from the Division of Career and Technical Education appointed by Committee Chair. At least one of faculty members from this division shall teach at least one general education course on a regular basis.
- One faculty member from the Division of Nursing and Allied Health appointed by Committee Chair.
- an academic advisor appointed by the chair.

Committee Service Length:

Beginning in the 2012-2013 academic year, two of the faculty members from Arts and Sciences and one from Career and Technical Education shall serve a three year terms. Other faculty members shall serve a two-year term. Subsequent terms will be for two years. At least two of faculty members from this division shall teach at least one general education course on a regular basis.

Members may be re-appointed.

Appointment of the ASK chair and vice chair shall be made and ratified during the spring semester prior to the academic year during which the term begins.

Responsibilities:

1. Review general education and other curricular outcomes.
2. Review the procedures and plans used to assess of student knowledge by all departments and programs in the college
3. Coordinate and support the annual assessment of student knowledge by departments and programs.
4. Develop and implement assessments of student knowledge that involve multiple departments and programs, especially in the area of general education and the modality of instruction.

Approved by Instructional Council 4/11/12

5. Undertake, as directed by the Instructional Council, other projects related to the assessment of student knowledge.
6. Report to the Instructional Council at least two times every semester.
7. Provide copies of approved minutes, reports and recommendations to NPC Archives.
8. Provide an annual report to the Instructional Council on recommendations and findings related to the assessment of student learning and knowledge.

MEMORANDUM

October 5, 2011

To: All NPC Faculty
From: ASK Committee
Cc: Mark Vest, Vice President for Learning and Student Services
Deans & Assistants
Re: Planning Day

Last year, the ASK committee approached Planning Day differently. It seemed to work and we all appreciate one less big meeting. Instead of a large general meeting, we are again asking each department to meet separately, review your department's assessment report from last year, and develop an assessment plan for 2011-12. There are some questions on the below to help guide your discussion and outline your plan. Finally, please send a brief outline/summary of the department's 2011-12 plan for Assessment of Student Learning. Submit the summary to Shannon Newman, chair of the ASK committee within the first week of November.

The HLC Assessment Academy project of assessing General Education continues and your help is needed. Assessment of Critical Thinking/Critical Inquiry and Effective Communication are continuing. Last year we began assessing the quantitative reasoning and scientific inquiry outcomes. Social & Behavioral Sciences are helping with a pre & post test addressing; we need some assessment from other areas. This year we need to begin implementing assessment of Information Literacy and Diversity; what ideas do you have as to how they might be assessed? Please take a moment to review the NPC General Education Student Learning Outcome below and consider what assignments, activities, exam questions, etc. you may already utilize or easily embed in your courses which could assess the outcome.

Committee members are available to assist with assessment planning during departmental meetings or at other times.

Last year's departmental reports can be accessed with the following link.
http://cis.npc.edu/ask/Draft_Departmental_Assessment_Reports.php

ASK Committee:

Shannon Newman(chair), Tom Nagle, Dana Jolly, Mike Solomonson, Eric Bishop, Debra Thompson, Eric Henderson

General Education at NPC

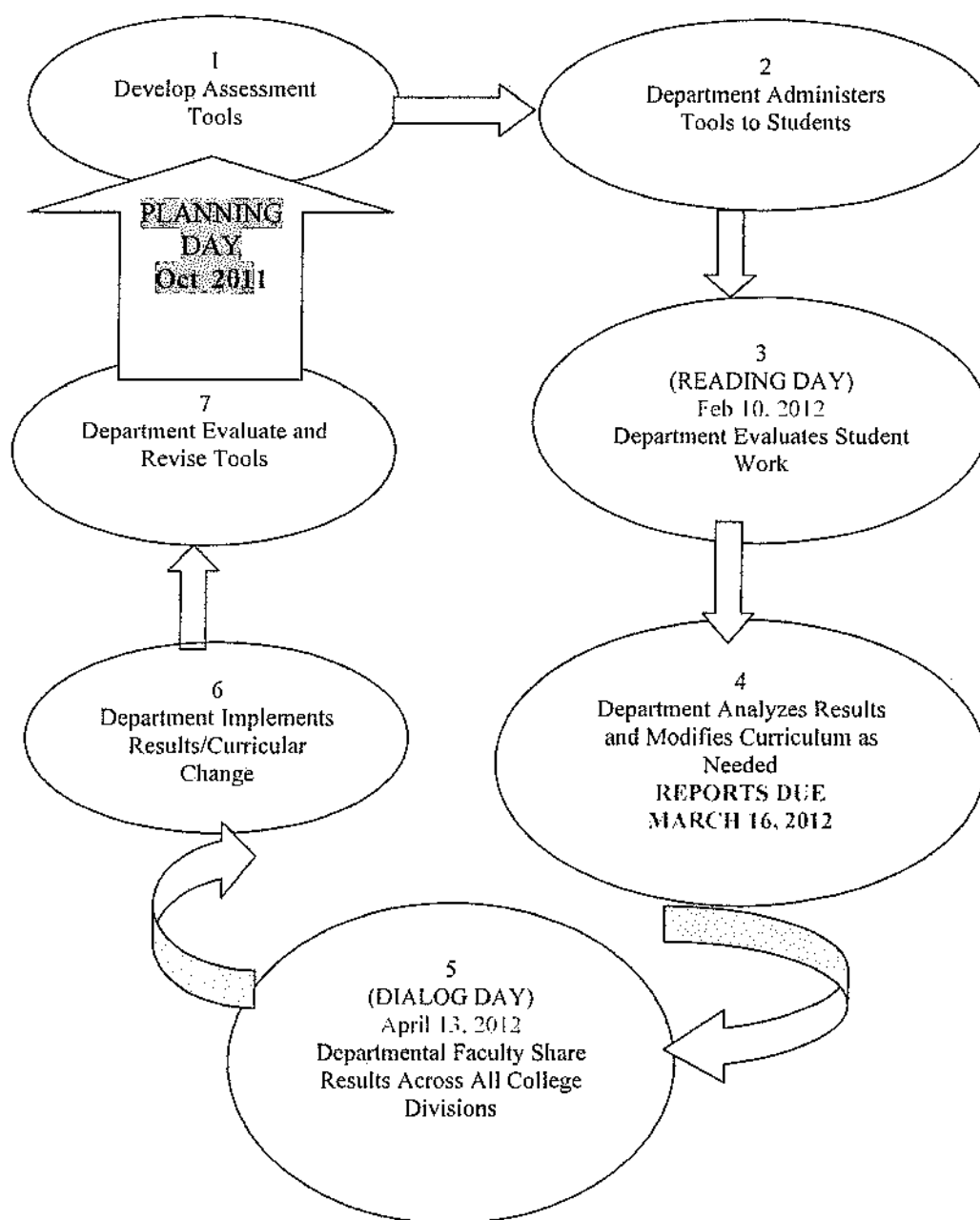
Mission Statement: "The NPC general education program promotes skills in critical inquiry, communication and an understanding of diversity that supports a life-long intellectual engagement in cultures and the natural world."

- NPC 1 - Critical Thinking / Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.
- NPC 2 - Effective Communication: Students will develop thoughtful and precise verbal and written skills across a variety of social venues.
- NPC 3 - Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.
- NPC 4 - Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.
- NPC 5 - Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.
- NPC 6 - Diversity: Students will develop knowledge of diverse cultural and natural environments.

Adopted by the Instructional Council of Northland Pioneer College (December 12, 2008)
 The ASK committee strongly urges collaboration of departmental members in all phases of data collection, analysis, and writing. Below are some questions to help guide preparation of the assessment plan for your department.

1. What recommendations or next steps were identified in last year's assessment report?
2. What is one question (or two) dealing with student learning the department will explore this year?
3. Does this question relate to any of the General Education Outcomes? If so, please explain which outcome and how?
4. What data will be collected and how?
5. How will the data be analyzed and by whom?
6. What will be done with the results of the analysis?

ASSESSMENT CYCLE for 2011-2012 ACADEMIC YEAR



MEMORANDUM
January 25, 2012

To: All NPC Faculty
From: ASK Committee
Cc: Mark Vest, Vice President for Learning and Student Services
Deans & Staff
Re: Reading Day

First off, let us thank you for past participation and responsiveness to these email missives. Because of you slogging through my emails and following through with annual assessment reports we have been able to minimize the need to schedule too many big get-togethers, training sessions, and so forth. Last year we had 81% participation with final reports and this year we are hoping to inspire the last few stragglers. When I go to HLC events and participate in the Assessment Academy, I come out with the realization NPC is doing fairly well with assessment of student learning. If it applies – Pat yourself on the back! For those who may be somewhat new or just now paying attention regarding assessment, this email includes some additional information to explain why we do this and some of the history. Please slog onward.

Always, the ASK committee is willing to discuss, schedule consultations, provide feedback and so forth related to assessment upon request.

It is that time again – Reading Day! The ASK committee scheduled it for Feb. 10th. Reading day is the time when each department or program gets together to review, analyze and discuss the data they have gathered according to their assessment plan. Hopefully, you have a plan to follow. If not, now is the time to get organized. With the yearly reporting schedule ASK realizes you may not be completing an entire assessment cycle each year. We do need a report from each department sharing progress, findings, conclusions, results of what has been accomplished in regards to assessment submitted by March 16th and shared at Dialogue Day April 13th.

ASK needs an update as to when and where (or what means) each department will meet for Reading Day. Please decide and send a brief email to your dean and shannon.newman@npc.edu.

Most importantly, Assessment of Student Learning provides the opportunity to explore and delve into what we care about – student learning. Secondly, it is a necessary part of the accreditation process. The results you provide are a requirement of the portfolio NPC will need to present to the Higher Learning Commission.

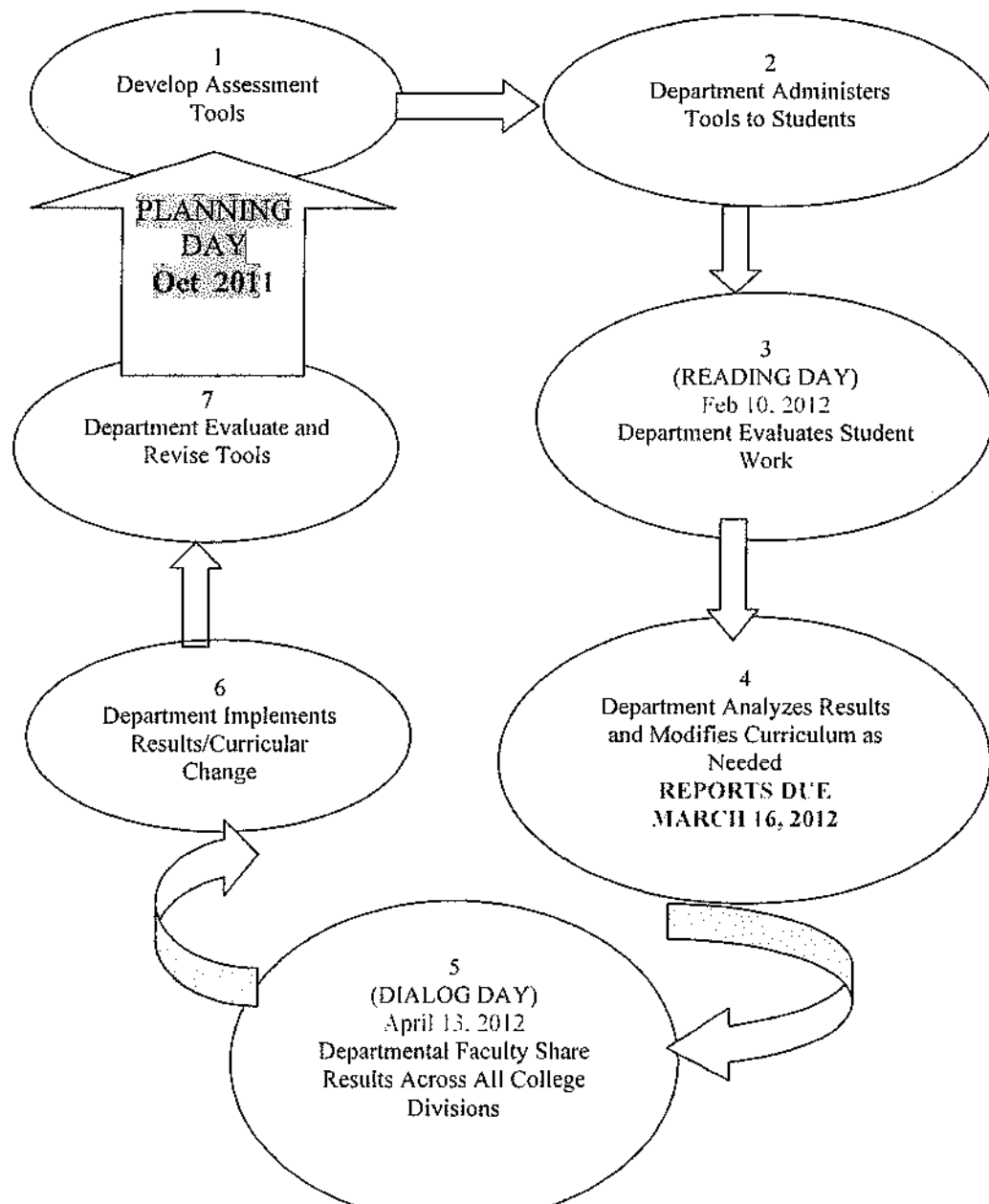
Also, necessary is continued progress with our Assessment Academy Project: Assessment of General Education. NPC participating in the Assessment Academy allowed for the area of assessment to be set aside during our recent accreditation process. Progress and reaching a point where the assessment of the General Education Program becomes a consistent and ongoing process is part of maintaining the status of having assessment set aside. (The stick does loom out there - HLC could actually come back to evaluate assessment if we stop the project.)

Departments which include general education courses (those courses which meet the General Education Requirements for degrees) have been asked to develop plans to assess student learning regarding the Six General Education Outcomes adopted by Instructional Council in 2008. Those outcomes are listed below for your reference. Not everything needs to be assessed all at once, but data needs to be specific to individual outcomes and the plan needs to be comprehensive over a period of time.

Last year's departmental reports can be accessed with the following link.
http://cis.npc.edu/ask/Draft_Departmental_Assessment_Reports.php

ASK Committee:

Shannon Newman (chair), Eric Henderson, Tom Nagle, Dana Jolly, Mike Solomonson, Eric Bishop, Debra Thompson



General Education Student Learning Outcomes

MISSION STATEMENT:

"The NPC general education program promotes skills in critical inquiry, communication and an understanding of diversity that supports a life-long intellectual engagement in cultures and the natural world."

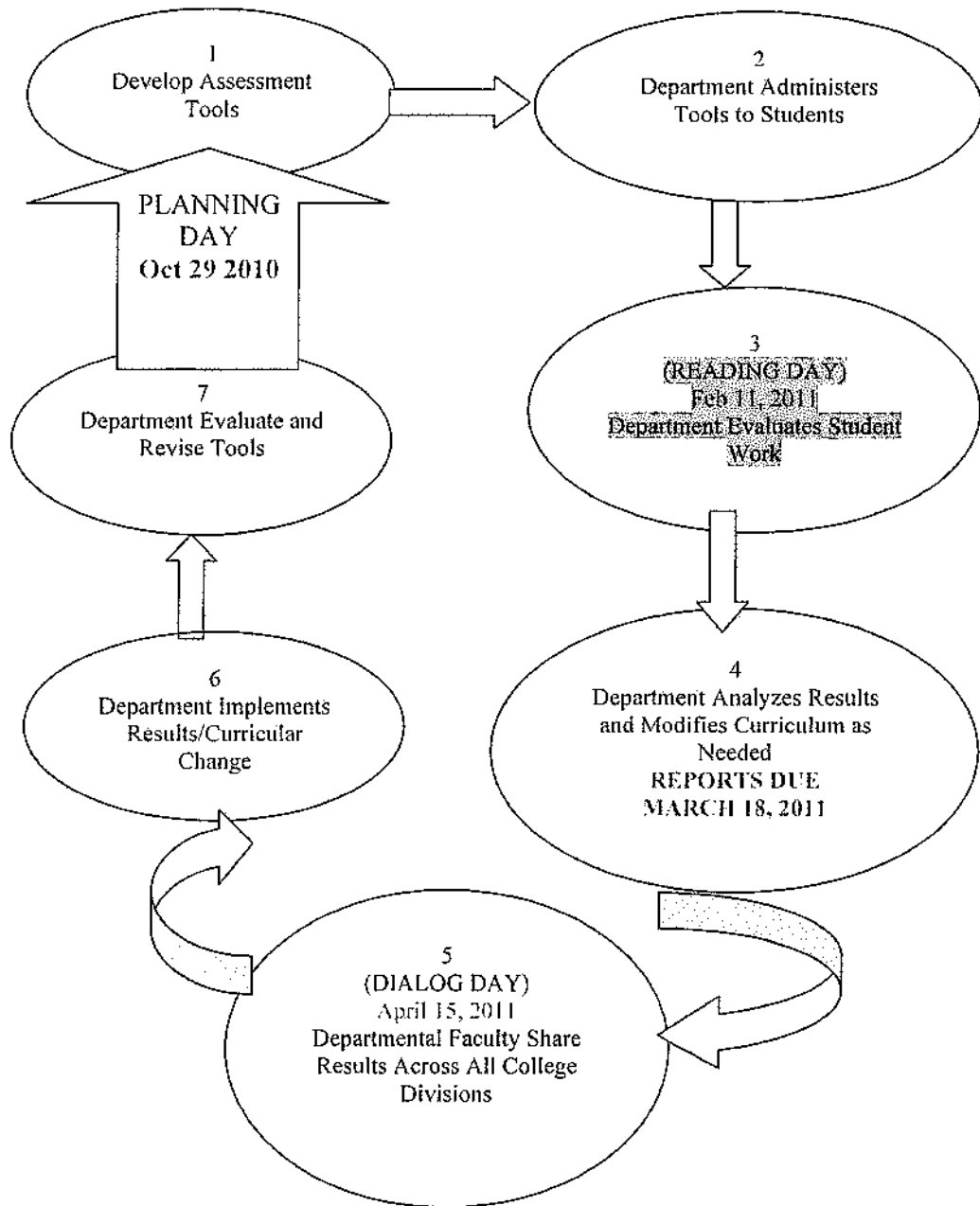
- NPC 1 - Critical Thinking / Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.
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- NPC 6 – Diversity: Students will develop knowledge of diverse cultural and natural environments.

Adopted by Instructional Council December 12, 2008

The ASK committee strongly urges collaboration of departmental members in all phases of data collection, analysis, and writing. Below are some questions to help guide preparation of the assessment report for your department.

1. What is one question (or two) dealing with student learning did the department explore this year?
2. Does this question relate to any of the General Education Outcomes? If so, please explain which outcome and how?
3. What data was collected and how?
4. How was the data be analyzed and by whom?
5. What did you learn from the data?
6. What will be done with the results of the analysis?
7. What thoughts does the department have for next steps in their assessment of student learning?

ASSESSMENT CYCLE for 2010-2011 ACADEMIC YEAR



Dialog Day Agenda

April 15, 2012 SCC PAC 9:30 am to 12:00 pm.

9:30 – 10:00 am General Session:

Opening Comments

Higher Learning Commission Assessment Academy Update
Assessment of General Education

Overview of Assessment Procedures at NPC
Assessment of Student Knowledge Subcommittee of Instructional Council
Course level assessment

Plan for the Day

10:00 – 10:10 Break

10:10 - 11:10 Small Group Discussions of this year's reports -- Breakouts

Break out 1: AIS/BUS, CHM, Comm Ed, ECD, EMT, FRS, GEO, IMO, NUR, TLC
Henderson, Nagle – need to identify a note taker

Break out 2: BIO, CIS, COS, EDU, ENL, HUM, MAT, SBS, WACH
Solomonson, Jolly – need to identify a note taker

11:20 – 12:00 General meeting
Reports from small Breakouts
General Discussion

GENERAL EDUCATION MISSION STATEMENT:

"The NPC general education program promotes skills in critical inquiry, communication and an understanding of diversity that supports a life-long intellectual engagement in cultures and the natural world."

NPC 1 - Critical Thinking / Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.

NPC 2 – Effective Communication: Students will develop thoughtful and precise verbal and written skills across a variety of social venues.

NPC 3 – Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.

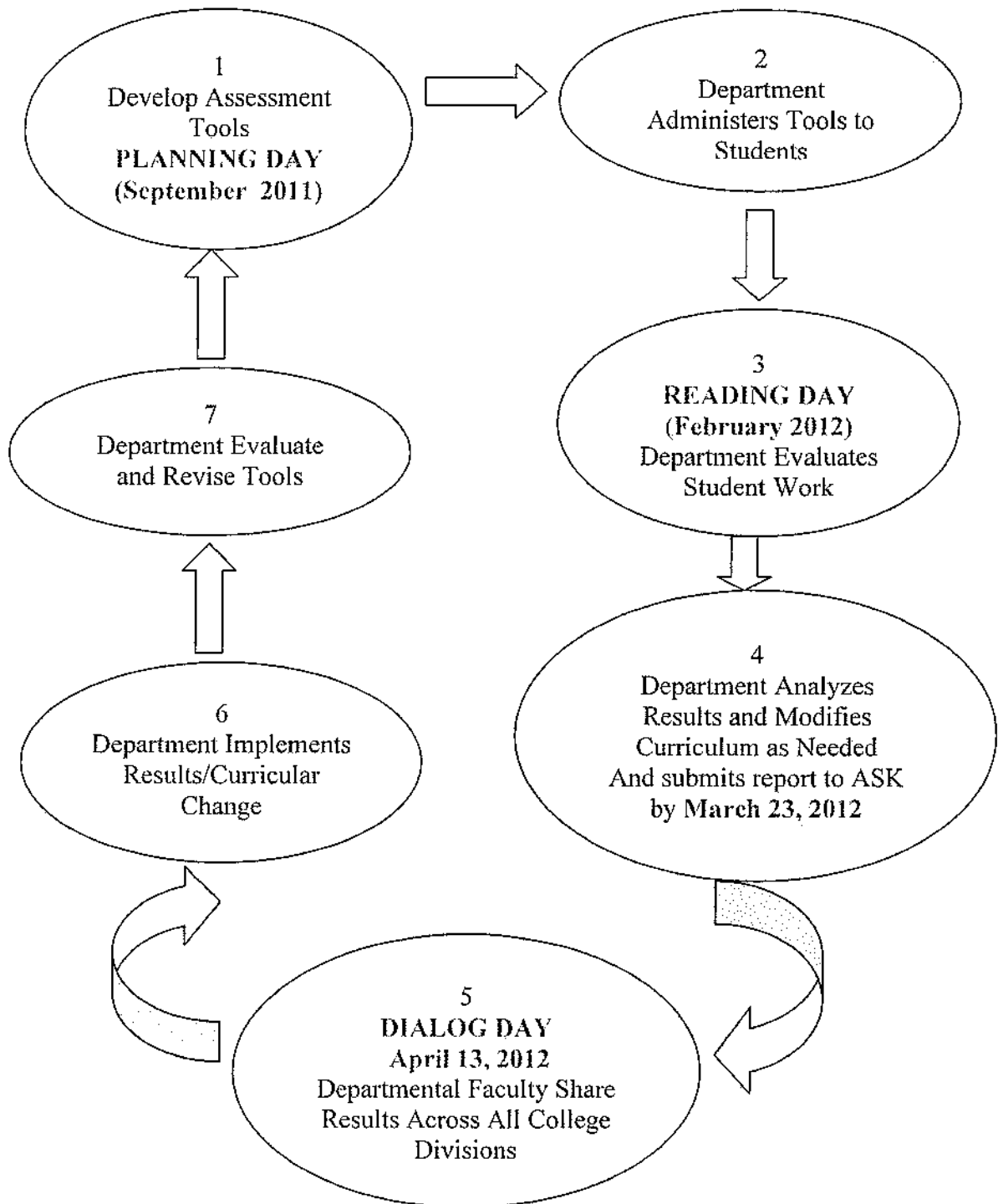
NPC 4 – Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.

NPC 5 – Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.

NPC 6 – Diversity: Students will develop knowledge of diverse cultural and natural environments.

Adopted by the Instructional Council of Northland Pioneer College (December 12, 2008)

NPC's GENERAL ASSESSMENT MODEL
2011-2012



Discussion Questions

1. What were the most significant or interesting findings from 2011-12 cycle of your assessment of student learning?
2. What changes were or will be made to impact student learning as a result of the assessment findings?
3. What were the challenges or problems you encountered?
4. What ideas do you have to address the challenges or problems?
5. Where are you in the assessment cycle? See the cycle below. (It is not necessary to complete an entire cycle each year.)
6. What are the next steps for assessment in the department?

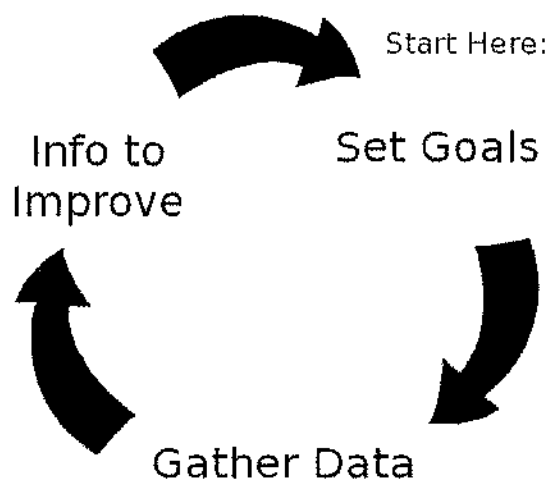
The Assessment Process

There are three phases to the overall assessment process:

1. Articulate your goals for student learning
2. Gather evidence about how well students are meeting your established goals
3. Use this information to improve student learning

The third phase is often referred to as "closing the loop", however you will find that it is actually more of a spiral. Upon completing the third phase, you repeat the process starting over with phase one with a new goal or to implement changes that may improve the results of the original goal for the next iteration.

This process can also be represented with a simple graphic:



Dialog Day
April 13, 2012
SCC – PAC

Attendees: Loyelin Aceves, Stuart Bishop, Lynn Browne-Wagner, Curtis Casey, Janice Cortina, Barry Graham, Karen Hanson, Andrew Hassard, Eric Henderson, Thomas Hodgkins, Janet Hunter, Rickey Jackson, Dana Jolly, Ryan Jones, Kenny Keith, Gary Mack, Tom Nagle, Shannon Newman, Russell Ott, Randy Porch, Ryan Rademacher, Charlotte Roberts, Doug Seely, David Smith, Mike Solomonson, Carol Stewart, Mark Vest, Leslie Wasson, Bobette Welch (note taker)

Mark Vest thanked everyone for attending the meeting. Mark and Dr. Leslie Wasson have started working on a change request with the Higher Learning Commission (HLC) to offer distance education degrees. They are doing it not because they want to but because the commission changed their rules. We received a 2—page document to respond to with many of the last questions dealing with assessment. How do we do everything to with assessment? It's important for your own departments and students and, on a broader scale, with the college. We're doing evaluations of things we've already done and whether they are successful or not. It's been a challenge. Earlier this week we looked at two different survey tools with broad applications. We'll probably go with Qualtrics, since it's based on post-secondary education systems. We will have a lot of opportunities to gather data we haven't been able to before. It has the capability to move all of our student evaluations into it. It will help answer what kind of value-added do students get by going here. It also contains many types of reporting tools and is easy to use.

Shannon Newman told the group that assessment is important mostly for our students. We want to find out what our students are learning – sometimes they're learning other things. Are our improvements helping? Are they learning what we want them to learn? We moved from a 2-year to a 1-year cycle. Departments report every year and are at different stages. What do you want to know? How are you going to assess that? You can go in different directions. Most important, are we making the changes and what are those changes we are making?

We chose the general education project to work on for the HLC Academy. General education is the group of transfer courses students all take. The six outcomes are the things that students learn in general education classes. In every department that has one of those courses, they are assessing one or more of these outcomes. You aren't going to assess all of the six outcomes but choosing just one or two at a time to assess. We can report to HLC with the data we come up with from those course assessments.

Our 1-year cycle starts in the fall. We have a Planning Day to decide where we are in the cycle and what we are doing this year. We get back together in February on Reading Day. We then generate a report and come to share that on Dialog Day and hear what other departments are doing. We talk to our colleagues. All the information is gathered and presented to Instructional Council (IC). Our plan for today is to break out into two groups. All the departments are listed, but we don't have reports from all of them. We asked you to bring two representatives so one of you can join each group.

Eric Henderson explained that everyone in the room is involved in the overall general education of our students. Some departments have produced really nice data and embedded information into non-general education courses, so every course has some component of general education and specific

content-related outcomes in each of these classes. If you are stuck, we have an institutional research director, Dr. Leslie Wasson, who may be able to figure out how to help you measure.

Question: Are we staying in the Assessment Academy? Shannon said we extended our part in the AA for one year. Eric said we did very well during the site visit. Even though we were in the academy, we actually got commendations. We are doing very well due to efforts on Dialog Day. He thinks they were very impressed by that and the reports. If we continue getting together and talking about it, we are doing well. Shannon agreed and added we have been doing a great job because we care about our students.

Break-out Session 1: AIS/BIS, CHM, Community Education, ECD, EMT, FRS, GEO, IMO, NUR, TLC
Facilitators – Eric Henderson and Tom Nagle

Break-out Session 1 notes

Eric said normally we have free-form discussion broadly looking at some of these discussion questions. We ask the representative from each department to explain what they have done for assessment. We want contributions from everyone. This is one of the places where faculty get together and talk about what they are doing to help students learn what they need to learn. We'll start with TLC because it's the foundation and covers all programs and is the entry into college for many of our students.

TLC – Janice Cortina

We're working on three projects. One is ongoing from earlier looking at the TLC066-Fractions course. By the time students get to algebra, they forget their fractions. We tried to get them to use fractions in problem solving. We went to 8-week classes and had an overall higher completion rate. We really saw significant change and it helped them to come twice a week. We have to encourage them and build foundations with them. We'll continue 8-week classes. Now we're looking at success rates of students moving from developmental to regular courses. Some students were successful. We are very concerned with our students. In our labs, we also did more subject level grouping, having English and Math come separately.

Gary Mack (MAT) said when students get into trouble in higher math classes, 9 out of 10 times it has something to do with fractions. Kenny Keith (IMO) said many instructors think students already know their math, but they don't. Lynn Browne-Wagner (EMT) said they hand out multiplication tables to their students because they don't know what 5×9 is. She asked Jan if they see certain age groups having more trouble than others. Jan said no, but the younger ones don't come to class as often as they should. Lynn said they do placement tests and students pass, but in class they can't read or do math. Stuart Bishop (AIS/FRS) said maybe we need to make the placement scores more consistent.

Eric talked about the Placement Committee of IC and how they will be working on whether to recommend adding placement testing to more courses.

AIS/CIS – Janet Hunter

Right now we don't have specific placement scores, and we want to see if we need scores for all classes. We have students who don't seem to be able to read and write. Either they haven't taken the TLC courses they should have or they've decided to go ahead and take their classes and skip the

TLC courses. We hope that once the Placement Committee goes through their research, maybe we will learn more about whether to use placement scores or not. We also see students who can't do fractions. Next year, we will be doing pre- and post-testing (and gathering data) for introductory and advanced courses to see how students do in lower level courses vs. higher level courses.

Thomas Hodgkins said his students don't understand the question to begin with. Eric said there's a reading score to get into MAT109. Gary said they ended up bumping the score up. Lynn said their students are doing the minimum to get through because they just want a job and EMT is a relatively short program. The EMT test passing rate was 93% and now it's at 66%.

GLG – Randy Porch

He has been dealing with identification of materials using physical properties. He's redesigned the exams to deal more specifically with the properties. So exam scores dropped. He's looking at the scores on the final because the students aren't "getting it." He wants students to go beyond just memorizing answers.

CHM – Thomas Hodgkins

He's been dropped into the assessment cycle. The American Chemistry Society has exams for these courses, by level of course. Each question on the exam has a difficulty index. He will be checking selected questions and will put those on his final exam to see how his students do. From the difficulty rating, he can see how his students compare to the national norm. Eventually, he might want to give the entire test as a final exam. He also gave the Toledo Placement Exam at the beginning of this semester. Students didn't do as well as students nationally. He may also use some of those questions on the final.

IMO – Kenny Keith

This year he's used Survey Monkey hoping to reach more students. He's going to re-do the survey for next year to compare. The data from question 5 on technology equipment showed that more time needs to be spent on labs. He wants to get a better-built survey. Students were getting mixed up with the book and the CD and getting confused. Survey questions that ask for comments gave him more data.

NUR – Carol Stewart

For 2-3 years now, they've been working on critical thinking within Nursing. They haven't had a lot of change in the scores. Oral exams have been given. You would think the students would feel like they are being put on the spot, but they liked that part because it tells them how they are doing. They are testing the ability to research a question that concerns the student. The student researches to find out about the data behind the way things are done. Our scores haven't dropped – we have maintained the same standards. We do tend to take the higher scores for entrance into the program. We know that employers say nurses need to have math, and we have questions about that on every test. We give students materials to work on during the summer. They don't get actual credit for the summer work, but it gives them lots of information they need to know to be successful in regular semester courses.

Community Education (CE) – Loyelin Aceves

Testing is not used in these courses, so this assessment was a challenge. Loyelin chose a gardening class that people take over and over. She contacted Johns Hopkins Center because they are trying to educate people on fruits and vegetables and their benefits. She sent a survey to the students. In Whiteriver, 20 small gardens were started at homes. An old greenhouse was also found and refurbished, and vegetables grown there were sold. It was good to know that we are contributing to the community.

Eric said a few years ago the president of the college was talking about community gardens. He wonders if this CE effort has led to any progress in improving nutrition in the smaller communities. Lynn suggested that Loyelin talk to the hospital staff who work with nutrition and diabetes to see if there have been any improvements. Loyelin said they have had more interest in gardening-related areas.

ECD – Eric Henderson (for Claude Endfield)

Claude Endfield couldn't attend today, but she did send a brief report. They are continuing with the same project they've done for several years. With a new faculty member coming on board this fall, that may change.

EMT – Lynn Browne-Wagner

Lynn said the EMT program has already been discussed today, and now she has four new ideas to work on.

Carol had a final comment about placement scores. They gave a test for progression and noticed this last cycle that the conversion scores are a lot lower than they used to be (when compared to a national norm). They may want to raise the level of scores. These students previously would have been considered excellent, but now they are not looking as excellent. They're going to look at this and try to figure out why it's changed.

Break-out Session 2: BIO, CIS, COS, EDU, ENL, HUM, MAT, SBS, WACH
Facilitators – Mike Solomonson and Dana Jolly

CIS – Doug Seely

CIS focused on introductory course CIS 105. Recent revisions have moved to utilizing an online textbook available to students through Moodle. The publisher is continually updating content weekly. CIS assessed student reaction to the online tools and text. Overall 65% of students said the online text was as good as or better than a physical text.

WACH – Curtis Casey

The focus in WACH programs has been employability skills including resume, portfolio, interview training, etc. The assessment was done by instructors with a survey completed by students. The response from students was overwhelmingly positive and students felt the training was helpful.

Industry & employment partners were surveyed for comments and they state student applicants were well-prepared. The goal for the future is to work on electronic portfolios and requiring those for graduation. A suggestion from the group was to consider a 1 credit professional development course for employability to be required in their degrees.

ENL – Ryan Jones & Ryan Rademacher

Did and assessment of research papers from ENL 101 & 102 and used a rubric to assess critical thinking and effective communication. There was a 70-89% success range. As a result of the assessment the English department is look at a goal for improvement of assessing sources for research papers and to improve communication with adjunct and dual enrollment instructors.

SBS – Andrew Hassard

SBS continued the critical writing assessment. They are also working on an assessment of quantitative reasoning using a 20 question pre & post quiz administered through moodle. There has been some difficulty accurate measurement for the test and they are making improvements to the questions. They are still gathering enough responses to have a sufficiently large sample. A future consideration is to require students to include a graph and/or data chart in their papers.

HUM – Mike Solomonson

They again used their rubric for critiques of critical writhing assessment. Next year students will be required to use and cite sources. 84% were at a C or better success rate. This is an improvement from the previous year.

BIO – David Smith & Russell Ott

They analyzed results of final exams to determine retention of learning from BIO181 as students move to subsequent coursework. The exam has undergone additional revisions and they are creating a baseline. To address the general education outcome of scientific inquiry, next year the plan is to assess student lab reports for understanding of scientific inquiry & method.

COS – Charlotte Roberts

Their assessment plan was to gather data from a new course, but that course was delayed in approval and implementation. The course will start F12 and be assessed next year. The back-up plan to review data from state exams was hindered by not having access to the database. Several of their students placed well in the Skills Competition.

MAT – Barry Graham & Gary Mack

The math department chose to assess both Information Literacy and Diversity by giving MAT 142 & 152 students an assignment to compile a list of 10 diverse mathematicians and a brief summary of each. The results were satisfactory, but next time recommendations are to provide more emphasis on the need for diversity, specific instructions to include citations and utilize a variety of sources. The average scores were 70% and 75% for the classes given the assignment. Only 7 of 30 students included a citation page.

Another focus for the math department in assessment this year was to develop a plan to assess the general education outcome of quantitative reasoning. The plan is to assess MAT 105 & 142 next year with respective 10 multiple choice questions targeting the 5 areas of skills they identified: modeling, problem solving, interpreting data, computation, logical reasoning.

Assessment of Student Knowledge

AIS/BUS Report

November 3, 2011

Updated April 13, 2012

Janet Hunter, Ph. D., Chair

Assessment Activities, 2011-2012

Assessment activities for the current academic year (2011-2012) will focus on evaluation of student mastery at two levels of coursework provided by the AIS department; assessment will also evaluate two levels of coursework provided by the BUS department. The courses to be evaluated include AIS 102 Business Grammar and AIS 112 Proofreading as representative of lower level AIS coursework. AIS 170 Business Communication was chosen as the representative course for second year AIS students. We will also assess AIS 123 Vocabulary for the Medical Office as it is a foundation course for students focusing on training in medical office and medical transcription. Business courses to be evaluated include BUS 100 Introduction to Business as a lower level course and BUS 140 as a higher year course. BUS 140 is also a transfer course, thus will provide some indication as to student learning in a transfer level course.

The evaluation will consist of pre- and post-tests, which will provide statistics on the increase in student knowledge due to course coverage. Data were collected beginning in Spring 2011 semester. Data was also collected for the Summer 2011 session and Fall 2011 semester. This data is expected to supply a sufficient number of scores in each course to provide relevant data. The statistical results will be reviewed to help the department faculty determine whether the course is providing appropriate learning activities and coverage to develop student knowledge of the course material.

AIS and BUS faculty are concerned that some students entering AIS/BUS classes lack the reading skills that are needed to successfully complete our courses. Adding prerequisite reading and writing scores (using Compass or Asset testing) was discussed, but will be withheld until the NPC Placement Committee has completed assessment of student success in Career and

Technical Education courses (including AIS and BUS). The Placement Committee is scheduled to complete their review in the academic year 2012-13. After receipt of the results of the Placement Committee analysis, AIS and BUS faculty will determine the need for additional course prerequisites.

Continuing Revisions to AIS and BUS Degree and Certificate Programs

As was indicated in the Assessment Report for 2009-10, the Administrative Information Services (AIS) and Business (BUS) departments have been working on revision and updating of department programs and course offerings. The revised programs are currently being submitted to the Curriculum Committee for approval and are expected to be effective Fall 2013.

Proposed Combination of AIS and BUS Departments

The Departments of Administrative Information Services and Business will be combined into one Department of Business. This will allow potential employers a clearer concept of what graduates of NPC Business programs have studied and the skills that they have mastered. As noted above, some of the current areas of specialization will be eliminated or combined into new areas of specialization, which will provide a more current and updated approach for students pursuing careers in business or other organizational structures.

Summary of Proposed Changes to Areas of Specialization in BUS

The Business Department will consolidate the five areas of specialization currently offered into four areas of specialization, with three Certificates of Proficiency that flow into each of the four areas. Thus, students will be able to complete a Certificate of Proficiency and continue on to complete the Certificate of Applied Science (C.A.S.)¹ and the Associate of Applied Science (A.A.S.) degree with a seamless flow towards the degree. Table 1 provides a list of the current areas of specialization and certificates of proficiency offered by the Business Department. In addition to the revisions to the areas of specialization, Business faculty have developed three new courses —entrepreneurship, retail practices and policies, and organizational leadership—that will enhance and provide the signature courses for three of the revised areas of specialization.

Table 1

List of Current and Proposed Areas of Specialization and Certificates of Proficiency offered by the Business Department*

Current Areas of Specialization	Proposed Areas of Specialization
<i>Associate of Applied Science in Business Areas of Specialization</i>	
General Business Management	Retail management

¹ The Certificate of Applied Science required 6 credits in Math and English, in addition to 30 credits from the Business core courses listed in the area of specialization.

Public Administration	Organizational Leadership
Small Business Management	Entrepreneurship
Native American Enterprise	
Accounting	Accounting
Current Certificates of Proficiency	Proposed Certificates of Proficiency
Accounting	Accounting Fundamentals
Public Administration	Organizational Leadership Fundamentals
	Entrepreneurship Fundamentals
	Retail Management Fundamentals

*NPC also offers an Associate in Business degree program. This program transfers directly to the schools three state universities and requires the student to complete the BUS courses that transfer to the universities, along with the NPC required general education coursework. No changes to the Associate in Business Degree Program are proposed.

Summary of Proposed Changes to Areas of Specialization in AIS

AIS faculty members propose reducing the six areas of specialization currently offered into three areas of specialization, with four Certificates of Proficiency, three of which flow into each of the three areas of specialization; the fourth is a very basic certificate that can be used towards any of the three areas of specialization. Thus, students will be able to complete a Certificate of Proficiency and continue on to complete the Certificate of Applied Science (C.A.S.)² and the Associate of Applied Science (A.A.S.) degree with a seamless flow towards the degree. Table 2 provides a list of the current areas of specialization and certificates of proficiency offered by the AIS Department.

Table 2

List of Current and Proposed Areas of Specialization and Certificates of Proficiency offered by the Administrative Information Services Department

Current Areas of Specialization	Proposed Areas of Specialization
Administrative Information Services	Modern Office Technologies
Administrative Office Management	
Medical Office Procedures	Medical Office Technologies
Medical Transcription	Medical Transcription
Legal Office	
Records and Information Management	
Current Certificates of Proficiency	Proposed Certificates of Proficiency
Legal Office Fundamentals	

² The Certificate of Proficiency required 6 credits in Math and English, in addition to 30 credits from the Business core courses listed in the area of specialization.

Medical Office Fundamentals	Medical Office Technologies--Fundamentals
Medical Transcription	Medical Transcription Fundamentals
Modern Office Fundamentals	Modern Office Technologies--Fundamentals
Records management/ Data Processing Fundamentals	
Word Processing Fundamentals	

ASSESSMENT OF STUDENT ACADEMIC ACHIEVEMENT REPORT 2012

Department: Biology

Mission: General Education

1 There are currently five levels of assessment that are possible within each department. These levels are related to development of the department assessment data gathering techniques and use of the information to fine-tune courses as necessary.

Department Activity Level Checklist

Activity Level:	Departmental Progress:
Level I: The department assessment processes have been detailed and developed for use by faculty.	Yes <u> X </u> No <u> </u> Attach copies of instruments used, instructions for students, time frames for activities, etc.
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Level IV: Faculty, instructional leaders, and deans have used the data to improve student academic achievement.	Yes <u> X </u> No <u> </u> Attach highlights related to curriculum and/or assessment changes which were implemented through this process such as revision of study guides, exams, changes in grading rubrics.
Level V: Data has been used to improve the assessment process.	Yes <u> X </u> No <u> </u> Attach highlights related to improvements and/or streamlining the assessment process.

David Smith
Assessment Project Chair

April 12, 2012

Department of Biology Chair's Signature

Date

Dean of Arts & Science's Signature

Date

The initial assessment of student academic achievement by the Department of Biology assessment began in 2002. In 2004, the data revealed that the concepts of Evolution, Metabolism, and the Origin and History of Life proved to be difficult topics for our students. Therefore, a complete course revision was begun in 2005 and completed in August of 2007.

Fall 2007-Fall 2008 Semesters

As a part of the course changes, the Origin and History of Life material was moved to General Biology II (BIO 182). As a result of our assessment information, the Faculty of the Department of Biology agreed to frame each area of the course in the spirit of Theodosius Dobzhansky's statement in *The American Biology Teacher*, March 1973 (35:125-129), that "nothing in biology makes sense except in the light of evolution." By embedding the common thread of evolution throughout the course, assessment of student academic achievement could be woven into each course topic as part of their understanding of evolution. The Biology Faculty identified papers/articles/summaries for the topics covered in each chapter that illustrated Dobzhansky's statement. Students were asked to read these articles and complete a voluntary online survey for each chapter that would help the Biology Faculty gather information on their level of understanding of biological evolution at each stage in the course. We saw semester-to-semester variation in our students' grasp of the concepts of evolution in 2007 and 2008, but no clear consistent pattern of improvement. In the spring of 2009, we discontinued the use of the surveys. When we compared data from that semester with previous samples, we did not see any major improvements (Table 1, 2).

Fall 2009-Current Semesters

In an effort to increase student understanding of evolution, a supplement text by Dr. Neil Shubin titled *Your Inner Fish: A Journey into the 3.5-Billion-Year History of the Human Body* was added to the course in the Fall 2009 semester. Feedback regarding this text has been positive. Subsequently, the Department of Biology faculty created a new assessment tool in the Fall 2010 semester. The tool is in the form of an exam that is given start of all Biology 201 and Biology 205 sections. It is composed of 50 questions organized by the following topics:

- General Concepts
- Chemistry
- Cells
- Energy and Metabolism
- Cell Cycle and Cell Division
- Genetics and Biotechnology
- Evolution

This assessment was implemented for the first time in fall 2011. Students were not warned of the assessment beforehand. There was no time limit and students were informed that the assessment score would not affect their course grade. The assessment tool is designed to look for changes in student retention of information across semesters. The test results were incorporated into the overall study of student cognitive retention. How recently the students took introductory biology and where they took it was not controlled for. We assumed equal variance within the samples, but it was not tested rigorously. Observed variance about means, however, appeared quite large. Assumptions of strict independence were violated, somewhat weakening possible inferences about the statistical results, but some general trends can be observed. The descriptive statistics are presented in Table 2.

Changing the test, however, means we lose some comparability across time. It will be two more years before we can reliably state we have trend data for these newer measures. However, student performance is fairly consistent across tests and the new scale has many good features, such as sensitivity and potential for improved scores.

A Student's t-test compared the means of the overall results for Fall 2011 and Spring 2012. An ANOVA will have to be undertaken to compare results from more than two semesters and establish trends over time for the revised assessment tool.

Results

The new test is topic sensitive (Table 3), but changing it means that it will take some time to establish reliable trends. The overall average of the 2012 classes was 58.4%. The P results for a two-tailed test, assuming equal variance and independent groups, was 0.52. Any value over 0.05 supports the hypothesis that the means are the same at a 95% confidence interval. Comparisons over subsequent semesters will have to make use of an ANOVA, as there will be more than two groups. Cronbach's alpha is a measure of the reliability of the test results. Typically, this statistic should be 0.7 or higher to indicate a reliable result. For this test, Cronbach's the alpha value is 0.871, implying that the new test measures consistently and reliably. Some ANOVA results covering the earlier semesters indicate that variation among test takers is greater than variation among topics in individual performances (Table 3). Most students are performing at the same level across all of the measured topics, with the exception of genetics, from semester to semester (Figure 1).

Conclusions

It appears that considerable variability in performance across the test that was observed in the early years of assessment has begun to converge, becoming more consistent (Figure 1). That means that most students are learning at about the same level of performance in all the measurement areas, and that there are fewer programmatic weak spots. The extensive statistical analyses, interpretation, and discussion were performed and written by Dr. Leslie Wasson.

Table 1

Previous Assessment Data measured as Average Percentage of Correct Answers

Assessment Topic	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Average 2007-09	Fall 2010
General Concepts	71	68	73	77	88	72	77
Chemistry	95	32	45	52	50	61	72
Cells	42	51	57	70	60	53	69
Energy/Metabolism	56	36	54	50	65	45	68
Cell Cycle/Cell Division	56	47	65	60	60	59	61
Genetics/Biotech	35	23	38	36	35	51	58
Evolution	54	42	50	49	57	44	64

Table 2
Descriptive Statistics

Statistics		General	Chemistry	Cells	Metabolism	Cell Cycle	Genetics	Evolution
N	Valid	8	8	8	8	8	8	8
	Missing	3	3	3	3	3	3	3
Mean		68.53	54.72	54.06	50.24	55.58	39.31	49.52
Median		72.50	51.00	55.00	52.00	59.50	37.00	49.50
Std. Deviation		19.667	21.299	13.282	13.680	9.270	10.707	8.876
Skewness		-2.270	.872	-.595	-.380	-1.488	.556	.155
Std. Error of Skewness		.752	.752	.752	.752	.752	.752	.752
Kurtosis		6.010	.647	.034	-.601	1.778	.637	-.293
Std. Error of Kurtosis		1.481	1.481	1.481	1.481	1.481	1.481	1.481

Table 3

ANOVA testing topic sensitivity

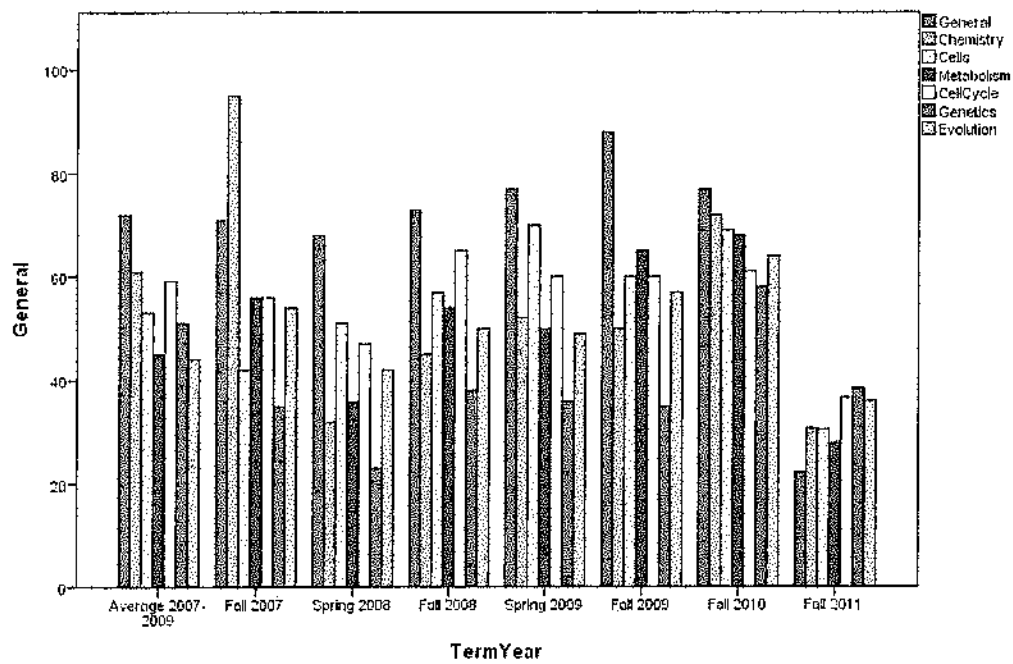
ANOVA

	Sum of Squares	Df	Mean Square	F	Sig
Between People	5861.442	7	837.349	5.681	.000
Between Items	3669.622	6	611.604		
Within People Residual	4521.750	42	107.661		
Total	8191.373	48	170.654		
Total	14052.815	55	255.506		

Grand Mean = 53.14

Figure 1

Student retention across successive semesters



**ASSESSMENT OF STUDENT ACADEMIC ACHIEVEMENT REPORT
COMMUNITY EDUCATION DEPARTMENT
February 2012**

INTRODUCTION:

Community Education has chosen to review some of the Agriculture classes taught by Kim Howell-Costion, she has taught at NPC for over 10 years. She teaches soil classes, green house organic gardening, raising your own starts, and many other topics. We want to determine how students were benefiting from these classes.

Johns Hopkins Center for American Indian Health has encouraged many of their employees and community members in the Whiteriver/Cibecue area to take Agriculture classes to help the area become more self-reliant. The data collected comes from employees of the Johns Hopkins Center.

DATA COLLECTION RESULTS:

Information received from the Johns Hopkins Center for American Indian Health:

- By taking Kim Howell-Costion's classes employees from Johns Hopkins, People's Farm in Whiteriver and community members, learned gardening skills that they were able to implement on Fort Apache Indian Reservation and start farming and gardening again.
- She helped us with the development of the edible school gardens at Cibecue and East Fork School. This was all done using the lasagna gardens that we learned in her classes.
- We were able to start 20 small gardens in Whiteriver at community member's homes last year and they all were lasagna gardens.
- After the Raising Your Own Starts class, the staff from the People's Farm found an old greenhouse and started growing starts, that they then sell to the community. They learn a skill and are able to earn an income from this.
- The instructor also went to Tuba City and helped workers created their garden as well. She did this with the help

from three employees from People's Farm. They all took her classes and then work in the field with her.

- At both of Hopkins sites- Whiteriver and Tuba City community members are using gardening methods taught in these classes.
- After taking her classes on the World of Heirloom Tomatoes, The World of Chili Peppers, The World of Basil and etc. the staff at the Peoples farm planted and grew garlic, onions, tomatoes, greens, chilies for the first time.

CONCLUSION:

The students have been able to become more self-reliant, both by providing fresh food for their families but in some instances also creating an income by selling the starts they have grown in their gardens to others in the community. It has given the communities a sense of pride in their accomplishments.

ASSESSMENT OF STUDENT ACADEMIC ACHIEVEMENT REPORT 2012

DEPARTMENT: CIS

MISSION: *(Circle One)* General Education, Transfer Preparation, Employability, Developmental Education, Customized Education (Economic Development), or Personal Interest.

There are currently five levels of assessment that are possible within each department. These levels are related to development of the department assessment data gathering techniques and use of the information to fine-tune courses as necessary.

Department Activity Level Checklist

Activity Level:	Departmental Progress:
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Level V: Data has been used to improve the assessment process.	Yes _____ No _____ Attach highlights related to improvements and/or streamlining the assessment process.

Assessment Chair's Signature

Date

Dean's Signature

Date

CIS ASK REPORT 2012

As a department, we are using an online package in the college Moodle LMS. This package contains the course reading material, test material, video tutorials, and readings current to that week.

We decided to investigate student's attitudes towards using this package and the companion book.

Students were asked the following questions:

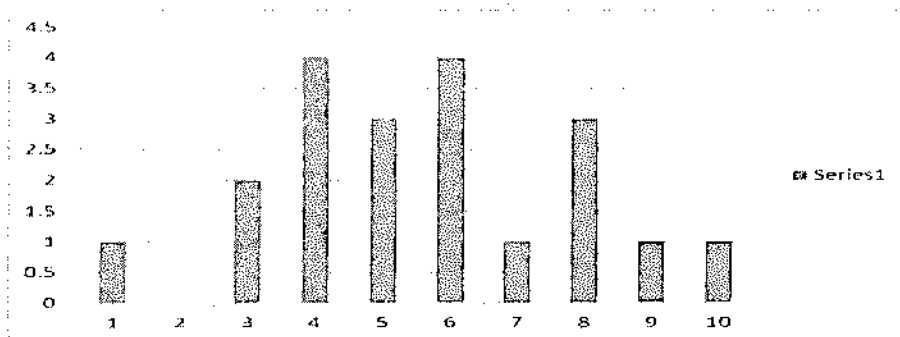
1. On a scale from 1 to 10 how would you rate the use of on-line books as part of an LMS like Emerge 3.0 on Moodle, as compared to a regular hardcopy textbook (where a textbook would be rated a 5. If you felt it was not good, select a number under 5, if you thought it was the same select 5, if you thought it was better, select an appropriate number above 5.
2. Did you buy the Emerge 3.0 Companion book?
3. What were the strengths of Emerge 3.0 package?
4. What were the weaknesses of the Emerge 3.0 package?

The data and comments were collected from surveys given to students currently enrolled in CIS classes. 20 surveys were completed and submitted.

RESULTS

Student Comparison of On-line books to Hardcopy.

Students Responding favorably to Emerge 3.0	50%
Students Responding equally to Emerge 3.0	15%
Students Responding less favorably to Emerge 3.0	35%
Students who bought the companion book	45%
Students who bought the companion book who responded favorably	40%



Student ratings for Emerge compared to standard textbook

The following are the students' comments:

Strengths:

Available anywhere with an Internet connection.

Has videos and links to outside sources

Up-to-date

Multimedia - not available in books

Test like quizzes

The strengths I feel were the use of the internet and computer itself. It was a computer course and think it promotes more learning with it also being an internet course. It was easy to click around to different topics. It was nice to have the related links for more information on the internet. The video sidebars were useful too.

I did like the fact that you could work right along with the instructor on projects and I did think the quizzes were helpful.

It was convenient when I had my computer handy! Also, although the projects in emerge were long and a bit challenging, they were great learning experiences.

Strengths were videos, audio, and links to outside sites

Lots of information

Strengths:

- a) Easy to read: language used in the book is easy to understand:
- b) Easy to navigate through the book and desired material:
- c) The book highlights major terms and concepts:
- d) Provides learning pictures, videos, and most recent news for better understanding of the material;
- e) Provides detailed instructions in the skills area that allows students to learn essential computer skills and programs at their own pace.

There was so much information available and I felt I was able to learn much more than just from a textbook. The websites and videos that were provided were very helpful.

I like the personal test it offered and hands on learning exercises. I also like the video clips. They helped give visual to the text, so it was a big boost in learning. The notes section was helpful as well.

The interface. I also enjoyed the videos.

- a) Up-to-date information
- b) Easy platform to navigate
- c) You can't lose it
- d) Easy testing platform

The strengths are the graphics, the updated RSS feeds of each subject, the websites that apply to the subject at the end of the lessons.

I like the fact that it is updated weekly and that it provided the opportunity to learn to use the programs you may have not had an opportunity to use before. It was also nice that I didn't have to add more weight to my already loaded bag.

Easier navigation than flipping to Table of Contents. The extra on-line links and quizzes were nice.

Weaknesses:

Too wordy – chapters take longer to read

Videos seemed to be unrelated to the material

For me, I like to have a hard copy in front of me. For that reason, I probably should have bought the companion book, but I was too cheap! I would get frustrated to not have the words staring at me from a book in front of me. I've tried reading books from Nook and from my Iphone, and it bugs me not to have the physical book in my hands. It's probably something I could get used to though.

The instruction was slow to load and the streaming of the video was not great-at least on my computer.

If I didn't have access to a computer or internet access, it was extremely difficult to do homework assignments or study. Also, some of the layout was hard to follow.

Instead of just the follow-along videos, it would have been nice to follow along with the skills projects that detailed the end project. That way you could work on it at a different pace, like the projects at the top of the page.

Weaknesses:

- a) Many people are still more comfortable with regular hardcopy textbooks; digital format of e-books is something that takes time to get used to.

Just wasn't portable without then internet. But was accessible from anywhere there was, so I would have to say outweighed the downfall.

Had to have an internet connection. Sometimes it was really slow to load up a page.

- a) Cannot sell it once used
- b) Expensive
- c) If you do not have computer access at home you cannot study
- d) If site goes down for some reason you can't use it

The weakness for me, is that there was way too much information to read and try to understand in such a short amount of time for each subject. I took the practice test after each lesson, and it didn't help me at all on the real tests.

The fact that it was online caused situations where the book was not accessible and staring at a computer screen caused too much eye strain.

Not having the ability to take the book anywhere with me. If I have spare time waiting at a doctors office or travelling, I like to use that time to read my textbook and I couldn't do this with an on-line text. Also, I no longer have a home computer, and that really hindered my ability to use the on-line book. The worst thing about this system is that when we purchase this, we are given limited access for a specified number of days, so we cannot sell the text. We used to be able to sell our textbooks to other users or back to the company to at least get some of our money back. I see this as a way for the textbook companies to make more money. I think there is more inconvenience with the change from a hard copy textbook to on-line text.

	Strengths	Weaknesses
Videos/multimedia	7	2
Tests	1	1
Ease of Navigation	5	
Up-to-date information		
Cost		2
Access	3	3
Resale ability		2*

*The students were not aware that the cost of the online version was \$100 less than the texts used in previous semesters

Conclusions:

- Overall the students are positive about the online content.
- Students like having additional resources available
- Some students may need assistance determining where to focus and how access major content efficiently.
- Strength out way the weaknesses -- will continue using

ASSESSMENT OF STUDENT ACADEMIC ACHIEVEMENT REPORT 2012

DEPARTMENT: Early Childhood (ECD), Educational Assistant (EDU) and Residential Child and Youth Care (HUS)

MISSION: (Circle One) General Education, Transfer Preparation, Employability, Developmental Education, Customized Education (Economic Development), or Personal Interest.

There are currently five levels of assessment that are possible within each department. These levels are related to development of the department assessment data gathering techniques and use of the information to fine-tune courses as necessary.

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Charles Cuddeback
Assessment Chair's Signature

3.19.12
Date

Frank Bender
Dean's Signature

3/28/2012
Date

**STUDENT OUTCOMES RESULTS
2011 REPORT (Compiled March 2012)**

Date of evaluation/reading by Council members or by committee	Number of philosophy statements received/evaluated	Number meeting 50% of criteria	Number meeting 75% of criteria
Sept. 19, 2001	17	41%	
Feb. 12, 2002	8	99%	
October 2, 2003	29	90%	14%
Jan 22, 2004	34	71%	29%
Nov. 18, 2004	17	57%	29%
Feb. 16, 2006	54	67%	11%
April 24, 2007	12	92%	42%
Feb. 12, 2008	25	81%	16%
Feb. 18, 2009	32	81%	5%
March 17, 2011 (Committee review - results to be presented to Advisory council in May, 2011)	13	92%	31%
Results to be presented to EC Advisory Council in April, 2012	26	92%	27%

Beginning in fall 2005, philosophy statements were assigned as an assignment for ECD 200 students (Intro to Early Childhood Education). In addition EDU Educational Assistant and HUS Residential Child and Youth Care students also complete the philosophy assignment which sometimes results in different philosophy beliefs. The two lowest scores in the chart below were from ECD high school dual enrolled students who worked in elementary settings with older children.

NOTE: The Advisory Council since the beginning of the outcomes implementation determined that meeting 50% of the 24 criteria was acceptable. Beginning in the Fall 2010, the checklist was increased to 25 criteria from 24.

STUDENT OUTCOMES RESULTS

Score	# received	Percentage	Score	# received	Percentage
3	1	12%	17	4	68%
9	1	32%	18	3	72%
13	6	52%	20	2	80%
14	2	56%	21	2	84%
15	1	60%	22	2	88%
16	1	64%	23	1	92%

STUDENT OUTCOMES CHECK LIST
EARLY CHILDHOOD DEVELOPMENT PROGRAM
DATE _____

Reviewer Initials	Reviewer Initials	Evaluation criteria
		Provides safe/secure/healthy-learning environment.
		Promotes nutritional concepts.
		Facilitates learning by using educational centers
		Implements open-door policy
		Observes/records child behavior
		Enhances development of gross/fine motor skills
		Promotes learning through play
		Fosters communication.
		Encourages making choices
		Promotes age appropriate cognitive skills, including problem solving
		Encourages creativity.
		Encourages cultural acceptance and diversity
		Nurtures socialization/emotional cooperation/respect
		Facilitates development of the total child
		Implements development of self-help skills
		Promotes positive self-esteem through successful experiences
		Respects individual rights of children/families
		Meets individual needs of the children/families
		Encourages parent involvement and provides educational opportunities
		Develops and promotes family and community partnerships.
		Facilitates transitional activities for children and parents.
		Effective manager of time, lessons and environment
		Uses developmentally appropriate techniques
		Demonstrates positive attitudes and professionalism
		The philosophy statement is clear, well organized and represents an understanding of early childhood best practices.

Score: /25

Percentage:

Comments:

2010-2011 English Department Assessment

ENL 101 Assessment: This year the English Department used the same assessment tool and grading rubric as we did last year; however, we did modify the rubric to more closely measure our objectives. Additionally, we also included in the assessment a Critical Thinking/Critical Inquiry component, along with Effective Communications. We also continued to expand the percentage of papers assessed (30%).

Assessment Results for English 101 for 2010-2011: Our results are based on a sampling of 30% of all finals taken in all English 101 classes at NPC for a total of 120 essays; evaluation was based on a standard grading system (90-100 is equivalent to an A; 80-89 a B, etc.). Our results are as follows:

90-100 =	37
80-89 =	35
70-79 =	33
60-69 =	11
50-59 =	4

These grades not only reflect an overall passing rate but also a high percentage of students doing very well scoring in the A and B grade ranges. Generally the passing rate for English 101 is up from last year.

Critical Thinking/Critical Inquiry: Our rubric is broken into five categories, and Critical Thinking/Inquiry is one of them. Although the above assessment factors in all of the categories, the percentages below reflect only the critical thinking/critical inquiry. Again, the percentages reflect the following scale: 90-100 is equivalent to an A; 80-89 a B, etc

90-100 =	32
80-89 =	27
70-79 =	34
60-69 =	16
50-59 =	11

These scores do show a consistency of students scoring in the higher percentile.

Effective Communication: Again, our rubric is broken into five categories, and Effective Communication is one of them. Thus, the percentages below reflect only the Effective Communication category:

90-100 =	22
80-89 =	30
70-79 =	42
60-69 =	18
50-59 =	8

Quantitative Reasoning and Scientific Inquiry do not really apply to the English Department. **Information literacy** is demonstrated in both English 101 and 102 vis-a-vis library assignments and a completed research paper (see below).

Note: The scores for both Critical Thinking/Critical Inquiry along with Effective Communication are indicative of what goes on in the classroom, that is, students tend to do better with analysis/evaluation than documentation, writing technique and developing and utilizing primary sources.

Assessment Conclusion: The 2009-10 ENL 101 assessment scores are fairly consistent with last year, that is, the scores continue to reflect an improvement over the scores of previous years. Again, we believe this can be attributed to the revised final Analyses question (prompt) and the revised rubric.

2011-2012 Objectives and Goals: Because the outcomes for the English department final have been successful as scores continue to improve, the English department will continue to use the same assessment tool and grading rubric., with a few clarifications in the works.

Background to ENL 102 Assessment: As with English 101, last year the English department changed the assessment tool and grading rubric in order to address various on-going problems with department assessment, namely low scores on the assessment which showed a discrepancy in pass-fail percentages between the individual English 102 courses and the final department assessment. The modified assessment tools resulted in an overall improvement over previous years' scores. However, this year we changed the prompt to include an analysis of various "critical approaches" to literature, which didn't work so well. Although we had a larger sampling than last year, our overall scores are down. Based on these results members of the English department modified the prompt to include an analysis of various literary elements sans the critical approaches. We believe we can do this without compromising our standards while assessing more accurately what students are learning in class.

Assessment Results for English 102 for 2009-2010: The following results are based on the revised Analyses question (prompt) and rubric used for evaluation. Our results are based on a sampling of 30% of all finals taken in all English 102 classes at NPC for a total of 80 essays; evaluation was based on a standard grading system (90-100 is equivalent to an A; 80-89 a B, etc.). Our results are as follows:

90-100 =	30
80-89 =	25
70-79 =	18
60-69 =	6

50-59 = 1

Assessment Conclusion: Again, our modified prompt resulted in poorer scores and did not accurately measure what we were doing in the classroom. So we modified the prompt and rubric to more closely reflect the goals and objectives of the course, along with a closer reading of various literary elements outlined in the textbook.

Critical Thinking/Critical Inquiry: The rubric for English 102 is also broken into five categories, and Critical Thinking/Inquiry is one of them. Although the above assessment factors in all of the categories, the percentages below reflect only the Critical Thinking/Critical Inquiry categories. Again, the percentages reflect the following scale: 90-100 is equivalent to an A; 80-89 a B, etc

90-100 =	18
80-89 =	20
70-79 =	26
60-69 =	15
50-59 =	1

These scores do show a consistency of students scoring in the higher percentile.

Effective Communication: Again, our rubric is broken into five categories, and Effective Communication is one of them. Thus, the percentages below reflect only the Effective Communication category:

90-100 =	15
80-89 =	21
70-79 =	30
60-69 =	10
50-59 =	4

Again, students scored higher on the Critical Thinking/Critical Inquiry categories than they did with the Effective Communication categories. This could, however, be attributed to the new prompt.

Research Paper Assessment: As part of our assessment process this year the English department reviewed 20% of all research papers written in English 101. This was an informal review of the papers designed to accomplish three things: (1) whether or not the papers were fulfilling the objectives of the course; (2) overall quality of the papers in terms of meeting MLA requirements; (3) overall quality of the papers in terms of research. Based on our sampling, we found that most research papers were fairly well written and met some of

the course objectives; however, we did find 5 common errors. These errors are:

1. Poor documentation;
2. Inconsistent source citing;
3. Students using themselves as sources;
4. Difficulty paraphrasing;
5. Underdeveloped thesis or supporting material.

To remedy this problem, the English department came up with a set of research paper guidelines. These guidelines include:

1. Consistent documentation and in-paper works cited;
2. Minimum number of sources;
3. Minimum number of pages, not including Works Cited page;
4. Consistency with paraphrase citing;
5. Consistency with using MLA.

Assessment Results for English 101 Research Paper (2010-2011) In order to determine the efficacy of our new research paper guidelines, we assessed 20% of research papers that were turned in for assessment for a total of 45 papers.

Our results are as follows:

90-100 =	5
80-89 =	15
70-79 =	13
60-69 =	9
50-59 =	3

This is the first time the English Department has systematically assessed research papers. The results show strong success in the 70-89 percentage range. There was improvement in documentation and source citing; but improvement does need to be made regarding paraphrasing and thesis support, along with overall consistency with documentation.

Diversity: I really don't know how we would go about measuring diversity. In both English 101 and 102 we teach a wide diversity of racial, ethnic and gender studies, these include writers, essayists, photographers, painters, and sculptors. Most of us teach the following: Native Americans, Hispanic, Latino (Columbia/Argentina), African-American, Indian, to name a few. This is an integral part of our curriculum

Mission Statement: "The NPC general education program promotes skills in critical inquiry, communications, and an understanding of diversity that supports a life-long intellectual engagement in cultures and the natural world."

NPC1 – Critical Thinking/Critical Inquiry: Students will develop the practice of disciplined independent thinking that allows for the analysis and evaluation of information.

- ENL: Reported out the Critical Thinking scores from the rubric from a sample of 30% of the final essay papers in ENL 101 and 102. In 101 scores were consistent with previous year and the department will only be making a few minor clarifications to the assignment. For 102 the scores were consistently at the higher levels.
- HUM: Assessed a sample of the Critique assignment given across Humanities courses. Overall scores were reported out with improvement over the previous year. Rubric incorporates the categories of Ideas, Organization and Coherence, Support, Style & Mechanics.
- SBS: Completed an analysis of sample of research papers using the Critical Writing Assessment rubric. The data & analysis have not yet been submitted. In the past we were attempting to take the scores from the department assessment and combine with data from college to compare Critical Writing Assessment results to student progress within the General Education coursework. Pulling the data has proven too time intensive to continue this type of analysis.
- NUR: Students responded individually to patient scenarios as an evaluation of multiple general education outcomes. This activity allows instructors to identify areas for improvement.

NPC 2 - Effective Communication: Students will develop the thoughtful and precise verbal and written skills across a variety of social venues.

- ENL: Reported out Effective Communication aspect of Rubric from a sample of 30% of final essay papers in ENL 101 and 102. ELN 101 scores were satisfactory. ENL 102 scores were lower than those of Critical Thinking. This was attributed to the new prompt and rubric. The conclusion was that the rubric did not reflect what was happening in the classes, so the prompt needs additional revision.
- HUM: Assessed a sample of the Critique assignment given across Humanities courses. Overall scores were reported out with improvement over the previous year. Rubric incorporates the categories of Ideas, Organization and Coherence, Support, Style & Mechanics.
- SBS: Completed an analysis of sample of research papers using the Critical Writing Assessment rubric. The data & analysis have not yet been submitted. In the past we were attempting to take the scores from the department assessment and combine with data from college to compare Critical Writing Assessment results to student progress within the General Education coursework. Pulling the data has proven too time intensive to continue this type of analysis.

ASK Assessment of NPC General Education Student Learning Outcomes Summary 2011-12

- ECD: Philosophy statements written by students are evaluated for program outcomes and clear communication.
- NUR: Students responded individually to patient scenarios as an evaluation of multiple general education outcomes. This activity allows instructors to identify areas for improvement.
- WACH: The Welding, Automotive, Construction and Heavy equipment programs completed a 5 year cycle of improving and assessing areas of workplace preparation. The final area was employability skills assessing for each student a cover letter, resume, references, career plan, and interview along with student and employer surveys. As a result of the project, the WACH department has "more focus on well-rounded students who can do all aspects of a career, present themselves, speak clearly, and provide documentation." An area identified for improvement is more exposure for the students to situations and individuals where they might be uncomfortable such as professional type interviews. They are also considering moving towards electronic portfolios.

NPC 3 - Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.

- MAT: Developed a plan to rotate assessment through MAT courses utilizing 10 questions imbedded in the course finals. They will start with MAT 105 & 152 fall 2012.
- SBS: Continuing to accumulate data for a pre/post quiz of quantitative questions.
- NUR: Analyzed results of student project & presentations regarding evidence-based research to support practice. This is the second year using the assignment. Changes in clarity of directions, support, and examples for the assignment resulted improved scores on the rubric. Instructors also worked on consistency of scoring.

NPC 4 - Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.

- BIO: Submitted a plan assess student lab reports from BIO 181 for 2012-13.
- NUR: Analyzed results of student project & presentations regarding evidence-based research to support practice. This is the second year using the assignment. Changes in clarity of directions, support, and examples for the assignment resulted improved scores on the rubric. Instructors also worked on consistency of scoring.

NPC 5 - Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.

- MAT: Utilized an assignment for students to identify diverse mathematicians via internet research. Found few students provided citations/source information. As a result future assignment directions will include specific information regarding source & citation requirements.

- ENL: Looked at 20% of research papers in ENL 101 and found some common errors. To address those errors they developed guidelines for the research paper assignment to implement in 2012-13.
- HUM: Made plans to incorporate Information Literacy into the 2012-13 Critique assignment by requiring students utilize and properly cite at least one source.
- NUR: Analyzed results of student project & presentations regarding evidence-based research to support practice. This is the second year using the assignment. Changes in clarity of directions, support, and examples for the assignment resulted improved scores on the rubric. Instructors also worked on consistency of scoring.

NPC 6 - Diversity: Students will develop knowledge of diverse cultural and natural environments.

- MAT: Utilized an assignment for students to identify diverse mathematicians via internet research. Found results limited in diversity. As a result future assignment directions will include more detailed directions regarding diversity.
- ENL: Acknowledged diversity in an integral part of their curriculum, but need further exploration as to how to assess.
- NUR: Students responded individually to patient scenarios as an evaluation of multiple general education outcomes. Part of the evaluation included if students responded in a manner sensitive to patient cultural diversity. This activity allows instructors to identify areas for improvement.

Strengths:

- Assessment of the general education outcomes is growing.
- Assessment of the general education outcomes is expanding to programs and courses beyond the specific list of general education courses.
- Contact has been made to bring Fire Science, EMT, Nursing Assistant Program, and Cosmetology back to participating in assessment for the 2012-13 year.
- A few departments have been willing to stretch outside their comfort zones and pilot assessment in additional areas.

Areas for Improvement:

- There is a need to help programs/ departments to identify and report out the "closing the loop" aspect of assessment.
- Now that we are assessing all 6 general education outcomes departments could benefit from developing a plan for assessing applicable outcomes over time to rotate through general education courses. This is to make the assessment process manageable and not seem as if they need to assess every outcome in every course every year.
- The remaining science areas of Chemistry, Geology, and Geography need to participate.
- Departments need support in exploration of how to assess the Diversity outcome.

Assessment of Student Learning in the HUMANITIES

Spring, Summer, Fall 2011 – Northland Pioneer College

Report submitted February 23, 2011 by Mike Solomonson, Humanities Coordinator, to Dr. Eric Henderson, Dean of Arts and Sciences & Shannon Newman, Coordinator of the Assessment of Student Knowledge Subcommittee

The Humanities Faculty met on February 10, 2012, for Reading Day. Present at our Reading Day was Magda Gluszek, Ron Goulet, Ryan Jones, Julie Neish, Mike Solomonson and Jennifer Witt.

Process of Assessment

- 40 critiques were selected randomly (a sampling proportionate to the number of students enrolled in each class) for evaluation of the larger pool of critiques that had been submitted.
- On Reading Day, February 10, 2012, each critique was read twice by one of the six HUM faculty readers.
- If there was more than a 10-point discrepancy in the two scores, the critique was read for a third time by another member of the HUM faculty readers.

The Rubric:

- The rubric consists of five criterion: ideas (30 points), organization & coherence (25 points), support (25 points), style (10 points), and mechanics (10 points).
- The assessment tool questions are weighted according to the level of critical thinking involved in the response.
- The rubric has a total score of 100 points.

Assessment Results:

In applying our Critical Writing Assessment form we followed a standard assessment scale of:

A= 90% or above

B=80% or above

C=70% or above

D=60% or above

F=59% or below

Roughly 73% of the time, Humanities Faculty readers scored papers within 10 points of each other. There were 11 papers out of 40 (27.5% of the total) that needed to be read by a third reader.

The individual scores of the 32 papers which were read by two readers and were within the 10-point margin were averaged together to determine the paper's final score. With the 9 papers that needed to be read by three readers, all three scores were averaged together to achieve the paper's final score. Below are the scores for the 40 papers and where they fell on the assessment scale. The scores are a reflection of our group assessment effort to quantify the students' abilities to fulfill the assignment and to help determine how successful students were in their ability to learn and apply the educational material.

2011 Critique Results

A=12 papers (30 %)

B=16 papers (40%)

C=10 papers (25%)

D=1 paper (2.5%)

F=1 paper (2.5%)

If the above score breakdown is roughly accurate in reflecting the larger pool of critique assignments, the students were successful in completing work at a “C” or better performance level—95% of the time. 5% of the students taking a Humanities course would be performing at an unacceptable level of learning and applying lessons taught in the classes, as reflected by this critique assignment. This year’s group of students who completed critiques outperformed the sampling from 2010—which can be viewed below:

2010 Critique Results

A= 11 papers (28.9%)

B= 15 papers (39.5 %)

C= 6 papers (15.8 %)

D= 6 papers (15.8 %)

F= 0 papers (00.0 %)

If the above score breakdown is roughly accurate in reflecting the larger pool of critique assignments from 2010, the students were successful in completing work at a “C” or better performance level—84.2 % of the time. 15.8% of the students taking a Humanities course would be performing at an unacceptable level of learning and applying lessons taught in the classes, as reflected by this critique assignment.

The Difference: From 2010 to 2011, we had an 11% increase in students who achieved the “C” or better performance range.

Humanities Department Discussion:

The Humanities Faculty has decided that we want to incorporate the information literacy/research component in our rubric for the Fall of 2012. To do this, we are making it mandatory that students research and incorporate one outside source that is appropriately cited in their paper using MLA format. The source cannot be the class textbook, but must come from another source. This assessment cycle also represented some Humanities courses that had not submitted critiques in the recent past, including: Music Appreciation, History of Television, and Introduction to Film. Based on new insights gained by going through reading day, the Music faculty member is going to revise the Music Appreciation paper critique prompt for the Fall of 2012, so that it requires the students to respond to a piece of music by writing in a more narrative form. This year’s prompt used checkboxes and sort of short answer responses to questions. To reflect this change in incorporating the information literacy/research component, it is suggested the that Critical Writing Assessment Form be altered as suggested in the red type below:

CRITICAL WRITING ASSESSMENT FORM

Student ID: _____

Critical writing assignments will be graded on a 100-point scale.

Course: _____

Circle - NAVIT Student? Y or N

Circle - Class Mode: Aud Vid Int Reg

Ideas – 30 points possible - An "A" paper: Excels in responding to assignment. Interesting and demonstrates sophistication of thought. Central idea/thesis is clearly communicated and worth developing; limited enough to be manageable. Paper recognizes some complexity of its thesis; may acknowledge its contradictions, qualifications, or limits and follow out their logical implications. Understands and critically evaluates its sources, appropriately limits and defines terms.

Points for **Ideas** _____

Comments:

Organization and Coherence – 25 points possible - An "A" paper: Uses a logical structure appropriate to paper's subject, purpose, audience, thesis, and disciplinary field. Sophisticated transitional sentences often develop one idea from the previous one or identify their logical relations. It guides the reader through the chain of reasoning or progression of ideas.

Points for **Organization and Coherence** _____

Comments:

Support – 25 points possible - An "A" paper: Uses evidence appropriately and effectively, providing sufficient evidence and explanation to convince. One outside source (not the class textbook) will be used to help support the student's discussion. The source should be cited in the text of the paper and in a Works Cited page, using MLA format.

Points for **Support** _____

Comments:

Style – 10 points possible - An "A" paper: Chooses words for their precise meaning and uses an appropriate level of specificity. Sentence style fits paper's audience and purpose. Sentences are varied, yet clearly structured and carefully focused, not long and rambling.

Points for **Style** _____

Comments:

Mechanics – 10 points possible - An "A" paper: Almost entirely free of spelling, punctuation, and grammatical errors. Demonstrates the correct usage of requested style guide: MLA, APA... etc.

Points for **Mechanics** _____

Comments:

TOTAL POINTS FOR PAPER: _____

Other comments or suggestions

The ASK committee is most interested in **NPC4** this year. It would be unacceptable if the science courses did not meet the criteria of NPC4. For now we can assess the 201,205 pretests to see how students do on question #3 and #4. Based on that analysis, we can tweak how we cover the scientific method and perhaps add a few more scientific method questions. In the future I think the best way to meet and assess NPC4 would be to have at least 1 formal lab report in bio 181 each semester. We could work together on which lab it would be. Then we can analyze the reports to see how well the students understand the scientific process. We can also use this data for NPC1 and NPC 3, depending on the lab. Below are some examples of how I think we meet the NPC's in my classes.

NPC1 -Critical thinking/ critical inquiry: Bio 181 genetics problems, lab exercises, CHM 130 problems, lab exercises, Bio 205 – lab exercises

NPC2- Effective communication: Bio 181, Bio 205, CHM 130 – research project that they present to the class

NPC3- Quantitative reasoning: Bio 181 – genetics problems, lab exercises CHm 130 – calculations, lab exercises, Bio 205 – dilution problems

NPC4-Scientific inquiry: Bio181, Chem 130 – scientific method, laboratories where experiments are evaluated, lab reports Bio 205 – laboratories and lab reports

NPC 5- Information literacy-Bio 181, Bio 205, Chm 130- research for their project

NPC 5- Diversity= Students will develop knowledge of diverse cultural and natural environments: Bio 205- the microbial ecology of the human body, chem. 130 – the world of chemistry, bio 181 – the microscopic world, world of the cell.



STUDENT ACADEMIC ACHIEVEMENT ASSESSMENT REPORT

Industrial Maintenance and Operations Department

March, 2012

INTRODUCTION

The Industrial Maintenance and Operations Department surveyed current IMO students in an effort to obtain information, as well as personal opinions, as to how curriculum, instructors, and overall classroom performance could be improved. The survey consisted of 29 questions, ranging from "Which class are you in?" to "Would seeing other facilities give you a better understanding?" The primary purpose of the survey was to determine which was easier to understand: the books or the CBTs? An average of 32 students participated in the survey. The survey was conducted at both the NPC Painted Desert Campus in Holbrook and the NPC St. Johns Center. NAVIT and adult students were involved. The Industrial Maintenance classes used textbooks and the Operations classes used computer-based training and lectures. Faculty members were particularly interested in finding out which method (hands-on with a textbook versus computer application and lecture) was most preferred by students. Interestingly enough, both sides requested more time and direct clarity on understanding the information provided in the textbook and on the computer.

EVALUATION RESULTS

While the survey answers helped evaluators to get a better picture of how the IMO classes are perceived by the students, it was the individual student comments that helped the most in understanding what students are really getting out of the classes and what is needed for improvement. Although, it appeared that in some instances, the broader survey questions/answers conflicted with the actual student comments. Therefore, after taking both the survey results and the individual student comments into consideration, it was determined that:

1. Power points for the subject matter were not at a level consistent with the information being presented.
2. Instructors were in a time restraint which is not allowing students enough time to complete assigned work, as well as allowing for tours and/or hands-on practice.
3. CBTs need to be updated to reflect new technology.
4. Antiquated operating systems and equipment should be removed.
5. On an average, students concisely requested more hands-on practice, agreeing that just reading the material without sufficient hands-on training would not be enough to prepare them for the real world.

6. Tours are very successful in helping students understand system processes and that more tours are desired.
7. Visiting other facilities would be beneficial to students.

SURVEY OUTCOMES

Based on survey outcomes, the IMO Department's action plan is as follows:

- Evaluate currently provided power points and based on this evaluation, build new power points that are more consistent with the subject matter and program.
- Realizing that time will always be an issue, develop a plan to improve the proficiency of the classrooms.
- Allow for more qualified lab aides with a better knowledge of the subject matter when the class is more than one semester in the lab.
- Provide more props and accessibility to practice the hands-on portion of the course.

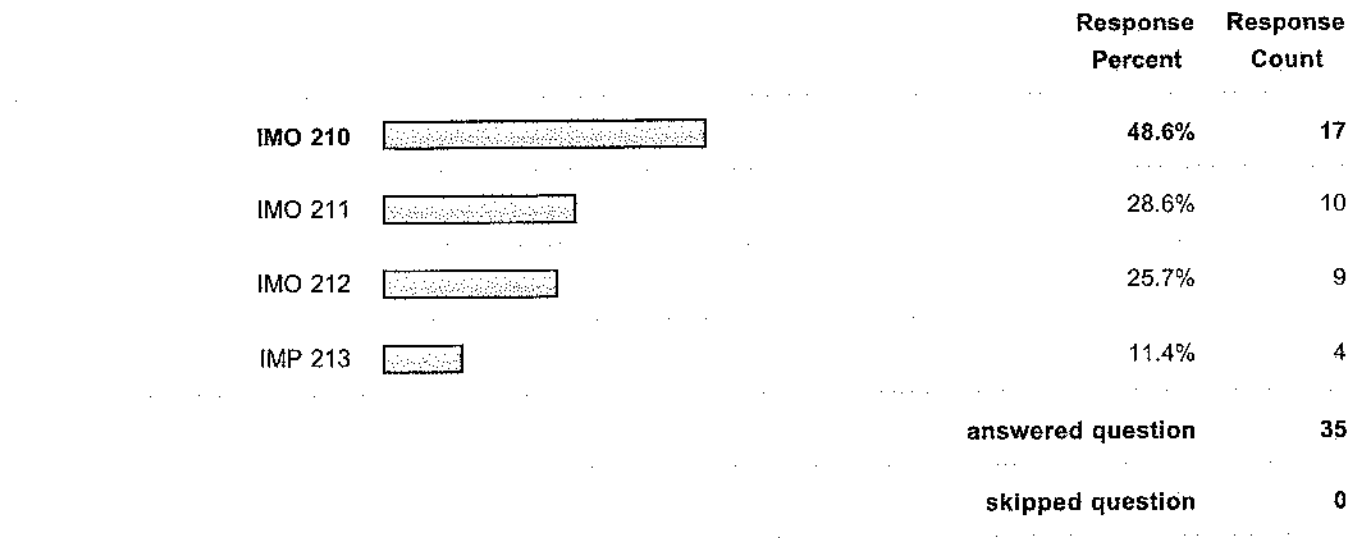
The survey, as well as the results, can be reviewed in Attachment A, located at the end of this report. Individual student comments can be read in Attachment B.

CONCLUSION

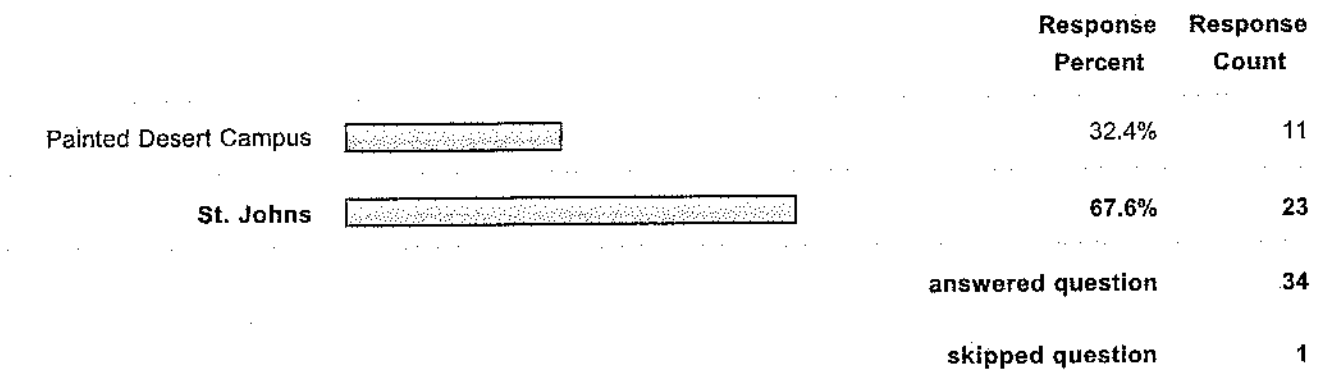
A survey of current NAVIT and adult IMO students was conducted during the Fall 2011 semester. The majority of students were in agreement that more time and hands-on practice was needed. Students also agreed that textbook and computer information was unclear and needed more direct clarity. Power points, operating systems, and equipment are in dire need of updating. Qualified and knowledgeable lab aides are needed when classes run more than one semester in the lab. Tours are overwhelmingly beneficial in reinforcing the students' understanding of power plant operations. In fact, students would like to go on more tours than are currently scheduled.

It was determined that these survey results warrant a follow-up survey next semester to see if the department made satisfactory improvements in the inadequate areas. The new survey will be directed more towards each program individually at both locations. Additionally, the breakdown will also address NAVIT versus Adult classes.




1. In which class(es) are you enrolled?





2. Please select the location of your class.



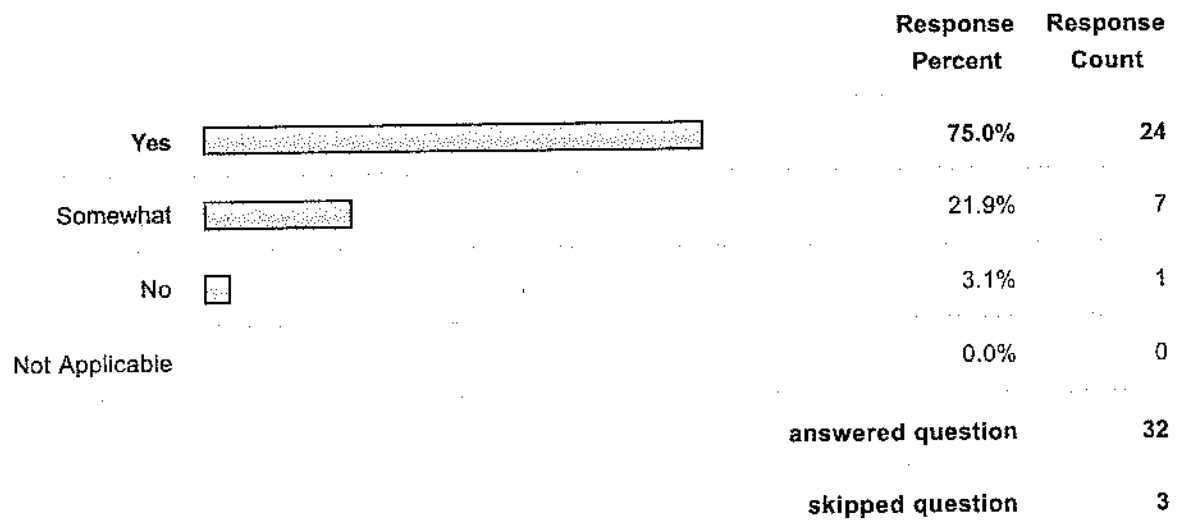
3. Was the information on the CBTs accurate and up to date?

		Response Percent	Response Count
Yes		65.6%	21
Somewhat		28.1%	9
No		6.3%	2
Not Applicable		0.0%	0
answered question			32
skipped question			3

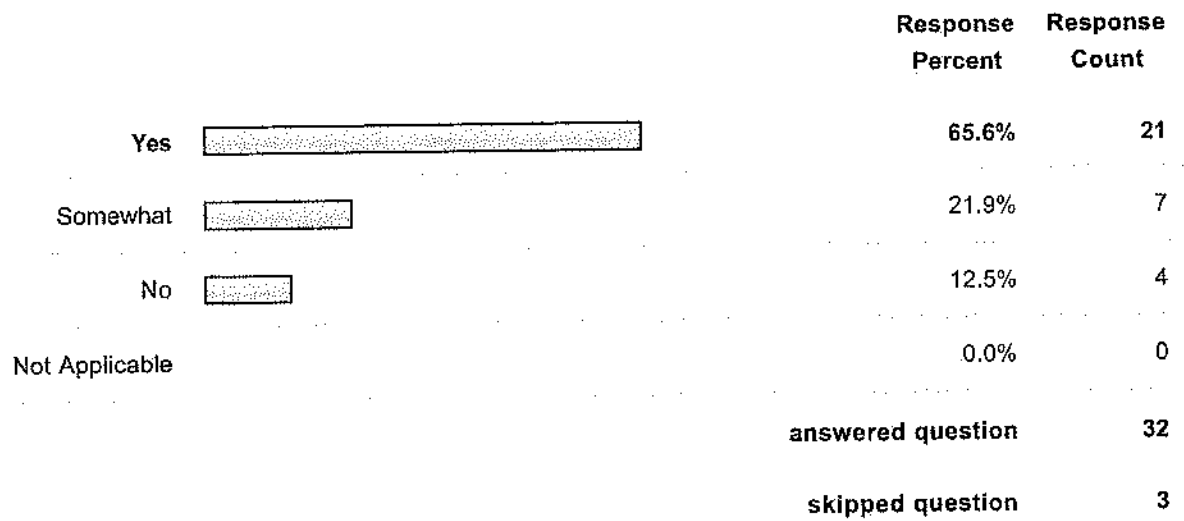
4. Did the CBTs help you understand the subject matter?

		Response Percent	Response Count
Yes		66.7%	20
Somewhat		33.3%	10
No		0.0%	0
Not Applicable		0.0%	0
answered question			30
skipped question			5

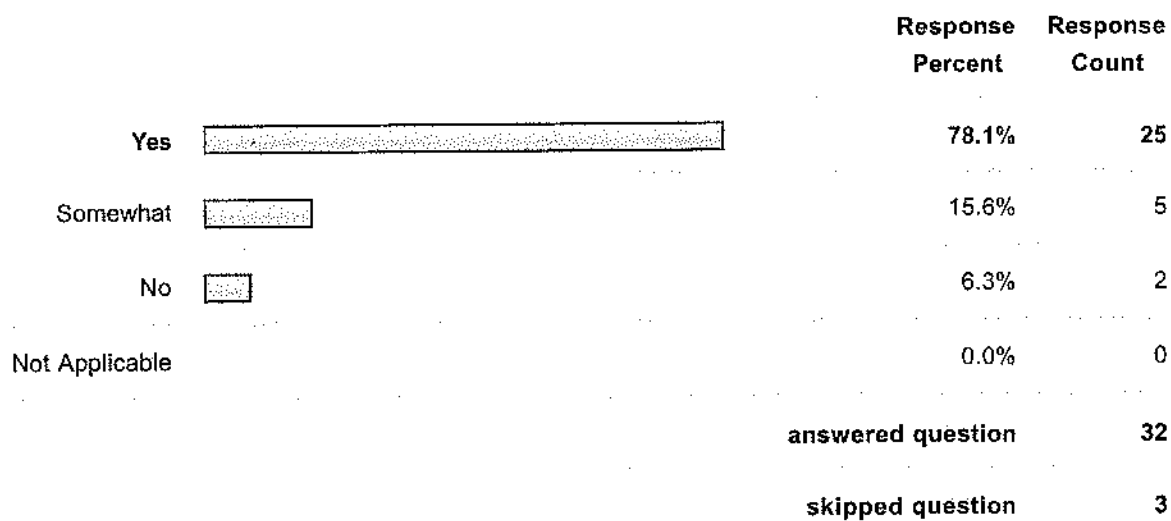
5. Were the CBTs presented in a way that was easy to follow?



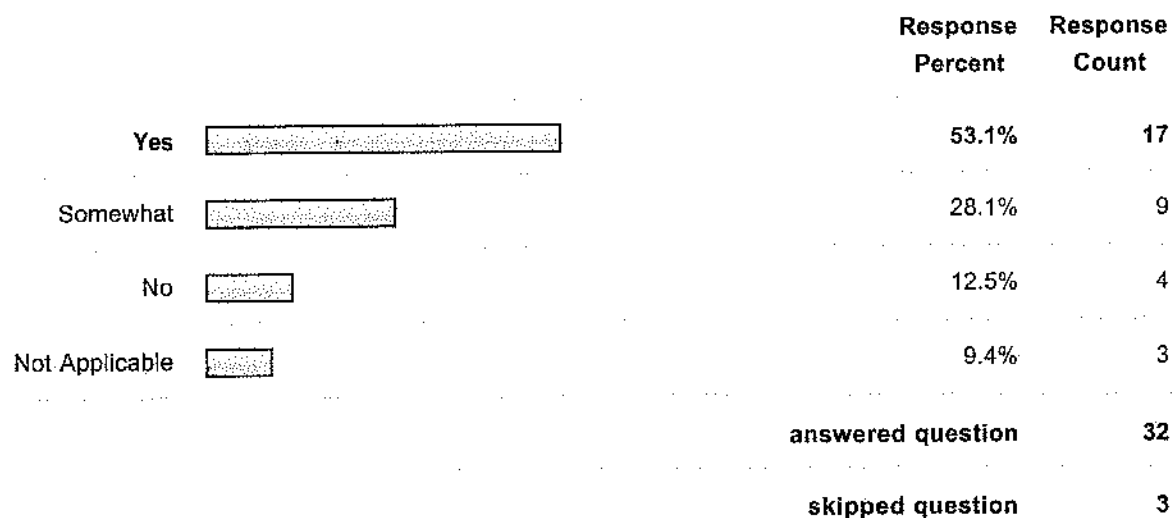
6. Were the CBTs assigned at the time the subject was presented?



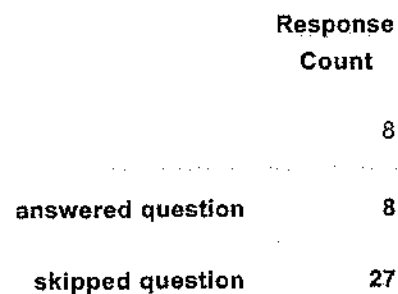
7. Did the CBTs help you understand the plant processes?



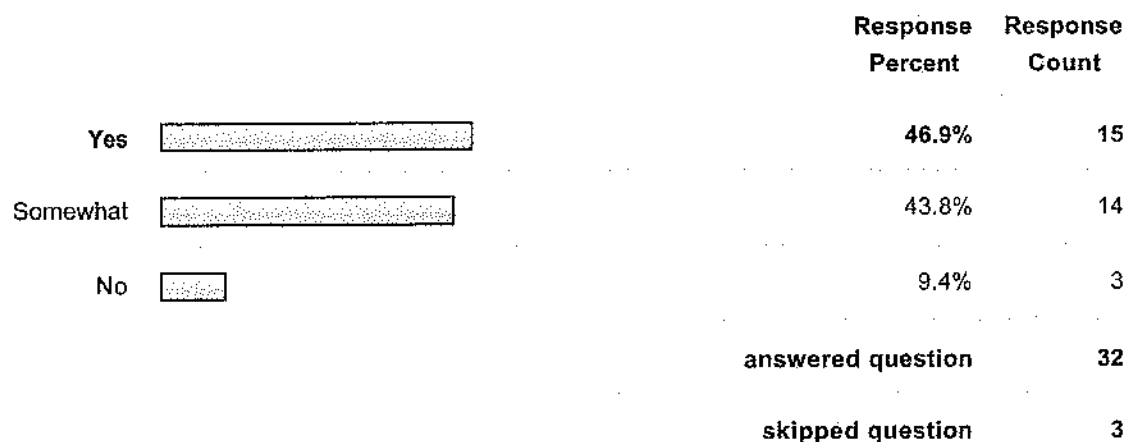
8. Was there enough time in class to work on the CBTs?



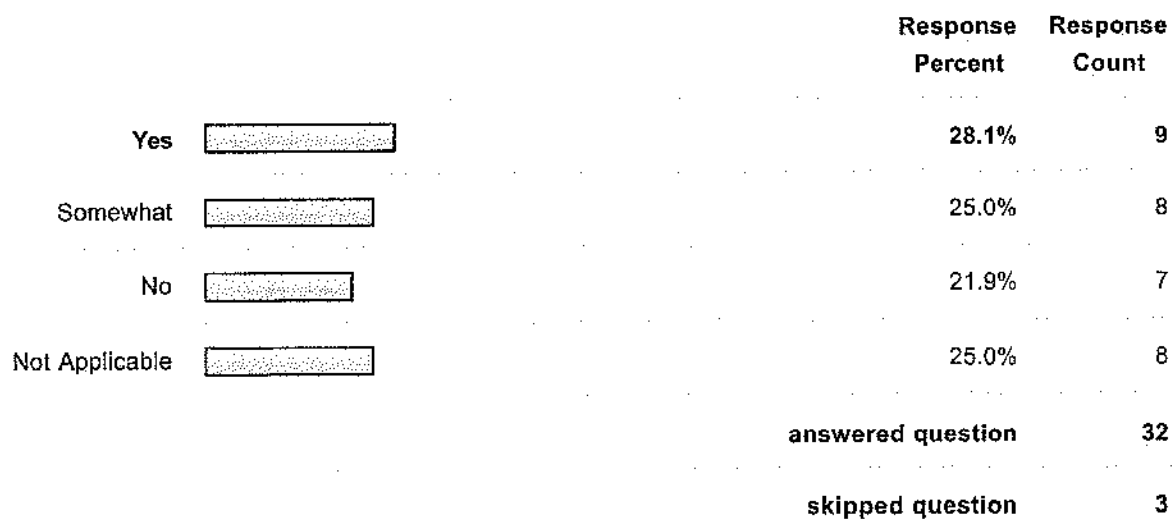
9. Please provide any comments or suggestions regarding the CBTs.



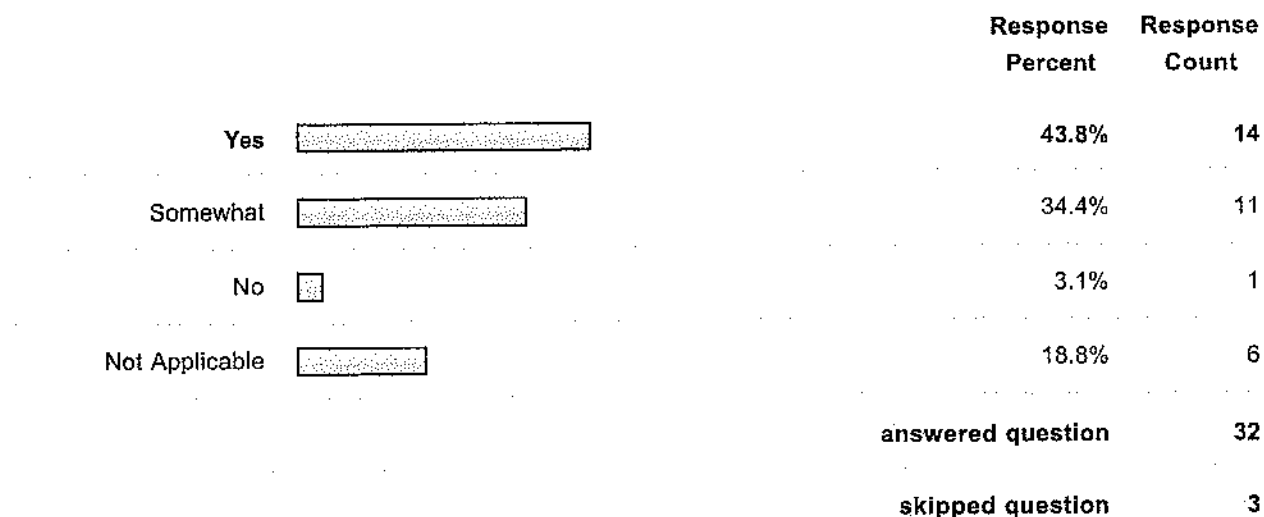
10. Are the books and materials up to date?



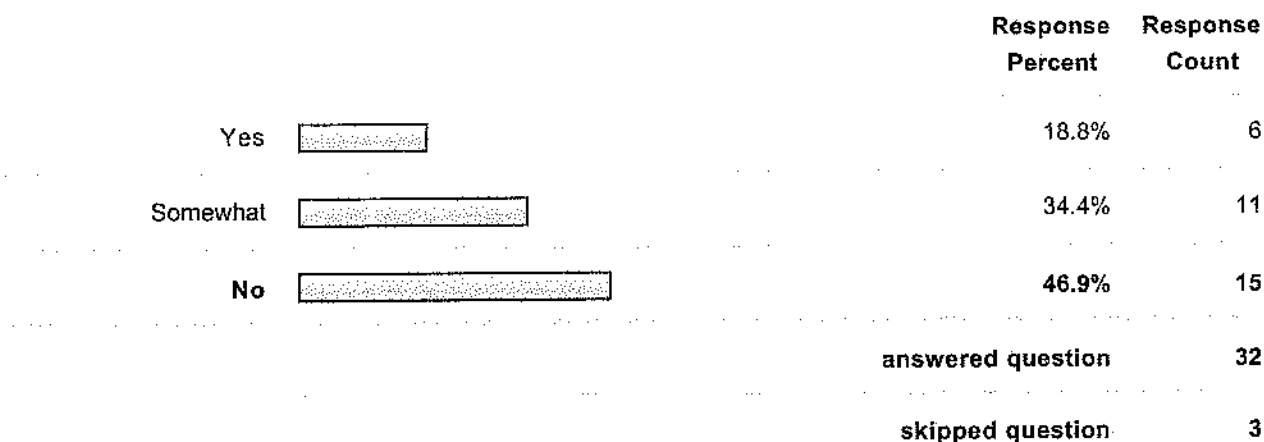
11. Are the books easier to understand than the CBTs?



12. Did the books and the CBTs complement each other?



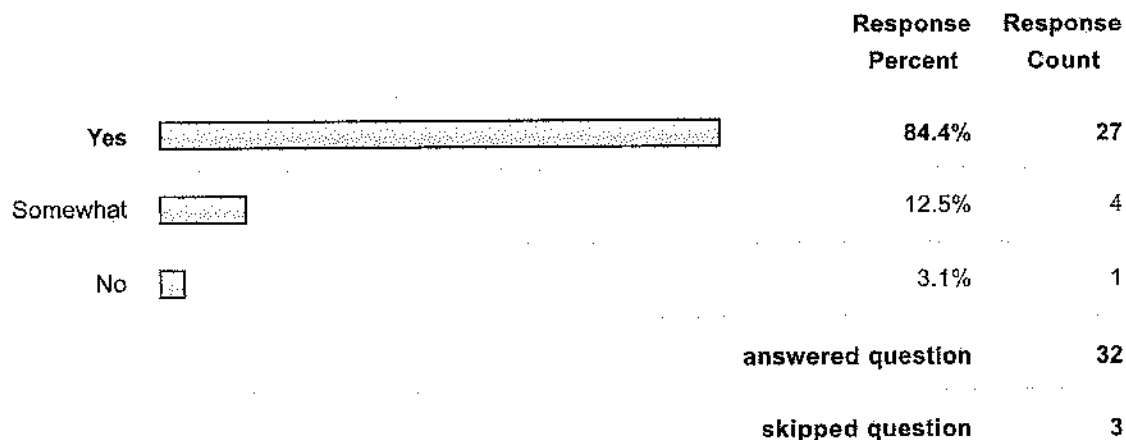
13. Can the material be condensed?



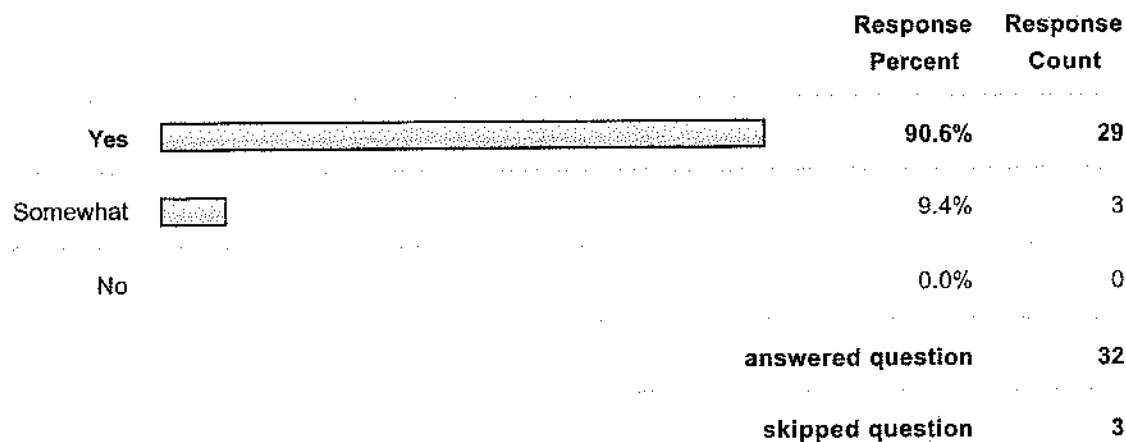
14. Please provide comments or suggestions regarding the books and materials.



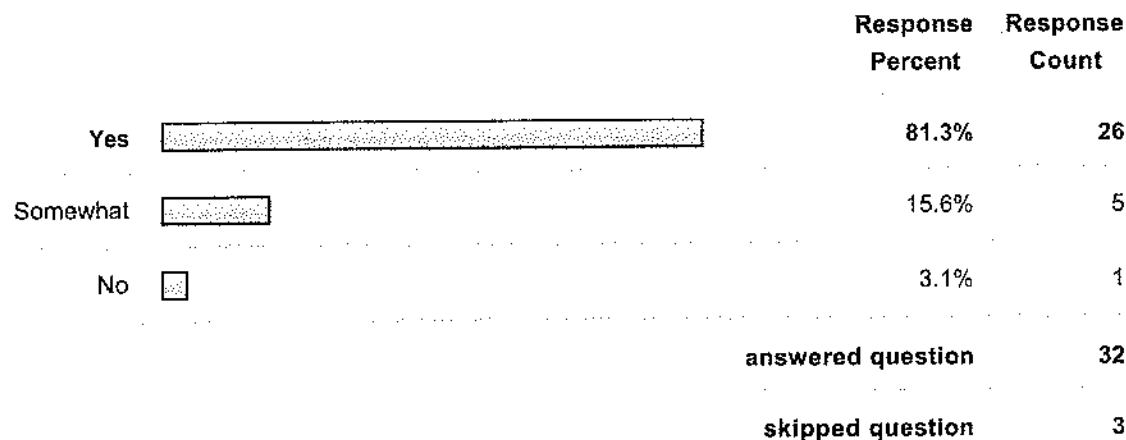
15. Was the instructor able to keep you focused on the subjects?



16. Was your instructor well prepared for the lesson?



17. Did the instructor present the material in a clear and concise manner?



18. Please provide comments or suggestions regarding your instructor.

	Response Count
	10
answered question	10
skipped question	25

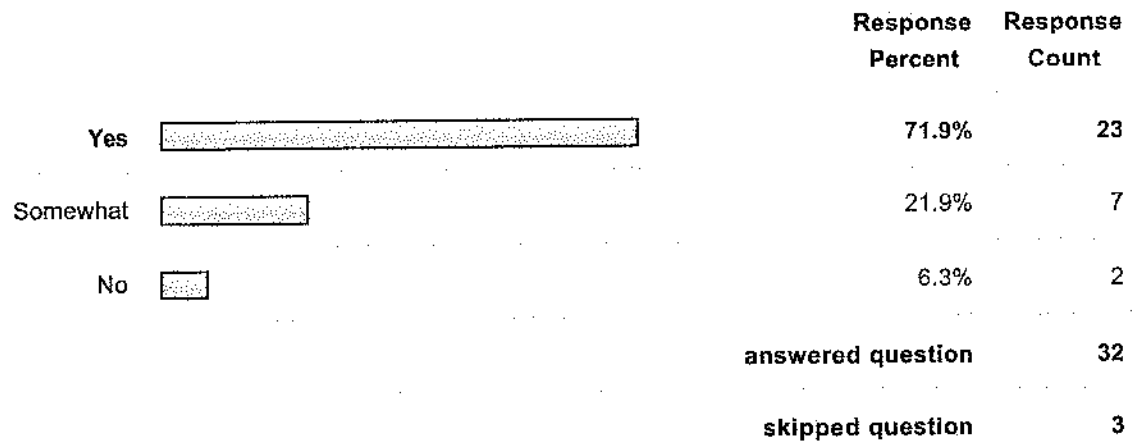
19. Did your tours help you understand the systems processes?

	Response Percent	Response Count
Yes	78.1%	25
Somewhat	15.6%	5
No	6.3%	2
answered question		32
skipped question		3

20. Should there be more tours given?

	Response Percent	Response Count
Yes	75.0%	24
Somewhat	15.6%	5
No	9.4%	3
answered question		32
skipped question		3

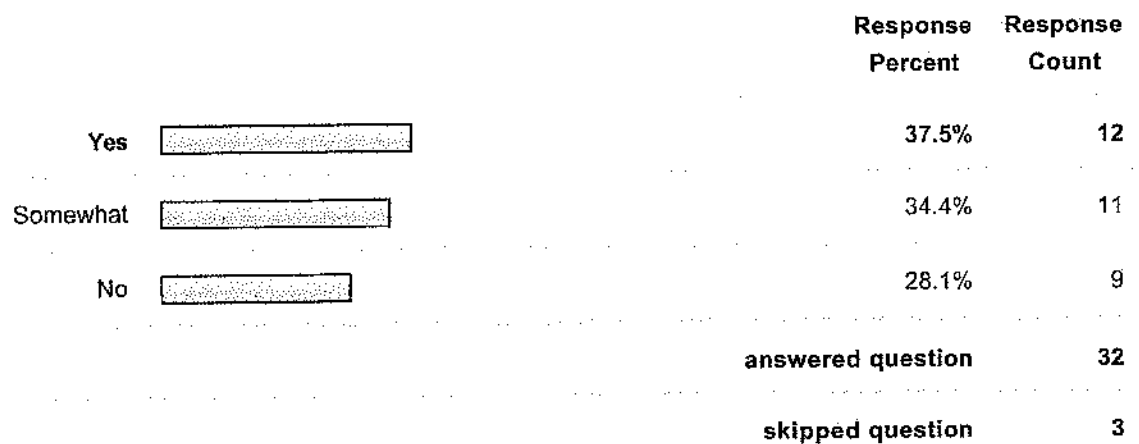
21. Would seeing other facilities give you a better understanding?






22. Please provide comments or suggestions regarding the tours.

	Response Count
	10
answered question	10
skipped question	25

23. Was there enough time for hands on training?




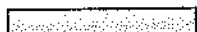

24. Did the hands on training help you understand how to use the instruments?

		Response Percent	Response Count
Yes		62.5%	20
Somewhat		25.0%	8
No		12.5%	4
answered question			32
skipped question			3

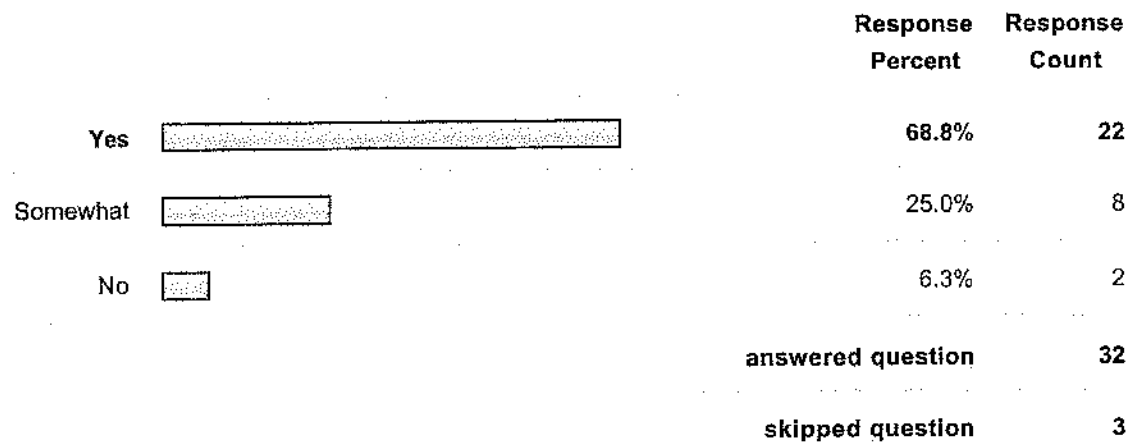
25. Please provide comments or suggestions regarding the hands on training.

	Response Count
	6
answered question	6
skipped question	29

26. Was your time used effectively?

		Response Percent	Response Count
Yes		68.8%	22
Somewhat		28.1%	9
No		3.1%	1
answered question			32
skipped question			3

27. Was your class time structured?



28. Please provide comments or suggestions regarding class time.

	Response Count
	4
answered question	4
skipped question	31

29. Please provide comments or suggestions on any additional areas you feel need attention.

	Response Count
	6
answered question	6
skipped question	29

Page 2, Q7. Please provide any comments or suggestions regarding the CBTs.

1	i have no problem with the CBT'S. i think it was well organized and no major changes needed.	Nov 17, 2011 1:04 PM
2	the online course was good i learned alot but its somewhat boring	Nov 17, 2011 12:59 PM
3	i think that it great i had no problems understanding any of the concepts	Nov 17, 2011 12:59 PM
4	MORE TIME	Nov 17, 2011 12:58 PM
5	after completing them it would be nice to be able to go back and review instead of having them closed once completed	Nov 14, 2011 5:53 PM
6	the growing world of tech. has grown some CBT'S need to be removed as some systems have upgraded and dont use them anymore, some CBT'S need to be added to suppoert and teach about new equipment	Nov 10, 2011 5:53 PM
7	Good. No comment.	Nov 10, 2011 5:53 PM
8	need better info on compressor lab, week 11. not very clear and hard to follow to do the study guide.	Nov 10, 2011 5:50 PM

Page 3, Q5. Please provide comments or suggestions regarding the books and materials.

1	the book and materials is a lot to take in but it's worth it.	Nov 17, 2011 1:05 PM
2	The books are good	Nov 17, 2011 1:00 PM
3	more time	Nov 17, 2011 12:59 PM
4	The books should maybe try to break it down more into things people can understand.	Nov 17, 2011 12:55 PM
5	recommend that the CBT have added to it prior to any orther course a in depth description of plant processes. Think it would be beneficial at the onset of the curriculum in my opinion.	Nov 14, 2011 5:56 PM
6	with new tech and equipment some material need to be added	Nov 10, 2011 5:54 PM
7	Good. No comment	Nov 10, 2011 5:53 PM
8	didnt have any books	Nov 10, 2011 5:52 PM

Page 4, Q4. Please provide comments or suggestions regarding your instructor.

- | | | |
|----|---|-----------------------|
| 1 | the instructor really knows what his doing and does all he can to make us understand the material and assignments. | Nov 17, 2011 1:07 PM |
| 2 | i think our insturctor is doing a great job | Nov 17, 2011 1:00 PM |
| 3 | more time | Nov 17, 2011 12:59 PM |
| 4 | i would like more hands on stuff and for the instructor to explain more on all of the matireal | Nov 17, 2011 12:58 PM |
| 5 | He is a very good instructor and does eveything he can to provide the answer to our questions also he does all he can to help us pass he cares about his students. | Nov 17, 2011 12:56 PM |
| 6 | Kim Was among the best instructors I have ever had. Recommend not losing him as an asset. | Nov 14, 2011 5:56 PM |
| 7 | Kim does a good job. | Nov 14, 2011 5:54 PM |
| 8 | Kim Finch is an excellent instuctor. He knows the material and the in and outs of the plant. It has been a pleasure to be in the class with Kim as the instructor. | Nov 10, 2011 6:03 PM |
| 9 | Mr. Finch is excelent at teaching these courses. He is very thorough with the subject matter and willing to help with or answer any questions or problems that may arise. | Nov 10, 2011 6:01 PM |
| 10 | great instructor | Nov 10, 2011 6:00 PM |

Page 5, Q4. Please provide comments or suggestions regarding the tours.

- | | | |
|----|--|-----------------------|
| 1 | i think we should go to a nuclear facilities, because that what i'm planning on becoming later on in the feature. it would give me a visial understanding of how its gonna be like. | Nov 17, 2011 1:09 PM |
| 2 | we should take more tours | Nov 17, 2011 1:01 PM |
| 3 | we have not gotten any tours | Nov 17, 2011 1:01 PM |
| 4 | more tours | Nov 17, 2011 1:00 PM |
| 5 | i would like it if there are more tours around the plant and to other plants after any type of section of the book | Nov 17, 2011 1:00 PM |
| 6 | These help show how everything operates ad how some places are differet then other some are maual and others are automatic. So, it gives you a good idea of what you can do and become. | Nov 17, 2011 12:57 PM |
| 7 | Hard to hear Headsets would be invaliable on the tour | Nov 14, 2011 5:57 PM |
| 8 | Tours help connect the class work to the plant. | Nov 10, 2011 6:02 PM |
| 9 | diffrent plants have diffrent operation and equipment other facilities would help prepare for anything, tours offer hands on training and pull everything from the book together nothing can compeat with hands on | Nov 10, 2011 5:57 PM |
| 10 | tours are a huge help in the class work. it is were the rubber meets the road. | Nov 10, 2011 5:52 PM |

Page 6, Q3. Please provide comments or suggestions regarding the hands on training.

- | | | |
|---|---|----------------------|
| 1 | hands on training comes pretty natural if u know what your doing. | Nov 17, 2011 1:10 PM |
| 2 | i think that we should do more projects with the equipment just to get more understanding and get more comfortable with tools that we'll be using almost on an everyday basis once we get a job somewhere | Nov 17, 2011 1:03 PM |
| 3 | we also need more hands on stuff in the work area of the building and make plans to do it as well | Nov 17, 2011 1:01 PM |
| 4 | more hands on | Nov 17, 2011 1:00 PM |
| 5 | nothing can compare to hands on training there need to be more | Nov 10, 2011 5:58 PM |
| 6 | no hands on. we just read the lesson, do the homework and attend the lectures. | Nov 10, 2011 5:53 PM |

Page 7, Q3. Please provide comments or suggestions regarding class time.

- | | | |
|---|---|----------------------|
| 1 | i have no time to waste time. | Nov 17, 2011 1:11 PM |
| 2 | i think that we had plenty of time in the class room just not enough in the shop | Nov 17, 2011 1:03 PM |
| 3 | more time | Nov 17, 2011 1:00 PM |
| 4 | it takes a hour and a half of driving time to get to a 15 min class. the tours are great but class time is a waist of time. | Nov 10, 2011 5:52 PM |

Page 8, Q1. Please provide comments or suggestions on any additional areas you feel need attention.

- | | | |
|---|--|----------------------|
| 1 | when every i need help. | Nov 17, 2011 1:12 PM |
| 2 | we need to have the instructors explain the matirial more often other than to make us read it by our selfs we need to go over it all together and ask questions and answer the questions. and we also need to have more hands on things around the plant to get us involved more. | Nov 17, 2011 1:05 PM |
| 3 | more time | Nov 17, 2011 1:00 PM |
| 4 | The computers with the study guides and evaluations they should be more accurate with eachother when you go to look for what they are asking your having to go through the whole study guide but other then that i think is a wonderful program and anyone who is willig to actually learn and soak everything they possibly can up they can pass this class and stay focused on what they want and need to do to get where they want to be. | Nov 17, 2011 1:00 PM |
| 5 | some cbt s and classroom work need updated to the new style power plant methods and more directed to operations | Nov 10, 2011 6:03 PM |
| 6 | if more plants accrossed the state or even accrossed the country got on board with these classes and tough people these jobs before they were hired they would get the most out of there new hired workers, | Nov 10, 2011 6:01 PM |

IMO Student Survey F11

1. In which class(es) are you enrolled?

- ☐ IMO 210
☐ IMO 211
☐ IMO 212
☐ IMP 213

2. Please select the location of your class.

- ☐ Painted Desert Campus ☐ St. Johns

CBTs

1. Was the information on the CBTs accurate and up to date?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

2. Did the CBTs help you understand the subject matter?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

3. Were the CBTs presented in a way that was easy to follow?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

4. Were the CBTs assigned at the time the subject was presented?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

5. Did the CBTs help you understand the plant processes?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

6. Was there enough time in class to work on the CBTs?

- ☐ Yes ☐ Somewhat ☐ No ☐ Not Applicable

7. Please provide any comments or suggestions regarding the CBTs.

Materials and Books

IMO Student Survey F11

1. Are the books and materials up to date?

☐ Yes

☐ Somewhat

☐ No

2. Are the books easier to understand than the CBTs?

☐ Yes

☐ Somewhat

☐ No

☐ Not Applicable

3. Did the books and the CBTs complement each other?

☐ Yes

☐ Somewhat

☐ No

☐ Not Applicable

4. Can the material be condensed?

☐ Yes

☐ Somewhat

☐ No

5. Please provide comments or suggestions regarding the books and materials.

Instructor

1. Was the instructor able to keep you focused on the subjects?

☐ Yes

☐ Somewhat

☐ No

2. Was your instructor well prepared for the lesson?

☐ Yes

☐ Somewhat

☐ No

3. Did the instructor present the material in a clear and concise manner?

☐ Yes

☐ Somewhat

☐ No

4. Please provide comments or suggestions regarding your instructor.

Tours

IMO Student Survey F11

1. Did your tours help you understand the systems processes?

☐ Yes

☐ Somewhat

☐ No

2. Should there be more tours given?

☐ Yes

☐ Somewhat

☐ No

3. Would seeing other facilities give you a better understanding?

☐ Yes

☐ Somewhat

☐ No

4. Please provide comments or suggestions regarding the tours.

Hands on Training

1. Was there enough time for hands on training?

☐ Yes

☐ Somewhat

☐ No

2. Did the hands on training help you understand how to use the instruments?

☐ Yes

☐ Somewhat

☐ No

3. Please provide comments or suggestions regarding the hands on training.

Class Time

1. Was your time used effectively?

☐ Yes

☐ Somewhat

☐ No

2. Was your class time structured?

☐ Yes

☐ Somewhat

☐ No

IMO Student Survey F11

3. Please provide comments or suggestions regarding class time.

1. Please provide comments or suggestions on any additional areas you feel need attention.

This is one part of the Mathematics Department report to the Assessment Committee, April 2012.

Early in the Fall Semester, 2011, Shannon Newman sent out the following notice:

This year we need to begin implementing assessment of Information Literacy and Diversity; what ideas do you have as to how they might be assessed? Please take a moment to review the NPC General Education Student Learning Outcome below...

- **NPC 5 - Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.**
- **NPC 6 - Diversity: Students will develop knowledge of diverse cultural and natural environments.**

The Math Department gave a Take-Home component, of the Final Exam, to the students in MAT 152, about two weeks before the Final Exam in the Fall Semester of 2011.

We also gave the same assignment, for extra-credit, to the students in MAT 142 in the middle of the Spring Semester of 2012.

Here is the assignment:

Locate information on the Internet concerning persons who have made contributions to the field of Mathematics, and compile a list of the 10 persons who represent the most diverse cultures you can find. This list should include several females and several non-white males. For each of those 10 persons, write one or two sentences describing what they did mathematically, and one or two sentences about their cultural background.

Each paper that we received was graded by allowing up to two points per Mathematician, named in the paper, with a maximum possible score of twenty points.

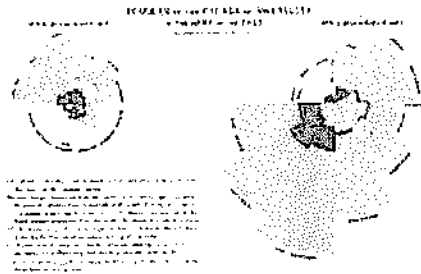
The submissions we received showed a great deal of Diversity. Many students included names, both female and male, from ancient times in China, Persia, India, Egypt, as well as more recent names from dozens of countries such as Japan, Brazil, Nigeria, America.

Many included the name of the first African-American male and the first female to obtain a Doctorate in Mathematics. There were also some Native Americans listed.

Perhaps the name that surprised me the most was Florence Nightingale. Here is a short excerpt from Wikipedia, about her.

http://en.wikipedia.org/wiki/Florence_Nightingale#Statistics_and_sanitary_reform

Statistics and sanitary reform



^[29]
"Diagram of the causes of mortality in the army in the East" by Florence Nightingale.

Indeed, Nightingale is described as "a true pioneer in the graphical representation of statistics", and is credited with developing a form of the pie chart now known as the polar area diagram,^[29] or occasionally the **Nightingale rose diagram**, equivalent to a modern circular histogram, in order to illustrate seasonal sources of patient mortality in the military field hospital she managed. Nightingale called a compilation of such diagrams a "coxcomb", but later that term has frequently been used for the individual diagrams. She made extensive use of coxcombs to present reports on the nature and magnitude of the conditions of medical care in the Crimean War to Members of Parliament and civil servants who would have been unlikely to read or understand traditional statistical reports.

In her later life Nightingale made a comprehensive statistical study of sanitation in Indian rural life and was the leading figure in the introduction of improved medical care and public health service in India. In 1858 and 1859 she successfully lobbied for the establishment of a Royal Commission into the Indian situation. Two years later she provided a report to the commission, which completed its own study in 1863. "After 10 years of sanitary reform, in 1873, Nightingale reported that mortality among the soldiers in India had declined from 69 to 18 per 1,000".^[29]

In 1859 Nightingale was elected the first female member of the Royal Statistical Society and she later became an honorary member of the American Statistical Association.

We received papers from nine students in MAT 152, Fall 2011, with the following scores:

20, 20, 16, 16, 14, 12, 12, 8, 4.

These nine had an average score of 14 points out of 20 possible.

Before giving the MAT 142 students the assignment, Spring 2012, I emphasized that they should not just give me the names of ten white males, like Isaac Newton. We received papers from 21 students, with the following scores:

20, 20, 20, 20, 20, 18, 18, 18, 18, 18, 18, 18, 16, 16, 16, 16, 14, 12, 12, 6, 4.

These 21 had an average score of 16 points out of 20 possible.

The results were satisfactory, but, next year, if we give a similar assignment to another Math class, we will state the need for Diversity even more clearly.

One thing we learned, from grading the papers, is that only 7 out of 30 students included a citation page. The other 23 students gave us no information as to where they found their names of Mathematicians. If a similar project is assigned next year, we will give specific instructions to include References, and perhaps require they utilize ten different websites.

Northland Pioneer College Mathematics Department

Assessment Plan for Quantitative Reasoning

(Beginning in fall of 2012)

I. General Education at NPC

Mission Statement: "The NPC general education program promotes skills in critical inquiry, communication and an understanding of diversity that supports a life-long intellectual engagement in cultures and the natural world."

- NPC 1 - Critical Thinking Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.
- NPC 2 - Effective Communication: Students will develop thoughtful and precise verbal and written skills across a variety of social venues.
- NPC 3 - Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.
- NPC 4 - Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.
- NPC 5 - Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.
- NPC 6 - Diversity: Students will develop knowledge of diverse cultural and natural environments.

II. Math Department's statement concerning quantitative reasoning

The ability to think clearly and reason critically about quantitative issues is imperative in contemporary society. Quantitative reasoning is necessary in all academic fields, all professions, and for making informed decisions in everyday life. The NPC mathematics department is committed to teaching students the requisite skills required to be proficient in the use of mathematical and statistical problem solving tools needed in today's quantitative reality.

III. Math General Education Courses

The entire gambit of math course offerings ranging from Math 101 Technical Math through Math 261 Differential Equations fulfill general education requirements for obtaining various types of associate degrees.

IV. Definition of Competency:

The mathematics curriculum is designed to develop critical thinking and problem solving skills needed for personal and professional intellectual growth. A basic goal of the mathematics department is to continue to offer a high quality general education curriculum by teaching mathematical competence in quantitative reasoning. We define mathematical competence in quantitative reasoning by the following skills:

1. Modeling
2. Problem Solving
3. Interpreting Data
4. Computation
5. Logical Reasoning

V. Standards for Competency

1. Modeling: Students will use valid models of physical and natural phenomena in order to accurately make predictions and draw conclusions.
2. Problem Solving: Students will read word problems, translate the given information into mathematical equations, solve the equations, and then use the solutions to draw conclusions.
3. Interpreting Data: Students will read and interpret representations of information such as tables and graphs and use them to make predictions and draw inferences.
4. Computation: Students will interpret mathematical language and symbols and perform basic calculations pertaining to mathematics or statistics applications.
5. Logical Reasoning: Students will deduce and identify appropriate generalizations from series of logical and mathematical statements.

VI. **Methods used to Gather Evidence of Competency:**

Mathematical competence in quantitative reasoning is accomplished by monitoring, assessing, and continually improving the effectiveness of the curriculum.

Assessment data will be collected and analyzed from exams consisting of 10 multiple-choice questions administered in conjunction with the course final exams. Each of the five standards for quantitative reasoning competency will be assessed by two of the 10 multiple-choice questions. Each math course will have a different set of questions reflecting the particular course content. The multiple-choice format will guarantee impartial assessment. These exams will be developed during the spring 2012 semester with full implementation beginning in the summer of 2012. Two math courses will be chosen to be assessed each year, beginning with the summer sessions. The courses to be chosen for initial implementation will be Math 142 and Math 105.

The following rubric will be used to measure competence in quantitative reasoning:

Level of understanding	Number of correct responses	Range of Scores
High	8-10	80-100%
Satisfactory	6-7	60-70%
Below Satisfactory	0-5	0-50%

Additionally, students will demonstrate competency from each skill area by correctly answering at least one of the two questions from that skill set.

VII. **Timeline:**

- Finalize assessment plan and formulate 10 multiple-choice questions targeting the five skill sets for assessing quantitative reasoning by May 15th, 2012
- Administer the 10 question assessment tool to all Math 105 and Math 142 students beginning with the summer 2012 sessions.
- Start analyzing results of data gathered beginning in fall of 2013.
- Beginning in spring of 2013, implement changes and modify curriculum, as needed.

Department of Nursing
ASK report
2011-2012 Cycle

What is one question (or two) dealing with student learning the department will explore this year?

I. The first question: Do NPC ADN students apply critical reasoning to provide safe competent culturally sensitive patient care in a clinical setting?

a. *Why did we choose this question?* Provision of safe competent culturally sensitive patient care is crucial to entry level nursing and our program prepares entry level LPNs and RNs. Widely published data suggests newly graduated Registered Nurses encountering complex patient care issues can have difficulty in adequately assessing and responding to a patient care issue in an effective, safe, and culturally sensitive way. This exercise gives faculty an ability to assess student application of learned cognitive, affective and psychomotor skills in a simulation setting.

b. Does this question relate to any of the General Education Outcomes? If so, please explain which outcome and how?

Yes: general education statements #1, 2, 3, 4, 5, 6.

NPC 1 - Critical Thinking/ Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.

Simulation provides the opportunity for students to practice thoughtful, organized and systematic assessment of a client in a simulated health care setting

NPC 2 – Effective Communication: Students will develop thoughtful and precise verbal and written skills across a variety of social venues.

Simulation provide the students the opportunity to practice communication utilizing SBAR with other members of the health care team

NPC 3 – Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.

Simulation requires students to interpret clinical findings and develop a plan of care

NPC 4 – Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.

Simulation requires student to apply best practice/evidence in the direct care of a patient during simulation

NPC 5 – Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.

Some parts of the simulation may require student to utilize resources of information in the process of providing patient care

NPC 6 – Diversity: Students will develop knowledge of diverse cultural and natural environments.

Some parts of the simulation require the student to incorporate the concept of cultural diversity in the provision of patient centered care.

c. What data will be collected and how?

Create two short (10") clinical simulation scenarios (one for 2nd semester and one for 4th semester students- or two or three for each) that will assess student readiness for patient care by including: one safety issue (ability to recognize and respond to an issue appropriate for level of education); one critical reasoning issue; one communication issue; and one (or more) appropriate assessments, including sensitivity to diversity among patients and settings. These will be conducted during skills labs with a rubric to help us collect data.

d. How will the data be analyzed and by whom?

All nursing faculty instruction in the nursing skills labs looked at the data. The first year nursing faculty at LCC and WMC analyzed data from the assessment at both campuses. The second year faculty did the same. See results.

e. What will be done with the results of the analysis?

The critical actions in the rubric (see appendix) provide assessment data to faculty on individual student performance. Scenarios are created to purposefully start at the point where the student should be able to identify and respond to the clinical condition. Faculty is then able to provide group and individual feedback to students related to critical evaluation of a simulated patient situation. Faculty can also evaluate and provide critique of student actions in response to the situation.

First Year Scenario Results

The following scenarios were presented to NPC NUR 122 Spring 2012 (2nd semester) students, one student at a time, during skills lab week seven. Deborah Keith, Michelle Hunt, Penny Weiermann, Kerry Button, and Melinda Powell were the instructor-facilitators. A total of 46 students from WMC (29) and LCC (19) participated and each student was presented both scenarios. The Instructor-facilitators agree on the effectiveness of this exercise, both as an assessment tool and a teaching-learning strategy. First semester skills labs are filled with learning the different skills and second semester is when we start critical thinking scenarios. Although this was one of the first scenarios, the students did quite well and expressed an interest in participating in more. Deborah emailed all instructor-facilitators with more specific grading criteria to maintain consistency in the student evaluations. Overall a good learning experience for everyone involved.

NUR 122 - Assessment Collection Rubric/templates

Date 3-02-12

Student name _____ Faculty name LCC & WMC

SCENARIO 1: The patient is a 45-year-old woman who had a bronchoscopy under local (topical) anesthesia about 15 minutes ago. She tells you that she is thirsty and scared and that her voice seems "squeaky." She also wants to smoke a cigarette because she has not had one for over 12 hrs. Her vital signs taken 10 minutes ago indicate a respiratory rate of 24 and an oxygen saturation of 92%. When you retake her vital signs, her respiratory rate is 28 and her oxygen saturation is 90%.

1. Are these vital signs of concern? Why or why not?
2. What are the possible causes of these changes?
3. Should you give her something to drink now?
4. Should she be allowed to smoke now? Why?
5. What should be your next action?

Grading Criteria:

- 3 Function independently without supporting cues.
- 2 Function with supervision, requiring occasional supporting cues.
- 1 Function with assistance, requiring frequent verbal and occasional physical directive cues.
- 0 Function dependently, requiring continuous verbal and physical cues.

Scenario 1 : Bronchoscopy	Average score of 46 2 nd semester students from LCC & WMC	
Critical actions	Score 0 - 3	Comments
1. Critical assessment one: Completes initial assessment (responds to increased Resp Rate & decreased O2Sat)	2.9	
2. Critical assessment two: Completes initial assess, includes LOC / gag reflex	2.5	
3. Critical reasoning issue 1: Recognizes change in respiratory status r/t possible complications of bronchoscopy;	2.5	Some did this independently others needed prompting - they were thinking anxiety
4. Critical reasoning issue 2: Recognizes respiratory difficulty and applies O2.	2.7	
5. Patient safety issue: Identifies error in patient identification band	2.1	
6. Communication issue: Calls for help; contacts Physician or initiates call for Rapid Response team (because no improvement in Resp status after O2 is applied)	2.5	
Total score: 0 -18	15.2	

NUR 122 - Assessment Collection Rubric/templates

Date _____

Student name _____ Faculty name _____

SCENARIO 2: The patient is a 5-year-old boy admitted to the pediatric unit with a diagnosis of asthma. He has been visiting family members who have numerous pets and denies any shortness of breath. After signing paperwork mother states she must leave.

1. What important information needs to be obtained on this patient?
2. What approach will you take with this patient when providing care? What growth and development considerations?

Admission assessment: temp 98.7 F, respirations 38 and wheezing auscultated, O2 Sat 92% on room air, pulse 130, weight 43 pounds. He received 2 albuterol nebulizer treatments prior to arrival. He is within normal parameters for height and weight.

3. What medications / treatments do you expect the physician to order for this patient?
4. Calculate a single dose for the following medication order: Prednisone 5mg/kg PO q 12hrs
5. What other actions need to be taken?

Grading Criteria:

- 3 Function independently without supporting cues.
- 2 Function with supervision, requiring occasional supporting cues.
- 1 Function with assistance, requiring frequent verbal and occasional physical directive cues.
- 0 Function dependently, requiring continuous verbal and physical cues.

Scenario2: Peds Asthmatic Patient	Average score of 46 2 nd semester students from LCC & WMC	
Critical actions	Score 0 - 3	Comments
1. Critical assessment one: Completes initial assessment, tailoring for Peds patient (least invasive to most invasive, pt handle equip)	2.7	
2. Critical assessment two: Completes initial assess, identifies abnormal breath sounds (wheezing), initiates SVN	2.8	
3. Critical reasoning issue 1: calculates prescribed dosage with 100% accuracy (Prelone 97.5 mg)	2.7	
4. Critical reasoning issue 2: Recognizes possibility for stranger anxiety and encourages mother to stay with patient	2.5	Hesitant about encouraging mother to stay
5. Patient safety issue: Lowers elevated bed	2.4	
6. Communication issue: uses appropriate language / questions for 5 yr old patient	2.6	
Total score: 0 -18	15.7	

Second Year Scenario Results

Assessment Collection Rubric/template example

Grading Criteria:

- 3 Function independently without supporting cues.
- 2 Function with supervision, requiring occasional supporting cues.
- 1 Function with assistance, requiring frequent verbal and occasional physical directive cues.
- 0 Function dependently, requiring continuous verbal and physical cues.

Scenario:		
Critical actions	Recognized need/issue	Accurately Completed/responded
1. Critical assessment one		
2. Critical assessment two		
3. Critical reasoning issue one		
4. Critical reasoning issue one		
5. Patient safety issue		
6. Communication/diversity issue		
Total score: 0-18		

These scenarios were presented to NPC NUR222 Spring 2012 (4th semester) students, one student at time, during clinical skills lab week six (about 10" per student). Dana Jolly, Orina Hodgson, and Carol Stewart were the instructor-facilitators. A total of 44 students from WMC (30) & LCC (14) participated. Dana, Carol, and I agree on the effectiveness of this exercise, both as an assessment tool and a teaching-learning strategy. We now develop such scenarios for three skills lab weeks per semester in second year nursing. The students, although nervous, and far from perfect, also expressed a desire to do more of this as they considered it a wonderful learning opportunity. As instructors we came away with clear direction for improved teaching points and strategies.

Assessment Collection Rubric/templates with Results

Student name _____ Date _____
Faculty name _____

Grading Criteria:

- 3 Function independently without supporting cues.
- 2 Function with supervision, requiring occasional supporting cues.
- 1 Function with assistance, requiring frequent verbal and occasional physical directive cues.
- 0 Function dependently, requiring continuous verbal and physical cues.

Scenario1 : Responding to chest pain/acute MI	Average score of 44 4 th semester students from both WMC & LCC	Score averages less than 2.5 may indicate areas that require increased emphasis in teaching-learning activities
Critical actions	Score 0 - 3	Comments
1. Patient safety issue: Washes hands, introduces self, and identifies patient using two identifiers	2.1	Most points lost for failing to wash hands and check patient ID!
2. Critical assessment: Completes focused chest pain assessment (includes ≥ 5 of following: history, onset, location, quality, intensity, duration, radiation, associated s/s)	2.65	Some students moved quickly to next action before completing chest pain assessment
3. Critical assessment: Completes initial assessment: evaluation of vital signs, O2 sats, chest sounds, skin, abdomen.	2.26	Most common omission was failing to assess O2 sats or moving to next action without completing assessment
4. Critical reasoning issue: Recognizes urgency of situation and puts on O2 (4 liters per NC or 5-6 liters per mask)	2.75	Almost everyone put O2 on patient, some at too low a concentration
5. Communication issue: Calls for help: another RN to room and initiates call for Rapid Response team	2.51	Many students were unsure of who to call; everyone got some kind of help.
6. Critical action: Delegates or applies 12 lead; obtains ECG	2.28	Although most students did obtain an ECG, a couple did not at all and a few needed quite a bit of prompting, pulling the average score down.
7. 7. Critical action: Delegates or initiates large-bore IV access	2.13	Huge variation on this one, from no IV at all, to needing lots of prompting to minimal prompting, to initiating on own.
Total score: 0 -21	16.68/21	

Other critical assessments and actions may be appropriate, but the critical actions in the above rubric will be those we use for the assessment criteria. Scenario is purposefully started at the point where student should identify and respond to opioid narcosis right away to keep it focused, short (10" or less), and assess students' performance related to critical reasoning and action.

II. The second question: Do NPC ADN students analyze research-based evidence to support clinical practice ?

a. Why did we choose this question? The field of nursing is placing increasing importance on nurses'ability to critically appraise and apply available data and research to understand and inform clinical decision-making better. NPC nursing graduates should

have a basic understanding of why this is important and what methods are available to analyze evidence to support nursing practice.

- b. Does this question relate to any of the General Education Outcomes? If so, please explain which outcome and how?

Yes: general education statements #1, 2, 3, 4, 5, and possibly 6.

NPC 1 - Critical Thinking/ Critical Inquiry: Students will develop the practice of disciplined, independent thinking that allows for the analysis and evaluation of information.

The evidence based practice project requires that students select a clinical practice question of importance, collect research data related to the question, and analyze the quality of the data.

NPC 2 – Effective Communication: Students will develop thoughtful and precise verbal and written skills across a variety of social venues.

The evidence based practice project requires that students prepare a poster presentation disseminating their questions and their findings to fellow students and faculty.

NPC 3 – Quantitative Reasoning: Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.

The evidence based practice project requires that students will be able to interpret and explain quantitative data found in the research reports they are analyzing.

NPC 4 – Scientific Inquiry: Students will develop the ability to formulate and assess hypotheses and analyze and evaluate theoretical frameworks.

The evidence based practice project requires that students select a clinical practice question of importance, collect research data related to the question, and analyze the quality of the data.

NPC 5 – Information Literacy: Students will demonstrate skills in locating, assessing, and analyzing information effectively, including the use of digital resources and tools.

The evidence based practice project requires that students locate, assess, and analyze information related to their topics. Much of this will be done with the use of digital resources.

NPC 6 – Diversity: Students will develop knowledge of diverse cultural and natural environments.

The evidence based practice project topics will vary greatly among students. Historically, many students select topics that involve diverse populations, but this is not a requirement.

- c. What data will be collected and how?

NPC 3rd semester Nursing students are required to complete an evidence-based practice project with both written and poster-presentation components. These are assessed and graded using a rubric.

- d. How will the data be analyzed and by whom?

Third semester Nursing faculty will look at the data collected from the graded rubrics and summarize the results into a table.

- e. What will be done with the results of the analysis?

The components in the rubric will provide assessment data to faculty on individual student performance related to development of a practice question, collection of research related to that question, analysis and presentation of the research findings. Nursing faculty can apply the results to further teaching-learning opportunities, working to improve in areas where more work may be needed.

Data from 30 WMC students graded rubrics were analyzed. The total scores with insight into components where students scored poorly were provided for 15 LCC students

Only 3/30 WMC students got less than 85% on the total project (81%, 83%, & 84%). The individual components of the grading rubric are more helpful in assessing the students' ability to "use the best research they can find to help them in decision making when confronted with a clinical practice problem or dilemma" as the assignment states.

The average scores of the 30 students' assignments are entered below in the rubric we used for individual grading. My reflections, which I hope to apply to my teaching related to this project next year are in blue.

Grading Rubric Evidenced Based Practice Assignment NPC NUR 221 Fall 2011

Paper	
Development of clinical foreground question incorporating the four elements (PICO) : 10 points. Each student had assistance in question development, so 100% was expected for this part of the assignment.	10/10 (100%)
Provides at least two high quality resources: 10 points Levels I-IV accepted. Students were allowed to show resources to faculty and got assistance from library with this component. Score improved from last year.	9.97/10 (99%)
Determine and discuss the level of evidence for each article: 10 points Instructors provided more guidance with this component this year than last and most students greatly improved in this area. One student did not do this at all, which pulled the average down.	9.47/10 (95%)
Provide well-organized summary the research in a 3-4 page single spaced Times New Roman, size 12: 15 points. Again, more assistance and examples were provided to the students this year and the summaries were dramatically improved over last year.	14/15 (93%)
The paper must be word processed without grammar/spelling errors in APA format with a reference page: 5 points. Although some students lost a few points on APA format, I am not as concerned about this aspect of the project. We do not have the time to teach the students perfect APA format. I do emphasize to them that if they continue their nursing education, they will need to improve in this area.	4.5/5 (90%)
Total paper points possible: 50 The additional assistance, examples, and resources made a big difference in meeting the goals of this part of the project.	47.94/50 Up from 43.6/50 Last year

Poster Presentation

Details on the poster capture the important information (research studies, results, etc.) about the topic (PICO question and answer must be included) and increase the audience's understanding: 15 points Again, with more assistance understanding the requirements for this component, the scores improved dramatically from last year.	14.5/15 (96.7%)
All information on the poster is organized, and easily viewed from 3 feet away (small print avoided): 10 points Most students did fine with this part.	9.8/10 98%
No grammatical, spelling or punctuation errors: 10 points Most students did fine with this part.	4.9/5 98%
All sources (information and graphics) are accurately documented in APA format: 5 points Most students did fine with this part.	9.9/10 99%
Adhere to time limit 8-10 minutes: 10 points Students helped each other with the timing, so all did fine.	10/10 100%
Total poster points possible: 50	49.17/50
Total project points possible Improved scores seem to reflect increased guidance, examples, and time spent on a project that was unfamiliar to most students.	97.11/100 Up from 90/100

ASK report Spring 2011

The SBS Dept has continued with its long lasting Critical Writing Assessment rubric. However, because the Dept has also begun a pilot project to address the ASK outcome #3, Quantitative Reasoning (*Students will develop skills in the interpretation, explanation, and manipulation of quantitative data*) the CW rubric has been reduced to a single class per faculty member due to the addition of the Quant. measure.

The CW rubric data has been gathered but not yet analyzed or compared to past data.

The Quantitative Reasoning measure is in the form of a 20 question quiz on Moodle. For the most part, several multiple choice or T/F questions related to a chart or graph provided by faculty in each discipline of the Dept. were constructed (PSY faculty provided a chart with several questions and so on...). Students were directed to take the quiz during the month of January, with approximately 160 takers. Every student in every SBS class was "encouraged" to take the quiz, with students taking more than one SBS course only required to take the quiz once. Due to this, faculty could provide incentives for taking the quiz, but not all did (I did not). If interested, we could look to see the success rates of faculty getting students to even take the quiz. Students will again be directed to take the exact same quiz in May. We will compare the results.

1. What question(s) regarding student learning did the department select to explore?

ASK outcome #3 – Quantitative Reasoning: *Students will develop skills in the interpretation, explanation, and manipulation of quantitative data.*

It is hoped that the pre/post quiz concept will address how well such skills get developed over the course of a semester in SBS courses.

2. What data was collected and how? Please include the data in the report or as an appendix.

A 20 question "pre / post" quiz on Moodle was designed, but "post" won't happen until May. Due to the quiz location in Moodle, access to anyone can be provided, however, I have not found an easy way to transfer the Moodle info to a document in concise fashion, likely because I have not yet read Dr. Ma's Moodle users guide for faculty...

3. What did you find in the data?

A low "bell curve" in the "pre" quiz, with a 61 average. (Scores: 90-100: 5, 80-89: 19, 70-79: 33+, 60-69: 33+, 50-59: 24, 40-49: 21, 30-39: 13, 20-29: 2, 0-19, at least 2) Also, faculty will address the lowest scoring questions to determine if the questions were "bad" or could be re-worded, or if the question simply doesn't address course outcomes as well as was supposed.

4. What conclusions were you able to make?

That there's room for student improvement by "post" quiz time! And, that the quiz itself likely needs more honing. Example: one of the questions had a mere 10% correct rate, indicating (to me) that the question is poorly worded or otherwise confusing.

5. What was the answer to the question?

- a. **There may not be an answer. You may have decided to do further study?**

The "post" quiz and analysis/comparison are surely needed, as is further honing of the quiz.

6. What are the next steps?

- a. **Curriculum or program changes?**

After analysis, maybe. At least two semesters of analysis and "honing" of quiz questions are, I think, needed before any substantial conclusions could be drawn.

- b. **Further study?**

Yes, as described above.

- c. **New directions?**

Not likely for some time, due to the newness of QA study.

2011-12 TLC Assessment of Student Learning Project

TLC completed cycles for three assessment projects this year. The fulltime TLC staff gathered At PDC February 24th to review data collected and organized primarily by our Data Specialist. Those participating included 4 faculty, 2 Special Sites Coordinators, Program Director, and Data Specialist.

Project A: What percent of successful TLC 066 students have long term fraction knowledge?

During the 2009-10 academic year The Learning Cornerstone began a process to assess the retention of fraction skills for TLC mathematics students. We chose to utilize a 10 question fraction assessment in all TLC math classes. Instructors pull out the quizzes of students who have successfully completed TLC 066 (passed with an A or B) for study. Instructors can determine success in previous courses by consulting student portfolios.

What to track? Instructors entered the following data via Survey Monkey

- Class location
- Current TLC math class
- When did the student pass TLC 066? 0-6 months, 7-12 months, 13-18 months 19+ months ago?
- Number of semesters it took the student to complete TLC 066
- Next TLC math class after TLC 066
- TLC 066 grade
- Number correct on the assessment

November 2009 all TLC math instructors were sent copies of assessment, an answer key, and directions to administer the assessment and enter data through Survey Monkey. The conclusions from the data were: 1. Students were not retaining the fraction skills as well as we would like. 2. Students have less retention of fraction skills over time even though they are currently enrolled in a next TLC math class. 3. Students taking more than one semester to complete TLC 066 have less retention of fraction skills. The recommendations were: 1. Ask TLC math instructors to put one fraction and one other review problem on the board each class session for students to work independently and/or with the class. 2. Revise the TLC 066 curriculum to move from two exams to four exams plus one math investigation activity. Also, include an extra credit challenge problem on each exam. 3. Pilot scheduling two back to back eight week TLC math classes at a campus and center location Fall 2010. 4. Repeat the assessment Spring 11 and Fall 11. Each of the recommendations was implemented. The curriculum changes were implemented F10.

Data:

When Reviewed	Feb. 2010	Feb. 2012		
By Whom	TLC fulltime Instructors 1 Special Sites Coordinator Dean	4 TLC fulltime instructors 2 Special Sites Coordinators 1 Data Specialist Director		
Semester Data from	Fall 2009	Spring 11	Fall 11	2011 Total
# students	46	18	8	26
% scored 6+	52	53	38	50%
% scored 0-5	48	47	62	50%
Of those earning an A in TLC 066 %	15 out of 25 - 60%	3 out of 5 - 60%	3 out of 6 - 50%	55%

3/17/2011

2011-12 TLC Assessment of Student Learning Project

scoring 6+				
Of those earning a B in TLC 066 % scoring 6+	6 out of 19 – 42%	7 out of 13 – 54%	0 out of 2 – 0%	47%

Retention of fraction skills and time since completing TLC 066:

	Time	# students	# scoring 6 +	%
2009	0-6 months	20	15	75%
2009	7-12 months	12	7	58%
2009	13-18 months	5	0	0%
2009	19 + months	9	2	22%
2011	0-6 months	12	5	42%
2011	7-12 months	7	5	71%
2011	13-18 months	4	2	50%
2011	19 + months	3	2	67%

Number of semesters for the student to complete TLC 066 and retention of fraction skills:

	Semesters to pass TLC 066	# students	# scoring 6+	%
2009	Less than 1 sem	15	13	87%
2009	1 sem	25	10	40%
2009	2 sem	2	0	0%
2009	4 sem	3	1	33%
2011	Less than 1 sem	3	3	100%
2011	1 sem	8	18	44%
2011	2 sem	2	5	40%
2011	4 sem	0	0	

Current TLC math class and retention of fraction skills

	Current TLC math class	# students	# scoring 6+	%
2009	TLC 067 Decimals	23	15	65%
2009	TLC 068 Geometry	2	2	100%
2009	TLC 069 Pre-Alg Basics	9	4	44%
2009	TLC 075 Math Problem Solving	5	0	0%
2009	TLC 076 General Math	2	2	100%
2009	TLC 092 Beginning Algebra	6	1	17%
2011	TLC 067 Decimals	22	8	36%
2011	TLC 068 Geometry	1	1	100%
2011	TLC 069 Pre-Alg Basics	0		
2011	TLC 075 Math Problem Solving	1	1	100%
2011	TLC 076 General Math	1	1	100%
2011	TLC 092 Beginning Algebra	2	2	100%

Conclusions:

- There was not as much participation in the subsequent data collection. Enrollment is not down enough to justify the fewer numbers of students for whom we had data. Thus, those reviewing the data were not confident the 2011 data represents current students.

Project B: Does shortening the timeframe of TLC classes improve student success? Last year we looked at the 8 week TLC classes implemented F10 at Whiteriver center and LCC. We analyzed completion rates and grades for the 8 week classes compared to the completion rates and grades of 16 week classes. It was determined the 8 week classes were at least as successful as 16 week courses, but it would be good to look at another set of data. The 8 week classes were implemented in additional locations for Fall 2011.

Data

Sites with 8-week and Semester-Long Classes ONLY (Chinle, LCC, PDC, SCC, WMC, WRV)

SUBJECT		Enrolled	Finished	%
GED-PREP	8-Week	1	1	100
	Semester	7	6	86%
MATH	8-Week	124	73	59%
	Semester	126	68	54%
READING	8-Week	38	32	84%
	Semester	69	40	58%
WRITING	8-Week	32	24	75%
	Semester	122	63	52%

TOTAL PROGRAM NUMBERS:

	Enrolled	Finished	%
8-Week	194	130	67%
Semester	571	340	60%
Totals	765	470	61%

1st Session vs. 2nd Session

	Enrolled	Finished	%
1st 8-Weeks	101	76	75%
2nd 8-Weeks	94	54	57%

	Enrolled	Completed	
8-Week Classes	195	130	67%

Semester Long Classes	328	179	55%
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8-Week Classes: Class Times

	Enrolled	Finished	
Math: Morning	88	53	60%
Afternoon	8	6	75%
Evening	28	14	50%
Reading: Morning	24	20	83%
Afternoon	14	12	86%
Evening	0	0	
Writing: Morning	24	18	75%
Afternoon	8	6	75%
Evening	0	0	

2011-12 TLC Assessment of Student Learning Project

Class	Subject	8-Week			Semester			TOTAL		
		Enrolled	Finished	%	Enrolled	Finished	%	Enrolled	Finished	%
TLC 010	R	0	0	0	2	2	100%	2	2	100%
TLC 020	R	1	1	100%	0	0	0%	1	1	100%
TLC 030	R	0	0	0%	1	1	100%	1	1	100%
TLC 050	W	1	1	100%	10	7	70%	11	8	73%
TLC 051	R	1	1	100%	5	4	80%	6	5	83%
TLC 056	M	2	1	50%	7	5	71%	9	6	67%
TLC 057	M	12	5	42%	18	5	28%	30	10	33%
TLC 060	W	3	3	100%	25	14	56%	28	17	61%
TLC 061	R	3	2	67%	27	21	78%	30	23	77%
TLC 062	GED	0	0	0%	1	0	0%	1	0	0%
TLC 063	GED	0	0	0%	1	1	100%	1	1	100%
TLC 064	GED	0	0	0%	1	1	100%	1	1	100%
TLC 066	M	38	20	53%	85	53	62%	123	73	59%
TLC 067	M	16	7	44%	20	12	60%	36	19	53%
TLC 068	M	0	0	0%	4	3	75%	4	3	75%
TLC 069	M	19	14	74%	25	17	68%	44	31	70%
TLC 070	W	3	2	67%	42	25	60%	45	27	60%
TLC 071	R	13	10	77%	38	25	66%	51	35	69%
TLC 074	M	0	0	0%	1	1	100%	1	1	100%
TLC 075	M	1	1	100%	3	1	33%	4	2	50%
TLC 076	M	19	13	68%	32	18	56%	51	31	61%
TLC 080	W	11	10	91%	54	29	54%	65	39	60%
TLC 081	R	7	7	100%	30	17	57%	37	24	65%
TLC 082	GED	0	0	0%	4	4	100%	4	4	100%
TLC 083	GED	0	0	0%	2	2	100%	2	2	100%
TLC 084	GED	0	0	0%	1	1	100%	1	1	100%
TLC 085	W	0	0	0%	1	1	100%	1	1	100%
TLC 086	GED	0	0	0%	1	1	100%	1	1	100%
TLC 089	GED	0	0	0%	6	5	83%	7	6	86%
TLC 090	W	13	8	62%	57	31	54%	70	39	56%
TLC 091	R	12	10	83%	16	9	56%	28	19	68%
TLC 092	M	17	12	71%	44	21	48%	61	33	54%
TLC 093	R	1	1	100%	1	1	100%	2	2	100%
TLC 095	CP	0	0	0%	2	2	100%	2	2	100%
TLC 099										
(SS)	GED	0	0	0%	1	1	100%	1	0	0%
TLC 100	CP	0	0	0%	4	1	25%	4	1	25%

Completion is defined as receiving a grade of A, B, C, or P for the course.

Conclusions:

- The 8 week classes overall had a consistently higher completion rate.
- There were better completion rates in the first 8 week sessions compared to the 2nd 8 week sessions .

3/17/2011

2011-12 TLC Assessment of Student Learning Project

- When separated by course, TLC 066 fractions, which has high enrollments, had a slightly lower completion rate of 53% compared to the semester long completion rate of 62%.

Recommendations

- There was discussion regarding frequency of instruction. A question posed is if the shorter time frame of the 8 week courses or the twice a week frequency of instruction creates the impact of improving completion rates. A couple of locations are trying classes which meet twice per week for 16 weeks.
- Continue the mix of schedule options for TLC courses.
- The support, efficiency, and great work of our Data Specialist makes it possible to have this data for analysis and decision making in our program.

Project C: Success rates of students moving from Developmental to college level coursework. We had long list of inquiries, but decided to simplify our focus. We will consider queries regarding student progress from additional TLC courses toward college level courses for later analysis.

Data:

TLC 090,091,092 in:	# students	Took ENL/MAT within year	% who took a ENL/MAT within a year	# Passed ENL/MAT within year	% passed
Fall 2009	84	54	64.3%	34	63.0%
Spring 2010	82	46	56.1%	33	71.7%
Summer 2010	14	10	71.4%	9	90.0%
Grand Total	180	110	61.1%	76	69.1%

Writing:	Students who took TLC 090:	48
	# A's	18
	# B's	7
	# C's	0
	# D's	0
	# P's	1
	# F's	2
	# W's	20
	# that PASSED:	26
	% Passed:	54%
	# that Took ENL 101:	15
	% passed that took ENL 101:	58%
	# that PASSED ENL 101	12

Reading	Students Who Took TLC 091:	16
	# A's	6
	# B's	5
	# C's	2
	# D's	0
	# P's	1
	# F's	0
	# W's	2
	# that PASSED:	14
	% Passed:	88%
	# that Took ENL 101:	6
	% passed that took ENL 101:	43%
	# that PASSED ENL 101	3

2011-12 TLC Assessment of Student Learning Project

	% passed TLC 090 that passed ENL 101:	80%
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	% passed TLC 091 that passed ENL 101:	50%
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Math	Students That Took TLC 092:	61
	# A's	20
	# B's	18
	# C's	2
	# D's	1
	# P's	0
	# F's	2
	# W's	18
	# that PASSED:	40
	% Passed:	66%
	# that Took MTH:	32
	% passed that took MTH:	80%
	# that PASSED MTH:	26
	% passed TLC 092 that passed MTH:	81%

Conclusions:

- Students completing the top level of Developmental Courses successful in college level coursework.
- The rates from TLC 091 (reading) to ENL 101 are not as great, but we do not know which students did or did not complete TLC 090 (writing). TLC 090 has a much higher coordination in content with ENL 101.

WACH Department Student Assessment Report Outline Employability Skills November 2011

Introduction

The Welding, Automotive, Construction and Heavy equipment departments (WACH) developed the following Program/Discipline Assessment Plan. Each program is using the same assessment model.

Envisioning the type of graduates instructors felt would be well prepared to enter the workplace five areas of focus were deemed critical for student development—These area's are:

1. Safety trained and safety conscious
2. Positive attitude and good self esteem
3. Sound workplace ethics
4. Professional grade skills
5. Employability skills

Phase	Year	Focus Area
1	2009	Safety trained and safety conscious
2	2010	Positive attitude and good self esteem
3	2011	Sound workplace ethics
4	2012	Professional grade skills
5	2013	Employability skills

FOCUS AREA

This year (2011/2012) the focus area for WACH is to concentrate on Phase 5 Employability Skills. To accomplish this WACH department will use a few tools embedded into the program and will borrow some from the SkillsUSA organization.

TOOLS

Each student is required to maintain a competency based training record to keep track of every assignment and test needed to complete their program of study. In addition to the tests and assignments the student is required to develop a professional portfolio which includes a generic cover letter, resume, copies of certificates and proof of participation in extra-curricular activities. This is designed to aid the student in preparing for the transition from school to work. It is a primary objective of the WACH department to help place each student into an entry level job related to their program of study upon completion. One such extra-curricular activity provided for the student is membership into the SkillsUSA (a student based and operated leadership organization).

TASKS

A new requirement by SkillsUSA is to have each competing student complete a career plan and resume along with an independently assessed mock job interview. They are then to submit it to be eligible to compete in any of their competitions. The WACH Department will use the following SkillsUSA assessment tool to assist in determining whether each student is prepared for the work place.

SKILLSUSA CAREER INTERVIEW & RESUME Rating Sheet

Evaluation Item	Not Demonstrated	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations	Points Earned
Interview					
Demonstrates poise, maturity, and a good attitude	0	1	2	3	
Professional appearance (meets dress code requirements)	0	1	2	3	
Demonstrates the ability to understand and respond to interview questions	0	1	2	3	
Resume					
Grammatically Correct and Free of Spelling Errors	0	1	2	3	
Education Complete	0	1	2	3	
Work/Volunteer/Extra Curricular Experience	0	1	2	3	
Effective	0	1	2	3	
Career Plan					
Career Plan Clearly Listed	0	1	2	3	
HS and PS Coursework Clearly Listed	0	1	2	3	
Extra Curricular Activities Clearly Listed	0	1	2	3	
Final Score					
					/30 max.

Name: _____

Judge's Signature: _____ Date: _____

Each Student must be asked these 5 specific questions:

- 1) Why did you choose this specific career?
- 2) What skills do you bring to this position?
- 3) What types of experiences have you had or activities that you have done to help you prepare for this career?
- 4) Give me some specific examples of your leadership and team-working skills and abilities.
- 5) Describe a situation where you had to make a difficult decision and how you handled that situation.

The Interview will be conducted by persons not directly affiliated with the program of study who will judge and provide feedback to the student and to the program instructors. The WACH department personnel will then collect and analyze the data from these interviews present suggestions of improvement to the student. Then the instructor will administer a self evaluation and program survey to each student.

Each instructor used the following ASK report check off sheet to verify completion of the intended tasks.

WACH Department ASK report check off sheet 2011-2012

Shop Location _____ Instructor _____

[illegible]

Below is a blank self evaluation and program survey administered to each student.

Assessment of Student Knowledge Survey
WACH 2012

Name (Optional) _____

Which class are you taking at NPC? Automotive, Heavy Equipment, Welding

Name of teacher _____

Please write a one to two paragraph response to the following question.

Do you feel that the employability training (resume writing, reference letters, interviews and portfolios) has helped to prepare you for future employment? If so, how? If not, how could it have been better?

Thank you for taking the time to complete this survey.

Results:

In the Taylor HQO program 13 students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
13	8	13	13	8	13	13

In the Springerville HQO program __ students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
10	10	10	1	1	1	0

In the Show Low ATO program 26 students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
26	26	26	26	26	0	22

In the Show Low WLD program 35 students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
35	30	30	23	15	10	35

In the St. Johns WLD program 30 students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
30	25	30	25	30	8	30

In the Holbrook WLD program __ students were trained, evaluated and surveyed with the following completion results.

Name	Cover letter	Resume	References	Career plan	Interview	Survey
38	6	12	8	11	33	33

Review of the survey questionnaire revealed that (with the exception of one) each student thought that the training was helpful and had prepared them better for employment. There were some additional suggestions as listed below.

"No it didn't help, cause its a waste of my time"

"I would suggest more mock-interviews and more specific direction in creating a resume"

"The daily requirement to verbally present a current event to the class helped me to prepare how to act and what to say for a future job."

"It would be better if the assignment was more clear with instructions and detail. Also if it was more interesting it wouldn't have been so boring. The assignment was confusing and boring but in the long run it did help."

"It has made me able to go through an interview without being so nervous."

"It helped me realize what employers want"

"This has helped me face my fears of speaking in front of large groups of people."

"Even if I don't pursue a career in welding, I believe this class really opened my eyes."

"Practicing sixty-second commercials and interviews has helped me develop courage to do it at any given time."

"I have learned how to make my documents professional, my instructor has taught me how to be the best of the best."

"I did not have a computer to do the cover letter. If we went to a computer lab to get it done it would have been better."

"Employability training greatly increased my skills for future employment. It could be a bit better if students show that they want to learn and if instructors go a little more into detail."

"The interviews are very helpful, it taught me how to respond to questions that are not asked on a daily basis."

"It's really nice to know that I am ready for employment."

This last statement "It's really nice to know that I am ready for employment" says it all. Our objective is to prepare them for employment through the technical training, hands on and theory. From the responses of the students and feedback from industry members it appears to have been a successful campaign.

Emails were sent to industry partners and welding advisory committee members asking for their input on the preparation of the students coming into their specific industry. The following are some examples of response letters.

Curtis,

In mid-February WIA held a hiring fair for Preferred Sands – a mine located in Sanders. The Mine Manager, HR Manager, and the Plant Manager were all in attendance at the fair and interviewed each person that came in to apply. Several graduating students from last year's programs came it no apply. All three Preferred Sands Representatives were clearly impressed and praised the efforts of the applicants as well as the instructors involved. I sent this feedback to the IMO advisory group as well as Ann in hopes it would be heard. I was going to advise at the welding meeting as well.

The young men came prepared, handled themselves well during the interview and brought their portfolios; I believe some of them were offered entry level positions with the company.

So, GREAT JOB on preparing them!

Thank you,

Judy Bratcher

Executive Director

Navajo and Apache Counties WIA

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Mr. Tenney,

I traveled to Preferred Sands, a sand mining operation outside Sanders, earlier this week. They have recently hired several of your students and were very complimentary about their knowledge, skills, and presentation and said that the students reflect very well on you as their instructor.

Congratulations.

Liz Flake

Business and Industry Training Coordinator

Northland Pioneer College

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