

# Assessment of Student Learning

## A Report of the 2014-15 Assessment Cycle

Submitted to Instructional Council by the Assessment of Student  
Knowledge (ASK) Sub-Committee:

Shannon Newman, Chair

Marina Powdermaker, Vice-Chair

Michael Solomonson, Faculty in Speech & Theater

Brian Burson, Faculty in Mathematics & Coordinator for Math and Science

Dana Jolly, Faculty in Nursing

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**Departmental Reports** –(Posted on ASK Page in MyNPC under the Employee Tab)

Biology

Administrative Justice

Business

Chemistry

Computer Information Systems

Construction

Cosmetology

Early Childhood

Education

Emergency Technician

English

Fire Science

Humanities

Industrial Maintenance & Mechatronics

Nursing Assistant Training

Nursing

Social & Behavioral Sciences

Spanish

The Learning Cornerstone

Welding

## OVERVIEW of the 2014-15 ASSESSMENT CYCLE

The Assessment of Student Knowledge (ASK) subcommittee of the Instructional Council (IC) was formally established in May 2008 and revised in April 2012 (Appendix I).

ASK held three meetings in the fall, two in the spring, and reported to IC twice each semester. Meeting agendas and notes were posted on the ASK page in MyNPC (APPENDIX 14).

At Fall Convocation two sessions were devoted to Assessment of Student Learning focusing on ideas relating assessment to student retention. The feedback gathered was used in planning Reading Day and developing templates for Department/Program ASK Plans and Reports (APPENDIX 10 & 11). With a few minor adjustments based on faculty feedback the templates will continue to be used in 2015-16. A rubric for evaluating the reports was developed and shared with faculty for input at the Spring Dialogue Day. Minor revisions were recommended and those were accepted by the committee, so the rubric is ready for implementation during 2015-16 (APPENDIX 12).

The regular assessment cycle with yearly reporting continued with 24 Of 27 Department/Programs submitting something for their Annual Report (APPENDIX 13). A few departments failing to complete assessment activities during the year provided plans for implementation during the 2015-16 cycle. The flexibility of departments to select assessment activities best meeting the needs of individual departments and programs also allows for assessment cycles to span multiple years. This allows departments to follow assessment projects through to completion and to use their results to make changes and then subsequently assess the effectiveness of those changes. We ask departments to report annually on whatever their assessment activities were for that year.

The cycle began with Reading Day on October 7, 2014. The ASK committee chose to have a face-to-face meeting to provide some basic assessment training, present the Plan for Assessment Across Instructional Modalities, and Emphasize Assessment of General Education. Departments submitted plans for assessment activities. Those departments teaching General Education Courses and not yet participating in assessing general education outcomes were encouraged to include this in their plans.

Individual departments scheduled Reading Day in February review and analyze data or develop assessment tools depending where they were in their assessment cycle. Annual reports were submitted late March and the ASK committee requested use of the Academic Assessment Report Template.

Dialogue Day continues to be the highlight of the NPC Assessment of Student Learning Process. Attendance was down, but most departments were represented and energy flowed as departments shared assessment activities, results, and future steps. Reviewing year's assessment cycle the ASK committee decided to recommend to Instructional Council Dialogue Day be mandatory for 2015. The committee felt much is gained from participation in Dialogue Day and many of those participating are the same every year.



Assessment of General Education is progressing with an ebb and flow. English and Humanities continue to be strong participants in the assessment process. The sciences are gaining momentum in fits and starts. Chemistry is underway in assessing both scientific inquiry and diversity of natural environments. Lack of participation by Social and Behavioral Sciences creates big gaps in the assessment of General Education. This year departments such as Nursing, Construction, and Early Childhood also assessed general education outcomes.

Assessment across teaching modalities began this year with a few departments gathering and reporting out data by modality as applicable. The initial data is not showing substantial differences. Data will be collected over several years to compile enough to determine conclusions.

Assessment of student learning continues to be a strength of Northland Pioneer College. Assessment activities are generally substantial and departments improving in utilizing results to improve instruction and documenting their process. The ASK committee continues to seek ways to support, maintain and expand assessment of student learning activities.

**Table 1: ASK Participation by Department**

<u>Department reports:</u>	Department Chair	Plan for Assessment of General Education Outcomes in Place	Reading Day Scheduled	Departmental Report Received	Assessed Gen Ed Outcome(s) Assessed	Data for Multiple Modalities
BUS	Chase, Tracy	x	2/20	3/20	None- only overall points reported.	Yes
AJS	Bishop, Stuart	Draft needs revision	2/19	3/11 Not in template	None	NA
ATO	Pinnell, Frank			3/20 Not in template	None	NA
BIO	Smith, David Burson, Brian	Draft needs revision	2/24	4/6	Sci Inq	Not yet
CHM	Hodgkins, Tom	Draft needs revision	2/23	3/20	Sci Inq & Diversity of Nat. Envir	None addressed in report – courses assessed probably are offered in multiple modalities
CIS	Baum, Clover	Draft needs revision		3/20	Plan to assess Crit Think & Effec Comm	Not yet
Community Education	?					
CON	Wilk, Ken		Update in progress	3/10 not in template	Quan Reas	NA
COS	Reidhead, Cloe	x		3/20	None	NA
ECD	Endfield, Claude	x	yes	3/20	Effec Comm (Philosophy statements	None addressed

<u>Department reports:</u>	Department Chair	Plan for Assessment of General Education Outcomes in Place	Reading Day Scheduled	Departmental Report Received	Assessed Gen Ed Outcome(s) Assessed	Data for Multiple Modalities
EDU	Jackson, Rickey  Johnson, Sandy	x		4/3 Not in template	Could be Effec Comm & Crit Think?	None
EMT	Browne-Wagner, Lynn	x		4/9 Not in template	None – Goals include effective drug calculations, but data is only overall grades	None addressed
ENL	Jones, Ryan	x	3/6	4/3 Not in template	Crit Think, Effec Comm, Inform Liter, and Diversigy	Yes
FRS	Bishop, Stuart	Draft needs revision	2/19	3/11 Not in template	None	NA
GEO	Hassard, Andrew  Burson, Brian					
GLG	Porch, Randy  Burson, Brian	x	2/21			
HUM	Ryan Jones	x	3/6	4/3 Not in template	Effec Comm & Inform Lit. Plan for cult diversity	Yes
IMO/MET	Keith, Kenny			4/1	NA	None – note sure if it was applicable
MAT	Burson, Brian	x	2/27 & June	3/20	Quantitative Reasoning	None

<u>Department reports:</u>	Department Chair	Plan for Assessment of General Education Outcomes in Place	Reading Day Scheduled	Departmental Report Received	Assessed Gen Ed Outcome(s) Assessed	Data for Multiple Modalities
Allied Health MDA/HES/PHT	Warren, Connie	In progress		3/10 Not in template	None	
NAT	Jamison, Susan	x	2/17	4/29	None	None
NUR	Stewart, Carol, Jolly, Dana	x	yes	3/4	Quantitative Reasoning	None
SBS	Hassard, Andrew			4/7 Not in template	No assessment work this year  Future plan for Crit Think, Effec Comm, Infor Lit. Plan to plan assessment of Cultural Diversity	None, but course offerings provide potential for valid data.
SBM						
SPA	Harris, Rich	Draft needs revision	Update in progress	3/10 Not in template	Eff Comm, general analysis, but no data to support	Courses assessed probably offered in multiple modalities, but did not address and provided no data.
TLC	Jackson, Rickey	x	2/9/15	3/20	None	None
WLD	Pinnell, Frank		?	3/20 Not in template	None	NA

## **APPENDIX 1: 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.
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.

Approved by Instructional Council 5/11/12

## APPENDIX 2: Charge from Instructional Council

Northland Pioneer College  
Assessment of Student Knowledge (ASK) Subcommittee  
Charge from Instructional Council (IC) for 2014-2015

- I. For 2014-2015, the IC Charge to ASK is:
  - a. Continue with the assessment of student knowledge
  - b. Send information to the Instructional Division about ASK events, including Planning Day, Reading Day and Dialog Day
  - c. Implement plan to assess student learning across modalities

(Reference 10-10-14 IC Minutes)

## **APPENDIX 3: 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.
- 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 Assessment of Student Knowledge (ASK) subcommittee on 12-4-08*

Adopted by Instructional Council

December 12, 2008



## **APPENDIX 4: ASK Assessment of NPC General Education Student Learning Outcomes Summary 2014-15**

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.

- English – Assessment of samples of Research Papers in ENL 101 and 102. The rubric specifically assesses Critical Thinking/Critical Inquiry, Effective Communication, and Information Literacy. This assessment and analysis results in productive discussion and areas for improvement in instruction. The results were analyzed by instructional modality.

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

- Spanish - Assessed oral reports. A general summary was presented, but no data provided as support.
- Early Childhood- One goal for the assessment process is a philosophy statement where student must clearly communicate their philosophy of education related to early childhood and is assessed by the Advisory Board. This is a longstanding part of the program.
- English – Assessment of samples of Research Papers in ENL 101 and 102. The rubric specifically assesses Critical Thinking/Critical Inquiry, Effective Communication, and Information Literacy. This assessment and analysis results in productive discussion and areas for improvement in instruction. The results were analyzed by instructional modality.
- Humanities – Continued assessment of a sample from Written Critique Assignments. The rubric includes ideas, organization and coherence, support, style and mechanics. The data is presented as group and by instructional modality. Results identified the continued need to work on students selecting, utilizing and documenting sources well.

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

- Construction – Developed an assessment of construction related mathematical reasoning and completed a trial run to establish a baseline
- Mathematics – Assessed in MAT 142 utilizing 10 questions embedded in the course final. Numbers were small, but the department is satisfied with the results and will move on in the cycle to MAT 152 next year.
- Nursing – Assessed student demonstration of 100% demonstration of correct dosage calculations and remediation process. Found their process was effective and students could reach expectations.

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

- Biology – Developed a Pre – Post set of questions addressing major concepts in biology, scientific method, and critical thinking. Administration is to begin in BIO 181 Fall 2105.
- Chemistry- Utilized a multipronged approach of common questions on exams and laboratory experiments to assess student knowledge in CHM 130 & 150. Student demonstration of knowledge and

skills was satisfactory, but areas were identified for improvement and follow-up will continue in 2015-16 following the curriculum & instructional improvements.

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

- English – Assessment of samples of Research Papers in ENL 101 and 102. The rubric specifically assesses Critical Thinking/Critical Inquiry, Effective Communication, and Information Literacy. This assessment and analysis results in productive discussion and areas for improvement in instruction. The results were analyzed by instructional modality.
- Humanities – Continued assessment of a sample from Written Critique Assignments. The rubric includes ideas, organization and coherence, support, style and mechanics. The data is presented as group and by instructional modality. Results identified the continued need to work on students selecting, utilizing and documenting sources well.

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

- Chemistry – Utilized poster presentations and reports to assess student knowledge of natural environments in CHM 130 & 150. Satisfied with the results the department recommends maintaining those course activities.
- English – Piloted an assessment via a reflective response to assess Cultural Diversity. Results indicated a need for altering the instrument. The new instrument will be piloted 2015-16.

Strengths:

- Assessment of the general education outcomes has expanded to some programs and courses beyond the specific list of general education courses.
- Some departments are developing and utilizing multiyear plans to cycle assessment through outcomes and/or courses.
- The Assessment Committee is implementing consistent report templates and rubrics for feedback to departments to emphasize connections to program and department goals and documentation of the “Closing the Loop” happening as part of the assessment process.

Areas for Improvement:

- There is more work to be done to help programs/ departments to identify and report out the “closing the loop” aspect of assessment.
- More 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 Geology and Geography need to participate. Social and Behavioral Sciences needs to be brought back to assessment after years of focus elsewhere.
- Departments need support in exploration of how to assess the Diversity outcome.

## **APPENDIX 5: Plan to assess student learning across teaching modalities**

### Teaching Modalities at NPC

1. Internet
  2. Face-to-Face
  3. Dual Enrollment
  4. Audio, Video, and Model Classrooms
- A. Departmental Assessments: Ask department to include tracking, evaluating, and reporting out assessment data for their individual projects by relevant teaching modalities and as a whole beginning with the 2014-15 cycle.
- B. College wide: Gather and report data across teaching modalities
1. Student success per grades by modality
  2. Pass/Fail data from the test/course pre-requisite for enrolling in Internet Courses
  3. Indirect Measures via student surveys and possibly point of service surveys through NPC website and Moodle

## APPENDIX 6: Planning Day Memorandum and Agenda

**From:** Newman, Shannon

**Sent:** Tuesday, October 07, 2014 11:30 AM

**To:** Faculty; Deans and Staff; Bishop, Stuart

**Cc:** Vest, Mark H.; Lucas, Hallie

**Subject:** Reminder of ASK Planning Day Friday Oct. 10th 11 - 2 at SCC

ASK is looking forward to seeing at least two representatives from each department on Friday Oct. 10th 11:00 - 2:00 at SCC for Planning Day.

A. **Agenda** Planning Day: October 10, 2014 11:00 – 2:00 SCC Symposium.

1. Welcome & Brief explanation of assessment at NPC and HLC - Shannon
2. Discussion and Sharing of department plans and ideas for assessment this year
3. Plan to assess across teaching modalities - Shannon
4. Tools and Tips for Assessment – Leslie Wasson
5. Wrap – up

\*Assessment Plans from each Department Due to ASK by Oct. 31<sup>st</sup>

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**From:** Newman, Shannon

**Sent:** Monday, September 29, 2014 10:54 AM

**To:** Faculty; Deans and Staff; Bishop, Stuart

**Cc:** Vest, Mark H.; Lucas, Hallie

**Subject:** RE: ASK Planning Day Location & Plan to assess student learnign across teaching modalities

Two things I missed in my email last week.

1. Planning Day will be Friday Oct. 10th 11:00 - 2:00 at SCC in the Symposium room of the Learning Center.
2. For planning your department assessment keep in mind beginning this year if the course(s) you are assessing is taught in multiple modalities we are requesting departments to report out assessment data by teaching modality and as a whole. This is part of our next phase of assessment.

Teaching Modalities at NPC

1. Internet
2. Face-to-Face
3. Dual Enrollment
4. Audio, Video, and Model Classrooms

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**From:** Newman, Shannon

**Sent:** Wednesday, September 24, 2014 3:17 PM

**To:** Faculty; Deans and Staff; Bishop, Stuart

Cc: Vest, Mark H.; Lucas, Hallie

**Subject:** Assessment of Student Knowledge Planning Day and other dates to note

Faculty,

Hello, I hope you have had a good start for this year. It is time to get to work on Assessment of Student Knowledge Planning for this year.

1. Mark your calendar for **ASK Planning Day Friday October 10, 2014 11:00 - 2:00**. A light lunch will be provided along with information and discussion for Assessment Planning. The ASK committee requests 2 representatives from each department.
2. Start considering/discussing/planning your department's 2014-15 plan for Assessment of Student Knowledge. Begin by reviewing your report from last year. Reports from previous years and other Assessment information can be found in MyNPC under the Employee Tab and look for ASK in the list on the left. A few departments will be receiving directives with specifics regarding their assessment plans for this year. **Plans** from all departments are **due October 31st**.
3. Mark your calendar with these ASK Dates:

**Oct. 10 Planning Day,**

**Oct. 31 Departmental Assessment Plans Due,**

**Feb. 2015 Individual Departments meet for Reading Day,**

**March 20, 2015 Assessment Reports Due,**

**Friday April 10, 2015 Dialogue Day**

Remember to: Keep it Useful, Manageable, and Interesting for the benefit of you and your students. The ASK Committee is willing to discuss and meet with departments and needed to help you meet these goals.

Sincerely,

The ASK Committee:

Shannon Newman, chair

Marina Powdermaker, vice chair

Mike Solomonson

Brian Burson

Dana Jolly

Thersa Parker

Jennifer Bishop

Marius Begay

Eric Henderson

Leslie Wasson

## APPENDIX 7: Reading Day Memorandum

**From:** Newman, Shannon

**Sent:** Thursday, January 22, 2015 7:37 PM

**To:** Faculty; Deans and Staff; Bishop, Stuart

**Cc:** Vest, Mark H.; Lucas, Hallie

**Subject:** Assessment of Student Knowledge Reading Day Feb 2015

Faculty,

Hope your semester is off to a great start. Time has come to plan Assessment of Knowledge Reading Day for your department sometime in February. Each department plans a time in February to collaborate on assessment. Depending on where your department is in their assessment plan you may be analyzing student work or data, developing assessment tools, or developing revising curriculum as a result of previous assessment results.

- Dig up your department's 2014-15 Assessment Plan & Review. Those submitted this fall not needing revisions are posted on the ASK page in MyNPC. Look under the employee tab and then find the ASK link in the list on the left. If you don't have an assessment plan, begin from where you are and move forward.
- Start talking among your department/program colleagues.
- Negotiate a date, time, location, and agenda.
- Send an email to your dean and Shannon Newman, ASK chair including details and brief description of expected activities.
- Start gathering what you will need to have a productive work session. (Student work, data, ... chocolate, coffee,...)

Dates to mark on your calendar:

March 20<sup>th</sup> – Annual ASK Reports Due.

April 10<sup>th</sup> – Dialogue Day

Remember to track & report data across teaching modalities. If your assessment involves courses taught in multiple modalities (see below) you are asked to track and report out data by modality and as a whole.

On 2-27-14 ASK reviewed the following plan and approved it to be submitted to Instructional Council.

**Plan to assess student learning across teaching modalities**

## Teaching Modalities at NPC

1. Internet
2. Face-to-Face
3. Dual Enrollment
4. Audio, Video, and Model Classrooms

A. Departmental Assessments: Ask department to include tracking, evaluating, and reporting out assessment data for their individual projects by relevant teaching modalities and as a whole beginning with the 2014-15 cycle.

B. College wide: Gather and report data across teaching modalities

1. Student success per grades by modality
2. Pass/Fail data from the test/course pre-requisite for enrolling in Internet Courses
3. Indirect Measures via student surveys and possibly point of service surveys through NPC website and Moodle

The ASK Committee is here to help. Contact members for questions and assistance. The ASK page in MYNPC also has useful information and links. (employee tab, look for ASK in the list on the left)

2014-15 ASK Committee: Shannon Newman-chair, Marina Powdermaker-vice chair, Mike Solomonson (Sabbatical Sp15), Brian Burson, Dana Jolly, Theresa Parker, Jennifer Bishop, Leslie Wasson, Eric Henderson.

## APPENDIX 8: Dialog Day Agenda

April 10, 2015 SCC 11:00 am to 2:00 pm.

11:00– 11:30 am    General Session – Symposium

Opening Comments

Overview of Assessment at NPC

Assessment of Student Knowledge Subcommittee of Instructional Council

Department/ Course level assessment

Assessment of General Education

Assessment across Teaching Modalities at NPC

Assessment Report Template & Rubric

Plan for the Day

11:30 – 11:40    Break

11:40 – 1:00      Small Group Discussions of this year's reports -- Breakouts

Break out Rm 111: BUS, AJS, CHM, ECD, EDU, FRS, IMO/MET, NAT, WLD, CIS, CON, GEO, MAT, SBS,

Break out Rm 110:     ATO, COS, EMT, ENL, HUM, HES/MDA/PHT, NUR, BIO, GLG, SBM, SPA, TLC, WLD

1:20 – 1:40    General meeting – Symposium

Reports from small Breakouts

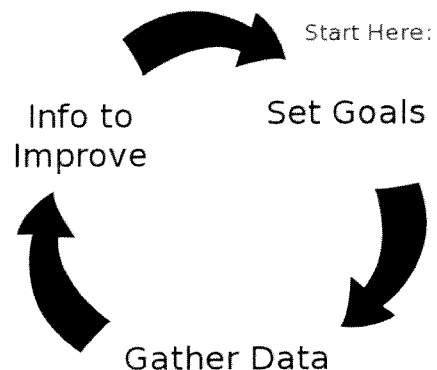
Wrap- up discussion

### 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.





## APPENDIX 9: Academic Assessment Plan Template

Department or Unit:

Academic Year: 2015-16

Lead Evaluator:

Submission Due Date: Friday November 13<sup>th</sup>, 2015

**Unit Mission:** (this mission, and your Goals & Objectives below, come from your program & curriculum planning)

### **Unit Goals & Objectives:**

#### 1. Goal 1

A. Objective 1A

B. Objective 1B, etc...

#### 2.

A.

B.

EXPAND, but you want to **keep it simple**, at least for the first year or two]

### **Evaluation Team Members:**

**Research Plan** (not more than 3 pages, please):

What will you do, how will you do it, and what kind of data will result from it? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.

What are your question(s)?

What will be your process?

Was any of this design influenced by last year's results? Please describe briefly what and how.

Are you assessing General Education Outcomes? Please describe.

Are you assessing in courses taught multiple delivery modalities? If so, please describe your plan to gather, report out and analyze data by teaching modality and as a whole.

Submit your plan to ASK chair, [Shannon.newman@npc.edu](mailto:Shannon.newman@npc.edu) and cc your department chair (if it is not you), your dean, and members of your department. This avoids having to gather physical signatures.

## **APPENDIX 10: Academic Assessment Report Template**

Department or Unit:

Academic Year: 2015-16

Lead Evaluator:

Submission Due Date:

**Unit Mission:** (this mission, and your Goals & Objectives below, come from your program & curriculum planning)

### **Unit Goals & Objectives:**

#### 1. Goal 1

A. Objective 1A

B. Objective 1B, etc...

#### 2.

A.

B.

Etc. [Keep it simple, at least for the first year or two]

### **Evaluation Team Members:**

### **Executive Summary of Results (not more than 3 pages, please):**

What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.

What was your question(s)?

What was your process?

Present your data summary...longer documents go to the List of Evidence Items below

What did you find? (observations from the data)

Implications & Conclusions

Recommendations & Next Steps

Detail the improvements to student learning that will occur as a result of (6)

**List of Evidence Items Appended** (linked to Goals and Outcomes):

Label these alphabetically and refer to them as appropriate in your summary above.

**Recommendations for Action with Approximate Timelines:**

What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?

**Itemized Resource Requests with Budget Amounts** (if any):

## **APPENDICES**

{Please attach evidence exhibits, each labeled with the goal(s) & outcome(s) it supports.}

**Email this report to Chair of ASK and cc your dean and department members.** This avoids having to get physical signatures.

## APPENDIX 11: Rubric for Evaluating Departments' Student Learning Assessment Reports

Report Elements	Excellent	Acceptable	Weak
<b>Student learning outcomes</b> – <i>faculty expectations of their graduates</i>	Three to five outcomes, consistently stated in terms of measurable knowledge, skills, or behaviors	Three to five outcomes, most stated in terms of measurable knowledge, skills, or behaviors	Fewer than three outcomes; not stated in terms of measurable knowledge, skills or behaviors
<b>Assessment methods</b> – <i>how faculty will collect evidence to determine how well students meet their expectations</i>	Two or more appropriate measures were described and implemented for each learning outcome	At least one direct measure was described and implemented for each learning outcome	Measures were inadequate or not implemented
<b>Criteria for success</b> – <i>the level of performance that meets faculty standards</i>	Specified the desired level of achievement using indicators other than grades	Desired level of achievement was not clearly described for all outcomes	Criteria for success were not included or inappropriate (used grades)
<b>Findings</b> – <i>the degree to which students met the faculty standards</i>	Reported and analyzed findings to indicate areas where students excelled, met standards, and fell short	Provided evidence of some analysis of students' learning beyond overall findings	Reported only overall findings or omitted the findings
<b>Use of results</b> – <i>the changes made to address issues identified in the findings and the efficacy of the changes</i>	Gave specific and logical actions taken based on the findings for each of the assessed outcomes and reported efficacy of the actions	Gave specific and logical actions taken for most of the assessed outcomes	Use of results was missing, future-oriented, or indicated that no changes were needed

\*\* Freely borrowed with much gratitude from the Baylor University web site. \*\*

## **APPENDIX 12: ASK Meeting Agendas and Notes**

### **ASK Meeting Notes August 1, 2014 via conference call**

Mike Solomonson, Marina Powdermaker, Brian Burson, Shannon Newman, Leslie Wasson, Eric Henderson

1. Address to all at Convocation: Shannon has 5 minutes to highlight NPC success in assessment, completion of Academy, General Education Project, highlight departments contributing, and moving forward. Utilize slides showing NPC General Education Outcomes and Academy Completion Certificate.
2. Two breakout sessions at convocation: Decided they will both be the same topic with different leaders.

### **ASK meeting Notes 9-29-2014**

**Conference call: Leslie Wasson, Marina Powdermaker, Dana Jolly, Eric Henderson, Shannon Newman**

**Absent due to teaching etc: Mike Solomonson, Brian Burson, Jennifer Bishop, Theresa Parker, Marius Begay**

- A. New member: Jennifer Bishop has agreed to fill the 2<sup>nd</sup> CTE position and she teaches a General Education Course.
- B. Planning Day: October 10, 2014 11:00 – 2:00 SCC Symposium. Eric will not be present due to teaching

#### **Agenda**

1. Welcome & explanation how assessment fits in with HLC - Shannon
  - a. We are assessing student learning
  - b. Need to formally report out what is being done
  - c. Need to emphasize how assessment results are used to improve student learning
  - d. Our results and data are shared with HLC in an ongoing basis
2. Have departments report out on their plans and ideas for assessment this year
  - a. This can provide ASK an idea where follow-up is needed
  - b. Encourage dialogue, discussion and questions
  - c. How might your plan ultimately improve student learning?
3. Present on Plan to assess across teaching modalities - Shannon
  - a. Data needs to be tracked by modality- 1) Face-to-face 2) Internet 3) Dual 4)Audio, Video, Model
  - b. Explain

- c. Example
  - d. Questions
- 4. Tools and Tips for Assessment – Leslie Wasson
- 5. Wrap – up
  - a. Request Assessment Plans from each Department by Oct. 31<sup>st</sup>
- C. Create template for Assessment Reports – Create a template to help organized & guide departments toward reporting how assessment is utilized to improve student learning. Leslie will create a draft from the following questions. Please provide her with additional input and feedback.
  - a. What was your question
  - b. What was your process
  - c. Data
  - d. Observations from the data
  - e. Conclusions
  - f. Implications
  - g. Next Steps
  - h. How did/will this data/process be utilized to improve student learning?
- D. Next Meeting Thursday Nov. 6 , 9:00 – 10:00 x7479

**Notes from ASK meeting Nov. 6, 2014 via conference line x7479**

**Brian Burson, Dana Jolly, Marina Powdermaker, Marius Begay, Leslie Wasson, Shannon Newman**

**Agenda & Notes**

- 1. Planning Day review
  - 28 participants from 22 departments

Audience seemed attentive and appreciative for the connections across departments and realization other departments may be struggling with similar challenges
- 2. Departmental assessment plans
  - o Good plans from BUS, NUR, ECD, EMT
  - o In progress: Allied Health, TLC, ENG, Humanities
  - o Need revision? SPA, CIS
  - o Missing many: all sciences, math, SBS, NAT, ATO, WLD, CON, COS, CCP, DOC, IMO
  - o Strategy for the revisions and missing

Math is working on revising due to eliminated course.

Call a work session for sciences Nov. 14<sup>th</sup> 1-3 at SCC to have available members from ASK there to facilitate departments working through the process and developing their plans.

Shannon will email all missing departments and appropriate deans to facilitate submission of plans and or discussions to assist with development of plans

3. Charge from IC attached – not much change from last year.
  - o Committee composition will remain the same as outline in our ASK guidelines. This should be approved at the next IC meeting Nov. 14<sup>th</sup>.
4. Sample rubric for evaluating Departmental Reports attached from Leslie Wasson  
Leslie sent the sample rubric and report template out again. At our next meeting Jan. 30<sup>th</sup> we will use these as starting points to develop a report template, evaluation tool, and criteria for assessment plans to utilize moving forward.
5. ASK page on MyNPC – additions of resources located by Leslie, power points from planning day, ASK meeting notes, department plans and updated materials continue to be added. If you find useful items please forward them to Shannon and she can post them.
6. Next meeting: Friday Jan. 30<sup>th</sup> 11:00 hopefully on x7479. Those not able to attend today please let Shannon know if you have any conflict.

#### **ASK Meeting agenda and notes 1-30-15**

**X7479**

**Present: Shannon Newman, Jennifer Bishop, Marina Powdermaker, Dana Jolly, Leslie Wasson**

**Absent: Eric Henderson, Brian Burson, Michael Solomonson (sabbatical), Theresa Parker**

- A. Reading Day – All Faculty reminders going out this week, along with individual nudges to departments who have not yet provided assessment plans or submitted plans needing revisions. Each department individually schedules a date, time, location in February to meet and collaborate on assessment. Depending on where the department is in for their individual plan they may be reviewing student work, developing assessment tools, working on curriculum/program changes, etc. We ask each department to email ASK (Shannon Newman) and dean with their Reading day details and brief summary of what they will be doing during that meeting.

Nursing meeting next Friday Feb 6

ECD starting on reviewing old assessment & working on new assessment

Send another reminder

B. Develop criteria for assessment plans, an assessment report template and a rubric for reviewing assessment reports. Attached are the samples Leslie located last fall, which we can use as a starting place for ours. Plus there is a brief assessment report template from 2013

1. Decided to use the Academic Assessment Report Template provided by Leslie as presented.
2. Rubric: Discussed ideas and provided suggestions. Leslie will work on a draft.
3. Template for Assessment Plans: Use same language/format as Report Template. Start from recommendations for Action & timeline from previous year.

C. Assessment Conference April 3 at Rio.

- a. Encourage faculty to attend
- b. Encourage presentations – many (most) departments have been/are doing interesting things in assessment of student learning which could be shared

Email to Faculty

BUS – Jennifer Bishop willing to present

MAT – talking about closing the loop, made course changes, eliminated courses based on assessment results

ENG – Doing impressive work

GEN ED assessment

- c. Flyer & info attached

D. Dialogue Day Friday April 10<sup>th</sup> – start planning

Invite student services to attend? Didn't think there would be time in the agenda. Maybe another venue? Convocation?

11:00 – 2:00 SCC – Symposium & Breakouts - Same format

E. Schedule Spring ASK meetings

Friday March 13<sup>th</sup> 11:00 x7479



Friday April 24<sup>th</sup> 11:00 x7479

F. Other

**Assessment of Student Knowledge Committee Meeting**

**April 24<sup>th</sup> 11:00 x7479**

Brian Burson, Jennifer Bishop, Theresa Parker, Shannon Newman, Marina Powdermaker

Items to discuss & notes:

A. Leslie share from AZ Assessment Conference

Oriented to new practitioners as an ongoing need for other Community Colleges. Fabulous keynote speaker who gave a how to on the basics of assessment. There is room to provide for intermediate level on assessment at future conferences.

B. Debrief Dialogue Day

Impressions & thoughts

Interesting data

Many are going the motions to do what needs to be done and missing the value of the process

It seems to be the same people every year

Some departments are on task and others were making excuses

Some departments need hand holding

Interesting things in other departments

Less attendance this year 20+ compared to 30-35 in past years

Discussed making Dialogue Day mandatory. Thought it might be valuable and provide emphasis to the assessment process. Suggested we have it the morning of the picnic day, so that it is only one day of classes canceled. Staff could work and keep campuses and centers open until noon or hold their own assessment or other activities.

C. Received reports from more departments than ever before. What do we want to do next with them – Post them on the ASK page in MyNPC & email faculty to remind them reports can be revised and resubmitted if they want to make any changes after Dialogue Day.

D. Ideas for next year

Convocation session sharing assessment projects –

All the breakouts for one session time are on assessment. All instructional department and 5 staff groups share their assessment highlights. Mix staff and faculty in each room utilizing 4-5rooms. Plan groupings to balance departments which are stronger with weaker in assessment to provide opportunity for discussion and peer mentoring. Each department has 5-8 minutes to share. Some questions to consider are:

- What have you tried? What worked? What didn't work?
- What are roadblocks have you encountered and how did you work around them?
- How have the assessment results been used?
- What would you tell someone just getting started in assessment?

Division meeting time to plan assessment. Arts & Sciences willing to devote their time to assessment

Show templates & rubric

Individual departments review last year's assessment

Individual departments plan 2015-16 assessments

E. Committee members for next year

Yes - Jennifer Bishop, Leslie Wasson, Brian Burson, Theresa Parker, Eric Henderson, Shannon Newman

Check with: Dana Jolley, Mike Solomonson

Marina Powdermaker on leave for the year

## ACADEMIC ASSESSMENT REPORT

Department or Unit: Biology

Academic Year: 2014/15

Lead Evaluator: Dr. David Smith

Submission Due Date: March 20, 2015

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

Evaluate student understanding of the Scientific Method and Critical Thought

Unit Goals & Objectives:

## 1. Goal 1

A. Develop reasonable questions addressing student understanding of the scientific method and critical thought in Biology 181

B.

## 2.

A.

B.

Etc. [THE BOX WILL EXPAND, but you want to keep it simple, at least for the first year or two]

Evaluation Team Members: David Smith, Russell Ott, Eleanore Hempsey, Cynthia Hutton, Pat Lopez

ACADEMIC ASSESSMENT REPORT

Executive Summary of Results (*not more than 3 pages, please*):

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*

- 1) What was your question(s)?
- 2) What was your process?
- 3) Present your data summary...longer documents go to the List of Evidence Items below
- 4) What did you find? (observations from the data)
- 5) Implications & Conclusions
- 6) Recommendations & Next Steps
- 7) Detail the improvements to student learning that will occur as a result of (6)

See attached.

List of Evidence Items Appended (linked to Goals and Outcomes):

*Label these alphabetically and refer to them as appropriate in your summary above.*

No data to date.

Recommendations for Action with Approximate Timelines: No data to date.

ACADEMIC ASSESSMENT REPORT

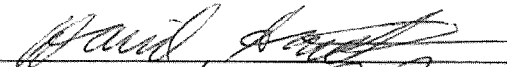
What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?

We are altering the assessment tool for Biology 181. Other courses will be re-evaluated in the future.

Itemized Resource Requests with Budget Amounts (if any):

NA


Lead Evaluator Signature:



Date:

March 19, 2015

Department Chair Signature:

3/19/15 

Date:

4/1/15

Dean Signature:



Date:

4/6/15

## ACADEMIC ASSESSMENT REPORT

### APPENDICES

{Please attach evidence exhibits after this face page, each labeled with the goal(s) & outcome(s) it supports.}

**ACADEMIC ASSESSMENT REPORT**

## Summary of Results

As a result of earlier discussion, we as a department came to the conclusion that the previous assessment tool did not address student learning in the fields of the scientific method and critical thought. Therefore, we generated a set of new questions that will hopefully deal with these issues. Currently, however, we lack data on the revised assessment tool, since we are only now in the process of changing it.

The major question concerned the student acquisition of knowledge about important concepts in biology, the scientific method, and critical thinking, during the one semester Introductory Biology class (Biology 181). We used a non-graded pre- and post-test series of questions (Appendix I) following Dr. Russell Ott's strategy and generated by the department that focused on critical thought, and the ability to read and interpret biological data. The tool is to be administered at the beginning of the semester and again at the end of the semester. This assessment strategy does not influence any such assessment given in the beginning of subsequent courses, such as Human Anatomy and Physiology (Biology 201).

Assessment in Biology 201 follows the previously generated design (Appendix II) to be administered at the beginning of the semester and a series of questions in the first lecture test covering the scientific method and data interpretation (Appendix I: final set of questions) as generated by Dr. David Smith. The set of questions outlines an example of an experiment undertaken at the University of Michigan that is discussed in the lecture. It includes data presentation, interpretation, influencing factors, and critical

**ACADEMIC ASSESSMENT REPORT**

thought. This strategy, however, may be revised in the future, as assessment in the non-majors biology and non-introductory classes is re-evaluated.

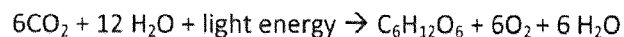
Statistical analysis over time by Dr. Leslie Wasson of the generated data is proceeding. Past results of these data are presented elsewhere. Current data are in the process of being analyzed. Conclusions and recommendations will depend upon the results. We intend to re-evaluate assessment of student learning in courses other than Biology 181 in the future.



## ACADEMIC ASSESSMENT REPORT

## Appendix I

1. The chemical reaction for photosynthesis is:



If the water used is labeled with a radioactive isotope of Oxygen,  $^{18}\text{O}$ , then the oxygen gas released as the reaction proceeds is also labeled with the  $^{18}\text{O}$ . Which of the following is the most likely explanation?

- During the light reactions of photosynthesis, water is split, the hydrogen atoms combine with the  $\text{CO}_2$  and oxygen gas is released
  - During the light reactions of photosynthesis, water is split, removing electrons and protons and oxygen gas is released.
  - During the Calvin cycle, water is split, regenerating NADPH from  $\text{NADP}^+$  and oxygen gas is released
  - During the Calvin cycle, water is split, the hydrogen atoms are added to intermediates of sugar synthesis, and oxygen gas is released.
2. Sickle-cell anemia results from a point mutation in the HBB gene. The mutation results in the replacement of an amino acid that has a hydrophilic R-group with an amino acid that has a hydrophobic R-group on the exterior of the hemoglobin protein. Such a mutation would most likely result in altered:
- Properties of the molecule as a result of abnormal interactions between adjacent hemoglobin molecules
  - DNA structure as a result of abnormal hydrogen bonding between nitrogenous bases
  - Fatty acid structure as a result of changes in ionic interactions between adjacent fatty acid chains
  - Protein secondary structure as a result of abnormal hydrophobic interactions between R-groups in the backbone of the protein
3. Experimental evidence shows that the process of glycolysis is present and virtually identical in organisms from all three domains, Archaea, Bacteria, and Eukarya. Which of the following hypotheses could be best supported by this evidence?
- All organisms carry out glycolysis in mitochondria
  - Glycolysis is a universal energy-releasing process and therefore suggests a common ancestor for all forms of life.
  - Across the three domains, all organisms depend solely on the process of anaerobic respiration for ATP production
  - The presence of glycolysis as an energy-releasing process in all organisms suggests that convergent evolution

**ACADEMIC ASSESSMENT REPORT**

4. A new organism is discovered in the Peruvian rainforest. Scientists there determine that the polypeptide sequence of hemoglobin from the new organism has 72 amino acid differences from humans, 65 differences from a gibbon, 49 differences from a rat, and 5 differences from a frog. These data suggest that the new organism   ?  .
- a. is more closely related to humans than to frogs
  - b. is more closely related to frogs than to humans
  - c. may have evolved from gibbons but not rats
  - d. is more closely related to humans than to rats
  - e. may have evolved from rats but not from humans and gibbons

## ACADEMIC ASSESSMENT REPORT

5. Using a series of arrows, draw the branched metabolic reaction pathway described below, and then answer the question at the end. Use a different color pen and minus signs to indicate inhibition.

L can form either M or N

M can form O

O can form either P or R

P can form Q

R can form S

O inhibits the reaction of L to form M.

Q inhibits the reaction of O to form P.

S inhibits the reaction of O to form R.

Which reaction would prevail if both Q and S were present in the cell in high concentrations?

- a.  $L \rightarrow M$
  - b.  $M \rightarrow O$
  - c.  $L \rightarrow N$
  - d.  $O \rightarrow P$
6. Consider a diploid animal cell in the G1 phase of the cell cycle. Relative to a second cell in the same animal that is in metaphase II \_\_?\_\_.
- a. The first cell has twice as much DNA as the second cell
  - b. The first cell has half as much DNA as the second cell
  - c. Both cells have the same amount of DNA
  - d. The first cell has four times the amount of DNA as the second cell
  - e. The first cell has three times the amount of DNA as the second cell

**ACADEMIC ASSESSMENT REPORT**

7. A gardener is concerned that her greenhouse is getting too hot from too much light, and seeks to shade her plants with colored translucent plastic sheets. What color should she use to reduce overall light energy, but still maximize plant growth?
- a. Green
  - b. Blue
  - c. Yellow
  - d. Orange
  - e. Any color will work equally well



ACADEMIC ASSESSMENT REPORT

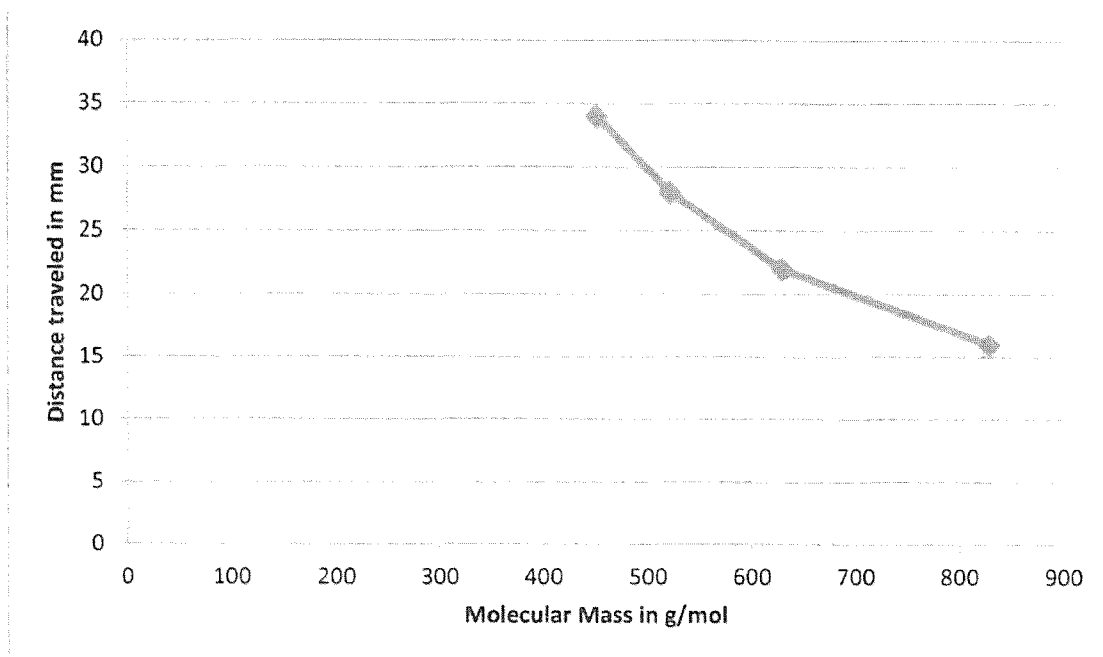


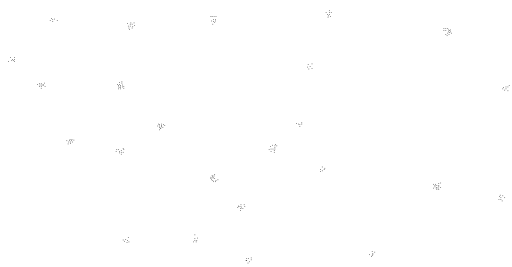
Figure 1

8. A researcher places four compounds of four different molecular masses in a gel electrophoresis box. The scientist runs the gel for 45 minutes, after which he records the distance each compound has traveled. Figure 1 shows a plot of the distance each compound has traveled in 45 minutes versus its molecular mass. According to these results\_?\_.
- heavier compounds travel faster than lighter ones
  - there is no relationship between molecular mass and how fast compounds move through the gel
  - the higher the molecular mass of a compound, the slower it travels through the gel
  - the scientist needs to run the gel for a full hour to obtain more data points
  - heavy compounds move as fast as light compounds

ACADEMIC ASSESSMENT REPORT

Buffer	pH before adding acid	pH after adding acid
A	6	6
B	8	7
C	5	2

9. You are testing different buffers. The results are in the table above. Which of the three buffers listed is the best buffer? (\*\*For its pH range? I don't get into this at all\*\*)
- A
  - B
  - C



**Figure for questions 10-12.** The above picture represents an animal cell (larger circle) in a solution. There is a higher concentration of solute (small, filled in circles) outside of the cell than inside of the cell.

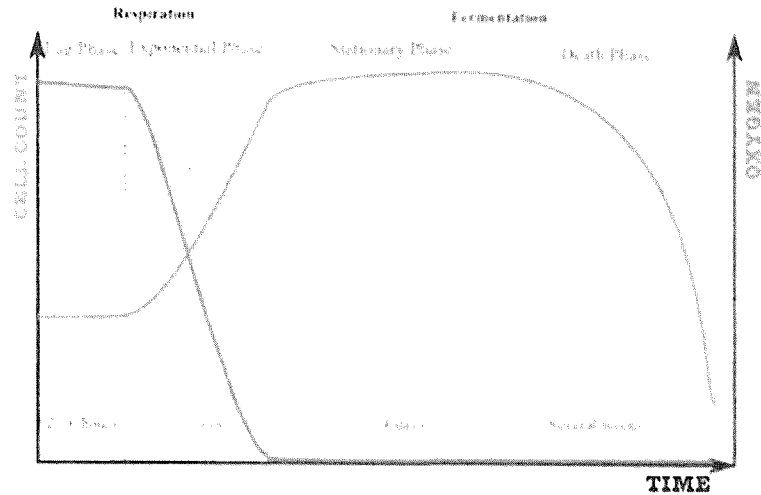
10. The solution is \_\_\_\_\_ to the cell
- Hypertonic
  - Isotonic
  - Hypotonic
  - Osmotic



ACADEMIC ASSESSMENT REPORT

11. The solute (little circles) is  $\text{Na}^+$ . Will the sodium ions travel across the plasma membrane without the assistance of a transport protein?
- Yes
  - No
  - It depends on their concentration
12. Although molecules move randomly, what will be the NET direction of movement of water molecules **initially**? (Assume the membrane has aquaporins)
- Into the cell
  - Out of the cell
  - Equally into and out of the cell
  - Water molecules will not move

Yeast growth with and without oxygen as a graph from: <http://www.brewshop.co.nz/blog/the-life-of-brewers-yeast/>



**Figure for questions 13-14.** Yeast is a facultative anaerobe, that is, it can live both with and without oxygen. When using yeast to brew beer, rather than remove all the oxygen from a vat, yeast are allowed to use the oxygen to oxidize the sugars available using cellular respiration. Once the oxygen is used up though, yeast continue to grow (the individual cells reproduce) using fermentation, which in the case of yeast produces ethanol.

13. The red curve follows the reproduction of yeast. During which phase above are yeast reproducing at the quickest rate?
  - a. Lag Phase
  - b. Exponential Phase
  - c. Stationary Phase
  - d. Death Phase
  - e. None of the above



**ACADEMIC ASSESSMENT REPORT**

14. The blue curve represents the amount of oxygen available. At which phase above is there no more oxygen available?
- a. Lag Phase
  - b. Exponential Phase
  - c. Stationary Phase
  - d. Death Phase
  - e. None of the above
15. Assuming that reproduction of yeast requires energy (and it does!) does cellular respiration or ethanol fermentation provide more energy to the yeast? (Examine the rate of reproduction of the yeast using the red curve).
- a. Cellular respiration
  - b. Ethanol fermentation
  - c. Either, it just depends on the amount of oxygen available
  - d. Neither, yeast grow as quickly using either process

ACADEMIC ASSESSMENT REPORT

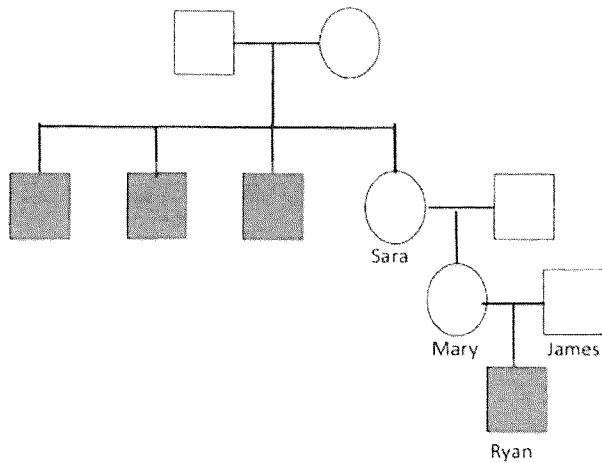


Figure for questions 16 and 17.

16. James and Mary's 1-year-old son Ryan is constantly fighting off bacterial infections, especially in his lungs. After examining the young boy, in addition to blood tests, the doctor asks questions about family history. Although both Mary and James are healthy, Mary's mother Sara lost three brothers at a young age. The doctor uses this information to generate the pedigree above. The doctor believes an X-linked mode of inheritance of a genetic immune disorder is most likely. Based on that information, predict the genotype for Mary.
- $X^A X^A$
  - $X^A X^a$
  - $X^a X^a$
  - $Aa$
  - Cannot tell from the given information

ACADEMIC ASSESSMENT REPORT

17. If James and Mary have a second child, use the Punnett Square to predict the likelihood that a second child will also be affected by this genetic disorder.

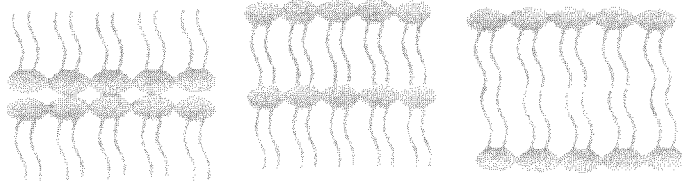
Dad's sperm


Mom's egg

- a. a  $\frac{1}{2}$  chance and all affected children will be boys
- b. a  $\frac{1}{4}$  chance and all affected children will be boys
- c. a  $\frac{1}{2}$  chance and all affected children will be girls
- d. a  $\frac{1}{4}$  chance and all affected children will be girls
- e. a  $\frac{1}{4}$  chance and affected children will be either boys or girls

**\*\*ADDITIONAL QUESTIONS\*\***

18. If I place a bunch of phospholipids into **vegetable oil**, how will they arrange themselves?



A?

B?

C?

- a. Letter A above
- b. Letter B above
- c. Letter C above
- d. None of the above

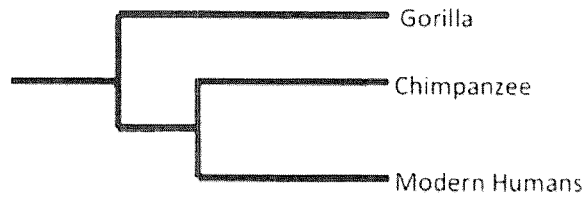


Figure for question 19.

19. Given the phylogenetic tree above, which of the following conclusions is correct based on the tree?
- a. Gorilla and chimpanzees are more closely related to each other than either is to humans
  - b. Chimpanzees and humans are more closely related to each other than either is to gorillas
  - c. Gorilla and humans are more closely related to each other than either is to humans chimpanzees

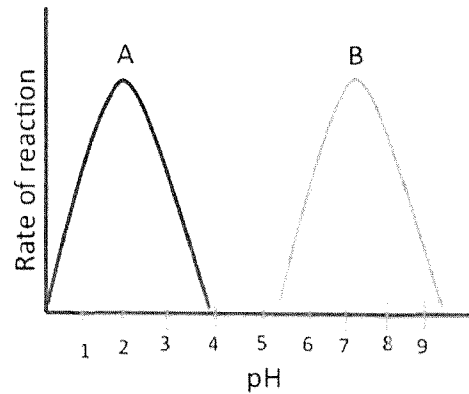


Figure for questions 20.

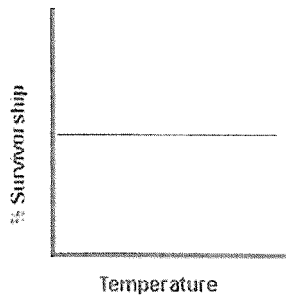
You test the function of two different digestive enzymes at different pH, and you get the above results. Use the figure and what you know about the human body to answer the following questions.

20. At which pH do enzymes A and B function the best?
  - a. They both function the best at a pH of 7.
  - b. They both function the best at a pH of 2.
  - c. Enzyme A functions best at a pH of 2, and enzyme B functions best at a pH of 7
  - d. Enzyme A functions best at a pH of 7, and enzyme B functions best at a pH of 2
  - e. You cannot tell from the given information
  
21. If you learned that enzyme B is found in human small intestine, what would you predict is the pH of the small intestine?
  - a. pH of 2
  - b. pH of 5
  - c. pH of 7
  - d. pH of 9
  - e. none of the above

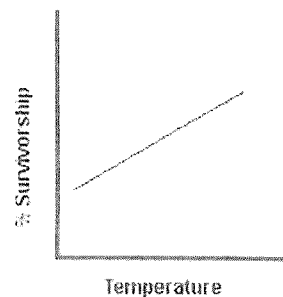
ACADEMIC ASSESSMENT REPORT

In an experiment studying the evolutionary advantage of fever, a number of lizards are injected with pathogenic bacteria and placed in incubators at given temperatures. The incubators are set at 34°, 36°, 38°, 40°, and 42°. Lizard survivorship is measured in each incubator. You find that lizard survivorship increases with temperature.

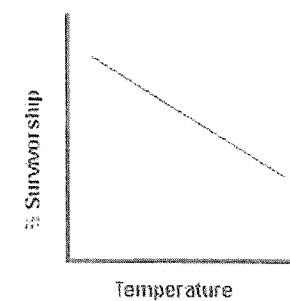
22. Which plot could represent these results?



a.



b.



c.

23. What would constitute a good control group?

- a. lizards injected with pathogenic bacteria
- b. lizards injected with saline solution
- c. the pathogenic bacteria
- d. this experiment would not need a control group



24. What is the dependent variable in this experiment?

- a. temperature
- b. incubators
- c. the specific pathogenic bacteria
- d. lizard survivorship

25. What is an example of a variable that would have to be controlled for that might influence your results?

- a. size of the lizards
- b. stress of the lizards
- c. age of the lizards
- d. sex of the lizards
- e. all of the above



## ACADEMIC ASSESSMENT REPORT

26) You recently measured the wingspan of 11 dragonflies. The data is shown below:

11 cm	6.8 cm
9 cm	6.3 cm
8.5 cm	6.2 cm
8.2 cm	5.8 cm
7.9 cm	5.5 cm
6.9 cm	

- a) What is the median value for the samples?
- b) What is the mean value for the samples?
- c) What is the standard deviation for the data?

27) Which of the following double-stranded DNA molecules will melt open at the highest temperature?

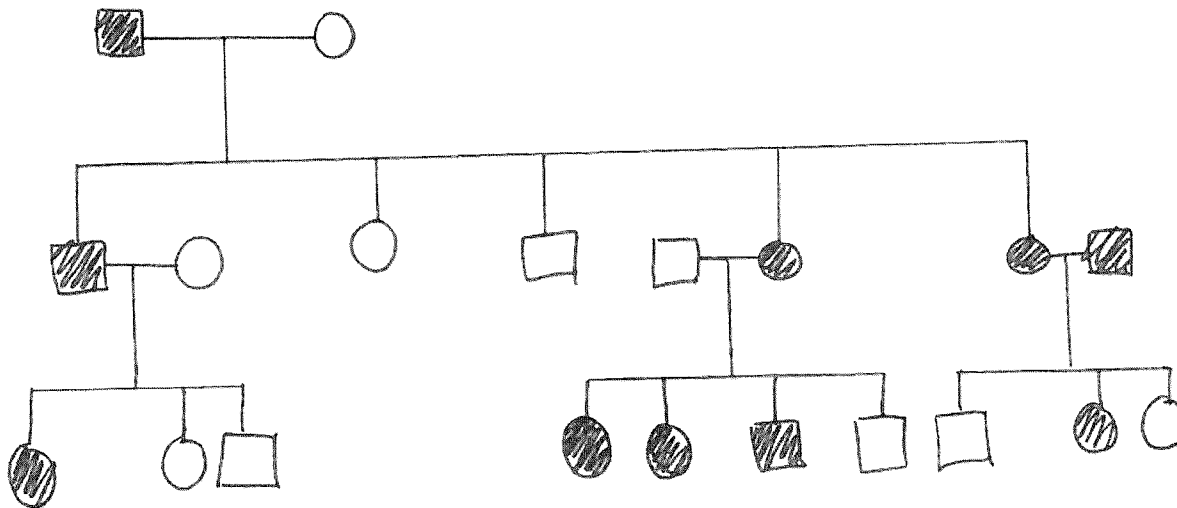
- |                  |                  |
|------------------|------------------|
| a) 5'-AGGATTC-3' | b) 5'-CCCTAGG-3' |
| 3'-TCCTAAG-5'    | 3'-GGGATCC-5'    |
| c) 5'-AGATTGC-3' | d) 5'-ATGGCTA-3' |
| 3'-TCTAACG-5'    | 3'-TACCGAT-5'    |
| e) 5'-CGATTAG-3' |                  |
| 3'-GCTAATC-5'    |                  |

ACADEMIC ASSESSMENT REPORT

28) If tRNA hydrogen-bonded to four base pairs in the mRNA rather than three, how many codons will be in the genetic code?

- a) 4
- b) 16
- c) 64
- d) 256
- e) 512

You've recently discovered a gene that codes for excessive boredom in humans. A pedigree for a family carrying this disorder is shown below:



**ACADEMIC ASSESSMENT REPORT**

29. The boredom trait is inherited as:

- a) an autosomal recessive gene
- b) an autosomal dominant gene
- c) an X-linked recessive gene
- d) an X-linked dominant gene

30. The following data was observed about onion root tip cells in mitosis. The total number of cells in each phase was determined to be:

interphase	120
prophase	15
metaphase	16
anaphase	10
telophase	14

Which phase of the cell cycle is longest in duration?

- a) interphase
- b) prophase
- c) metaphase
- d) anaphase
- e) telophase



ACADEMIC ASSESSMENT REPORT

Appendix II

Name: \_\_\_\_\_ Current Course (check one): Bio201 ☐ or Bio205 ☐

*Note: Circle your answer for each question below as well as on the scanner answer sheet.*

Choose the one alternative that best completes the statement or answers the question.

1. Which of the following properties or processes do we associate with living things?
  - a. evolutionary adaptations
  - b. energy processing
  - c. responding to the environment
  - d. growth and reproduction
  - e. all of the above
2. What is a localized group of organisms that belong to the same species?
  - a. biosystem
  - b. community
  - c. population
  - d. ecosystem
  - e. organ system
3. What is a hypothesis?
  - a. the same thing as an unproven theory
  - b. a tentative explanation that can be tested and is falsifiable
  - c. a verifiable observation sensed directly, or sensed indirectly with the aid of scientific instrumentation
  - d. a fact based on qualitative data that is testable
  - e. a fact based on quantitative data that is falsifiable
4. What is the primary reason for including a control group within the design of an experiment?
  - a. To ensure that the results obtained are due to a difference in only one variable
  - b. To ensure that the experimenter can perform a more complete statistical analysis
  - c. To demonstrate in what way the experiment was performed incorrectly
  - d. To accumulate additional facts that can be reported to other scientists
  - e. To test the effect of more than one variable

**ACADEMIC ASSESSMENT REPORT**

5. What is the difference between covalent bonds and ionic bonds?
- a. Covalent bonds involve the sharing of protons between atoms, and ionic bonds involve the sharing of electrons between atoms.
  - b. Covalent bonds involve the sharing of neutrons between atoms, and ionic bonds involve the sharing of electrons between atoms.
  - c. Covalent bonds involve the sharing of electrons between atoms, and ionic bonds involve the electrical attraction between atoms.
  - d. Covalent bonds involve the sharing of protons between atoms, and ionic bonds involve the sharing of neutrons between atoms.
  - e. Covalent bonds involve the transfer of electrons between atoms, and ionic bonds involve the sharing of neutrons between atoms.
6. The bonding of two amino acid molecules to form a larger molecule requires which of the following?
- a. removal of a water molecule
  - b. formation of a hydrogen bond
  - c. addition of a water molecule
  - d. formation of an ionic bond
  - e. both a and b

**ACADEMIC ASSESSMENT REPORT**

7. Which of the following molecules are polymers?
- a. carbohydrates
  - b. proteins
  - c. lipids
  - d. nucleic acids
  - e. a, b, d
8. What are the basic "building blocks" of deoxyribonucleic acid (DNA)?
- a. 100,000 different kinds of proteins
  - b. 26 different kinds of chromosomes
  - c. 20 different kinds of amino acids
  - d. 4 different kinds of nucleotides
  - e. 3 different kinds of genomes
9. Which of the following statements is true about buffer solutions?
- a. They maintain a constant pH when bases are added to them but not when acids are added to them.
  - b. They maintain a constant pH when acids are added to them but not when bases are added to them.
  - c. They maintain a constant pH of exactly 7 in all living cells and biological fluids.
  - d. They maintain a relatively constant pH when either acids or bases are added to them.
  - e. They are found only in living systems and biological fluids.
10. Which of the following is a hydrophobic material?
- a. paper
  - b. salt
  - c. fat
  - d. sugar
  - e. pasta
11. The shape of a polypeptide is \_?\_.
- a. maintained by bonding among its parts
  - b. important for its function
  - c. ultimately dependent upon its primary structure
  - d. all of the above

**ACADEMIC ASSESSMENT REPORT**

12. The structure of RNA differs slightly from that of DNA. Which of the following describes this difference?
- a. DNA contains deoxyribose, while RNA contains ribose
  - b. DNA contains a phosphate group, while RNA contains a sulfur group
  - c. DNA contains a 5-carbon sugar, while RNA contains a 6-carbon sugar
  - d. DNA does not contain nitrogen bases, while RNA does
  - e. DNA is composed of four possible nitrogen bases, while RNA is composed of five possible nitrogen bases
13. The movement of a substance across a biological membrane against its concentration gradient with the help of energy input is \_\_?\_\_.
- a. diffusion
  - b. exocytosis
  - c. active transport
  - d. facilitated diffusion
  - e. osmosis

**ACADEMIC ASSESSMENT REPORT**

14. Which of the following is/are true of the eukaryotic plasma membrane?
- a. It is semipermeable
  - b. It is fluid
  - c. It is a phospholipid bilayer
  - d. It contains proteins and polysaccharides
  - e. all of these
15. The movement of oxygen from an area of high concentration to an area of low concentration is an example of
- a. osmosis
  - b. active transport
  - c. diffusion
  - d. facilitated diffusion
  - e. filtration
16. An animal cell in distilled water would \_\_?\_\_.
- a. shrivel
  - b. burst
  - c. demonstrate turgor pressure
  - d. stay the same
17. In the previous question, the distilled water is \_\_?\_\_ to the animal cell.
- a. isotonic
  - b. hypertonic
  - c. hypotonic
  - d. cryotonic
18. The base sequence of the DNA molecule codes for
- a. carbohydrates
  - b. lipids
  - c. amino acids
  - d. food for the cell





**ACADEMIC ASSESSMENT REPORT**

19. Cows that chew cud are able to digest which of the following macromolecules due to bacteria in their digestive system?
- a. starch
  - b. cellulose
  - c. chitin
  - d. glycogen
20. Which of the following characteristics of a eukaryotic cell are NOT found in a prokaryotic cell?
- a. Ribosome
  - b. DNA
  - c. Flagella
  - d. Nucleus
21. The membrane activity most nearly opposite to exocytosis is \_\_?\_\_.
- a. facilitated diffusion
  - b. phagocytosis
  - c. active transport
  - d. osmosis
  - e. plasmolysis

## ACADEMIC ASSESSMENT REPORT

22. An organism that produces its own food is called a(n) \_\_?\_\_.
- a. heterotroph
  - b. homotroph
  - c. autotroph
  - d. animal
23. Usually, enzymes are \_\_?\_\_.
- a. proteins
  - b. steroids
  - c. phospholipids
  - d. fats
  - e. monosaccharides
24. Factors affecting enzyme speed include:
- a. substrate concentration
  - b. temperature optimum
  - c. pH optimum
  - d. enzyme concentration
  - e. all of the above
25. The chemical reactions within cells are regulated by organic catalysts called \_\_?\_\_.
- a. feedback activators
  - b. feedback inhibitors
  - c. enzymes
  - d. metabolites
  - e. nutrients.
26. The final electron acceptor of aerobic respiration is \_\_?\_\_.
- a. lactic acid
  - b. ATP
  - c.  $\text{NAD}^+$
  - d. carbon dioxide
  - e. oxygen

**ACADEMIC ASSESSMENT REPORT**

27. In the reaction  $\text{NAD}^+ + 2\text{H}^+ + 2\text{e}^- \rightarrow \text{NADH} + \text{H}^+$ . The reactant  $\text{NAD}^+$  is undergoing the reaction known as:
- a. oxidation
  - b. transmutation
  - c. reduction
  - d. saponification
28. What is the term for metabolic pathways that release stored energy by breaking down complex molecules?
- a. catabolic pathways
  - b. anabolic pathways
  - c. fermentation pathways
  - d. thermodynamic pathways
  - e. bioenergetic pathways
29. Which metabolic pathway is common to both cellular respiration and fermentation?
- a. oxidative phosphorylation
  - b. the citric acid cycle
  - c. the oxidation of pyruvate to acetyl CoA
  - d. chemiosmosis
  - e. glycolysis

**ACADEMIC ASSESSMENT REPORT**

30. In the process of photosynthesis \_\_?\_\_ is converted to \_\_?\_\_.
- a. chemical energy, solar energy
  - b. chemical energy, ATP
  - c. solar energy, chemical energy
  - d. solar energy, heat
31. In the process of aerobic cellular respiration \_\_?\_\_ is converted to \_\_?\_\_.
- a. chemical energy, solar energy
  - b. chemical energy, ATP
  - c. solar energy, chemical energy
  - d. ATP, chemical energy
32. What is the structural feature that allows DNA to replicate?
- a. three-component structure of the nucleotides
  - b. sugar-phosphate backbone
  - c. disulfide bonding (bridging) of the two helices
  - d. twisting of the molecule to form an  $\alpha$  helix
  - e. complementary pairing of the nitrogenous bases
33. The process of forming mRNA is \_\_?\_\_.
- a. replication
  - b. transcription
  - c. translation
  - d. ribolation
  - e. protein synthesis
34. If the reading strand of a DNA has the sequence: TAC-TGA-GGG-AAC-GCA what is the sequence of bases on the mRNA molecule?
- a. ATG-AGT-CCC-TTG-CGT
  - b. AUG-ACU-CCC-UUG-CGU
  - c. UAG-UCT-CCC-UUG-CGU
  - d. AUG-ACU-AAA-UUG-CGU

**ACADEMIC ASSESSMENT REPORT**

35. Which of the following statements is false?
- Genes are the basic unit of inheritance.
  - Genes are composed of DNA
  - Genes are organized on chromosomes
  - Some genes are composed of amino acids
  - DNA is composed of deoxynucleotides
36. What is the difference between a chromosome and chromatin?
- A chromosome is in the nucleus, chromatin is in the cytosol
  - Chromatin is in the nucleus, the chromosomes are in the cytosol
  - Chromosomes are condensed DNA and protein, chromatin is the same DNA and protein in a more diffuse state
  - Chromosomes are made of DNA, chromatin is not made of DNA
37. How does the process of mitosis differ from the process of meiosis?
- In mitosis, 2 exact genetic copies of the parental cell are made, in meiosis the 4 cells produced contain half of the original number of chromosomes
  - In mitosis, 4 exact genetic copies of the parental cell are made, in meiosis the 2 cells produced contain half of the original number of chromosomes
  - In mitosis, the daughter cells differ from the parent, in meiosis the daughter cells are identical to the parent
  - Mitosis is used to produce gametes, meiosis is used for repair and growth
38. The sister chromatids separate during this phase of mitosis.
- prophase
  - metaphase
  - anaphase
  - telophase
  - interphase
39. Chromosome homologues separate during which phase of meiosis?
- prophase I
  - prophase II
  - anaphase I
  - anaphase II
  - telophase I



ACADEMIC ASSESSMENT REPORT

40. The union of a spermatozoan and an oocyte produces a(n) \_\_?\_\_.
- embryo
  - zygote
  - blastula
  - grastula
  - morula
41. When can nondisjunction occur?
- during prophase of mitosis
  - during anaphase of meiosis I
  - during transcription
  - during translation
42. The normal karyotype of a female mammal is \_\_?\_\_.
- XO
  - XX
  - XY
  - YO
  - XYY
43. Tall is dominant to short. If a homozygous tall plant is crossed with a homozygous short plant, what percentage of the offspring will be tall?
- 100%
  - 75%
  - 50 %
  - 25%
  - 0
44. What is a genome?
- the complete complement of an organism's genes
  - a specific sequence of polypeptides within each cell
  - a specialized polymer of four different kinds of monomers
  - a specific segment of DNA that is found within a prokaryotic chromosome
  - an ordered display of chromosomes arranged from largest to smallest

**ACADEMIC ASSESSMENT REPORT**

45. Which is a true statement concerning genetic variation?
- a. It tends to be reduced by the processes involved when diploid organisms produce gametes.
  - b. It arises in response to changes in the environment.
  - c. It is created by the direct action of natural selection.
  - d. It must be present in a population before natural selection can act upon the population.

**ACADEMIC ASSESSMENT REPORT**

46. Which of the following statements is an inference of natural selection?
- a. Subsequent generations of a population should have greater proportions of individuals that possess traits better suited for success in unchanging environments.
  - b. An individual organism undergoes evolution over the course of its lifetime.
  - c. Habitats do not generally have unlimited resources.
  - d. Natural populations tend to reproduce to their full biological potential.
  - e. Some of the variation that exists among individuals in a population is genetic.
47. The Darwinian fitness of an individual is measured most directly by \_\_?\_\_.
- a. the number of its offspring that survive to reproduce
  - b. the number of "good genes" it possesses
  - c. the number of mates it attracts
  - d. its physical strength
  - e. how long it lives
48. When we say that an individual organism has a greater fitness than another individual, we specifically mean that the organism \_\_?\_\_.
- a. competes for resources more successfully than others of its species
  - b. mates more frequently than others of its species
  - c. utilizes resources more efficiently than other species occupying similar niches
  - d. lives longer than others of its species
  - e. leaves more viable offspring than others of its species
49. Which of the following statements best summarizes evolution as it is viewed today?
- a. It is goal-directed.
  - b. It represents the result of selection for acquired characteristics.
  - c. It is synonymous with the process of gene flow.
  - d. It is the descent of humans from the present-day great apes.
  - e. It is the differential survival and reproduction of the most-fit phenotypes.



**ACADEMIC ASSESSMENT REPORT**

50. What is the basic unit of evolution? At what level does evolution occur?
- a. individual
  - b. species
  - c. subspecies
  - d. population
  - e. biosphere

ASSESSMENT OF STUDENT KNOWLEDGE  
ADMINISTRATION OF JUSTICE DEPARTMENT  
MARCH 2015

The NPC Administration of Justice program still consists of just one course, AJS102- "Intensive Police Academy." This only change in the class is that we went to a "full-time" academy status which runs Monday-Thursday from 7:00am – 5:30pm for a period of 18 weeks, instead of the 11 month part-time academy that we ran during the first Academy class held at NPC.

The goals for the AJS102 class remained the same as the prior years in which they were to prepare the students in passing the Arizona Police Officer Standards and Training (AZPOST) 585 hour training course. Since we are mandated to follow all of their proficiency requirements, the assessments that will be used for this class will be the following tests: Classroom learning, Defensive Tactics, Defensive Driving, Firearms, Police Officer Physical Agility & Testing (POPAT), Limited Authority Written exam, and Certified Officer Final exam.

During the 2014 calendar year, we ran two "Intensive Police Academy" classes (2014-1 and 2014-2). 18 students actually started both classes, and we were able to graduate 14 of those students. The five students that left the class left for a variety of reasons; however none of them were due based on being unable to meet the academic standards of the written tests (53 in total). Of the 18 students that successfully graduated, all 18 have been hired to a full-time job as a law enforcement officer.

To successfully graduate from the class the students had to pass an AZ Peace Officer Standards and Training comprehensive final exam which consisted of a 4 part, 426 question exam that took all day to take, that was proctored by representatives from AZPOST.

In conclusion, it is our opinion based on the current test results that we are achieving the desired results in getting our students prepared for their AZPOST Police Officer certification.

Submitted by: Stuart Bishop, NPC Director of Public Safety Education

# 2015 ASK Report Automotive Technology's

## Introduction

In the fall of 2013 the ATO department went from in class trainers to CDX, a computer based-class learning program that combined an internet based study program that the students could access from any computer. CDX has 10 modules, nine of which covers each of the ASE/NATEF required areas of training, and a safety module. This program also includes a large amount of in-shop tasks and task sheets that has to be complete as they go thru each module. Each module has a pretest and a final exam as does each chapter in the modules. We are able to pull-up each students pretest and finals and compare their scores. This allows us to gauge the amount of retention each student is showing, and we are able to break it down into sections of the module as well as individual questions. Since instituting more class lectures in 2014/2015, and focused on trouble areas, as shown by last year's results, we are seeing a marked improvement in their overall scores, and a wider spread between their pre and post test.

## Improvement in different modules

	2013-2014		2014-2015	
Engine Repair	pre-38%	post- 81%	pre-37%	post-87%
Engine Performance	pre-27%	post- 88%	pre-30%	post-94%
Electrical	pre-21%	post- 86%	pre-27%	post-91%
Manual Drive Train	pre-14%	post-67%	pre-13%	post-79%
Automatic Transmission	pre-24%	post-91%	pre-26%	post-97%
*Brakes	pre-30%	post-84%	N/A	
Steering and Suspension	pre-34%	89%	pre-34%	post-92%
HVAC	pre-15%	post-86%	pre-14%	post-88%

Student scores on the ASE test, which is our departure test and NATEF test at the end of the semester, has also increased. We went from a Pass rate of 91% to a pass rate of 98%. These are pass/fail style test but we can see the scores and there is a marked improvement in the overall scores. We will continue to institute more lectures, and power points in the class room.

\*No students have completed Brakes in 2015 as of this report



Northland Pioneer College

## ACADEMIC ASSESSMENT REPORT

Department or Unit: **BUSINESS**

Academic Year: **2014-2015**

Lead Evaluator: **TRACY CHASE, DEPARTMENT CHAIR**

Submission Due Date: **MARCH 20, 2015**

Unit Mission: To create final assessment projects and applicable rubrics for 10 of our core business courses and to track the outcomes of online and multicourse labs/Navit students.

### Unit Goals & Objectives:

1. Goal 1: To create final assessment projects for the following courses: BUS105, BUS110, BUS115, BUS132, BUS150, BUS180, BUS185, BUS210, BUS220, and BUS225. This was completed during the summer of 2014.

A. Objective: This will allow analysis of 10 core business courses via final projects instead of a pre- and post-test assessment. The department felt this to be a better analysis of concept learning.

2. Goal 2: To analyze the results of student grades on final projects by modality from Fall 2014 semester.

A. Objective: This will help to determine the student understanding of course concepts by modality of multicourse labs/Navit and online. This will also determine whether our mode of assessment will be a successful means of analysis or whether it needs to be revised.

### Evaluation Team Members:

**Clover Baum, Jennifer Bishop, Terry Green, and Jeremy Raisor**

## ACADEMIC ASSESSMENT REPORT

Executive Summary of Results (**not more than 3 pages, please**):

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*

- 1) What was your question(s)? Are students achieving an overall understanding of the course concepts? Were there significant withdrawals in any of the courses signaling that the courses/projects might be too difficult?
- 2) What was your process? Creation of final projects and applicable rubrics for 10 core business courses so that students can be consistently and objectively evaluated. Students were given a copy of the rubric along with an explanation of the expectations the first day of class. Business faculty were asked to note outcomes of final projects for Fall 2014 semester as a baseline to see if we were tracking pertinent information. In addition, we reviewed the number of withdrawals.
- 3) Present your data summary...longer documents go to the List of Evidence Items below. See attached Excel spreadsheet.
- 4) What did you find? (observations from the data). It was recognized that dramatic differences in grades can skew the averages as do varying enrollments in each modality. So the median results were reviewed as well. But overall it was apparent that there were no significant differences between the scores of Navit students versus adult students in BUS105 when taught in a multicourse lab setting. There is a slight difference in the results across the board of online students versus those in multicourse labs. This difference could be the result of the added self-discipline required of online students and/or a lack of preparedness for an online modality. One semester does not tell us much other than setting a baseline. But the business department will track the same results for Spring 2015 semester and will compare. Withdraw numbers were not out of the ordinary in any of the 10 assessed courses.
- 5) Implications & Conclusions. Our method of assessment is very good and should be continued. The rubrics are strong and are a clear, objective way to track student understanding of concepts. It is believed that our mode of assessment is strong enough to be expanded to include dual enrollment instructors for the 2015-2016 academic year.
- 6) Recommendations & Next Steps. We believe that more data needs to be collected other than just from one semester since not all of the 10 assessed courses are taught every semester.
- 7) Detail the improvements to student learning that will occur as a result of (6). We believe our chosen method of assessment has created a consistent and clear pathway for all students in each class to understand expectations of their final projects, and for faculty to grade.



## ACADEMIC ASSESSMENT REPORT

List of Evidence Items Appended (linked to Goals and Outcomes):

**PLEASE SEE ATTACHED EXCEL SPREADSHEET**

Recommendations for Action with Approximate Timelines:

*What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?*

A Qualtrics survey will be created and distributed prior to Fall 2015 semester to all instructors teaching the 10 assessed courses as a way of notifying everyone of the information they will be asked for at the end of each semester. This will include our dual enrollment teachers who teach 3 out of the 10 courses chosen for assessment.

Itemized Resource Requests with Budget Amounts (if any):

**None being requested.**

Lead Evaluator Signature: \_\_\_\_\_ Tracy L. Chase \_\_\_\_\_ Date: \_\_\_\_\_ March 16, 2015 \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_ Tracy L. Chase \_\_\_\_\_ Date: \_\_\_\_\_ March 16, 2015 \_\_\_\_\_

Dean Signature: \_\_\_\_\_ \_\_\_\_\_ Date: \_\_\_\_\_ \_\_\_\_\_

**FALL 2014 ASSESSMENT**  
**DEPARTMENT OF BUSINESS**  
**RAW NUMBERS BY COURSE OFFERED**

	COURSE	MODE OF DELIVERY	TOTAL OUT OF 200 POSSIBLE POINTS	
	BUS105	Online	176	
	BUS105	Online	176	
	BUS105	Online	188	
	BUS105	Online	148	
	BUS105	Online	194	
	BUS105	Online	186	
	BUS105	Online	178	
	BUS105	Online	142	
	BUS105	Online	166	
	BUS105	Online	194	
	BUS105	Online	172	
	BUS105	Online	190	
	BUS105	Online	138	
			<b>172.92</b>	<b>AVERAGE</b>
			<b>176</b>	<b>MEDIAN</b>
	BUS105	Multicour	174	
	BUS105	Multicour	186	
	BUS105	Multicour	176	
	BUS105	Multicour	183	
	BUS105	Multicour	185	
	BUS105	Multicour	180	
	BUS105	Multicour	190	
	BUS105	Multicour	165	
	BUS105	Multicour	187	
Navit	BUS105	Multicour	175	
Navit	BUS105	Multicour	200	
Navit	BUS105	Multicour	200	
Navit	BUS105	Multicour	200	
Navit	BUS105	Multicour	175	
Navit	BUS106	Multicour	196	
Navit	BUS107	Multicour	192	
			<b>185.25</b>	<b>AVERAGE</b>
			<b>185.5</b>	<b>MEDIAN</b>
			TOTAL OUT OF 200 POSSIBLE POINTS	
	BUS110	Online	199	
			143	
			100	
			<b>147.33</b>	<b>AVERAGE</b>
			<b>143.00</b>	<b>MEDIAN</b>
	BUS110	MultiCour	177	



		TOTAL OUT OF 190 POSSIBLE POINTS		
Course	Mode			
BUS115	Online	180		
BUS115	Online	179		
BUS115	Online	170		
BUS115	Online	161		
BUS115	Online	121		
BUS115	Online	172		
BUS115	Online	95		
BUS115	Online	152		
BUS115	Online	160		
BUS115	Online	168		
BUS115	Online	186		
BUS115	Online	185		
BUS115	Online	187		
BUS115	Online	180		
BUS115	Online	122		
		<hr/>		
		161.20		AVERAGE
		170.00		MEDIAN
BUS115	MultiCour	186		
BUS115	MultiCour	187		
BUS115	MultiCour	172		
		<hr/>		
		181.67		AVERAGE
		186.00		MEDIAN
BUS132		NO ENROLLMENT		
BUS150		NO ENROLLMENT		
BUS180		NO ENROLLMENT		
		TOTAL OUT OF 100 POSSIBLE POINTS		
BUS185	MultiCour	90		
		80		
		<hr/>		
		85		AVERAGE
BUS210	Online	90		
		90		
		92		
		35		
		85		
		<hr/>		
		78.40		AVERAGE
		90.00		MEDIAN
BUS220		NO ENROLLMENT		
BUS225	MultiCour	95		



ACADEMIC ASSESSMENT REPORT

Department or Unit: Chemistry

Academic Year: 2015

Lead Evaluator: Thomas Hodgkins

Submission Due Date: March 20, 2015

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)* To prepare students for the next step in their careers. Specifically, CHM 130 is designed to be a fundamental introductory course presenting chemistry for nursing/allied health and general education for nearly all Associate degree programs (except A.S.). The CHM 151-152 course sequence is designed for science and engineering students. The emphasis in CHM 151 is on inorganic chemistry concepts and principles, while the emphasis in CHM 152 is on thermodynamics, kinetics and equilibria.

Unit Goals & Objectives:

1. Goal 1: To test students' knowledge of the scientific method and how to conduct a scientific inquiry.

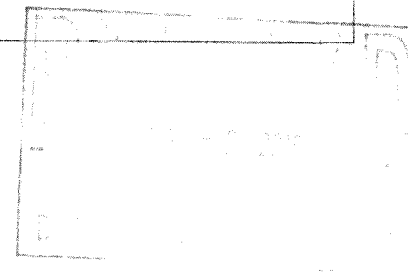
A. Objective 1A: To determine if the average student in CHM 130 and in the CHM 151-152 course sequence has a basic knowledge of the scientific method.

B. Objective 1B: To determine how well the average student in CHM 130 and in the CHM 151-152 course sequence can apply the scientific method (i.e. can conduct a scientific inquiry).

2. Goal 2: To help the students become aware of and learn to appreciate the diversity of natural environments.

Evaluation Team Members: Thomas Hodgkins, Cynthia Hutton, Russell Ott

Executive Summary of Results *(not more than 3 pages, please):*





ACADEMIC ASSESSMENT REPORT

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*

- 1) What was your question(s)? How well is a knowledge of the scientific method being taught in CHM 130 and CHM 151 and can students apply the scientific method in the laboratory? Can students become aware of and appreciate the diversity of natural environments?
- 2) What was your process? Goal 1: To test students' knowledge of the scientific method and how to conduct a scientific inquiry. On the first lecture test in both CHM 130 and CHM 151, students are asked to distinguish between a theory and a hypothesis. CHM 130 students performed the laboratory experiment Qualitative Analysis of Some Common Substances in which each student needed to identify a white powder by performing physical and chemical tests on it. In a separate laboratory experiment, Atomic Fingerprints, CHM 130 students were asked to identify an unknown gas from its atomic spectrum. CHM 151 students performed a similar experiment, entitled Atomic Spectra, where they tried to identify an unknown gas from its atomic spectrum. CHM 152 students were not tested on the first part of this objective because it was assumed that they already had been introduced to the scientific method. Goal 2: To help the students become aware of and learn to appreciate the diversity of natural environments. In Dr. Hodgkins' and Dr. Hutton's CHM 130 laboratory sections, students were required to present a poster on an assigned element or vitamin. Among the questions to be answered on the poster was the following: Where, how, when and by whom was the element or vitamin discovered? Dr. Ott required his students to write a two-page biographical sketch of an important figure in Chemistry. This paper should include the individual's date and place of birth, parents' occupation, education and positions held. Dr. Hodgkins, Dr. Hutton and Dr. Ott administered the Toledo Placement Examination during the first week of the semester to their CHM 130 students. This Exam was also administered by Dr. Hodgkins to his CHM 151 students during the first week of the semester. This Examination was written by the American Chemical Society for placement purposes. Selected questions from this Exam are placed on the CHM 130 Final Examination by all three lecture instructors.
- 3) Present your data summary. Goal 1: Most students in CHM 130 and all students in CHM 151 were able to distinguish a hypothesis from a theory on the first test of the semester. A majority of CHM 130 and CHM 151 students were able to identify the gas correctly in the Atomic Fingerprints and Atomic Spectra laboratory experiments. Goal 2: The poster questions on where, how, when and by whom was the element or vitamin discovered were answered correctly by most students. Dr. Ott's students each received a perfect score on the questions connected to the biographical sketch. A marked improvement in the percentage of correct answers on the selected questions from the Toledo Placement Examination was noted between the first week of the semester and the time of the Final Examination in CHM 130.
- 4) What did you find? (observations from the data): Most students appear to be gaining an understanding of both the scientific method and how to apply it to problems and how to learn to appreciate the diversity of natural environments.

## ACADEMIC ASSESSMENT REPORT

- 5) Implications & Conclusions: Most CHM 130 and CHM 151 students appear to have at least a rudimentary understanding of the scientific method and its application in laboratory situations. Students in all three Chemistry courses also appear to have an appreciation of the diversity of both human and natural environments.
- 6) Recommendations & Next Steps: Dr. Hodgkins recommends that, although the teaching of the scientific method, and the learning thereof by the students, is adequate at present, some improvements might nonetheless be made in this area. In all three chemistry classes, the average student becomes aware of and appreciates the diversity of natural environments. Dr. Hodgkins plans to make changes to the CHM 152 experiment The Dissociation Constant of a Weak Acid so that an unknown acid can be identified from experimental data.
- 7) Detail the improvements to student learning that will occur as a result of (6): Providing more examples of the use of the scientific method would be appropriate for both CHM 130 and CHM 151 students. Formulating test questions that measure students' understanding of the order of the steps in the scientific method is also appropriate.

List of Evidence Items Appended (linked to Goals and Outcomes):1. Goal 1: To help students develop knowledge of the scientific method and how to conduct a scientific inquiry.

Objective 1A: To determine if the average student in CHM 130 and CHM 151 has a basic knowledge of the scientific method.

During the Spring of 2014, 72% of all of the CHM 130 students answered the following question correctly on the first lecture test of the semester: Multiple choice: When using the scientific method, an idea that has successfully predicted the outcome of a number of experiments that were designed to test the validity of the original idea is called a (a) theory (b) hypothesis (c) both a theory and a hypothesis. (The correct answer is underlined.)

During Fall of 2014, 85% of all of the CHM 130 students answered the following question correctly on the first lecture test of the semester: Multiple choice: When using the scientific method, which one of these should be considered a theory/hypothesis? (a) a set of observations (b) an idea that explains some observations but has not yet been rigorously tested (c) an idea that has successfully predicted the outcome of a number of experiments that were designed to test the validity of the original idea. (c is correct if the question asked about a theory, b is correct if the question asked about a hypothesis)

## ACADEMIC ASSESSMENT REPORT

During the Spring of 2015, 77% of all of the CHM 130 students answered the following question correctly on the first lecture test of the semester: Multiple choice: When using the scientific method, a non-mathematical idea that explains some observations but has not yet been rigorously tested is called (a) a set of observations (b) a hypothesis (c) a theory (d) a law. Correct answer: b

Objective 1B: To determine how well the average student in CHM 130 can apply the scientific method (i.e. can conduct a scientific inquiry).

In the CHM 130 laboratory experiment Qualitative Analysis of Some Common Substances, each student is given a small vial containing a white powder and is told that this powder may consist of either vitamin C, baking soda or starch, or any two of these or all three of these. Each student then performs a series of tests in order to identify the powder. This experiment is due to be performed on March 18<sup>th</sup> and 19<sup>th</sup>, 2015.

The number of students who correctly identified the unknown powder in the Qualitative Analysis of Some Common Substances experiment during the Spring and Fall of 2014 can be estimated by examining the grades for this experiment: incorrect identification of the unknown meant a deduction in the student's grade of 10 points. Students who earned a grade above 90 accounted for 68% of the students during both the Fall of 2014 and the Spring of 2014 (excluding students registered at the Hopi and White River Centers, for which data is unavailable).

In the CHM 130 laboratory experiment Atomic Fingerprints, each student is asked to identify the contents of a discharge tube containing an unknown gas from its atomic spectrum. This experiment was performed on March 11<sup>th</sup> and 12<sup>th</sup>, 2015.

The number of students who correctly identified the unknown gas in the Atomic Fingerprints experiment during the Spring and Fall of 2014 can be estimated by examining the grades for this experiment: incorrect identification of the unknown meant a deduction in the student's grade of 10 points. Students who earned a grade above 90 accounted for 44% of the students during the Spring of 2014 (excluding students registered at the Hopi and White River Centers, for which data is unavailable) and 55% of the students during the Fall of 2014. During the current semester (Spring of 2015) 56% of all students identified the unknown correctly in the Atomic Fingerprints experiment.

Objective 1A: To determine whether or not the average student in CHM 151 has a basic knowledge of the scientific method. (Students in CHM 152 were not tested on this objective.)

During Fall of 2014, 100% of all of the CHM 151 students answered the following question correctly on the first lecture test of the semester: Multiple choice: Which one of the following should be called a theory? (a) a set of observations (b) an untested idea that explains a limiting number of observations (c) an idea that has successfully predicted the outcome of a number of experiments that were designed to test its validity (d) is another word for a law.



## ACADEMIC ASSESSMENT REPORT

Objective 1B: To determine how well the average student in CHM 151 and CHM 152 can apply the scientific method (i.e. can conduct a scientific inquiry).

In the CHM 151 laboratory experiment Atomic Spectra, each student is asked to identify the contents of a discharge tube containing an unknown gas from its atomic spectrum. The number of students who correctly identified the unknown gas in the Atomic Spectra laboratory experiment in CHM 151 during the Fall of 2014 can be estimated by examining the grades for this experiment: incorrect identification of the unknown meant a deduction in the student's grade of 10 points. Students who earned a grade above 90 accounted for 73% of the students during the Fall of 2014. The CHM 152 experiment the Dissociation Constant of a Weak Acid will incorporate unknowns and will be performed later this semester.

2. Goal 2: To help the students become aware of and learn to appreciate the diversity of natural environments.

Dr. Ott required his students to write a two-page biographical sketch of an important figure in Chemistry. This paper should include the individual's date and place of birth, parents' occupation, education and positions held. Each of his three students earned the maximum number of points on this sketch.

When preparing and presenting the poster that is required in Dr. Hodgkins' laboratory sections of CHM 130, the following questions were asked and the average grade on each question was awarded:

Question	Average Percentage of Points Earned Per Question				
	Spring 2014			Fall 2014	
	CHM 130-03	CHM 130-04	CHM 130-55	CHM 130-02	CHM 130-06
Charge on element, molecular structure	80%	66%	100%	90%	84%
Who discovered the element or vitamin?	100%	88%	100%	98%	91%
Where was the element or vitamin discovered?	77%	78%	81%	82%	86%
How is the element or vitamin discovered?	77%	80%	97%	86%	80%
When was the element or vitamin discovered?	96%	95%	99%	88%	92%
What levels are needed by the body and how do these levels vary with age and gender?	91%	89%	94%	83%	79%
Who, when, where and how was the element's or vitamin's value in human nutrition discovered? (optional)	25%	48%	49%	39%	59%

# ACADEMIC ASSESSMENT REPORT

Dr. Hutton reported that she used the same grading criteria that was used in Dr. Hodgkins's CHM 130 sections, but she did not know the average percentage of points earned per question. The average poster grade for those who presented a poster was 91%. She also incorporated a flame test into the Atomic Fingerprints experiment. Of those who responded, 79% identified the unknown correctly.

When preparing and presenting the required poster in CHM 152, the student was required to state who, when, where and how the subject of the poster was discovered. The average grade for this part of the poster presentation was 76%.

Dr. Hutton, Dr. Ott and I administer the Toledo Placement Exam during the first week of the semester to my CHM 130 and CHM 151 students. This Exam was written by the American Chemical Society for placement purposes. Selected questions from this Exam are placed on the CHM 130 Final Exam by all three CHM 130 lecture instructors. These questions include the following (the correct answer is underlined:case):

## TOLEDO PLACEMENT EXAM VS. FINAL EXAM FOR CHM 130

### SPRING 2014, CHM 130-03

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct for all who took Toledo Exam	% correct on	
				Toledo Exam for those who also took Final Exam	% correct on Final Exam
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	40	50	75
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	80	92	83
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	39	32	27	58	58
#34: In which state - solid, liquid or gas - do the molecules of	8	71	67	67	58



## ACADEMIC ASSESSMENT REPORT

water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.					
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	19	39	47	50	50

## SPRING 2014, CHM 130-55

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct for all who took Toledo Exam	% correct on Toledo Exam for those who also took Final Exam	
					% correct on Final Exam
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	36	38	86
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	64	69	86
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	39	32	21	23	43
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.	8	71	43	46	43
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	19	39	43	38	43





## ACADEMIC ASSESSMENT REPORT

SPRING 2014, CHM 130-02 (PDC)

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct		% correct on Final Exam
			for all who took Toledo Exam	Toledo Exam for those who also took Final Exam	
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	17	18	45
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	67	73	64
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	39	32	33	36	73
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.	8	71	58	64	45
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	19	39	33	27	45

## ACADEMIC ASSESSMENT REPORT

SPRING 2014, CHM 130-02 (HOPI)

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct		
			for all who took Toledo Exam	Toledo Exam for those who also took Final Exam	% correct on Final Exam
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	10	11	33
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	30	33	44
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	39	32	0	0	33
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.	8	71	40	44	67
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	19	39	10	11	33



## ACADEMIC ASSESSMENT REPORT

FALL 2014, CHM 130-06

FALL 2014, CHM 130-06

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct	% correct on	% correct on
			for all who took Toledo Exam	Toledo Exam for those who also took Final Exam	
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	45	39	82
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	75	78	82
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	35	32	5	6	53
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.	8	71	60	61	65
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	18	39	40	39	53

## ACADEMIC ASSESSMENT REPORT

FALL 2014, CHM 130-02

QUESTION NUMBER ON TOLEDO EXAM	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct on		
			% correct for all who took Toledo Exam	Toledo Exam for those who also took Final Exam	% correct on Final Exam
#22: Which is an example of a physical change? (A) burning gasoline (B) boiling water (C) digesting food (D) fermenting sugar	1	66	33	33	80
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as (A) elements (B) compounds (C) mixtures (D) solutions	5	85	100	94	93
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass? (A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.	35	32	27	28	67
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy? (A) solid (B) liquid (C) gas (D) All are the same.	8	71	60	56	67
#40: Which atom is most likely to gain electrons in a chemical reaction? (A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C	18	39	33	33	73

## ACADEMIC ASSESSMENT REPORT

FALL 2014, CHM 130, Section 90650 (WRV)					
	QUESTION NUMBER ON FINAL EXAM	Toledo Difficulty Index, X 100	% correct for all who took Toledo Exam	% correct on Toledo Exam for those who also took Final Exam	% correct on Final Exam
#22: Which is an example of a physical change?		66		33	100
(A) burning gasoline (B) boiling water					
(C) digesting food (D) fermenting sugar					
#25: Substances that cannot be broken down into other substances by ordinary chemical means are classified as		85		67	100
(A) elements (B) compounds (C) mixtures (D) solutions					
#33: Within the first family of elements in the periodic table, how does the number of valence electrons vary as the elements increase in mass?		32		67	100
(A) The number remains the same. (B) The number increases as the mass increases. (C) The number decreases as the mass increases. (D) The number first increases, then decreases.					
#34: In which state - solid, liquid or gas - do the molecules of water have the highest average kinetic energy?		71		67	100
(A) solid (B) liquid (C) gas (D) All are the same.					
#40: Which atom is most likely to gain electrons in a chemical reaction?		39		33	100
(A) oxygen, O (B) magnesium, Mg (C) neon, Ne (D) carbon, C					

## Recommendations for Action with Approximate Timelines:

Dr. Hodgkins recommends that, although the teaching of the scientific method, and the learning thereof by the students, is adequate at present, some improvements might nonetheless be made in this area. Dr. Hodgkins plans to make changes to the CHM 152 experiment The



ACADEMIC ASSESSMENT REPORT

Dissociation Constant of a Weak Acid so that an unknown acid can be identified from experimental data. This can be done to a limited extent during the current semester. When this course is next offered, in the Spring of 2016, the unknowns for this experiment may include acetic acid, ascorbic acid and potassium hydrogen phthalate, which are already in the chemistry stockroom. Providing more examples of the use of the scientific method would be appropriate for both CHM 130 and CHM 151 students. Formulating test questions that measure students' understanding of the order of the steps in the scientific method is also appropriate, especially in CHM 151. Both of these can be incorporated into these courses in the Fall of 2015.

Dr. Ott should continue assigning a biographical sketch of an important Chemist in the future. Dr. Hodgkins and Dr. Hutton should continue to assign poster presentations in the future, although perhaps the students' bibliographies should be replaced by footnotes in the future. Dr. Hutton has said that she intends to collect data on each of the required questions answered on the poster beginning in the Fall of 2015. All three Chemistry instructors will continue to administer the Toledo Placement Examination at the beginning of each semester and to place the selected questions mentioned above on their Final Examinations.

Itemized Resource Requests with Budget Amounts (if any): No new purchases need be made for future assessments.

Lead Evaluator Signature:

*Thomas Hodgkins*

Date:

*March 18, 2015*

Department Chair Signature:

*NP 3/19/15*  
*[Signature]*

Date:

*4/1/15*

Dean Signature:

*[Signature]*

Date:

*4/6/15*



ACADEMIC ASSESSMENT REPORT

Department or Unit: **Computer Information Systems**

Academic Year: **2014-2015**

Lead Evaluator: Clover V. Baum

Submission Due Date: **Fall 2014**

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

To create an assessment of critical thinking and critical inquiry; and be able to communicate what they have learned in a clear and concise manner.

Unit Goals & Objectives:

1. Goal 1: To create assessments of critical thinking and critical inquiry questions.

A. Objective 1A: This will allow analysis of semester long concept learning.

Goal 2. For the student to be able to communicate their knowledge of the subject in precise writing skills, that continue throughout the semester.

A. To be able to analyze the results of students grades on continuing papers throughout the semester.

B. Help to determine the students understanding of course concepts, researching topics, and being able to communicate that research in a concise manner.

Evaluation Team Members:

Clover Baum, John Chapin, and Doug Seely

Executive Summary of Results (*not more than 3 pages, please*):

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*



ACADEMIC ASSESSMENT REPORT

- 1) What was your question(s)? Are students achieving an overall understanding of course Concepts? And can they communicate those in written communication.
- 2) What was your process? Finding appropriate questions to assign, Creating a rubric that will show Critical Thinking/Critical Inquiry skills and present those ideas and research in writing.
- 3) Present your data summary...longer documents go to the List of Evidence Items below: CIS Dept. will be submitting this data in Fall 2015.
- 4) What did you find? (observations from the data) N/A
- 5) Implications & Conclusions N/A
- 6) Recommendations & Next Steps N/A
- 7) Detail the improvements to student learning that will occur as a result of (6): N/A

List of Evidence Items Appended (linked to Goals and Outcomes):

*Rubric and Excel Spreadsheet attached.*

Recommendations for Action with Approximate Timelines:

The CIS Dept is meeting with Leslie Wasson on Thursday, March 19 to discuss various ways to report and analyze data.

*The CIS Dept will analyze the data in Fall 2015 and make decisions on what to continue, change, or discontinue.*

Itemized Resource Requests with Budget Amounts (if any):

None at this time.

Lead Evaluator Signature: \_\_\_\_\_

Date:





**ACADEMIC ASSESSMENT REPORT**

Department Chair Signature: \_\_\_\_\_

Date:

\_\_\_\_\_

Dean Signature: \_\_\_\_\_

Date:

\_\_\_\_\_

**APPENDICES**

Rubric

Excel Spreadsheet



ACADEMIC ASSESSMENT REPORT

**CRITICAL WRITING/ CRITICAL THINKING ASSESSMENT FORM**

**Student ID:** \_\_\_\_\_

Critical writing assignments will be graded on a 10-point scale.

**Course:** \_\_\_\_\_

Circle -

**Class Mode:** Multi Course, Internet, Lecture

**Ideas – 2 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 – 2 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 – 2 points possible** - An “A” paper: Uses evidence appropriately and effectively, providing sufficient evidence and explanation to convince.

Points for **Support** \_\_\_\_\_

Comments:

**Style – 1 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** \_\_\_\_\_



**ACADEMIC ASSESSMENT REPORT**

Comments:

**Mechanics – 3 points possible** - An "A" paper: Almost entirely free of spelling, punctuation, and grammatical errors. The assignment should be 1 page in length double spaced, 12-point font, 1-inch margins, and approximately 200 words

Points for **Mechanics** \_\_\_\_\_

Comments:

**TOTAL POINTS FOR PAPER:** \_\_\_\_\_

Other comments or suggestions:



**Ask Evaluation CON**

*Evaluation: Questions are graded from 0-3 based upon: diagrams, completeness, showing work of math calculation, steps of solving the problem, and correct answers.*

*Maximum: 15 points Score: \_\_\_\_/15*

*Student will be graded on attempt on evaluation 1, thoroughness (explain your answers) 1, effort (answer all questions) 1, and correct answer 0.5.*

*3.5 points per question, Score: \_\_\_\_/17.5*

**1. What does OSHA stand for and what is its mission?**

**2. What is the actual dimension (L and W) of a 2"x4"x8'?**

**3. What is the volume of a cube 10'Lx10'Wx120"H? What is the area of the base if you had to cover it with flooring?**

**4. If a floor is 11'x 132" how many square feet is it? If carpet cost \$2.53 per square foot how much does it cost to install? If the labor hours for productivity are 0.457 hours per square foot how long does the job take?**

**5. If you ordered \$223.27 in lumber and you received 92 pieces what is the unit price of lumber?**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**CON Department ASK Plan**

**Ken Wilk, Faculty, Construction**

**3/9/15**

**Assessing NPC General Education Student Learning Outcomes for Safety and Construction knowledge basics**

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

**Courses: CON 100 Construction Math and Safety, CON 200 Integrated Management Laboratory**

**CON 100**

**NPC 3 Quantitative Reasoning**

**Objective:** Learn basic geometry as it relates to construction: Volume, Area, Unit of Measure conversions, and Quantity.

**Assessment:** Questions on quizzes and exam: Math Problems

Quantitative evaluations are made of student understanding as they are involved in completing contextualized math problems.

**CON 200**

**NPC 3 Quantitative Reasoning**

**Objective:** Estimates for production and output

**Assessment:** Spreadsheets on quantity to be performed on project and productivity rates

Quantitative evaluations are made of student understanding as they are involved in completing contextualized productivity in the laboratory setting.

**Timeline**

Evaluation will occur in the fall semester on an annual basis starting 2015/2016 academic year.

### Results/Evaluation

Preliminary results from the trial data for first/second year students for the morning section at PDC are as follows. The students were assessed on 3/10 to provide a baseline for the assessment tool and effectiveness.

Student Data Collected				
	1st y NAVIT	2nd y NAVIT	1st y com.	2nd y com.
	6	13.5	14	10.5
	14	10		12
Data Analysis				
Mean	10	11.75	14	11.25
Median	10	11.75	14	11.25
Sample Size	2	2	1	2
STD Dev	5.65685425	2.474873734	#DIV/0!	1.06066
Max	14	13.5	14	12
Min	6	10	14	10.5

### Discussion

Not Much to discuss, the sample size was too small to do any comprehensive analysis

Student Data Collected

1st y NAVIT 2nd y NAVIT 1st y com. 2nd y com.

6	13.5	14	10.5
14	10		12

Data Analysis

Mean	10	11.75	14	11.25
Median	10	11.75	14	11.25
Sample Size	2	2	1	2
STD Dev	5.65685425	2.474873734	#DIV/0!	1.06066
Max	14	13.5	14	12
Min	6	10	14	10.5





ACADEMIC ASSESSMENT REPORT

Department or Unit: Cosmetology

Academic Year: 2014-2015

Lead Evaluator: Mrs. Chloe Reidhead

Submission Due Date:

Unit Mission: Are goal is to improve student scores with the Arizona State Board Licensing Exam.

Unit Goals & Objectives

As a result of this assessment we will be able to identify progress and deficiency in the Arizona State Board of Cosmetology practical and written examinations within the past three years to present year at all three locations WMC, LLC, and St. Johns.

I. Arizona State Board Cosmetology Licensing Exam

1. Practical Examination

- A. Set Up and Client Protection
- B. Thermal Curling
- C. Haircutting
- D. Chemical Waving
- E. Virgin Hair Lightening/Tint Retouch
- F. Virgin Relaxer Application/Relaxer Retouch

2. Written Examination

- A. Scientific Concepts
- B. Hair Care Services
- C. Skin Care Services
- D. Nair Care Services



ACADEMIC ASSESSMENT REPORT

Etc. [THE BOX WILL EXPAND, but you want to keep it simple, at least for the first year or two]

Evaluation Team Members:

Chloe Reidhead

Theresa Parker

Barbara Hicks

Autom Christensen

Roxy Padilla

Glenna Constant

Stacy Ashcraft

Ferryn Sam

Oona Hatch

Julie Peck

Executive Summary of Results (**not more than 3 pages, please**):

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*

- 1) What was your question(s)? We want to improve our students Arizona State Board Licensing Exam scores.
- 2) What was your process? We revamp our final written examinations,
- 3) Present your data summary... attached is our graphs of the Arizona State Board of Cosmetology Licensing exam results
- 4) What did you find? (Incomplete) Still collecting data from the cosmetology graduates. 2014-2015
- 5) Implications & Conclusions. Pending.
- 6) Recommendations & Next Steps. Our next step is to continue collecting and calculating data.
- 7) Detail the improvements to student learning that will occur as a result of (6). Pending.



ACADEMIC ASSESSMENT REPORT

List of Evidence Items Appended (linked to Goals and Outcomes):

*Pending.*

Recommendations for Action with Approximate Timelines:

*What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?*

*We will continue to collect data to the end of this physical year 2014-2015.*

Itemized Resource Requests with Budget Amounts (if any):

Lead Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Dean Signature: \_\_\_\_\_

Date: \_\_\_\_\_



Northland Pioneer College

**ACADEMIC ASSESSMENT REPORT**

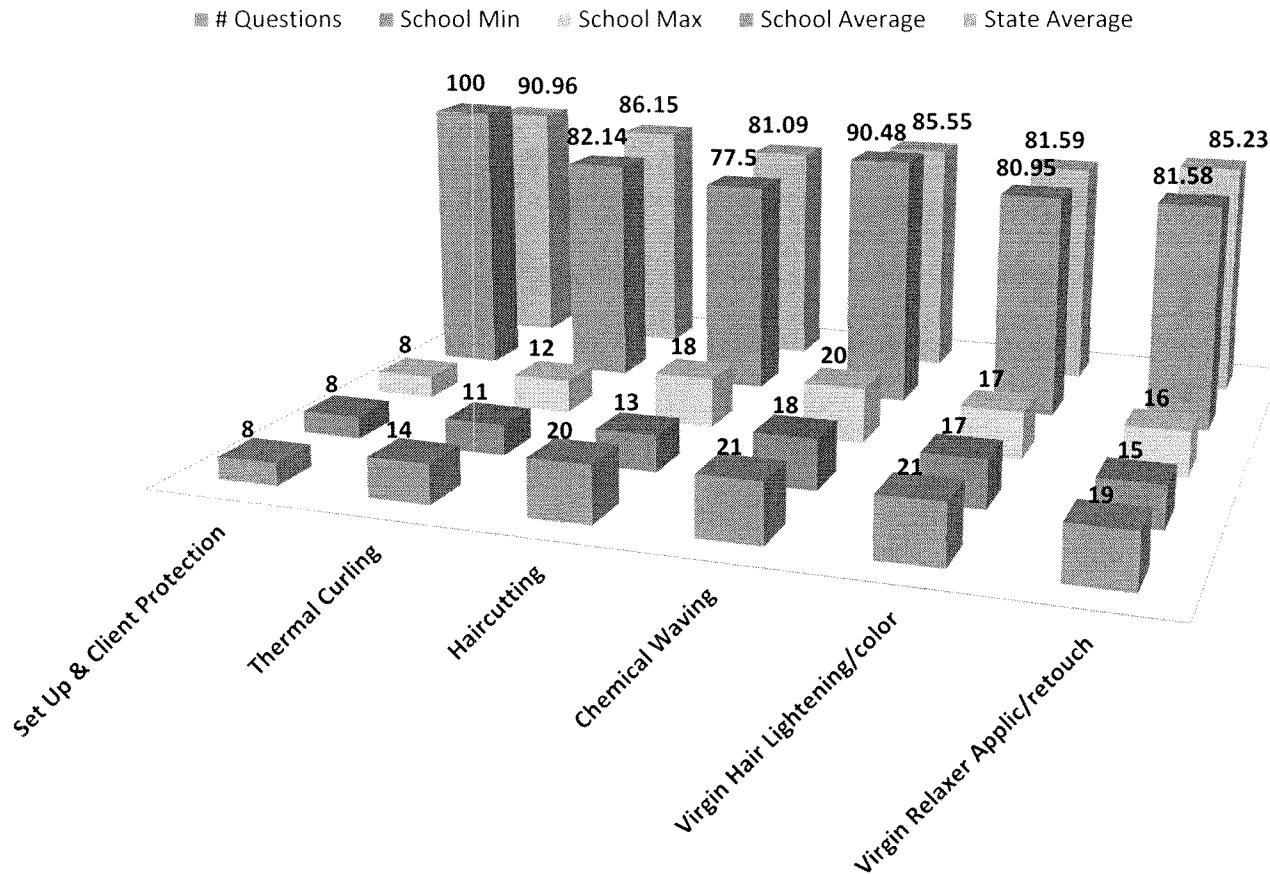
APPENDICES

{Please attach evidence exhibits after this face page, each labeled with the goal(s) & outcome(s) it supports.}



## St.Johns-Cosmetology Practical 2011-2012

Number of Exams: 2 Passed: 2 (100%) Failed: 0 (0%)

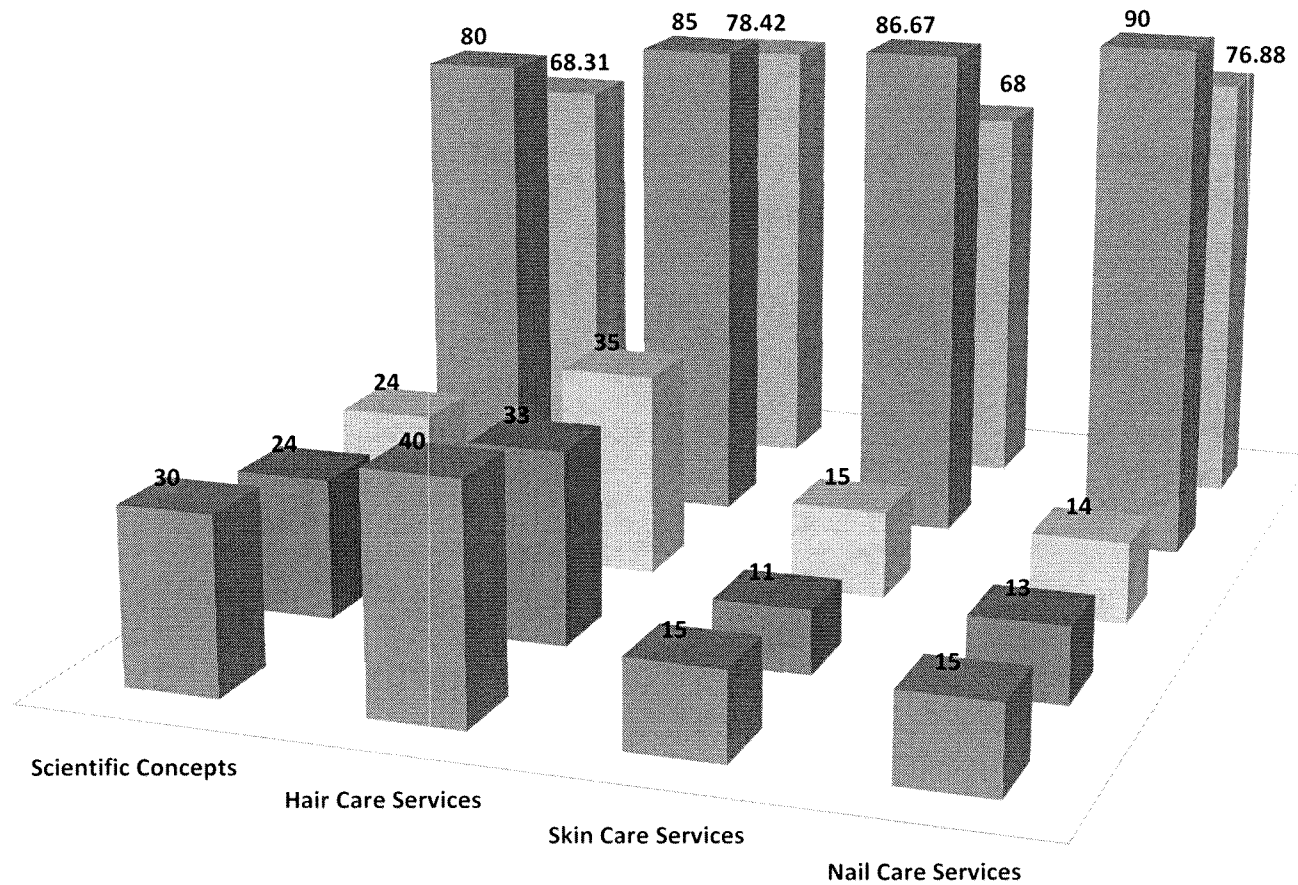




## St.Johns-Cosmetology Written 2011-2012

Number of Exams: 2 Passed: 2 (100%) Failed: 0 (0%)

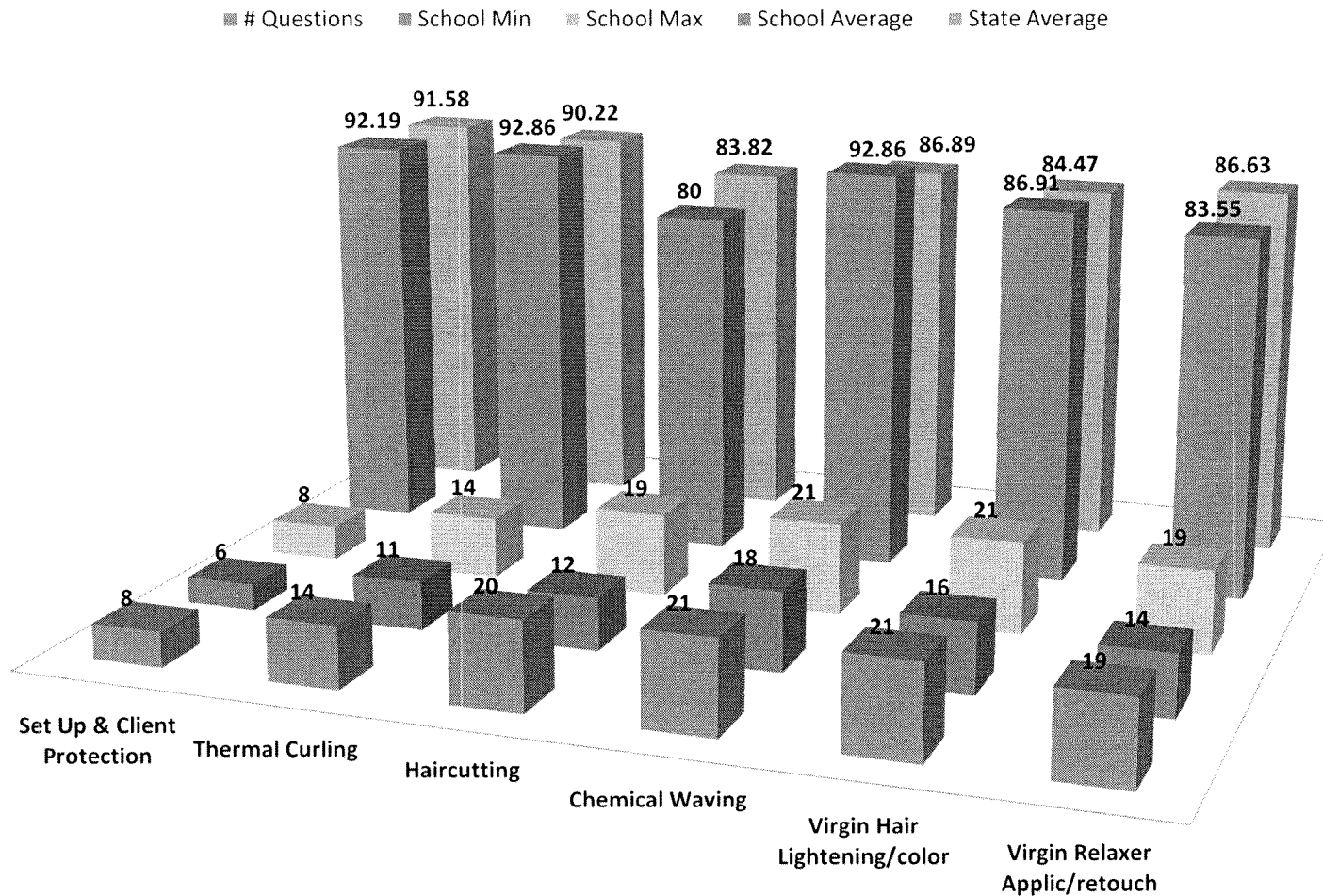
■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average





## St.Johns-Cosmetology Practical 2012-2013

Number of Exams: 8 Passed: 8 (100%) Failed: 0 (0%)

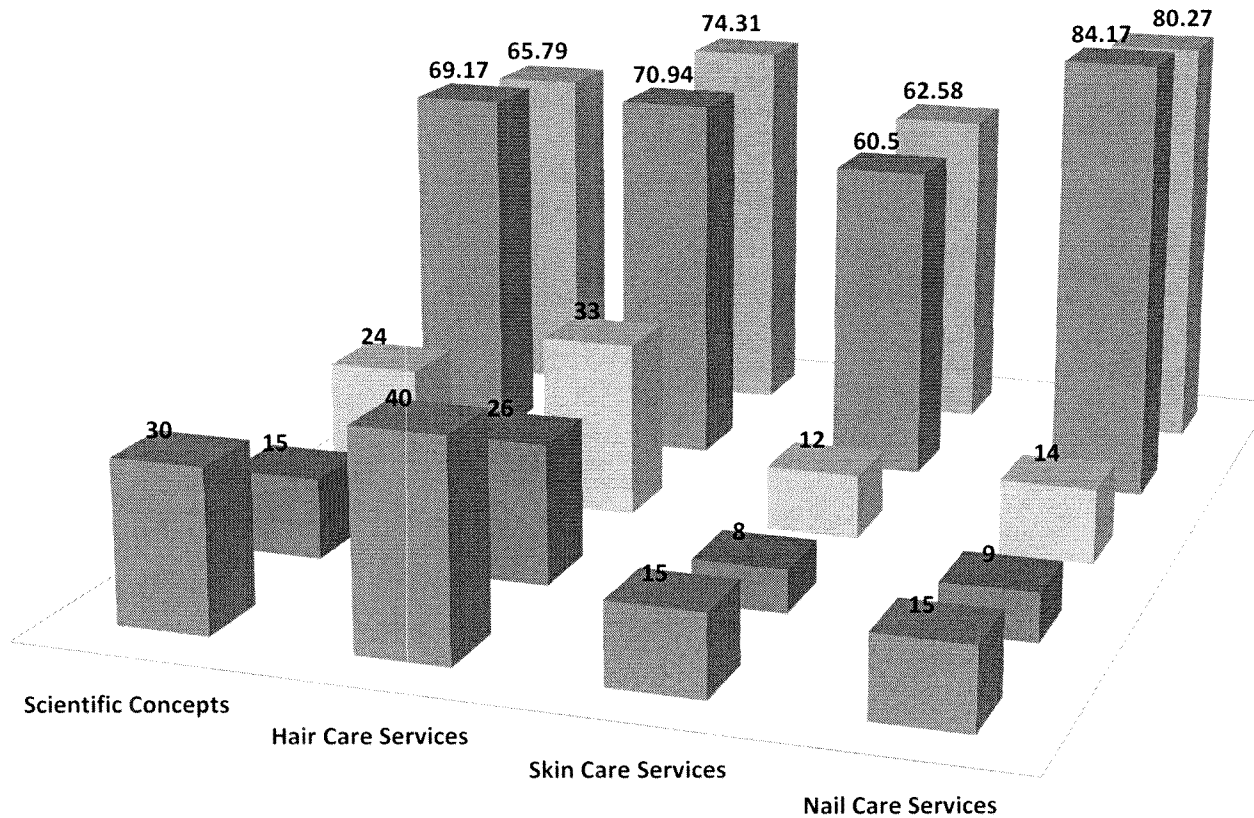




## St.Johns-Cosmetology Written 2012-2013

Numer of Exams: 8 Passed: 8 (100%) Failed: 0 (0%)

■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average



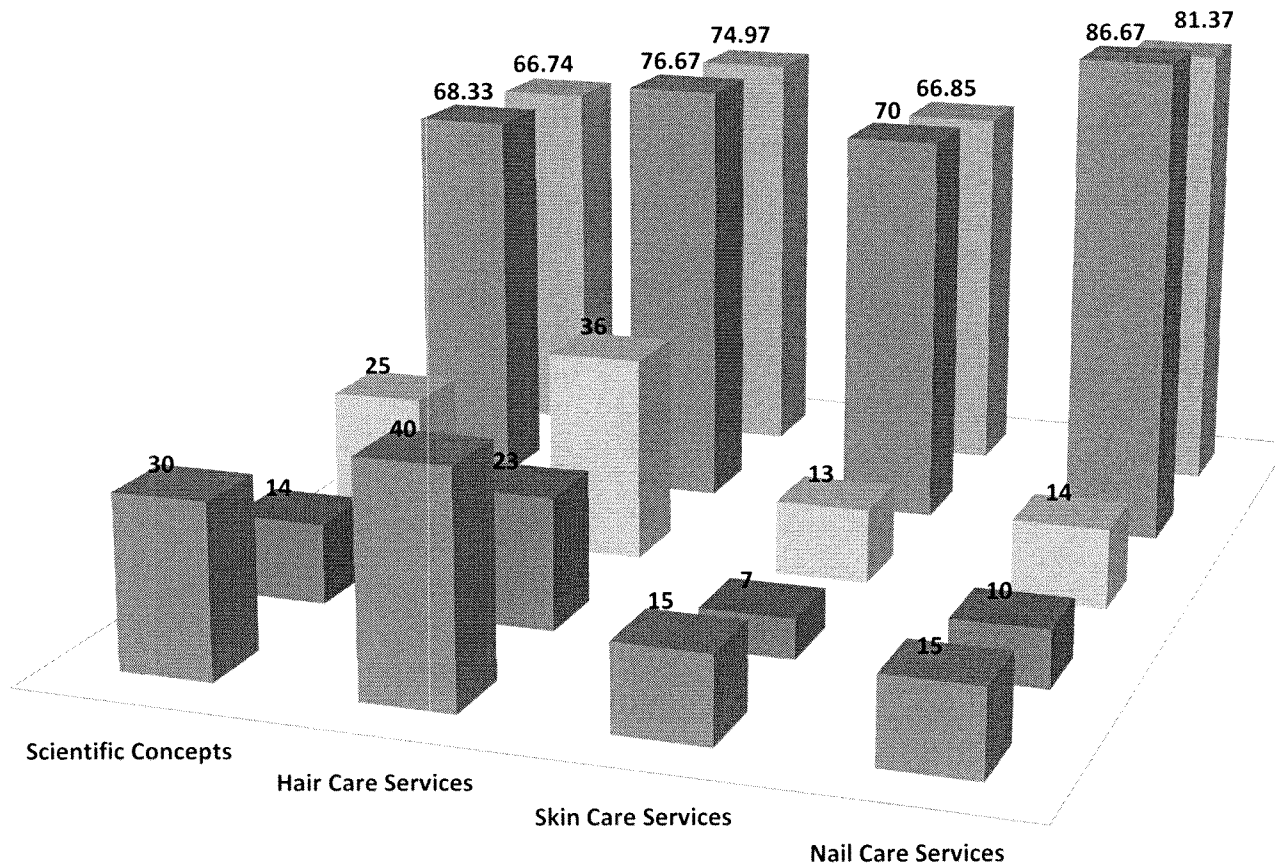




## St. Johns-Cosmetology Written 2013-2014

Number of Exams: 5 Passed: 5 (100%) Failed: 0 (0%)

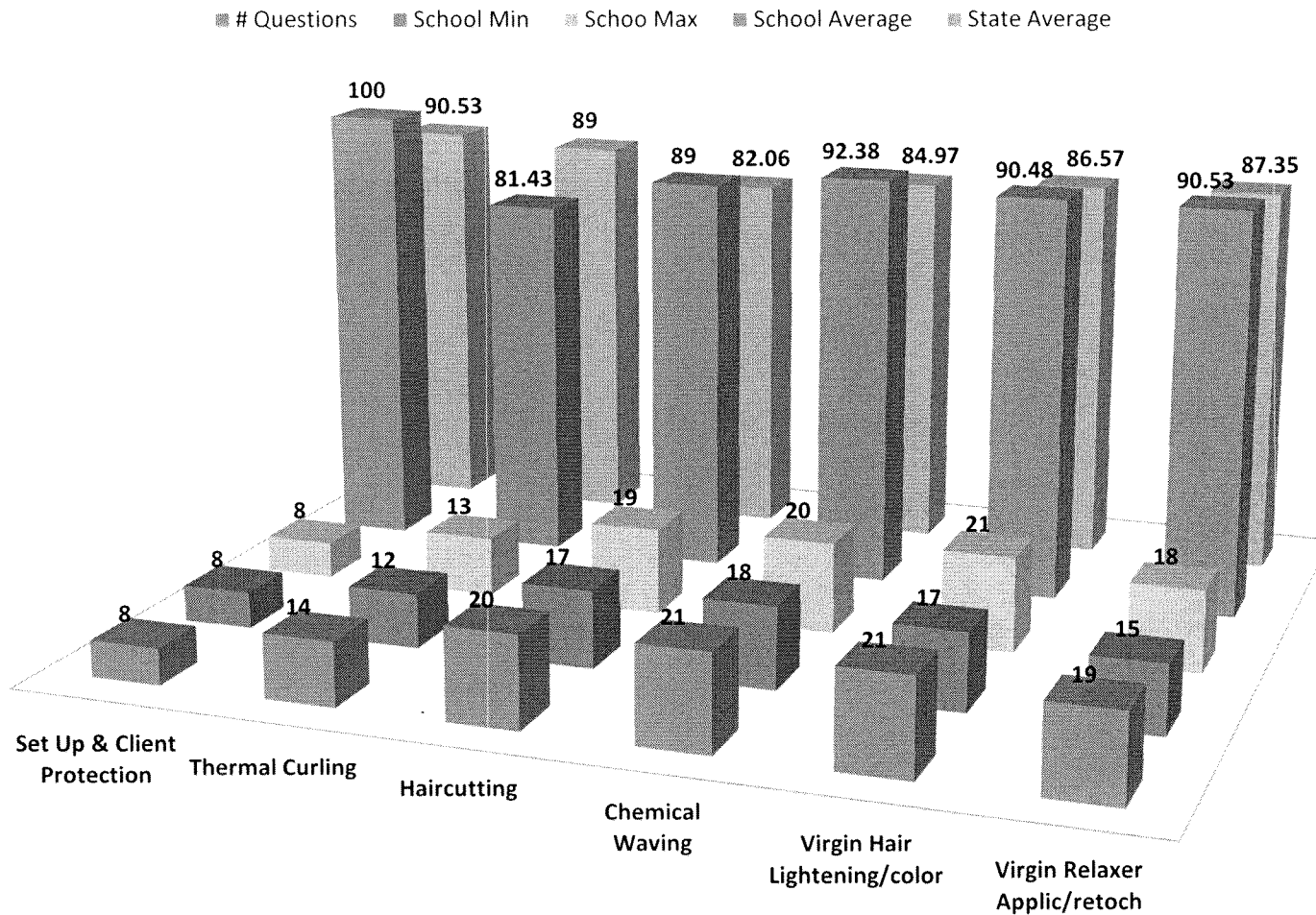
■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average





## St. Johns-Cosmetology Practical 2013-2014

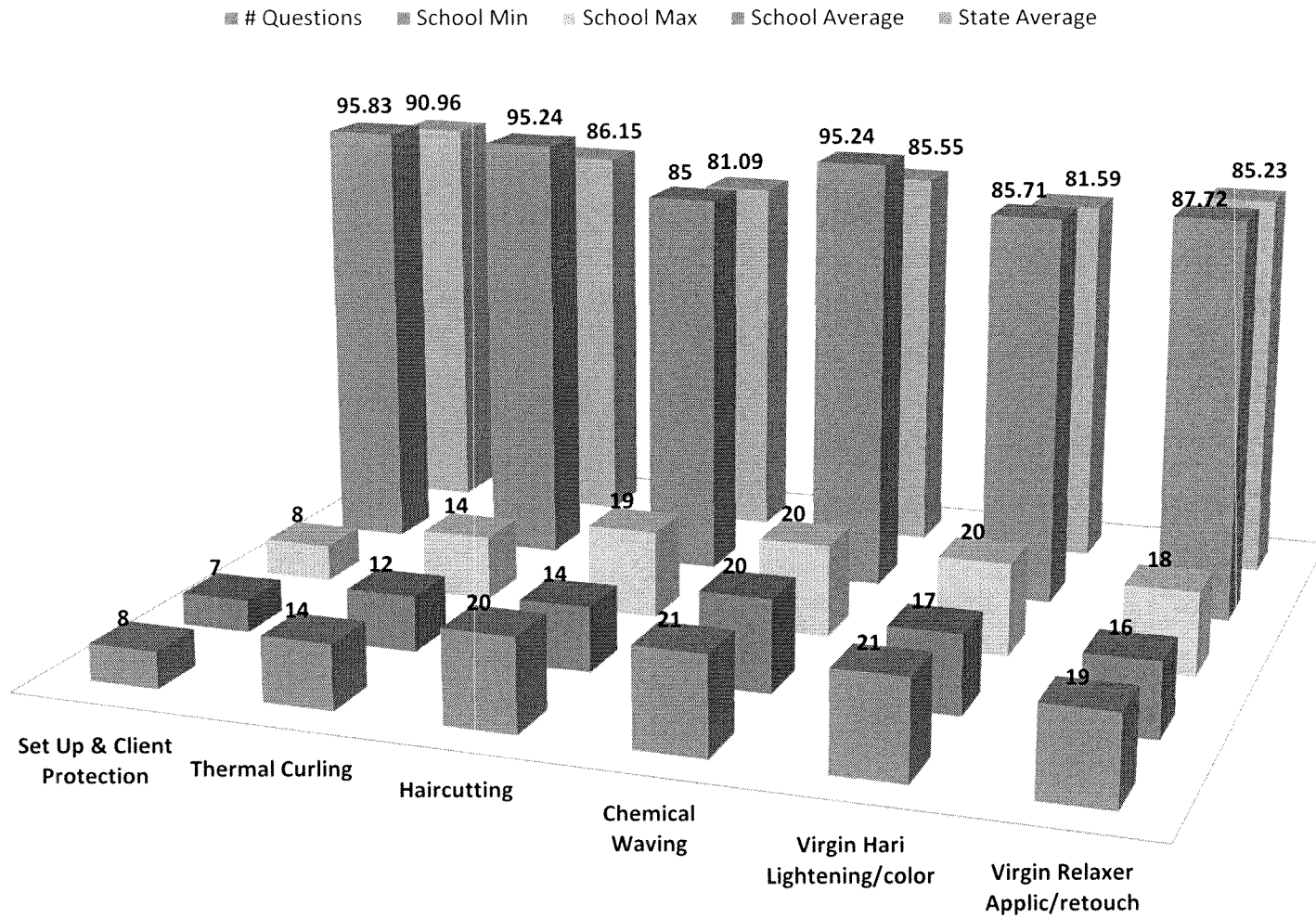
Number of Exams: 6 Passed: 5 (83.33%) Failed: 1 (16.67%)





## Winslow-Cosmetology Practical 2011-2012

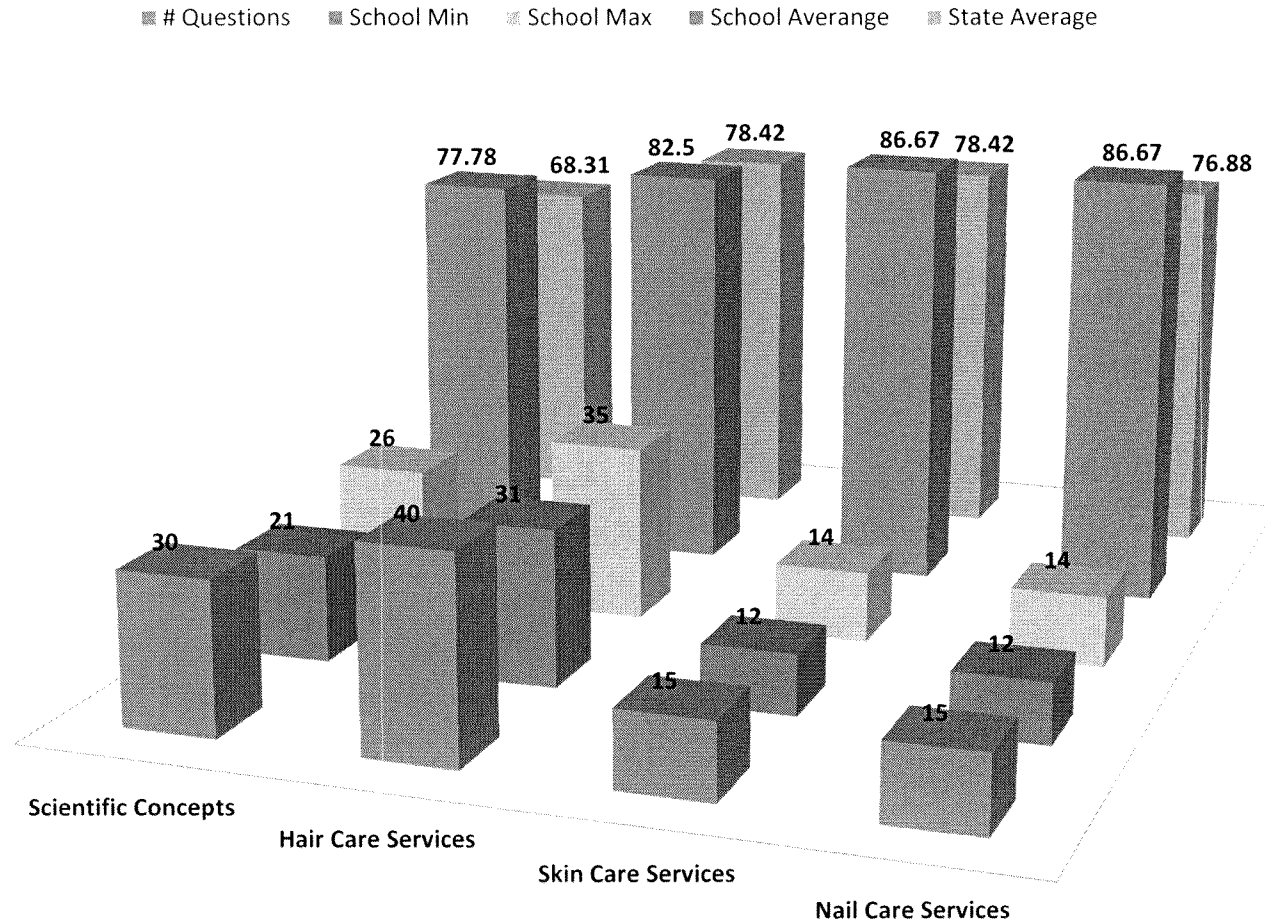
Number of Exams: 3 Passed: 3 (100%) Failed: 0 (0%)





## Winslow-Cosmetology Written 2011-2012

Number of Exams: 3 Passed (100%) Failed: 0 (0%)

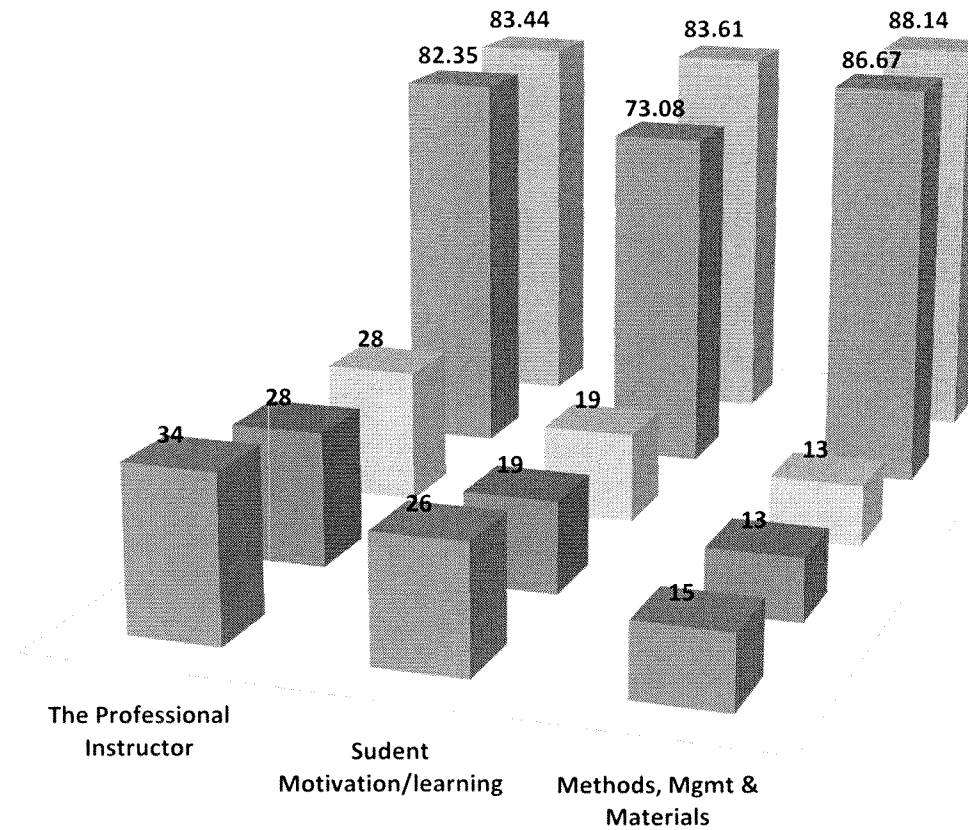




## Winslow-Cosmetology Instructor Theory 2012-2013

Number of Exam: 1 Passed: 1(100%) Failed: 0(0%)

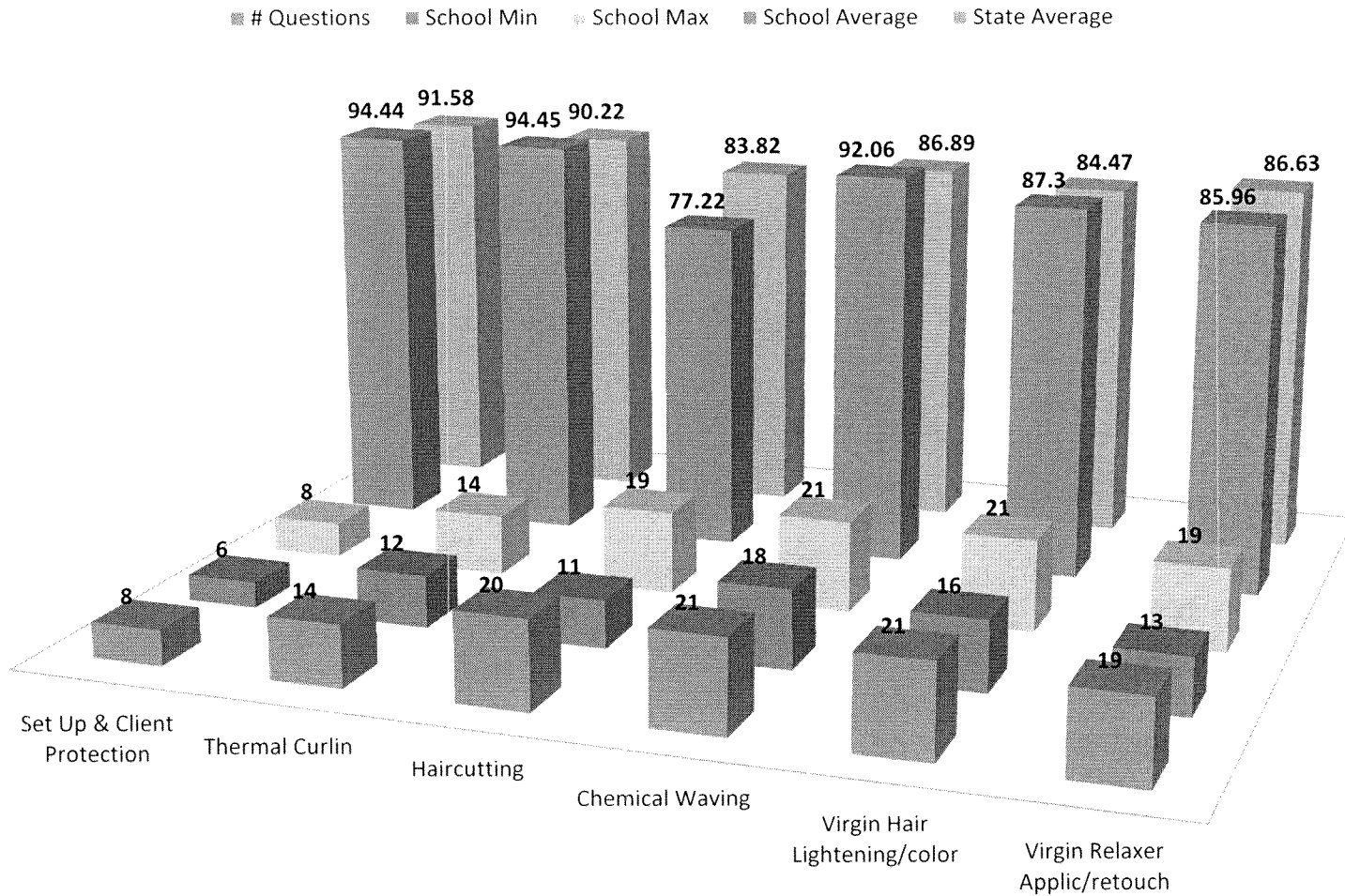
# Questions   School Min   School Max   School Average   State Average





## Winslow-Cosmetology Practical 2012-2013

Number of Exams: 9 Passed: 9(100%) Failed: (0%)

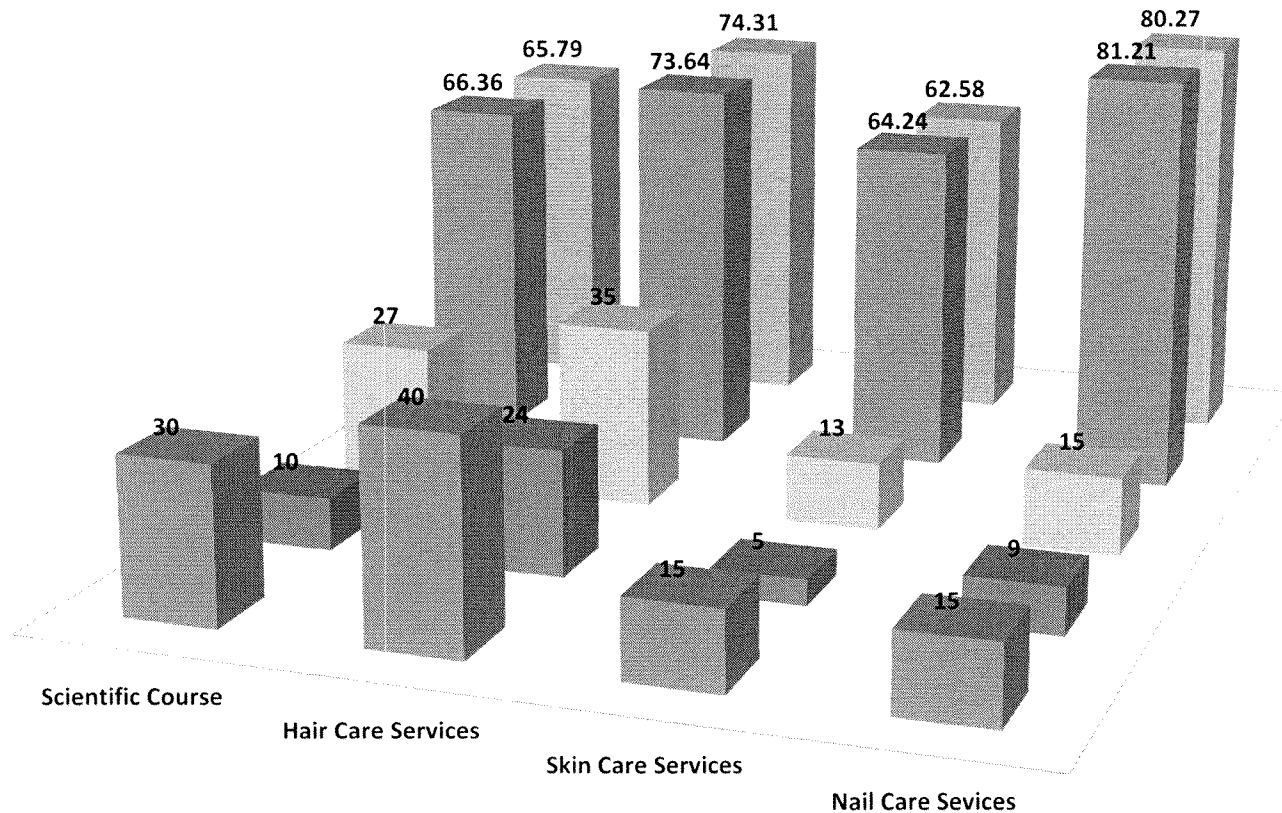




## Winslow-Cosmetology Written 2012-2013

Number of Exams:11 Passed: 8(72.73%) Failed: 3 (27.27%)

■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average



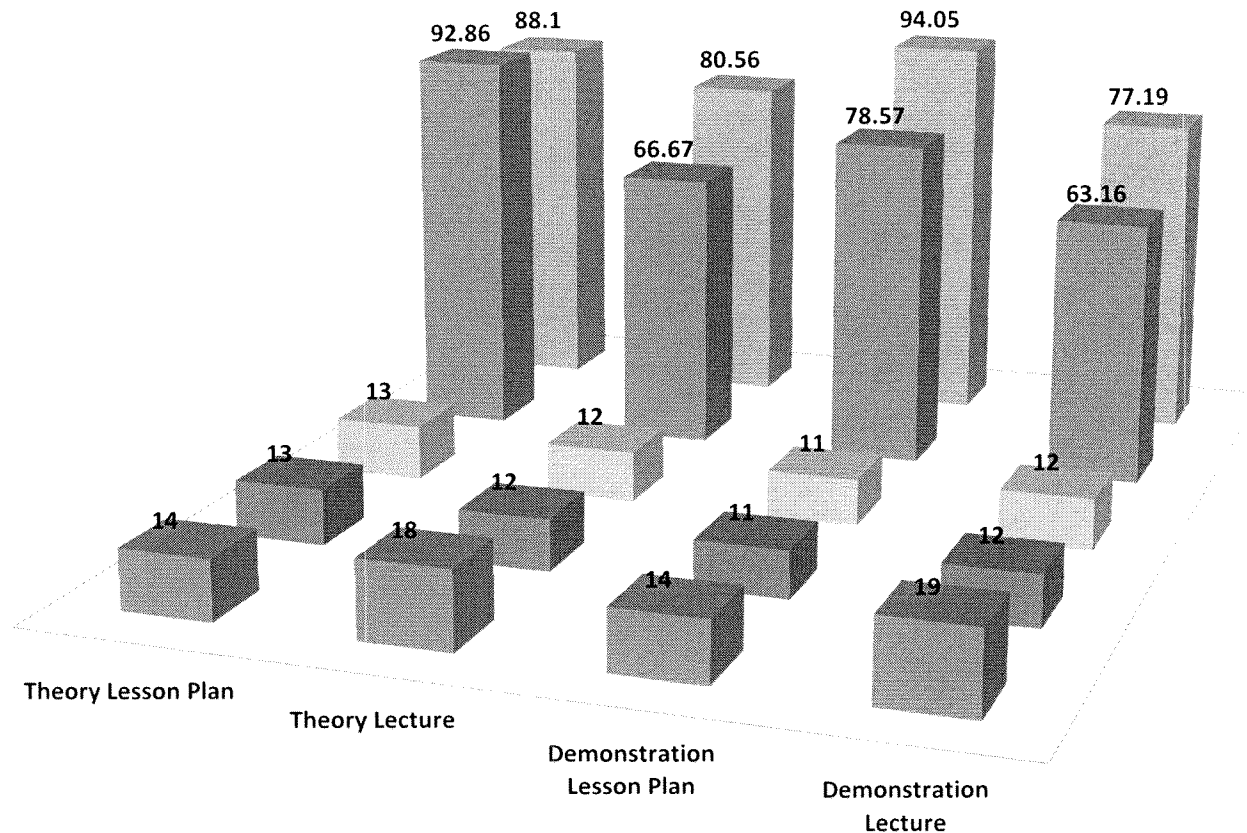




## Winslow-Instructor Cosmetology Practical 2012-2013

Number of Exams: 1 Passed: 1(100%) Failed: 0(0%)

■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average

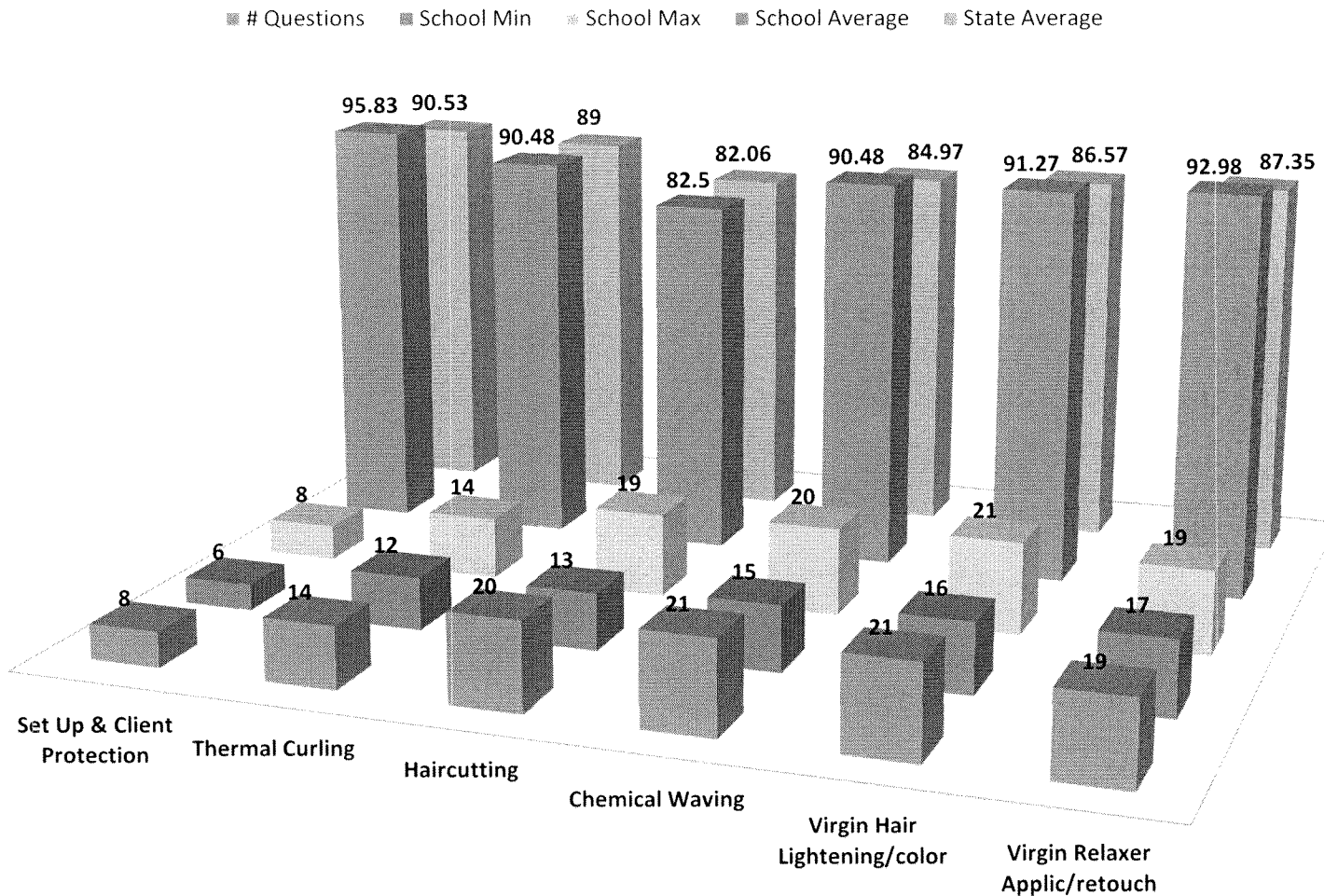






## Winslow-Cosmetology Practical 2013-2014

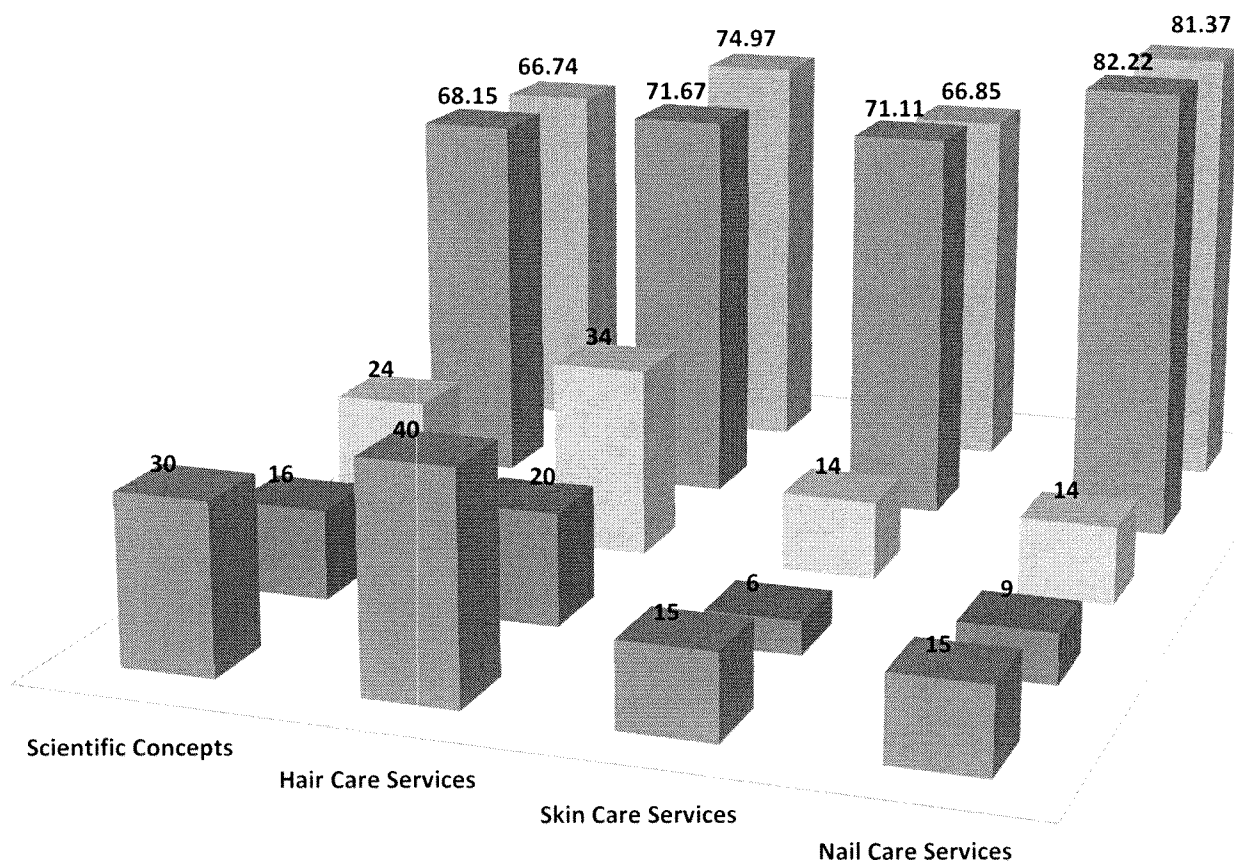
Number of Exams: 6 Passed: 6(100%) Failed:0 (0%)



## Winslow-Cosmetology Written 2013-2014

Number of Exams: 9 Passed: 7(77.78%) Failed: 2(22.22%)

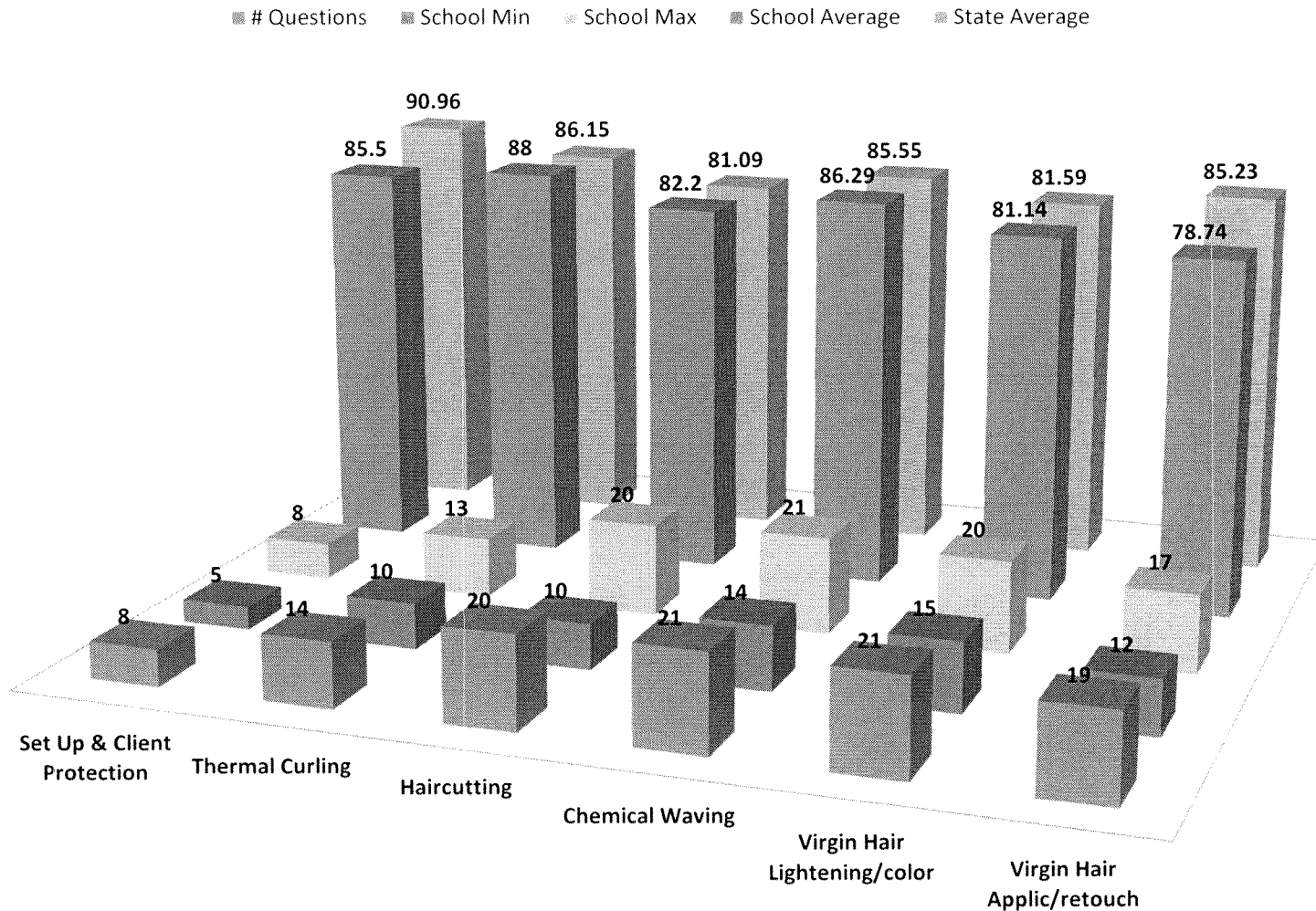
# Questions   School Min   School Max   School Average   State Average





## Show Low-Cosmetology Practical 2011-2012

Number of Exams: 25 Passed: 23(92%) Failed 2 (8%)

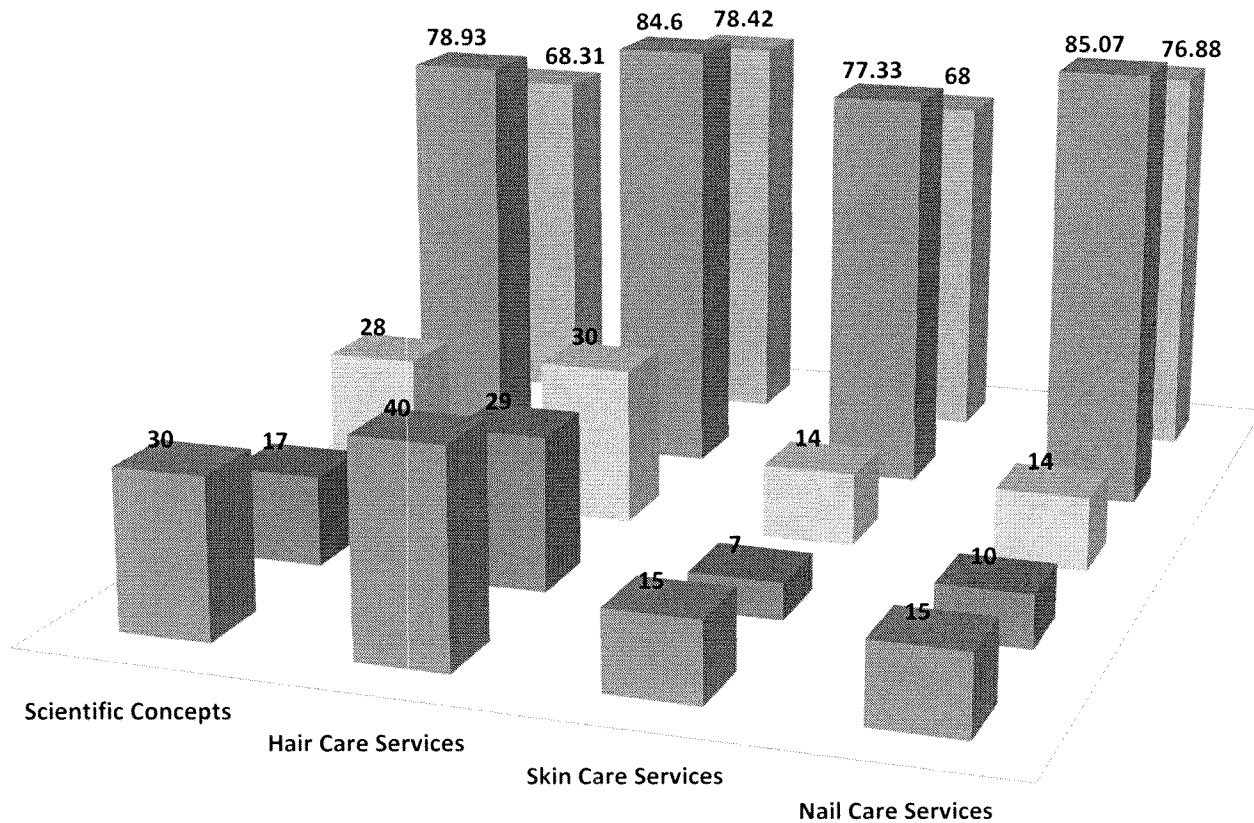




## Show Low-Cosmetology Written 2011-2012

Number of Exams: 25 Passed: 25 (100%) Failed: 0 (0%)

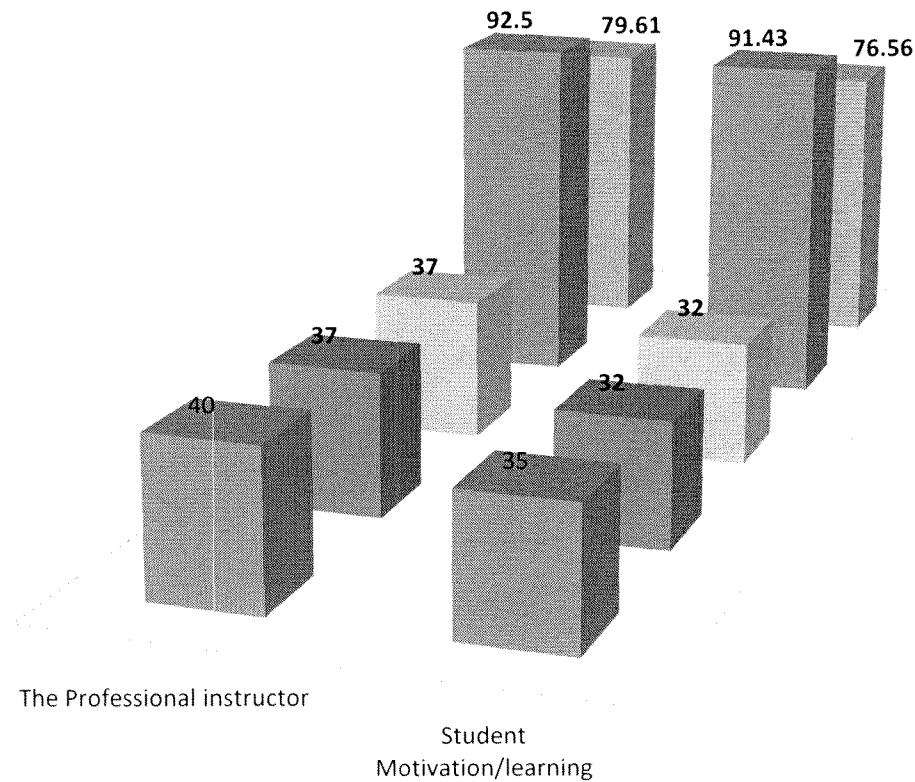
■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average



## Show Low-Cosmetology Instructor Theory 2011-2012

Number of Exams: 1 Passed: 1 (100%) Failed: 0 (0%)

# Questions   School Min   School Max   School Average   State Average

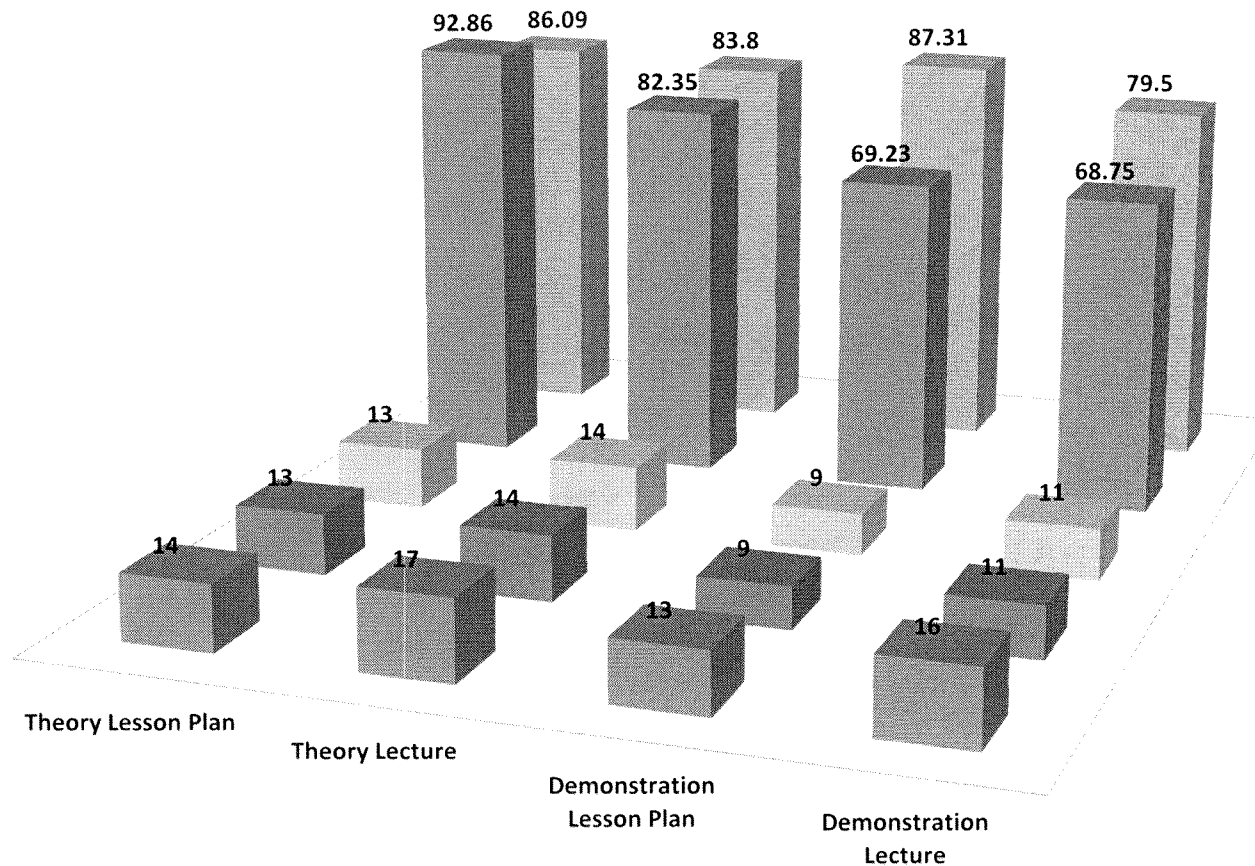




## Show Low- Instructor Cosmetology Practical 2011-2012

Number of Exams:1 Passed: 1 (100%) Failed: 0 (0%)

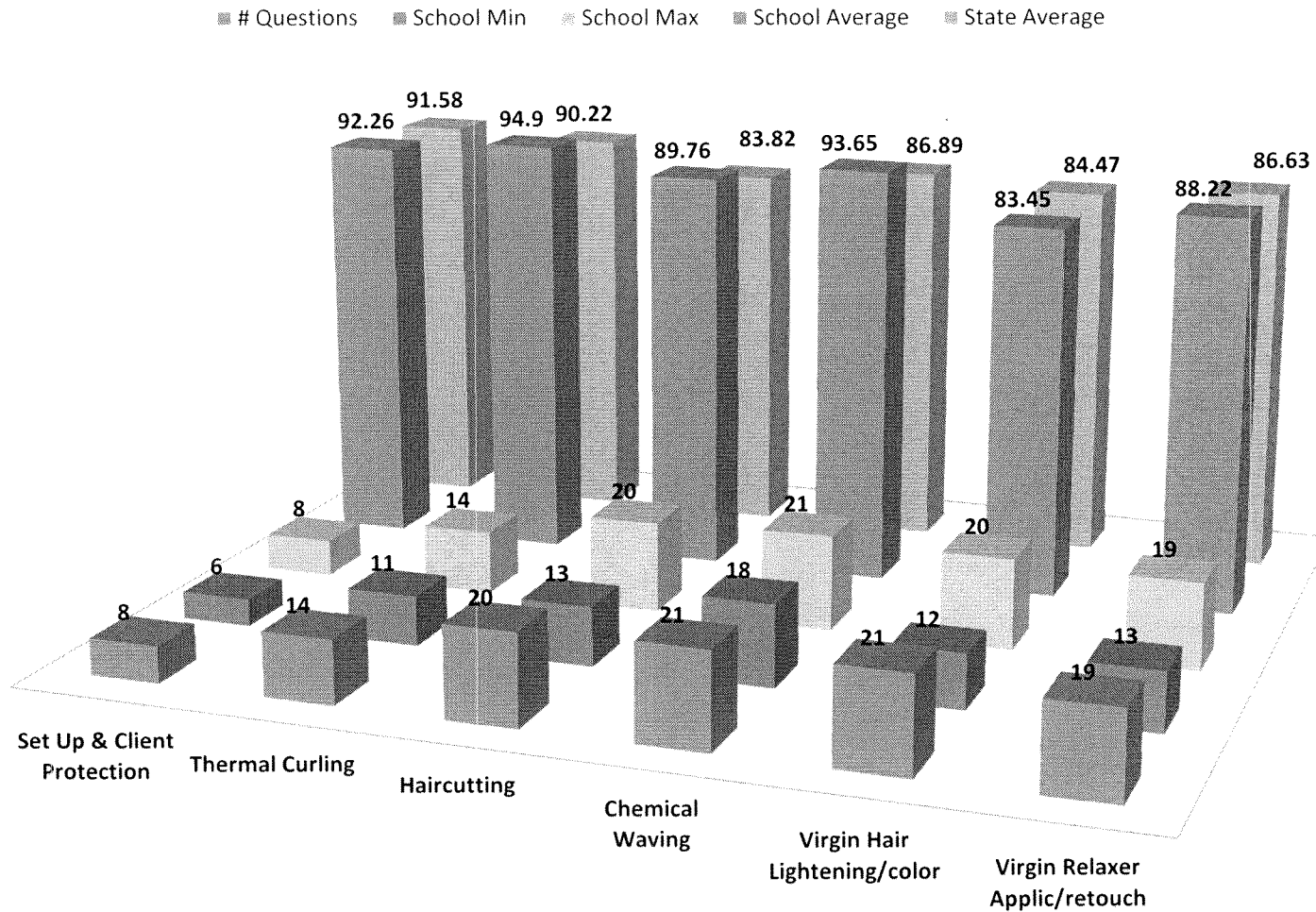
# Questions   School Min   School Max   School Average   State Average





## Show Low-Cosmetology Practical 2012-2013

Number of Exams: 21 Passed: 21 (100%) Failed: 0 (0%)



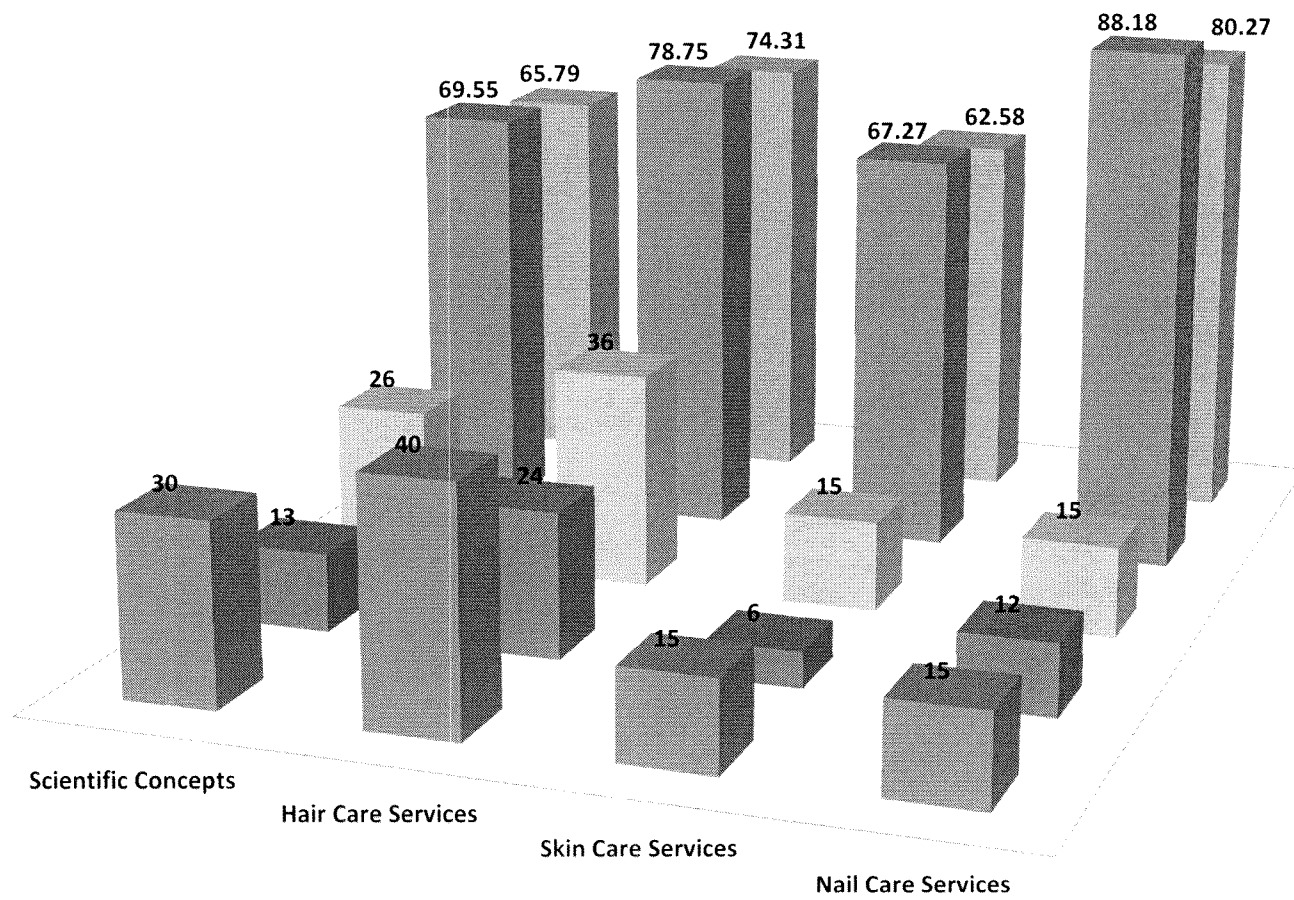




## Show Low-Cosmetology Written 2012-2013

Number of Exams: 22 Passed: 22(100%) Failed: 0 (0%)

# Questions   School Min   School Max   School Average   State Average



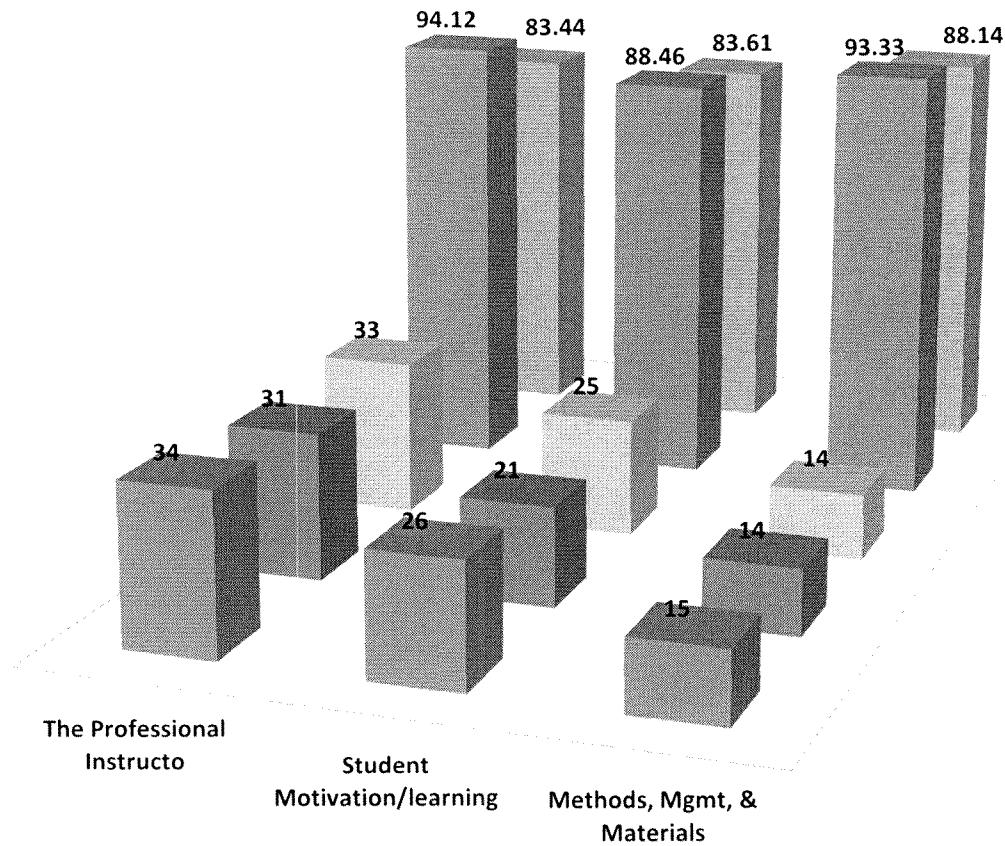




## Show Low-Cosmetology Instructor Theory 2012-2013

Number of Exams: 2 Passed: 2(100%) Failed: 0(0%)

# Questions   School Min   School Max   School Average   State Average

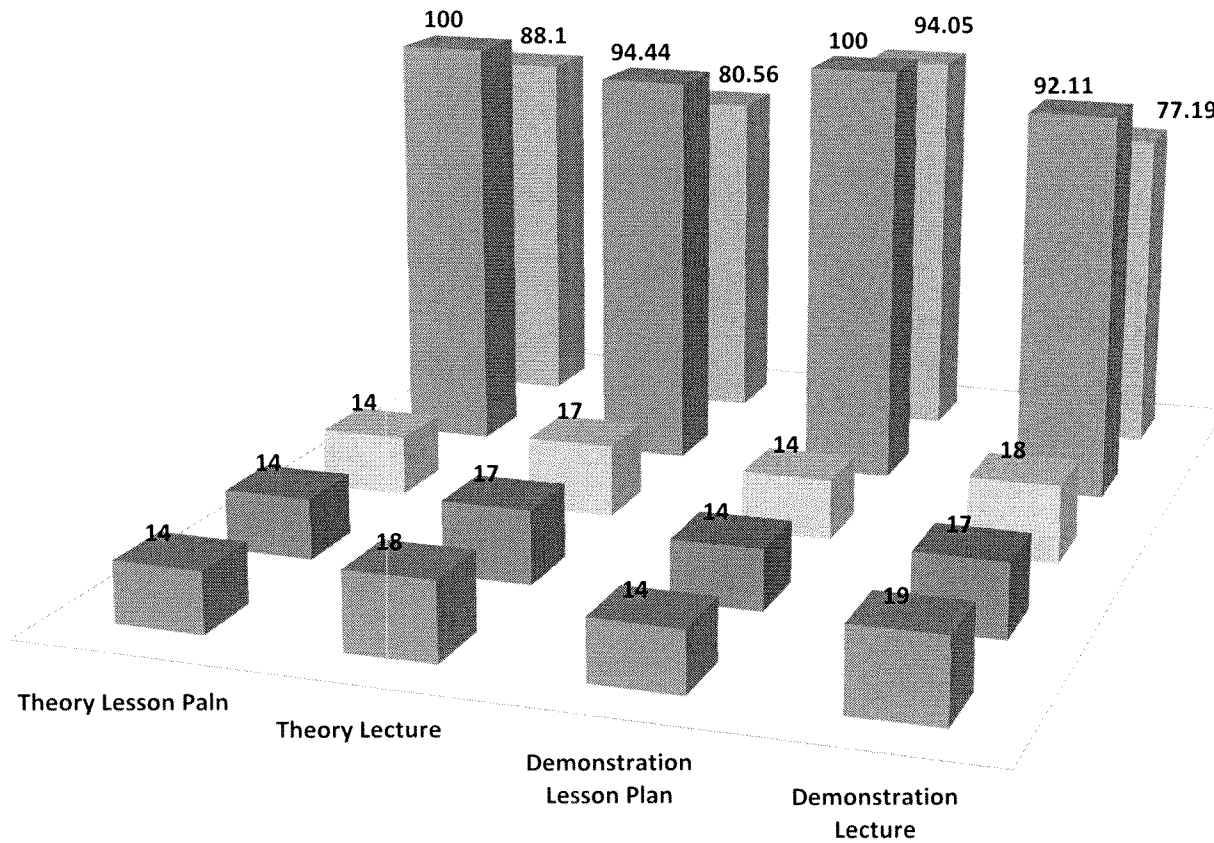




## Show Low- Instructor Cosmetology Practical 2012-2013

Number of Exams: 2 Passed: 2 (100%) Failed: 0 (0%)

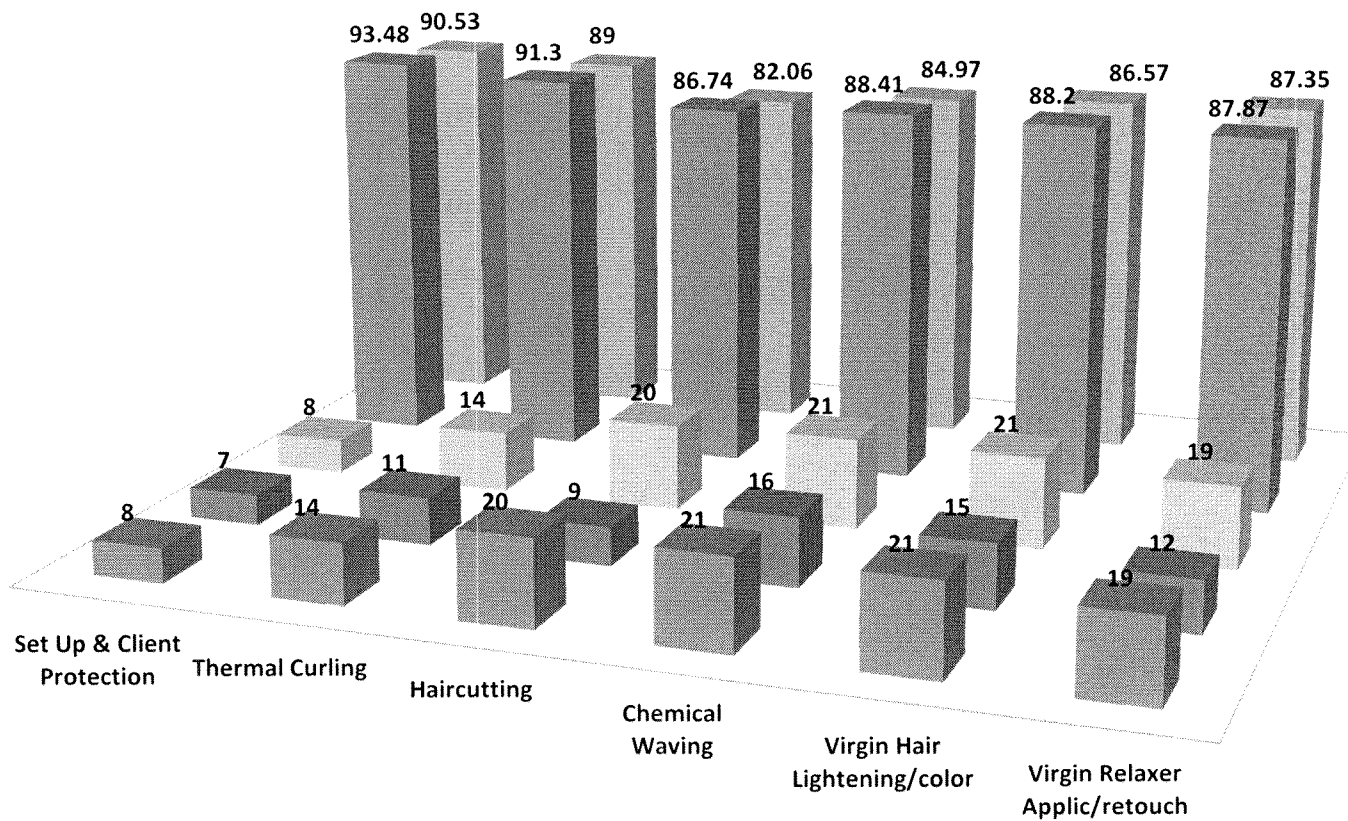
■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average



## Show Low-Cosmetology Practical 2013-2014

Number of Exams: 23 Passed: 23 (100%) Failed: 0 (0%)

■ # Questions ■ School Min ■ School Max ■ School Average ■ State Average

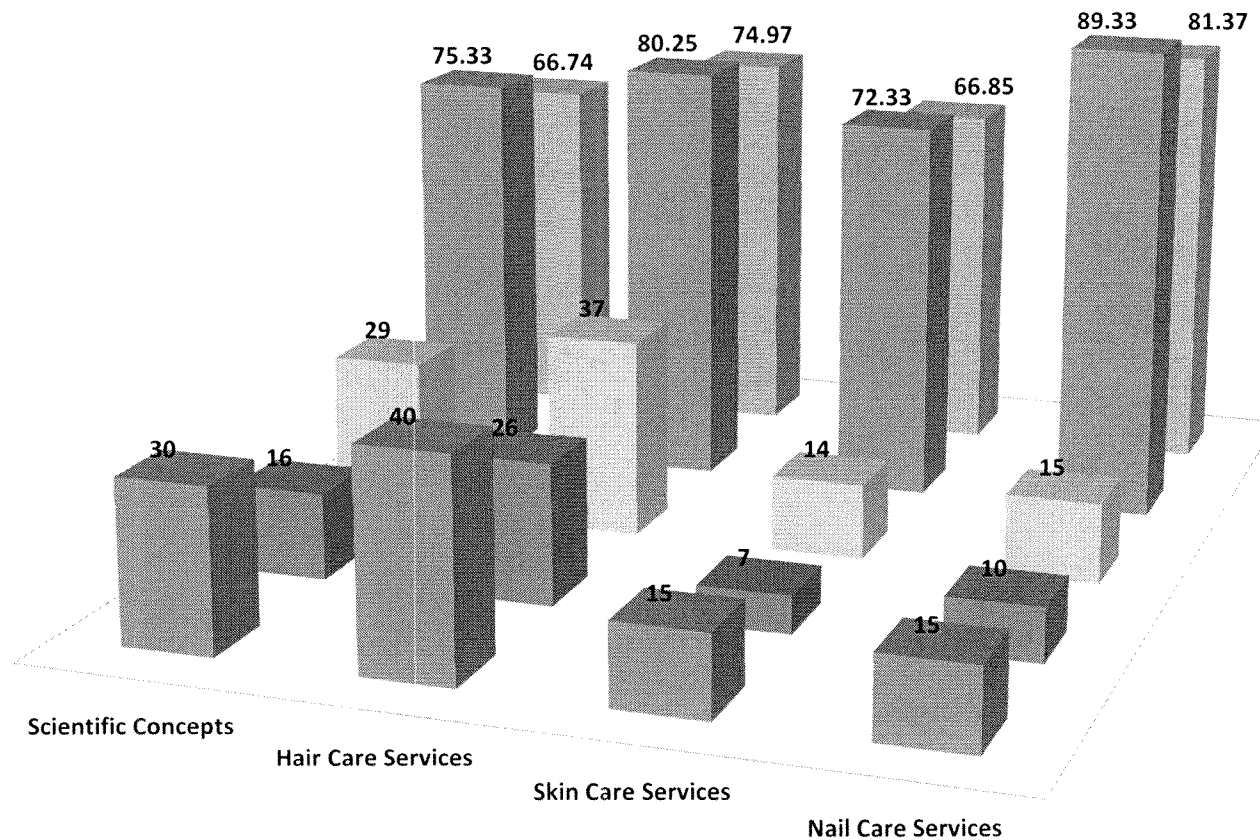




## Show Low-Cosmetology Written 2013-2014

Number of Exams: 20 Passed: 20 (100%) Failed: 0 (0%)

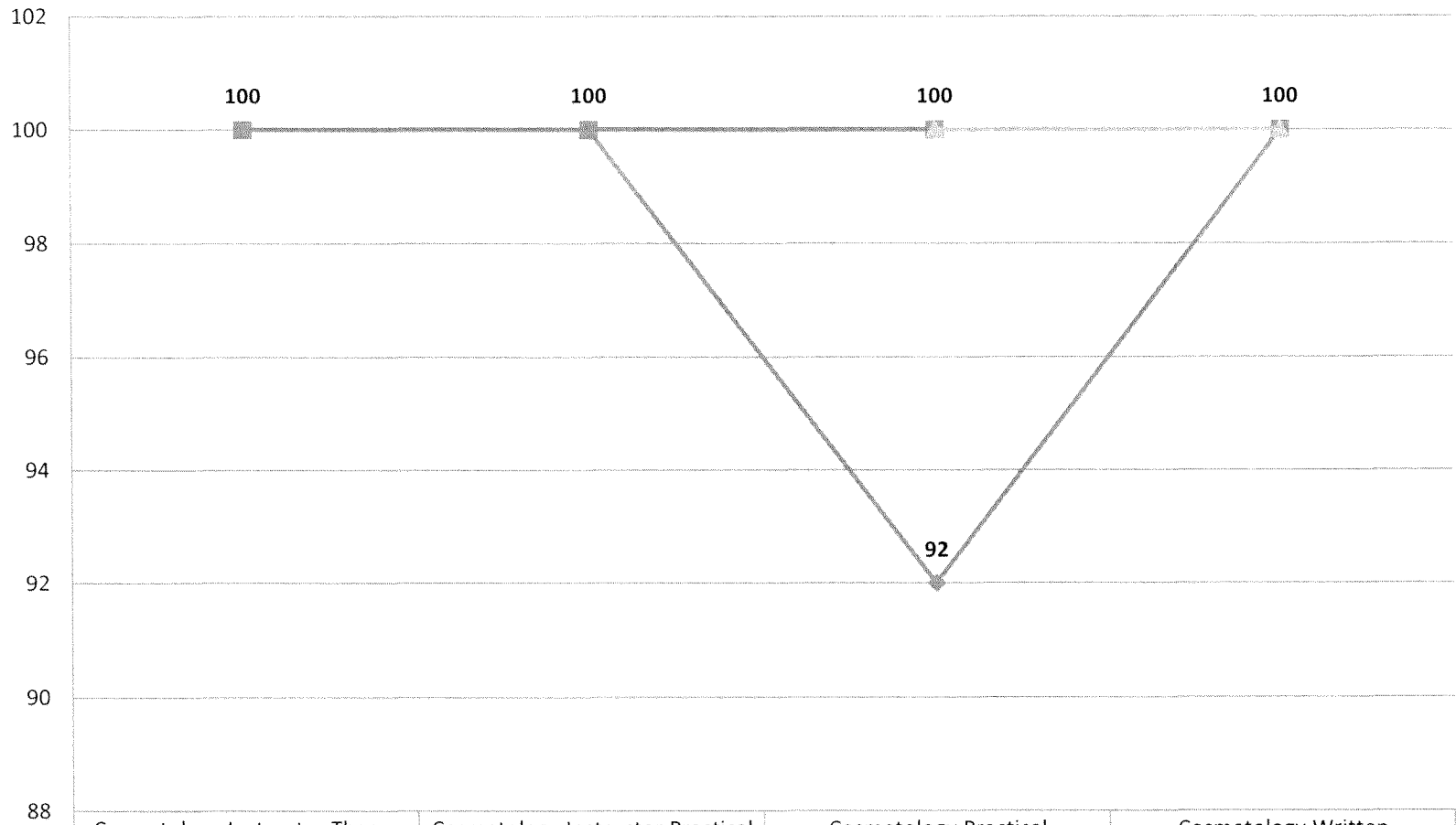
# Questions   School Min   School Max   School average   State Average





ACADEMIC ASSESSMENT REPORT

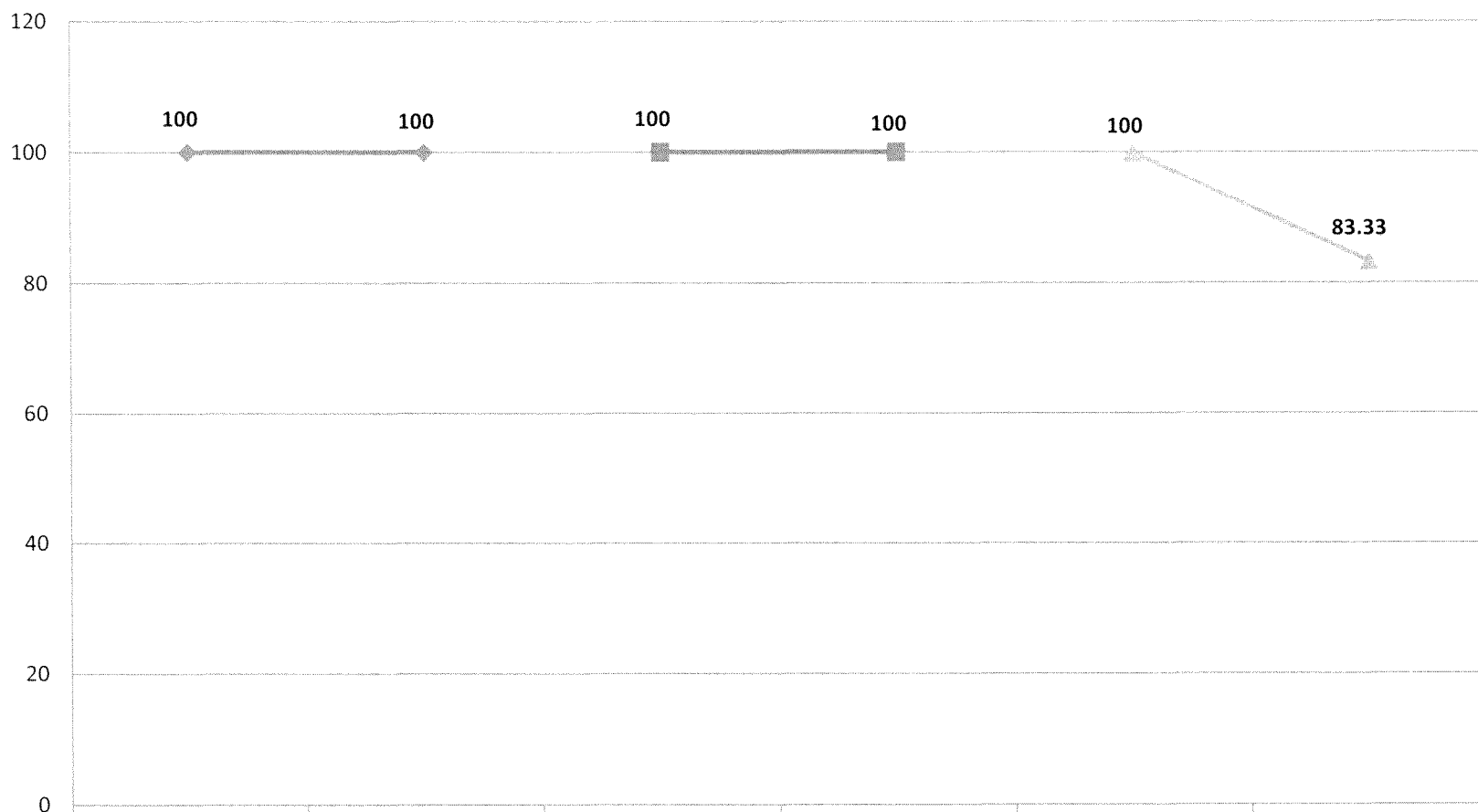
Show Low



	Cosmetology Instructor Theory	Cosmetology Instructor Practical	Cosmetology Practical	Cosmetology Written
2011-2012	100	100	92	100
2012-2013	100	100	100	100
2013-2014			100	100



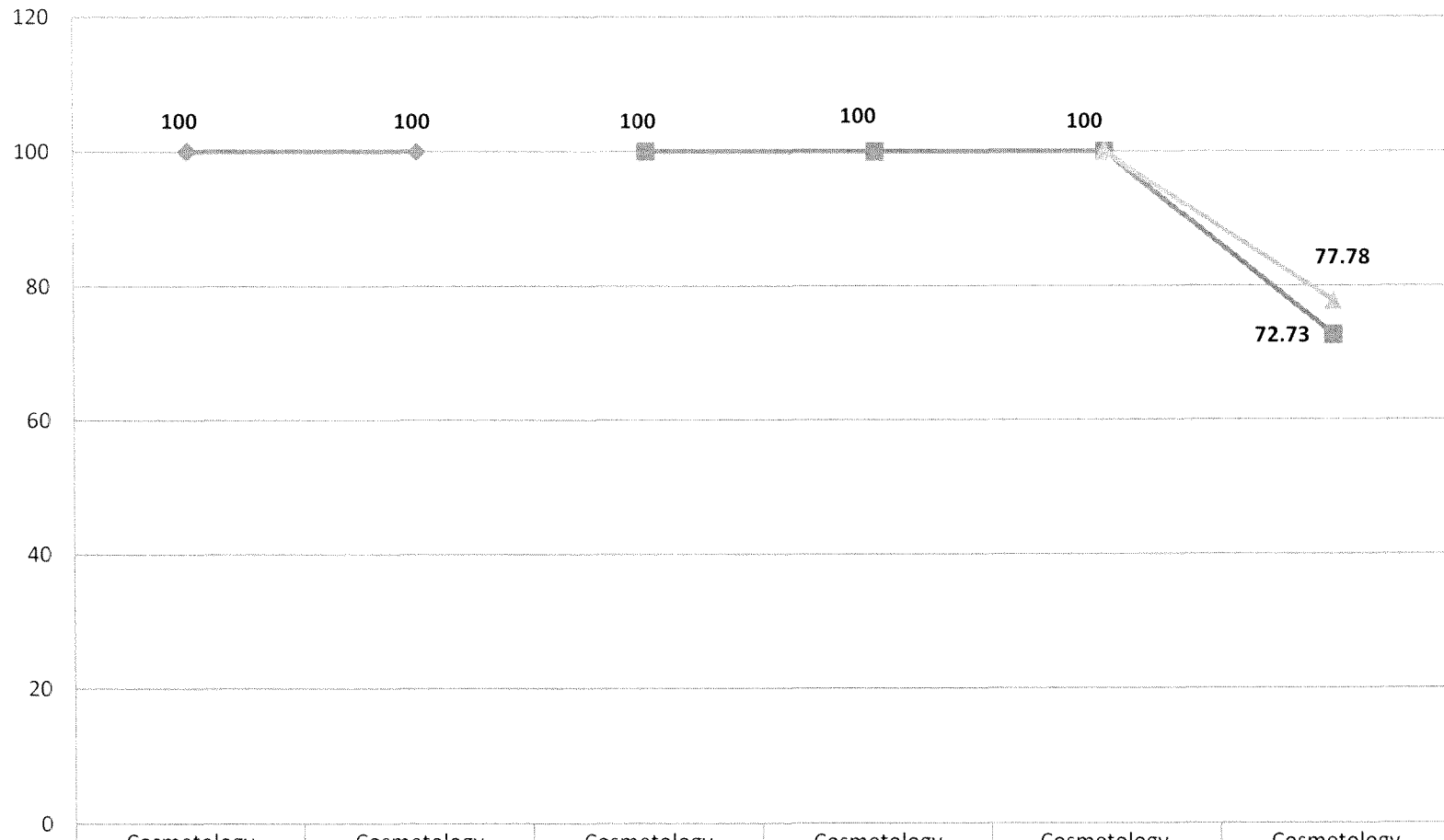
## St. Johns



	Cosmetology Practical	Cosmetology Written	Cosmetology Practical	Cosmetology Written	Cosmetology Practical	Cometology Written
2011-2012	100	100				
2012-2013			100	100		
2013-2014					100	83.33



## Winslow



	Cosmetology Practical	Cosmetology Written	Cosmetology Instructor Theory	Cosmetology Instructor Practical	Cosmetology Practical	Cosmetology Written
2011-2012	100	100				
2012-2013			100	100	100	72.73
2013-2014					100	77.78



Department or Unit: Early Childhood

Academic Year: 2014-2015

Lead Evaluator: Claude Endfield

DRAFT

Submission Due Date: March 20, 2015

Unit Mission:

Early Childhood students will be able to demonstrate mastery of subject matter and competency in the application of the knowledge of the early childhood emphasis area of their choice: Infant/Toddler, Family Child Care, School Age, Pre-school, Early Childhood Management and/or Residential Child and Youth Care.

Unit Goals & Objectives:

Goal 1 Early Childhood students will be able to demonstrate subject knowledge in the major emphasis area.

- A. Objective 1: 50% or above of the students completing module ECD 136: Understanding How Young Children Learn (1.0 credit) with a rating of "good" or above. Students summarize through use of module objectives what they have learned in the module.
  - 1. A committee will use a rubric to assess student's understanding of the course content. (See attached rubric)
- B. Objective 1: All students nearing the completion of the required core for their particular major early childhood area will develop a written Early Childhood Professional Philosophy as required for ECD 175: Professionalism (1.0 credit) and ECD 200: Introduction to Early Childhood, (3.0 credits).
  - 1. ECD Advisory Council members will assess philosophy statements using a 25 point Student Outcomes Check List developed by the Advisory Council comprised of early childhood program representatives that employ NPC students. (See attached checklist)  
*Note:* Due to the complexity of the different core competencies for the variety of early childhood programs a 50% score shall meet student outcomes.





ACADEMIC ASSESSMENT REPORT

outcome requirements.

C. Objective 1: 90% of Students who register for ECD 270: CDA Assessment Prep (2.0 credits) and apply for CDA Assessment through Washington, D.C., will be awarded the nationally recognized Child Development Associate Credential.

1. Copies of awarded CDA Credentials will be requested from students.

D. Objective1: Completers of Certificates of Proficiency, Certificates of Applied Science, Associate of Applied Science Degrees for the six early childhood emphasis areas and/or Associate of Arts Early Childhood degrees will be tracked on a semester and annual basis to evaluate success of early childhood programs and to develop future program goals.

Evaluation Team Members:

This new assessment template came out after the Jan. Early Childhood Advisory Council meeting and prior to the scheduled April, 2015 Advisory Council meeting which did not allow for input/comment from the members who hire NPC students.

This template was emailed to all full time and adjunct early childhood faculty, including high school dual enrollment faculty for input. (Etta Baldwin, Cheryl Carlson, Laurel Endfield, Julie Fitzgerald, Ann Hanley, Ben Hanley, Brandi Hatchett, Judy Haubert, Eve Hoskins, Leola Larzelere, Karen McIlroy, Katherine Mike, Betsy Peck, Marina Powdermaker, Sharon Raban, Lori Reynolds, Cotillion Sneddy, Wendy Watson, Robert Zaccaria)

Executive Summary of Results (not more than 3 pages, please):

**Question 1:** How well did the Early Childhood students demonstrate subject knowledge in the major emphasis area? .

A. Objective 1: The rubric was used on 4 ECD 136 Implementation plans from Fall, 2014. Two plans scored "good" and two scored "excellent" thus meeting the 50% or above of the students completing module ECD 136: Understanding How Young Children Learn (1.0 credit)

# ACADEMIC ASSESSMENT REPORT

- B. Objective 2: Thirteen Early Childhood philosophy statements were evaluated by the Advisory Council members in January, 2015: 5 scored below 50% and 8 scored above 50%. Average of all scores equaled: 56.9%
- C. Objective 3: 90% of Students who register for ECD 270: CDA Assessment Prep (2.0 credits) and apply for CDA Assessment through Washington, D.C., will be awarded the nationally recognized Child Development Associate Credential.
- D. Objective 4: Completers of ECD certificates and degrees will be tracked as illustrated in the chart below. Results indicate that there is an increased number of completers in the various pathway options.

ECD Graduate Applicants			Award				
			AAS	AGS	CAS	CP	Total
2014	FA	ECD - Early Childhood Mgmt	1				1
		ECD - Infant/Toddler	2			4	6
		ECD - Preschool	5	2	1	19	27
		ECD - School Age				1	1
		ECD - Special Needs	1				1
		Sub-total	9	2	1	24	36
2015	SP	ECD - Early Childhood Mgmt	1				1
		ECD - Family Child Care				1	1
		ECD - Infant/Toddler	1		2	4	7
		ECD - Preschool	10	2	4	21	37
		ECD - School Age	1			1	2
		ECD - Special Needs	4		1		5
Total			26	4	8	51	89

2) What was your process? Implementation plans and early childhood philosophy statements are collected at end of each semester and once per year, Early Childhood Advisory Council members and NPC ECD faculty review/score them based on rubric and criteria. The Institutional Research



ACADEMIC ASSESSMENT REPORT

Analyst has assisted with the compiling of data based on enrollment in ECD 270 and number of copies of CDA credentials submitted by students as well as gathering the data regarding student completion rates.

3) Data Summary has been stated above for all four objectives.

4) Implications & Conclusions: Objectives have been met for numbers 1 and 2 although the spring semester data was not included. Objective 3 data, which is based on student self-reporting, indicates students have been successfully awarded their CDA Credentials, although many students are assessed usually in the semester after they have completed ECD 270 CDA Assessment Prep.

5) Recommendations & Next Steps: During the next Early Childhood Advisory Council meeting to be held in late April, 2015, meeting agenda items will include the consideration of revising the 25 point checklist to reflect the different emphasis areas. Another agenda will be the brainstorming of definitions of "mastery of subject matter" and "competency of application" to be used program wide so that all faculty understand grading procedures. An additional discussion item will be to consider evaluating courses leading to the AA Early Childhood degree, such as ECD 250 Child Development I, (3.0 credits). This degree does not become effective until the Fall of 2015.

6) The improvements that will occur as a result of the above next steps will result in the hopeful consistency in grading student work and in evaluating their demonstration of competency by all early childhood faculty, a standardization of outcome definitions and the analysis if the measurement tools need to be changed.

List of Evidence Items Appended (linked to Goals and Outcomes):

*Implementation Plan assessment Rubric*

*Student Outcomes Checklist.*



ACADEMIC ASSESSMENT REPORT

Recommendations for Action with Approximate Timelines:

By April 28, 2015, an increased discussion will be held of checklist effectiveness and if different checklist criteria for evaluation needs to be created for each early childhood emphasis area. Brainstorming of terms by Early Childhood Advisory Council members with faculty input to be applied program wide by August, 2015.

Itemized Resource Requests with Budget Amounts (if any):

Lead Evaluator Signature: Claudel Endfield Date: 3-20-15  
Department Chair Signature: Claudel Endfield Date: 3-20-15  
Dean Signature: Eric Berolano Date: April 6, 2015

## IMPLEMENTATION PLAN ASSESSMENT RUBRIC

	<i>Thoroughly and correctly addresses most, (80-100%) of module objectives. Provides clear specific examples, when relevant. Provides two clear developmentally appropriate activities which directly relate to module topic/objectives.</i> <b>3 points</b>								<i>Addresses some, (50-79%), key elements of module objectives. (Parts are missing, explanations too broad, too narrow etc.). Activities are developmentally appropriate and relevant to module topic</i> <b>2 Points</b>								<i>Addresses less than half of key elements of module objectives. Key concepts are missing. Activity examples are unclear, non-specific to module.</i> <b>1 Point</b>							
Module Objectives	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
Activity 1																								
Activity 2																								
Notes																								

**TOTAL POSSIBLE POINTS: 12**

**STUDENT'S TOTAL POINTS:** \_\_\_\_\_

**Reviewer signature:** \_\_\_\_\_ **Reviewer signature:** \_\_\_\_\_

### ECD 136: UNDERSTANDING HOW CHILDREN LEARN

**Objective 1:** The Intern will recognize the abilities children process when they confront a learning situation.

**Objective 2:** The Intern will set up situations and plan activities which will help children use their natural abilities.

**Objective 3:** The Intern will demonstrate an understanding of how various types of activities foster the four types of learning.

**Objective 4:** The Intern will demonstrate an understanding of how children cognitively learn.

**Objective 5:** The Intern will demonstrate an understanding of learning skills which children develop, and plan activities which give children practice in each learning skill.

**Objective 6:** The Intern will identify cognitive concepts that are appropriate for young children and develop activity plans for these concepts.

**Objective 7:** The Intern will demonstrate his/her understanding of the roles of a teacher through activity/lesson planning and performance.

**Objective 8:** The Intern will evaluate the learning opportunities in his/her setting

**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:

## ACADEMIC ASSESSMENT REPORT

Department or Unit: EDUCATION

Academic Year: 2014-2015

Lead Evaluator: Rickey Jackson, Sandra K. Johnson

Submission Due Date: March 20, 2015

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

The Education Department will begin the Assessment of Student Knowledge process for the EDU 200 Introduction to Education class by evaluating students' written Philosophy of Education statements.

Unit Goals & Objectives:

1. Goal 1      Develop a rubric to assess the six key areas to be addressed by the student in their final Philosophy of Education statement.
  - A. Objective 1A:      Develop and pilot test a four-point scale holistic rubric during the fall 2014 semester.
  - B. Objective 1B:      Revise rubric as needed to use in assessment of philosophy statements in the spring 2015 class.
2. Goal 2      Have all student Philosophy of Education statements from the spring 2015 EDU 200 class be evaluated by at least two Faculty members to assess student progress using the approved rubric.
  - A. Objective 2A:      Have all students in EDU 200 in the spring of 2015 write their Philosophy of Education.
  - B. Objective 2B:      Have at least two EDU Faculty members score the student papers using the new rubric at the end of April 2015.
  - C. Objective 2C:      Summarize and share results from the assessment in the EDU ASK report for the 2015-2016 school year.

Etc. [THE BOX WILL EXPAND, but you want to keep it simple, at least for the first year or two]



ACADEMIC ASSESSMENT REPORT

Evaluation Team Members:

Rickey Jackson, Sandra K. Johnson, Ruth Creek-Rhoades, Marina Powdermaker

Executive Summary of Results (*not more than 3 pages, please*):

1) How well are students doing in completing their philosophy of education statements and how can we best assess them.

Goal 1            Develop a rubric to assess the six key areas to be addressed by the student in their final Philosophy of Education statements.

Goal 2            Have all student Philosophy of Education statements from the spring 2015 EDU 200 class be evaluated by at least two Faculty members to assess student progress using the approved rubric.

2) What was your process?

Goal 1: A decision was made by the team to develop a holistic rubric using a four point scale to assess the six areas of the philosophy statement and to include a seventh area of writing conventions. The four-team members reviewed and changed the rubric several times during the fall semester. At the end of the semester, Dr. Johnson used the rubric to evaluate the students in the EDU 200 class. Her key focus was to see if the rubric covered all of the areas expected in the written paper.

Goal 2:            There are 16 students enrolled in the EDU 200 Introduction of Education class for the spring 2015 semester. It is being taught in the Audio classroom. The students have covered the chapter on philosophies of education and have been given a outline on what to include in their papers. The final papers are due in April. At that time, copies (without names) will be made of each paper and at least two team members will score each paper. The results of their performances will be collected for the 2014-2015 ASK report.





## ACADEMIC ASSESSMENT REPORT

### 3) Present your data summary...longer documents go to the List of Evidence Items below

The pilot testing of the rubric was done using the 18 papers from the fall EDU 200 class. The rubric was clear, evaluated the key areas of the paper and was easy to use. No revisions were needed to the rubric. A copy of the rubric is attached in the Appendices. The data from the spring evaluation will be included in the 2014-2015 ASK report.

### 4) What did you find? (observations from the data)

The process of developing the rubric showed that it took different understandings of rubrics and of what was appropriate to include in a philosophy of education statement to arrive at the final product. It helped the EDU faculty clarify knowledge expectations for our students in order for them to successfully complete the assignment for the course. The team developed a successful rubric.

Having all team members use the new rubric to evaluate the student papers in April will also provide more data specifically on our students and our expectations for them.

### 5) Implications & Conclusions

While the EDU faculty will have additional data to report on student success in the 2015-2016 ASK report, this work has been a helpful process for the department. The discussion about content expectations for the EDU 200 course and the development of a successful rubric have clarified and strengthened expectations for students. It will also be helpful to assess student results over the next few years as the course is taught by different instructors and in different modalities.

### 6) Recommendations & Next Steps

Recommendations include completing the data collection on students this spring and make any needed revisions to the rubric for use in the fall. Philosophy of Education statements will be evaluated every semester from now on, so data can be collected over time with ongoing assessment of students and of what we are teaching. Any area that seems weak will help the faculty strengthen that area of their instruction.

### 7) Detail the improvements to student learning that will occur as a result of (6)

With the expectations of what should be in a Philosophy of Education statement as identified in the rubric used, student will know what is expected of them and will be able to clearly articulate their understanding of each area.



ACADEMIC ASSESSMENT REPORT

List of Evidence Items Appended (linked to Goals and Outcomes):

EDU 200 PHILOSOPHY RUBRIC

Recommendations for Action with Approximate Timelines:

*What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?*

THE EDU Department will follow-through on the plans as discussed for the EDU 200 class and begin work on the proposed evaluations for the three other core EDU courses. These include EDU 220 Diversity in Education, EDU 222 Intro to Special Education and EDU 276 Classroom Management. Plans will be developed to implement them over the next three years.

Itemized Resource Requests with Budget Amounts (if any):

None

Lead Evaluator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dean Signature: \_\_\_\_\_ Date: \_\_\_\_\_



## ACADEMIC ASSESSMENT REPORT

### APPENDICES

{Please attach evidence exhibits after this face page, e

ach labeled with the goal(s) & outcome(s) it supports.}

**Goal 1      Develop a rubric to assess the six key areas to be addressed by the student in their final Philosophy of Education statements.**



## EDU 200 PHILOSOPHY RUBRIC

The rubric that was developed for the Educational Philosophy paper for the Introduction to Education course is a holistic rubric. This rubric looks at the overall student paper to see if the key elements given in the assignment are present within the philosophy statement. Scoring criteria used is as follows:

- 4 EXCEEDS STANDARDS
- 3 MEETS STANDARDS
- 2 APPROCHS STANDARDS
- 1 BELOW STANDARDS



ACADEMIC ASSESSMENT REPORT

EDU 200 PHILOSOPHY RUBRIC

CONTENT	4 EXCEEDS	3 MEETS	2 APPROACHES	1 BELOW	SCORE
EDUCATIONAL PHILOSOPHY	The personal belief statement provides a clear strong, statement of the author's philosophy.	The personal belief statement provides a clear statement of the author's philosophy.	A personal belief statement is present, but does not make the author's philosophy clear.	There is no philosophy of education statement.	
PURPOSE OF EDUCATION	The author provides a clear, strong statement of beliefs.	The author provides a clear statement of beliefs.	A statement is present, but does not make the author's beliefs clear.	There is no statement of beliefs.	
STUDENT'S ROLE	Student role as related to the overall philosophy is clearly explained.	Student role as related to the overall philosophy is somewhat explained.	Student role as related to the overall philosophy is beginning to be explained.	Student role is not explained.	
TEACHER'S ROLE	Teacher role as related to the overall philosophy is clearly explained.	Teacher role as related to the overall philosophy is nearly explained.	Teacher role as related to the overall philosophy is beginning to be explained.	Teacher role is not explained.	
ROLE OF TEACHER TO COMMUNITY	Teacher role in working with the community and parents is clearly explained.	Teacher's role in working with the community and parents is nearly explained	Teacher's role in working with the community and parents is beginning to be explained.	Teacher's role in is not explained.	

## ACADEMIC ASSESSMENT REPORT

TEACHER'S ROLE IN EDUCATIONAL REFORM	Teacher role in educational reform is clearly explained.	Teacher role in educational reform is nearly explained.	Teacher role in educational reform is beginning to be explained.	Teacher role in educational reform is not explained.	
WRITING CONVENTIONS	Author makes no errors in grammar, spelling, punctuation or capitalization so the essay is easy to read.	Author makes 1- 2 errors in grammar, spelling, punctuation or capitalization, but the essay is still easy to read.	Author makes 3-4 errors in grammar, spelling, punctuation or capitalization that distract the reader from the content flow.	Author makes more than 4 errors that distract the reader from the content flow.	
TOTAL SCORE					

COMMENTS:



ACADEMIC ASSESSMENT REPORT

Department or Unit: EMT

Academic Year: 2013-14

Lead Evaluator: Lynn Browne-Wagner, RN, MSN

Submission Due Date: 12-15-14

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

It is the mission of the EMT Department to continually evaluate student outcomes in order to provide programs that will reflect effective learning.

Unit Goals & Objectives:

1. Provide effective preparatory courses for EMT and Paramedic students.
  - A. Demonstrate minimum competency in gaining new vocabulary with a passing grade of 80%
  - B. Demonstrate minimum competency in performing drug calculations with a score of at least 80%
  - C. Demonstrate minimal competency in recognition of 12 basic cardiac rhythms with a score of at least 80%
2. Improve upon the minimal competency requirements in the preparatory courses to enhance student outcomes
  - A. Evaluate student final exams scores in the EMT and Paramedic courses
  - B. Evaluate the NREMT passing percentages of the EMT and Paramedic students as related to first time and third time passing rates
  - C. Utilize the score results to determine the effectiveness of any EMT and Paramedic course and then revise said courses

Etc. [THE BOX WILL EXPAND, but you want to keep it simple, at least for the first year or two]



ACADEMIC ASSESSMENT REPORT

Evaluation Team Members: Lynn Browne-Wagner, Brian Gardner, Jeanmarie Nielson

Executive Summary of Results (*not more than 3 pages, please*):

- 1) What was your question(s)?
- 2) What was your process?
- 3) Present your data summary...longer documents go to the List of Evidence Items below
- 4) What did you find? (observations from the data)
- 5) Implications & Conclusions
- 6) Recommendations & Next Steps
- 7) Detail the improvements to student learning that will occur as a result of (6)

Executive Summary of Results

Question:

Do students who take the shortened version of the EMT 130 prep perform better in the EMT 132 course than those who took the prep class over a 6 week period of time:

Process:

Requested IR pull the data on the student passing scores and percentages of student completions for the EMT 130 short vs long class, the EMT 132 course and the NREMT national exam scores as related to passing on the first attempt or up to 6 attempts.





ACADEMIC ASSESSMENT REPORT

Data Summary: From SP 2011 through SU 2014 AND What did we find:

**275 students enrolled in EMT130**

**37 dropped the course, 13.5% of those that registered**

Of those that dropped, 16 (43.2%) took the long course, 21 (56.8%) took the short course

Of those that dropped 9 (24.3%) students switched from a long course to a short course

Of those that dropped 3 (8.1%) students switched from a short course to a long course

**10 withdrew from the course, 3.6% of those that registered**

Of those that withdrew, 8 (80%) from long course, 2 (20%) from short course

**228 students earned a grade in EMT130**

25.4% earned an A (long 20.7%, short 29.9%)

33.3% earned a B (long 27.0%, short 39.3%)

21.1% earned a C (long 21.6%, short 20.5%)

1.3% earned a D (long 1.8%, short 0.9%)

9.2% earned an F (long 17.1%, short 1.7%)

9.6% earned a W (long 11.7%, short 7.7%)

79.8% received a passing grade (long 69.4%, short 89.7%)

20.2% received a failing grade (long 30.6%, short 10.3%)

**Of the 228 students who earned a grade 136 (59.6%) subsequently took EMT 132**

Of the 136 students who went on to complete EMT132, 48 (35.3%) had taken the long EMT130 course and 88 (64.7%) had taken the short EMT130 course

Of the 136 students who completed EMT132, 113 (83.1%) received a C or better in 132

Of those 113 that received a C or better in EMT132, 35 (31%) had taken the long EMT130 course and 78 (69%) had taken the short course

## ACADEMIC ASSESSMENT REPORT

The pass rate for EMT132 for those taking the long EMT 130 course was 72.9%

The pass rate for EMT132 for those taking the short EMT 130 course was 88.6%

### Implications and conclusions:

An EMT 130 course that occurs in the 2 weeks prior to the start of the EMT 132 class keeps the knowledge and information at an effective level as opposed to offering the 6 week EMT 130 course the semester before starting the EMT 132 course. The information is current, fresh, relevant and immediately applicable in the more advanced class of EMT 132.

### Recommendations and the next step:

Starting in August of 2015, we will be offering an EMT 130 course in the first 2 weeks prior to the regular start of the college courses. We will do the same process in the first 2 weeks of January 2016.

### Student learning improvements:

We anticipate that our overall pass rate, scores and performance will improve over the previous 4 years. It is important on a national level that we have a first time pass rate on the NREMT examination that is higher than the national standard or any Arizona competitors. Quality of the student performance is expected to improve also. Our minimum class pass score is 80% and we would like to see final student scores significantly higher than a "C" range.

List of Evidence Items Appended (linked to Goals and Outcomes): This file is large and if fully opened would take up too many pages. It is available in zip form for anyone wishing to look at all the data compiled by Deb Myers

*Label these alphabetically and refer to them as appropriate in your summary above.*



EMT130\_student\_data.zip



ACADEMIC ASSESSMENT REPORT

Recommendations for Action with Approximate Timelines:

*We are planning to discontinue the 6 week EMT 130 course and offer only a 1 or 2 week course prior to the start of each semester*

Itemized Resource Requests with Budget Amounts (if any):

No change in our budget is required. The course remains a 3 credit 48 hour class, just offered in a 6 day stretch.

Lead Evaluator Signature:   **Lynn Browne-Wagner, RN, MSN**   Date:   4-9-15  

Department Chair Signature:   **Lynn Browne-Wagner, RN, MSN**   Date:   4-9-15  

Dean Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## English Assessment: English 101

### Assessment Method:

This is our first time using our new rubric that ties our measurement criteria to NPC's General Education Outcomes. We evaluated research papers from English 101 courses in the Spring and Fall of 2014. We read a total of 45 of the 442 English 101 research papers that were submitted : 10 of 94 from distance learning environments; 15 of 138 from stand-alone classes; 15 of 143 from dual-enrollment classes and 5 Of 47 internet papers. For each rubric criteria, the readers marked "below expectations," "meets expectations," or "above expectations." In addition, several readers expressed the desire to have more categories, and marked between the two categories. This year, "below expectations" received one point, "meets expectations" received two points and "above expectations" received three points, and half points were given when readers marked the line between two levels. Each paper was read by two readers. If the two readers disagreed significantly (more than one full point) on any evaluation criteria, the disagreement was noted. Results below are divided according to teaching modality.

### Results:

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 paper presents a clear argument**
  - Distance: average 2.025; no significant disagreements
  - Stand Alone: average 1.8; 3 significant disagreement
  - Dual-Enrollment: average: 1.75; 1 significant disagreement
  - internet: average: 2.4; no significant disagreement
- **The paper presents claims that are backed by evidence and addresses multiple perspectives and counter arguments, as appropriate:**
  - Distance: average 1.975; no significant disagreements
  - Stand Alone: average 1.85; 2 significant disagreements
  - Dual-Enrollment: average: 1.98; no significant disagreements
  - internet: average: 2.5; no significant disagreement
- **The paper employs sound reasoning**
  - Distance: average 2.075; no significant disagreements
  - Stand Alone: average 1.83; 2 significant disagreements
  - Dual-Enrollment: average: 1.766; no significant disagreements
  - internet: average: 2.5; no significant disagreement

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

- **The paper develops a focused argument with a clear thesis**

- Distance: average 2.235; no significant disagreements
- Stand Alone: average 2.23; 1 significant disagreement
- Dual-Enrollment: average: 2.23; 2 significant disagreement
- internet: average: 2.3; no significant disagreement
- **The paper uses tone and language choices appropriate for college writing**
  - Distance: average 2.225; no significant disagreements
  - Stand Alone: average 2.08; 3 significant disagreement
  - Dual-Enrollment: average: 1.98; 2 significant disagreements
  - internet: average: 2.2; no significant disagreement
- **The paper is organized effectively**
  - Distance: average 2.15; no significant disagreements
  - Stand Alone: average 1.95; no significant disagreement
  - Dual-Enrollment: average: 1.81; 1 significant disagreement
  - internet: average: 2.2; no significant disagreement
- **The paper presents well-developed paragraphs and sections**
  - Distance: average 2.1; no significant disagreements
  - Stand Alone: average 1.83; no significant disagreements
  - Dual-Enrollment: average: 1.81; 1 significant disagreement
  - internet: average: 2.2; no significant disagreement
- **The paper is relatively free of grammatical and mechanical errors**
  - Distance: average 2.125; no significant disagreements
  - Stand Alone: average 2.6; 5 significant disagreements
  - Dual-Enrollment: average: 1.8; 1 significant disagreement
  - internet: average: 2.2; no significant disagreement

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

- **The paper uses a variety of college-level sources to support its claims**
  - Distance: average 2.25; 2 significant disagreements
  - Stand Alone: average 1.86; 1 significant disagreement
  - Dual-Enrollment: average: 1.83; no significant disagreements
  - internet: average: 2.2; no significant disagreement
- **The paper acknowledges or attempts to avoid biases in its sources**
  - Distance: average 2.05; no significant disagreements
  - Stand Alone: average 1.78; 1 significant disagreement
  - Dual-Enrollment: average: 1.66; 1 significant disagreement
  - internet: average: 2.1; no significant disagreement
- **The paper correctly cites the sources it uses in MLA format and includes a works cited page**
  - Distance: average 2.075; 1 significant disagreement
  - Stand Alone: average 2.01; 1 significant disagreement

- Dual-Enrollment: average: 1.78; no significant disagreements
- internet: average: 2; no significant disagreement
- **The paper synthesizes information from various sources to reach clear conclusions**
  - Distance: average 2.15; no significant disagreements
  - Stand Alone: average 1.98; no significant disagreements
  - Dual-Enrollment: average: 1.76; 1 significant disagreement
  - internet: average: 1.9; no significant disagreement

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

In the fall of 2014, we did a trial of an instrument that we thought might measure knowledge of diversity. Based on a recommendation at dialogue day in 2014, we asked students to write briefly on how their background, values and experiences shaped their experiences in 101. This prompt did not produce useful results – far too many students simply reported that they discovered that they learned they needed to work harder and develop better work habits, despite being prompted to discuss the relationship between their backgrounds and their experiences with the course material, particularly the readings. As a result, we have decided to add a brief reflection assignment to the research paper project and ask students to discuss how their background, values etc. influenced their choice of and stance on their research paper topic, and also to consider how people from different backgrounds might react differently to the topic. This will be integrated into the rubric for next year.

#### **Reflection on the assessment:**

As we anticipated, the discussion about the assessment process was very productive. We discussed different ways of presenting the concept of argument (hard vs. soft arguments) that helped to explain different views on some of the papers. We noted that we need to help students assess the quality or their sources more effectively – we are doing this, but we need to do more. We noted that many students continue to struggle with grammar and mechanics.

While the scores for different modalities are not significantly different, it is interesting that scores in the internet sections were strongest. This might be the product of small sample size or of the fact that only one instructor taught the internet sections. However, it might also reflect high-quality students and a well-designed course.

It was also interesting that scores in the distance learning classes were slightly better than the scores in stand-alone classes. It is difficult to interpret this. It might be the result of the random selections of essays, and may not recur in the future – we will observe this closely. It might also partially reflect a lower retention rate in distance classes, so that only better students (who completed the course) turned

in papers for evaluation. In any case, the scores do not suggest that students in distance courses produce research papers that are inferior to students in other kinds of courses.

Dual-enrollment scores were slightly lower than regular NPC class scores. Our readers noted that the papers from different schools appear to have been responding to quite different prompts. We will communicate more clearly with dual enrollment instructors so that we can encourage consistency in instruction. However, the results were not starkly different, and there were many good papers written by dual enrollment students.

When we constructed the rubric, we decided that three scoring categories would be adequate. However, many readers felt that more options would best reflect their assessment, so next year's rubric will reflect this concern.

## English Assessment Summary: English 102

### Assessment Method:

This is our first time using our new rubric that ties our measurement criteria to NPC's General Education Outcomes. We evaluated research papers from English 101 courses in the Spring and Fall of 2014. We read a total of 40 of the 379 English 102 research papers that were submitted : 12 of 118 from distance learning environments; 12 of 115 from stand-alone classes; 12 of 110 from dual-enrollment classes and 4 of 36 from internet classes. For each rubric criteria, the readers marked "below expectations," "meets expectations," or "above expectations." In addition, several readers expressed the desire to have more categories, and marked between the two categories. This year, "below expectations" received one point, "meets expectations" received two points and "above expectations" received three points, and half points were given when readers marked the line between two levels. Because we spent significant time on reading day discussing the process and working on English 101 papers, the 102 papers received only one reading each this year. Results below are divided according to teaching modality.

### Results:

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 paper presents a clear argument**
  - Distance: average 2
  - Stand Alone: average 1.91
  - Dual-Enrollment: average: 1.83
  - internet: average: 2.5
- **The paper presents claims that are backed by evidence and addresses multiple perspectives and counter arguments, as appropriate:**
  - Distance: average 1.91
  - Stand Alone: average 2.04
  - Dual-Enrollment: average: 1.83
  - internet: average: 2.35
- **The paper employs sound reasoning**
  - Distance: average 1.87
  - Stand Alone: average 1.87
  - Dual-Enrollment: average: 2.08
  - internet: average: 2.25

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



- **The paper develops a focused argument with a clear thesis**
  - Distance: average 2.125
  - Stand Alone: average 2.08
  - Dual-Enrollment: average: 1.83
  - internet: average: 2
- **The paper uses tone and language choices appropriate for college writing**
  - Distance: average 2.166
  - Stand Alone: average 2.08
  - Dual-Enrollment: average: 1.91
  - internet: average: 2.25
- **The paper is organized effectively**
  - Distance: average 2.16
  - Stand Alone: average 2
  - Dual-Enrollment: average: 2.08
  - internet: average: 2
- **The paper presents well-developed paragraphs and sections**
  - Distance: average 2.25
  - Stand Alone: average 2.04
  - Dual-Enrollment: average: 2
  - internet: average: 2.125
- **The paper is relatively free of grammatical and mechanical errors**
  - Distance: average 2.25
  - Stand Alone: average 2.08
  - Dual-Enrollment: average: 1.958
  - internet: average: 2.25

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

- **The paper uses a variety of college-level sources to support its claims**
  - Distance: average 2.2
  - Stand Alone: average 1.91
  - Dual-Enrollment: average: 1.83
  - internet: average: 2.125
- **The paper acknowledges or attempts to avoid biases in its sources**
  - Distance: average 1.91
  - Stand Alone: average 1.83
  - Dual-Enrollment: average: 2.08
  - internet: average: 2.375
- **The paper correctly cites the sources it uses in MLA format and includes a works cited page**
  - Distance: average 2.04

- Stand Alone: average 2.16
- Dual-Enrollment: average: 2.25
- internet: average: 2.125
- **The paper synthesizes information from various sources to reach clear conclusions**
  - Distance: average 2.25
  - Stand Alone: average 2.08
  - Dual-Enrollment: average: 1.91
  - internet: average: 2

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

In the fall of 2014, we did a trial of an instrument that we thought might measure knowledge of diversity. Based on a recommendation at dialogue day in 2014, we asked students to write briefly on how their background, values and experiences shaped their experiences in 102. This prompt did not produce useful results – far too many students simply reported that they discovered that they learned they needed to work harder and develop better work habits, despite being prompted to discuss the relationship between their backgrounds and their experiences with the course material, particularly the readings. As a result, we have decided to add a brief reflection assignment to the research paper project and ask students to discuss how their background, values etc. influenced their choice of and stance on their research paper topic, and also to consider how people from different backgrounds might react differently to the topic. This will be integrated into the rubric for next year. We feel that this will be especially effective in 102 because of its emphasis on literature

#### **Reflection on the assessment:**

The scores in 102 did not differ significantly based on modality, nor were dual-enrollment courses significantly different from regular NPC classes. This seems to be a good sign. The assessment scores related to information literacy are somewhat stronger than they were for the 101 papers, which seems to suggest that students improve over the course of the two classes.

There was some concern that some students rely too heavily on non-academic sources, and that the department needs to emphasize the distinction between academic sources and others (such as Sparks Notes, Grade Saver and the like). We will make this a part of department meetings in the future. However, many papers across modalities and settings did use high-quality sources, which is encouraging.

As with 101, when we constructed the rubric, we decided that three scoring categories would be adequate. However, many readers felt that more options would best reflect their assessment, so next year's rubric will reflect this concern.

ASSESSMENT OF STUDENT KNOWLEDGE  
FIRE SCIENCE DEPARTMENT  
MARCH 2015

During the 2014 calendar year, with approval of the NPC Instructional Council, Fire Science Advisory Committee and District Governing Board, the Fire Science program underwent a complete makeover of the Fire Science program.

The Fire Science program changed its' program to reflect that of the Fire & Emergency Services for Higher Education (FESHE) model and actually received National Fire Academy FESHE certification on our program on September 25, 2014. The curriculum now consists of 30 classes as versus the 38 classes that were offered previous to receiving our certification. These classes range from hand-on skills type classes up to in-depth management orientated classes to prepare students for their work in supervisory/command type positions.

One of the most requested FRS "CORE" courses is the FRS104 "Firefighter I & II". This class is designed to prepare a student to meet the competencies of the National Fire Protection Association Professional Firefighter (NFPA 1001). It is also one of the few classes that students receive a certification from the AZ. Center for Fire Service Excellence (AZCFSE). This class is also the starting point for anyone wanting to start their career in the fire service. Based on the importance of this class, the FRS Department decided this was the best area in which to assess student knowledge.

The goals for the FRS104 class continue to remain the same which are to: assess the student on the knowledge they gain by attending this class. The class continues to be offered to both the NAVIT students and students outside of the NAVIT program.

As far as establishing evidence as to how well our students will be meeting the goals of the class, this process is a simple matter as each student is required to pass the AZCFSE manipulative skills and written testing process at the end of each class. The validity of this testing process is verified as the tests given are issued and proctored by AZCFSE members.

As we reviewed the results for last year, we found that out of the 37 students who took the FRS104 class during the Fall 2013/Spring 2014 calendar year, 37 students opted to take the AZCFSE State certification written and manipulative tests of which 25 passed and they were issued their AZCFSE Fighter I & II certification.

In conclusion, it is our opinion based on the final test results that we are achieving the desired results in getting our students their FF I & II State certification.

Submitted by: Stuart Bishop, NPC Director of Public Safety Education

## Assessment of Student Learning in the HUMANITIES

### Spring, Summer, Fall 2014 – Northland Pioneer College

Report submitted April 6, 2015 by Ryan Jones, Chair, Languages and Humanities Dept., to Dr. Eric Henderson, Dean of Arts and Sciences & Shannon Newman, Coordinator of the Assessment of Student Knowledge Subcommittee

The Humanities Faculty met on March 13, 2015, for Reading Day. Magda Gluszek, Richard Harris, Ryan Jones, Bryan Russell and Peterson Yazzie participated in reading day.

#### Process of Assessment

- 40 critiques were selected randomly for evaluation of the larger pool of 196 total critiques.
- 12 critiques were selected from 54 received from distance learning classes.
- 28 critiques were selected from 142 received from stand-alone classes.
- On Reading Day, March 13, 2015, each critique was read twice.
- If there was more than a 10-point discrepancy in the two scores, the critique was read for a third time.

#### The Rubric:

- The rubric consists of five criterion: **ideas**, which reflects NPC General Education Outcome 1 (30 points), **organization & coherence**, which reflects NPC General Education outcome 2 (25 points), **support**, which reflect NPC General Education Outcome 5 (25 points), **style**, which reflects NPC General Education outcome 2 (10 points), and **mechanics**, which reflects NPC General Education outcome 2 (10 points).
- The rubric has a total score of 100 points.

#### Assessment Results:

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

90% of the time, Humanities Faculty readers scored papers within 10 points of each other. Only four of 40 papers required a third reading. This is the most consistent we have ever been, which probably reflects the experience of the readers over a period of years, and is an indication that our efforts at norming our scores have been effective.

The individual scores of the 36 papers read by two readers (within the 10-point margin) were averaged together to determine the paper's final score. With the 4 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.

## **2014 Critique General Results – distance and Stand-Alone:**

### **Distance (Video/Audio/Model)**

A= 2 papers (16.6%)

B= 7 papers (58.3%)

C=3 papers (25%)

### **Stand-Alone**

A= 11 (39.3%)

B= 9 (32.1%)

C= 5 (17.85%)

D= 3 (10.7%)

### **Total**

A= 13 (32.5%)

B= 16 (40%)

C= 8 (20%)

D= 3 (7.5%)

**Average score on “ideas” component** (NPC General Education Outcome 1: Critical Thinking/Critical Inquiry): **25.38/30**

**Average score on “organization and coherence” component** (NPC General Education Outcome 2: Effective Communication): **22.49/25**

**Average score on “support” component** (NPC General Education Outcome 5: Information Literacy): **19.9/25**

**Average score on “style” component** (NPC General Education Outcome 2: Effective Communication): **8.95/10**

**Average score on “mechanics” component** (NPC General Education Outcome 2: Effective Communication): **8.18/10**

If the above scores roughly reflect the larger pool of critique assignments, the students performed at a “C” or better performance level—100% of the time. The fact that this is a higher score than might be expected by the course grades may be partially explained by the fact that many students who fail these courses never complete the critique assignments.

In addition, the average score on each rubric element fell in the “B” range. These individual rubric elements were evaluated this year in an attempt to more directly connect the assessment instrument to the NPC general education outcomes.

#### **Comparisons:**

The scores on this year’s critiques were roughly comparable to the sampling from 2010, 2011, 2012 and 2013, which can be viewed below:

#### **2013 Critique: General Results**

A=12 papers (23.3%)

B=28 papers (46.6%)

C=17 papers (28.3%)

D=1 papers (1.6%)

F=0 papers

**Average score on “ideas” component (NPC General Education Outcome 1: Critical Thinking/Critical Inquiry): 24.66/30**

**Average score on “organization and coherence” component (NPC General Education Outcome 2: Effective Communication): 21.5/25**

**Average score on “support” component (NPC General Education Outcome 5: Information Literacy): 20.99/25**

**Average score on “style” component (NPC General Education Outcome 2: Effective Communication): 8.37/10**

**Average score on “mechanics” component (NPC General Education Outcome 2: Effective Communication): 8.16/10**

#### **2012 Critique Results**

A=12 papers (30%)

B=17 papers (42.5%)

C=11 papers (27.5%)

D=0 papers

F=0 papers

#### **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%)

### **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 %)

### **Humanities Department Discussion:**

The critiques evaluated for this assessment covered a wide range of courses that students may select for humanities general education credits, including courses in art history, ethics, literature, philosophy, theatre, history of television and the general humanities courses. In some cases, disparities in the scores in the “ideas” component of the rubric may be the product of readers evaluating essays outside of their areas of expertise.

This was the second year the Humanities Faculty incorporated the information literacy/research component. We continued to notice some inconsistencies in the students’ abilities to correctly use and cite their outside sources in the text of their paper or in adequately identifying the sources on a Works Cited page. The 2014 scores were slightly lower than the 2013 scores, and this continues to be an area that needs work. We will emphasize the support component (finding and assessing quality, academic sources and citation of those sources) in the coming year.

In general, the group agreed that the 2014 critiques stronger than they have been in the past, especially in the ‘ideas’ category. It is difficult to determine if this is the result of improved performance or the ‘luck of the draw.’

Students appear to be doing better with the historical context portion of the prompt, which has been a weak spot in the past. We believe this reflects our efforts in the classroom, as this was an area we agreed needed work last year.

## **Assessment of NPC General Education Outcome 6: Diversity**

We have struggled to find a meaningful way to assess NPC General Education Outcome 6. This outcome is central to Humanities courses, but it is difficult to measure. Most of the instruments used nationally either assess courses that are explicitly 'diversity' courses, or are institution-wide measurements.

However, having exchanged and evaluated critique prompts from the different courses in the department, we noticed that the prompt used in art courses was more specific in the 'personal reaction' area, and we believe that this might be an organic way to evaluate outcome 6. Specifically, beginning in the Fall of 2015, our critique prompts will ask students to explain why they selected the work that is the focus of their critique, and to explain how their backgrounds may have shaped their reaction to it. In addition, students will be asked to discuss how their own reaction might differ from the reactions of the original audience and the reactions of others who do not share their own backgrounds. We will incorporate evaluation of outcome 6 into our scoring rubric next year and present the results of our preliminary efforts in next year's assessment report.



**ACADEMIC ASSESSMENT REPORT**

Department or Unit: IMO/MET

Academic Year: 2014/15

Lead Evaluator: Kenny Keith

Submission Due Date: April 10, 2015

Unit Mission: Our team decided to review and compare the test results of the IMO/MET students who took the National Career Readiness Certificate exam. The NCRC consists of three tests: Applied Mathematics, Reading for Information, and Locating Information. Administered through ACT's Workkeys, the certification process is an online set of timed assessments, 55 minutes each, aimed at giving employers a better picture of job candidates and their job skills. The examinees are also able to have a quantitative view of their knowledge and skills. The testing process takes up to four hours to complete and is broken down into two sessions. The initial schedule was the Talent Assessment and Locating Information for Session One with Applied Mathematics and Reading for Information on Session Two. There are four certificate levels which are based upon the lowest score of the three main exams. A minimum score of 6 earns a Platinum Certificate, Gold is 5, Silver is 4, and Bronze is 3. A score of <3 indicates that the examinee needs remediation in that area. The students additionally took the Talent Assessment. This assessment measures a potential employee's soft skills in Team Work, Work Discipline, Customer Service Orientation, and Managerial Potential. Our goal was to satisfy requirements of the ASC GIEC Grant and see where improvements in instruction are needed when it comes to properly preparing students for the work force. Graphic A in the evidence depicts the certificate levels and the percentages of jobs the examinee meets based upon their certificate level.



ACADEMIC ASSESSMENT REPORT

Unit Goals & Objectives: Review and Assess NCRC exam

1. Goal 1-

A. Objective 1A: Determine what area(s) students need additional support to meet employer requirements.

2. Meet Requirements of the ASC-GIEC Grant

A.

Evaluation Team Members:

Kenny Keith, Charlie Perkins, Fred Calderon, and Shawntel Skousen

Executive Summary of Results

Chart A (Listed in Evidence) shows the number students tested and their certificate level.

During the testing process and review of the scores, we noticed that our students struggle with the Location Information exam. This came as a bit of a surprise as we felt the Applied Mathematics would prove to be our lowest scoring area. Our first thought was to move the Locating Information to the same day as the Talent Assessment while moving the Applied Mathematics to the same day as

**ACADEMIC ASSESSMENT REPORT**

Reading for Information. While this did help to boost the scores, we still have many students that are on the cusp of moving up one or more levels if their Location Information score was higher. Chart B is a chart of students, divided by group, that indicates the number of students that dropped their certificate level due to their Locating Information score. These are the examinees that earned two of the same level scores at a higher level than in Locating Information. For example: The examinee has 6's for both their Reading and Mathematics scores but scored a 4 in Locating Information. The examinee has gone from a Platinum ranking to Silver.

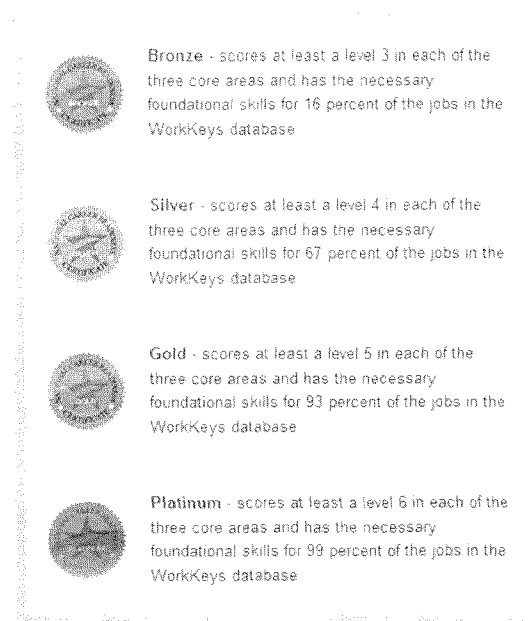
To earn the Talent portion of the exam, the examinee must earn at least one star, meet the 25<sup>th</sup> percentile, in at least one area. We found that many NAVIT students do not do well on the Talent Assessment, as shown in the chart C.



ACADEMIC ASSESSMENT REPORT

List of Evidence Items Appended (linked to Goals and Outcomes):

*Graphic A:*



*Source: ACT*

## ACADEMIC ASSESSMENT REPORT

Chart A:

Group	Platinum Level	Gold Level	Silver Level	Bronze Level	Below Bronze
Adult IMO	0	16	30	3	0
NAVIT IMO	0	2	15	3	1
Adult MET	0	0	3	0	0
NAVIT MET	0	6	1	0	0

Chart B:

Group	Platinum to Silver	Gold to Silver	Platinum to Gold	Gold to Bronze
Adult IMO	10	7	8	0
NAVIT IMO	0	7	2	0
Adult MET	0	1	0	0
NAVIT MET	0	1	4	0

Chart C:

Group	Talent Assessment
Adult IMO	100%
NAVIT IMO	71.4%
Adult MET	100%
NAVIT MET	62.5%



Recommendations for Action with Approximate Timelines:

Based on our findings, we feel there is a great need to help prepare students for the NCRC exam especially in the Locating Information area. Our NAVIT students and many adults also need to hone their soft skills. Our plan of action is to use the new MET 100 and IMO 208 as solid introductory courses utilizing the Energy Industry Fundamentals course which provides a great introduction to power production, transmission, and distribution as well as working with faculty in human development to prepare the students for NCRC exam through CareerReady 101. Additionally, greater use of the Edison Electric Institute testing will be incorporated as another resource for students to gain the knowledge they need to earn a higher certificate level on the NCRC and generally be more prepared for entering the work force.

Itemized Resource Requests with Budget Amounts (if any):

Testing is \$35.75 per student for initial testing.

Retakes vary by student.

ACT membership is currently paid for by the Arizona Sun Corridor- Get Into Energy Consortium Grant



Northland Pioneer College

**ACADEMIC ASSESSMENT REPORT**

Lead Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Dean Signature: \_\_\_\_\_

Date: \_\_\_\_\_



ACADEMIC ASSESSMENT REPORT

Department or Unit: Mathematics Department

Academic Year: 2014-2015

Lead Evaluator: Barry Graham

Submission Due Date: March 20, 2015

Mathematics Department's Mission:

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

Mathematics Department's Goals & Objectives:

**Goal 1 Teach the skills necessary for Modeling**

**Objective 1** Students will use valid models of physical and natural phenomena in order to accurately make predictions and draw conclusions.

**Goal 2 Teach the skills necessary for Problem Solving**

**Objective 2** Students will read word problems, translate the given information into mathematical equations, solve the equations, and then use the solutions to draw conclusions.

**Goal 3 Teach the skills necessary for Interpreting Data**

**Objective 3** Students will read and interpret representations of information such as tables and graphs and use them to make predictions and draw inferences.

**Goal 4 Teach the skills necessary for Computation**

**Objective 4** Students will interpret mathematical language and symbols and perform basic calculations pertaining to mathematics or statistics applications.





ACADEMIC ASSESSMENT REPORT

**Goal 5 Teach the skills necessary for Logical Reasoning**

**Objective 5 Students will deduce and identify appropriate generalizations from a series of logical and mathematical statements.**

Evaluation Team Members: Barry Graham, Brian Burson, Gary Mack, Eli Blake.

Executive Summary of Results (*not more than 3 pages, please*):

1) What was your question?

**What skill levels, in each of our five Goals, were demonstrated by those students who took MAT 142, in the Fall Semester, 2014?**

2) What was your process?

**We embedded ten questions in the Final Exam for MAT 142, in which each Goal was linked with two of those questions.**

**The following rubric was 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%

**We also checked to see: Were the students able to demonstrate competency, for each of the five Goals, by correctly answering at least one of the two questions that were linked with that Goal.**

3) Present your data summary...longer documents go to the List of Evidence Items below

## ACADEMIC ASSESSMENT REPORT

Eight students took the Final Exam, with the Ten Questions embedded.

Three students scored 8-10 correct, out of the 10 possible, and were rated as having a High level of understanding of Quantitative Reasoning, with competency in all five of the Goals.

Four students scored 6-7 correct, out of the 10 possible, and were rated as having a Satisfactory level of understanding of Quantitative Reasoning. One of these four students showed competency in all five of the Goals. But two of these four students were judged as lacking competency, in Goal #5, i.e. they gave incorrect answers to both of the Logical Reasoning questions, [#9 & #10]. Also, one of these four students was judged as lacking competency, in Goal #3, i.e. that student gave incorrect answers to both of the Interpreting Data questions, [#5 & #6].

One student scored 5 out of the 10 possible, and was rated as having a Below Satisfactory level of understanding of Quantitative Reasoning. This student was judged as lacking competency in both Goal #1, and Goal #3, i.e. this student gave incorrect answers to both of the Modeling questions, [#1 & #2], and both of the Interpreting Data questions, [#5 & #6].

4) What did you find? (observations from the data)	These results are very good. Seven of the eight students rated High or Satisfactory, with only one student rated Below Satisfactory. Four students had no skills lacking, while one student had two skills lacking, and three students had one skill lacking.
5) Implications & Conclusions	The MAT 142 course appears to be a good course for developing skills in Quantitative Reasoning.
6) Recommendations & Next Steps	We recommend that no changes be made in the Ten Questions. The next step will need to be: embed them in the MAT 152 Final Exam, at the end of this Spring Semester, in May of 2015. Unlike the MAT 142 course, which was taught under only one Modality [Audio], the MAT



ACADEMIC ASSESSMENT REPORT

152 course has been taught across Modalities, in face-to-face classes, and in Audio/Model/Video, and in Dual Enrollment. The next report from the Mathematics Department, will include a comparison of the results from these different learning environments.

List of Evidence Items Appended (linked to Goals and Outcomes):

**Appended Item A, the ten questions which we embedded in the MAT 142 Final Exam.**

Recommendations for Action with Approximate Timelines:

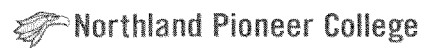
*What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?*

**We will continue to use the same ten questions, but in different courses, for example, we will use them in MAT 152, as a portion of the Final Exam, for Spring Semester 2015.**

Itemized Resource Requests with Budget Amounts (if any):

Lead Evaluator Signature: \_\_\_\_\_

Date: \_\_\_\_\_



**ACADEMIC ASSESSMENT REPORT**

Department Chair Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dean Signature: \_\_\_\_\_ Date: \_\_\_\_\_



Appended Item A, the ten questions that were embedded in the MAT 142 Final Exam.

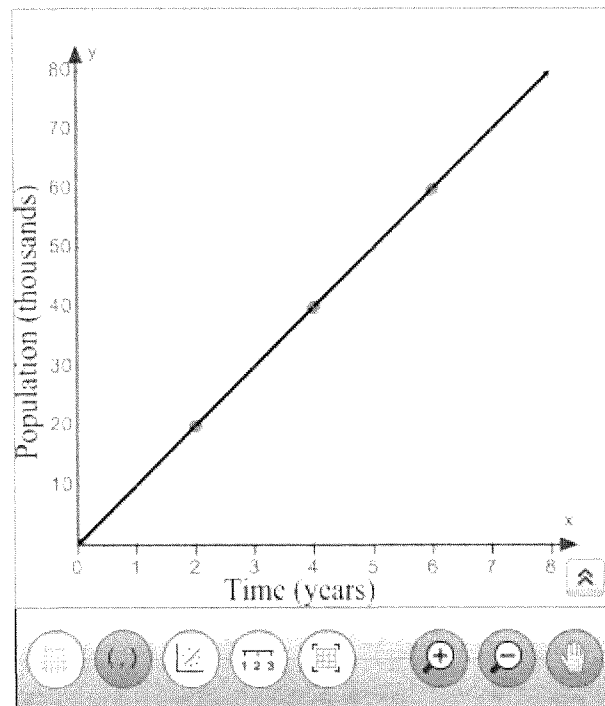
Goal 1 Modeling: #1 & #2

#1



Mat 142

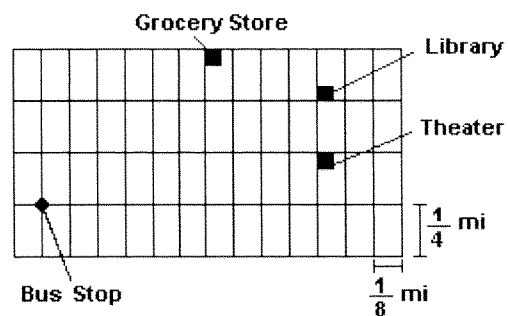
- In words, describe the function shown on the graph.
- Find the slope of the graph and express it as a rate of change (be sure to include the units).
- Briefly discuss the conditions under which a linear function is a realistic model for the given situation.





ACADEMIC ASSESSMENT REPORT

#2 Refer to the given map. Assume that the length of each east-west block is  $\frac{1}{8}$  mile and the length of each north-south block is  $\frac{1}{4}$  mile.



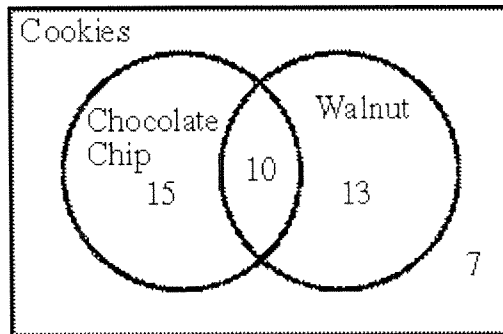
Find the shortest possible walking distance (following the streets) between the bus stop and the Library.

- A) 1.50 mi B) 2.0 mi C) 1.75 mi D) 1.25 mi

## ACADEMIC ASSESSMENT REPORT

Goal 2, Problem Solving: #3 & #4

#3 The following Venn diagram describes the types of cookies in a bakery. Use it to determine how many cookies have neither chocolate chips nor walnuts.



- A) 3    B) 17    C) 7    D) 10





**ACADEMIC ASSESSMENT REPORT**

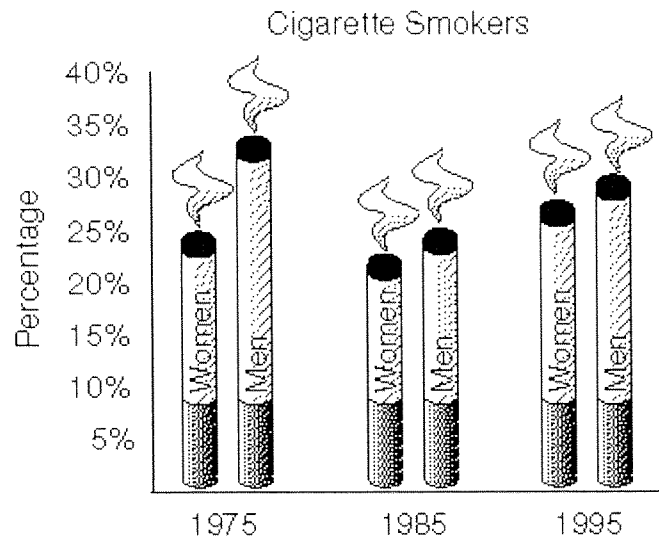
#4 Two bicyclists, 42 miles apart, begin riding toward each other on a long straight avenue. One cyclist travels 15 miles per hour and the other 20 miles per hour. At the same time, Spot (a greyhound), starting at one cyclist, runs back and forth between the two cyclists as they approach each other. If Spot runs 38 miles per hour and turns around instantly at each cyclist, how far has he run when the cyclists meet?



ACADEMIC ASSESSMENT REPORT

Goal 3, Interpreting Data: #5 & #6

#5 The following chart shows the percentage of cigarette smokers in Gotham City.



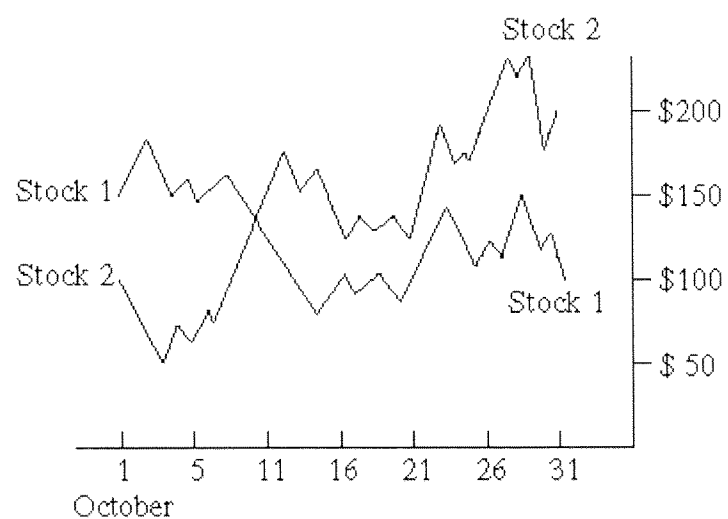
In which year does the percentage of men who smoke exceed the percentage of women who smoke by roughly 9 percentage points?

- A) 1995    B) 1975    C) 1985    D) None of the above



ACADEMIC ASSESSMENT REPORT

#6 The following time-series diagram tracks the performance of two stocks during the month of October.



Describe the overall trend in the value of each stock during the month of October. By what percentage did the value of each stock increase or decrease during the month of October?



ACADEMIC ASSESSMENT REPORT

Goal 4, Computation: #7 & #8

**#7** For the given principal, interest rate, and time period, determine the amount of interest that would be earned in an account paying simple interest. Also determine the amount of interest that would be earned in an account paying compound interest with interest compounded annually. Determine how much more interest would be earned in the account paying compound interest. Round to the nearest cent.

Principal: \$ 720   Rate: 2%   Years: 18

A) 43.37   B) 769.14   C) 49.14   D) 509.94



ACADEMIC ASSESSMENT REPORT

#8 Solve the problem.

Carla earned wages of \$ 49,017, received \$ 1583 in interest from a savings account, and contributed \$ 4388 to a tax deferred retirement plan. She was entitled to a personal exemption of \$3650 and had deductions totaling \$ 7767. Find her gross income.

- A) 50,600    B) 34,795    C) 46,212    D) 54,988



ACADEMIC ASSESSMENT REPORT

Goal 5, Logical Reasoning: #9 & #10

#9 Lycopene, glutathione, and glutamine are powerful antioxidants that neutralize the free radicals that are produced in the body as a result of routine bodily processes. An excess of these free radicals in your system causes rapid aging because they accelerate the rate of cellular damage. Aging is simply the result of this damage. Thus, to slow down aging it is necessary to supplement your diet with these antioxidants on a daily basis.

Which of the following, if true, most seriously undermines the author's contention?

- A. Most persons aren't concerned with the effects of aging until it is too late to do anything.
- B. Only overweight people who do not exercise on a daily basis are likely to have an excess of free radicals in their systems.
- C. Exercise associated with normal daily activities effectively neutralizes and dissipates the free radicals that are produced as a result of routine bodily processes.
- D. The cost of antioxidants is exorbitantly high and well beyond the budget of most consumers.
- E. Smoking cigarettes is one of the main causes of cellular damage in humans.



ACADEMIC ASSESSMENT REPORT

#10 Newspaper publishers earn their profits primarily from advertising revenue, and potential advertisers are more likely to advertise in newspapers with a wide circulation, (a large number of subscribers and other readers), than with other newspapers.

But the circulation of the newspaper that is currently the most profitable one in this city has steadily declined during the last two years, while the circulation of one of its competitors has steadily increased.

Four of the following reasons would help explain the apparent discrepancy between the two statements above. Which one would NOT help explain it?

- F. Advertisers generally switch from the most widely circulated newspaper to another one only when the other one becomes the most widely circulated newspaper instead.
- G. Advertising rates charged by the most profitable newspaper in the city are significantly higher than those charged by its competitors.
- H. The most profitable newspaper in the city receives revenue from its subscribers as well from advertisers.
- I. The number of newspapers competing viably with the most profitable newspaper in the city has increased during the last two years.
- J. The circulation of the most profitable newspaper in the city is still greater than that of any of its competitors.

# ASSESSMENT OF STUDENT KNOWLEDGE

## ALLIED HEALTH DEPARTMENT

Fall 2013-April 2014

The Allied Health Department is responsible for the core healthcare classes that serve as a gateway for students entering a variety of healthcare professions. These classes include Law & Ethics, Nutrition, Medical Terminology, Basic Pharmacology, and a NAVIT Career Skills Lab which assists the high school student in transitioning into a college healthcare field of studies. In addition to these courses, we offer Phlebotomy and Pharmacy Technician instruction which, upon completion of these courses, enables a student to take an exam for national certification status.

In the fall of 2014, the public can begin enrollment in our new Direct Care Worker class which will be offered on the Show Low campus. Successful completion will lead to an Arizona recognized Direct Care Worker certificate, making the graduate eligible to receive financial reimbursement from AHCCCS for taking care of family members in the home setting.

The Medical Assistant Program is one of our most well-known programs. A comprehensive assessment of the MDA Program was undertaken and a number of changes were made this past year.

One of the major revisions was to increase the number of hours of clinical procedure classes with lecture emphasis to include more back office theory and skills, in line with current medical assistant practice. This was accomplished by taking the former MDA 123 class and breaking it down into 2 semesters consisting of MDA 124 Clinical Skills I and MDA 125 Clinical Skills II. Credit hours were increased from 4 to 5 credits for each section. We have also added the Virtual Medical Office instruction which is an innovative learning system that provides the student with interactive lessons and realistic simulations that they might encounter in a real medical office work environment.

Other changes included the requirement for MA students to take HES 180 Basic Pharmacology as a core class and also Psychology 101, as one of the electives. We changed to a new textbook for HES 170 Medical Terminology that is less technical in nature and emphasizes clinical terms as they relate to patient diagnosis, procedures and diagnostic testing as well as medical acronyms that are used most commonly in patient documentation.

A component of the MDA program requires students to complete 160 hours of clinical externship. Skills checklists were reviewed and updated to make certain that all basic areas needed for MDA proficiency were included and could be practiced during the selected clinical rotation. In addition to signing off on student skills, mentors are asked to complete periodic reports on student progress, identifying areas of strengths and weaknesses. Periodic meetings with externship mentors and students were and will continue to be scheduled to provide faculty support to both NPC students and their mentors, as well as to monitor and evaluate student progress. Student and mentor surveys will be administered upon completion of the MDA externship and course improvements will be considered based on those responses.



Assessment of our medical assistant graduates will not end here. Recently, NPC has been approved as a preferred provider and test site school for the National Center for Competency Testing. This organization provides national certification testing for medical assistants throughout the U.S. Our graduates will now be able to test at NPC's Show Low campus in an electronic format and learn their test results immediately after testing. Our department will also have access to all test results which will be a great benefit in evaluating the effectiveness of our MDA program.

### **MDA 124 Clinical Skills I Pass Rates Fall 2013**

<u>Skills Tested</u>	<u>1<sup>st</sup> Try</u>	<u>2<sup>nd</sup> Try</u>
Hand washing	9/9	9/9
Blood pressure	8/9	9/9
Pulse	6/9	9/9
Respirations	8/9	9/9
Temperature- oral, rectal, axillary and temporal	6/9	9/9
Patient positioning	8/9	9/9

### **MDA 124 Written Final Exam**

8 students passed with a score of 75% or greater

1 failed

Report submitted by:

Connie M. Warren RN

Allied Health Coordinator



ACADEMIC ASSESSMENT REPORT

Department or Unit: NAT

Academic Year: 2014-15

Lead Evaluator: Susan Jamison, RN, MS

Submission Due Date: 4-22-15

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

The course goal is to prepare students to assume the role and responsibilities of a certified nursing assistant within community health settings with a focus on long-term care. Objective #5 is to Identify and demonstrate effective written, verbal, and nonverbal communication.

Unit Goals & Objectives:

Chapter 8: Understanding the Person

Identify the elements needed for good communication

Describe how to use verbal and nonverbal communication

Explain methods and barriers to good communication

Etc. [THE BOX WILL EXPAND, but you want to keep it simple, at least for the first year or two]

Evaluation Team Members: Susan Jamison and Dianna Kelley



ACADEMIC ASSESSMENT REPORT

Executive Summary of Results (*not more than 3 pages, please*):

1) What was your question(s)?

How did students rate their communication skills with older and/or disable adults before and after taking the course and can they identify therapeutic communication responses after taking the course.

2) What was your process?

A communication survey (4 items) and multiple-choice questions (7 items) was given to NAT students toward the end of the course.

3) Present your data summary...longer documents go to the List of Evidence Items below

See below

4) What did you find? (Observations from the data)

Communication survey: Comfort levels increased by 33%

Before class- 61% were very comfortable or comfortable communicating with older of disabled adults

After the class- 94% were very comfortable or comfortable

92% of respondents felt the lecture material would be helpful

87% responded that they used the information taught while in clinical

Multiple choice questions

Communication techniques identified correctly

Paraphrasing: 49%

Direct question: 50%

Open-ended question: 63%

Clarifying question: 77%

Focusing statement: 65%

Silence: 65%

Validation: 67%

**ACADEMIC ASSESSMENT REPORT****5) Implications & Conclusions**

Of the students who took the course, 1/3 were more comfortable communicating with older and/or disabled adults and most of the students felt the information was helpful and able to be used in clinical.

Regarding the identification of the communication techniques, many students could not identify the communication technique.

**6) Recommendations & Next Steps**

We revised our survey to make it clearer and revised the multiple choice questions to assess if the students can select therapeutic communication responses, not only identify the terms.

**7) Detail the improvements to student learning that will occur as a result of (6.**

If the students do not feel comfortable with communication and/or if they are not able select therapeutic communication we can see that we will need to make some changes in how we teach in this area.



ACADEMIC ASSESSMENT REPORT

Data Summary: Fall 2014 AND Results:

1. Before coming to this class, rate your comfort level at communicating with older or disabled adults.

N= 74    12 Very Comfortable, 33 Comfortable, 20 Neutral, 8 uncomfortable, 1 Very comfortable

2. Do you feel the lecture material on communication skills will help you feel more comfortable when communicating with older or disabled adults?

N=75    35 Very Comfortable, 35 Comfortable, 5 Neutral

3. Having completed this class, how would you rate your comfort level at interacting with older or disabled adults?

N=77    43 Very Comfortable, 29 Comfortable, 5 Neutral

4. While in clinical, did you use the information taught to you about therapeutic communication?

N=70    35 Very Comfortable, 26 Comfortable, 9 Neutral

***Using Communication Methods***

Paraphrasing: 49% correct

Direct question: 50% correct

Open-ended question: 63% correct

Clarifying question: 77% correct

Focusing statement: 65% correct

Using silence: 65% correct

Validation Therapy: 67% correct

N=94



ACADEMIC ASSESSMENT REPORT

Recommendations for Action with Approximate Timelines:

We are going to stay with the communication topic and will collect data for this semester.

Lead Evaluator Signature: ***Susan Jamison, RN, MSN***

Date: 4/22/15

## Departmental Assessment Plan 2014-2015

This year the Nursing Assistant Program will be addressing General Education Standard

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

We have developed a short questionnaire and multiple-choice questions relating to communication with older and/or disabled adults. The students will complete this during the last two weeks of class. The results will be tabulated.

### CNA Communication Assessment

On a scale of 1-5, rate the following

1- Very comfortable to 5-Very uncomfortable

\_\_\_\_\_ 1. Before coming to this class, rate your comfort level at communicating with older or disabled adults.

\_\_\_\_\_ 2. Having completed this class, how would you rate your comfort level at interacting with older or disabled adults?

On a scale of 1-5, rate the following

1 - very helpful to 5- not helpful

\_\_\_\_\_ 3. Do you feel the lecture material on communication skills helped you feel more comfortable when communicating with older or disabled adults?

\_\_\_\_\_ 4. While in clinical, did you use the information taught to you about therapeutic communication?

### Using Communication Methods

You have completed your duties for the morning and have some free time. Mr. Robert Black is a resident in the nursing center. He rarely has visitors and you try to spend time with him when you can. Answer the following questions about communication techniques you use when you visit with Mr. Black.

Mr. Black says, "I love the spring time when all the different flowers in my garden would start to come up and I would work in the garden for hours. My grass would really get to growing and It would take me all day to mow. I didn't use those fancy lawn mowers with the engines, I used the push mower that my father gave me. I had a nice lawn and flower garden at home."

Answer the following questions regarding this scenario:

1. An example of paraphrasing is:

- a. "It sounds like your garden and yard meant a lot to you."
- b. "My father had the best lawn in the neighborhood."
- c. "Did you like your garden?"
- d. "I love to grow flowers, too."

2. An example of an open-ended question is:

- a. "You said you had a flower garden at home?"
- b. "My mom took care of the garden and yard at our house."
- c. "Tell me about the kinds of flowers you had in your garden."
- d. "Did your wife also enjoy the garden?"

3. Mr. Black begins to cry when he talks about his flower garden. How can you show caring and respect for his situation and feelings?

- a. Be silent until he stops crying.
- b. Change the subject.
- c. Leave the room to give him privacy.
- d. Call a family member.

4. Mr. Black says he "hurts all over" and then begins to talk about going home. You want to ask him a focusing question, what do you say?

- a. "Let's go back to what you said about hurting all over."
- b. "Yes, most older people have aches and pains."
- c. "I would love to hear more about your garden."
- d. "Let's go and get a snack."

5. Mr. Black says, "I am tired today because of last night." You want to ask a clarifying question, what do you say?

- a. "Who had a party?"
- b. "I hear you saying that you did not sleep well last night."
- c. "Do you want to take a nap?"
- d. "Tell me about what kept you awake last night."

6. Mr. Black says "I wish I had flowers to give to my wife when she comes to visit tonight". Mr. Black's wife died two years ago. A response using validation therapy is

- a. "Your wife died 2 years ago."
- b. "Your wife is not coming here today."
- c. "Tell me about your wife."
- d. "I'm sure your wife will understand."



## Departmental Assessment Plan 2013-2014

This year the Nursing Assistant Program will be addressing General Education Standard 2 –

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

We have developed a short questionnaire and multiple-choice questions relating to communication with older and/or disabled adults. The students will complete this during the last two weeks of class. The results will be tabulated.

### CNA Communication Assessment

Rating Scale:

A – Very Comfortable

B - Comfortable

C – Neutral

D – Uncomfortable

E – Very uncomfortable

\_\_\_\_\_ 1. Before coming to this class, rate your comfort level at communicating with older or disabled adults. A=12, B=33, C=20, D=8, E=1

\_\_\_\_\_ 2. Do you feel the lecture material on communication skills will help you feel more comfortable when communicating with older or disabled adults?  
A=35, B=35, C=5

\_\_\_\_\_ 3. Having completed this class, how would you rate your comfort level at interacting with older or disabled adults?  
A=43, B=29, C=5

\_\_\_\_\_ 4. While in clinical, did you use the information taught to you about therapeutic communication? A=35, B=26, C=9

### Using Communication Methods

You have completed your duties for the morning and have some free time. Mr. Robert Black is a resident in the nursing center. He rarely has visitors and you try to spend time with him when you can. Answer the following questions about communication techniques you use when you visit with Mr. Black.

1. Mr. Black says, "I know this is the best place for me, but I miss my flower garden at home." You respond, " You miss your home." This is an example of

- a. Paraphrasing 49% correct
- b. Direct question
- c. Open-ended question
- d. Clarifying question

2. You ask Mr. Black, "You told me you did not sleep well last night. Can you tell me why?" He replies, "There was a lot of noise in the hall." This is an example of a

- a. Paraphrasing
- b. Direct question 50% correct
- c. Open-ended question
- d. Clarifying question

3. You say to Mr. Black, "Tell me about your flower garden at home." This is

- a. Paraphrasing
- b. A direct question
- c. An open-ended question 63% correct
- d. A clarifying question

4. When you say, "Can you explain what that means," you are asking a person to

- a. Paraphrase
- b. Be direct
- c. Focus
- d. Clarify 77% correct

5. Mr. Black says he "hurts all over" and then begins to talk about what he had for breakfast. You say, "Tell me more about where you hurt. You said you hurt all over." This is

- a. Paraphrasing
- b. Direct question
- c. Open-ended question
- d. Clarifying question
- e. Focusing statement 65% correct

6. Mr. Black begins to cry when he talks about his flower garden. How can you show caring and respect for his situation and feelings?

- a. Be silent until he stops crying. 65% correct
- b. Change the subject.
- c. Leave the room to give him privacy.
- d. Call a family member.

The following question is based on Validation Therapy, used as part of the care plan for a patient who has dementia.

7. While going from room to room, Mrs. Bell calls for her daughter. In reality, her daughter died 20 years ago. Using validation therapy, the caregiver says

- a. "Your daughter died 20 years ago."
- b. "Your daughter is not here."
- c. "Tell me about your daughter." 67% correct
- d. "I'm sure your daughter will come when she can."

N=94

Please provide comments to help us improve the content regarding therapeutic communication in the CNA program.



ACADEMIC ASSESSMENT REPORT

Department or Unit: Nursing

Academic Year: 2014-2015

Lead Evaluator: Dana Jolly

Submission Due Date: 2/2015

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

Evaluation methodologies are varied, reflect established professional and practice competencies, and measure the achievement of student learning outcomes. The student learning outcomes are used to organize the curriculum, guide the delivery of instruction, direct learning activities, and evaluate student progress. The curriculum incorporates established professional standards, guidelines, and competencies, and has clearly articulated student learning and program outcomes consistent with contemporary practice.

Unit Goals & Objectives:

1. Goal 1 Do NPC ADN students demonstrate adequate competency in medication dosage calculations?

*A. Students must be able to analyze the information given in a dosage calculation question and apply disciplined thinking to set up the equation and solve for the desired answer.*

*B. Students must be able to accurately interpret the situation presented in the problem and correctly manipulate the quantitative data to set up and correctly calculate a dosage problem.*

*C. Students will be required to adequately prepare for much of the dosage calculation exam. They will have to locate resources available to them, access these resources, and apply them through practice questions before they take the exams.*

Evaluation Team Members: Peg Erdman, Amber Gentry, Michelle Hunt, Deborah Keith, Dana Jolly, Carol Stewart and Penny Weiermann



ACADEMIC ASSESSMENT REPORT

Executive Summary of Results (*not more than 3 pages, please*):

*The results of the exams taken in the 2014-2015 academic year. Based on the results of the 2013-2014 cycle, the following changes were implemented:*

1. Both 1<sup>st</sup> and 2<sup>nd</sup> year instructors have made changes to the dosage calculation tutorials that students receive to help them prepare for their dosage calculation exams. The revisions are designed to make the tutorials more user-friendly and to remove material not currently relevant to the nursing courses.
2. Students who fail the first dosage calculation exam will be required to attend the offered remediation before the second exam. Students who fail the second exam will be required to attend the offered remediation before the third (and final) exam.
3. Students will have a one hour limit to complete each dosage calculation exam (10 problems each exam). On the first exam only, students may take their answer key up to the faculty/proctor to have the faculty put a check mark by any wrong answers. No discussion or questions allowed. The student may then attempt to correct the wrong answers as the one hour total time limit allows.

List of Evidence Items Appended (linked to Goals and Outcomes):

*See attached tables with data: see pages 5-13*



ACADEMIC ASSESSMENT REPORT

Recommendations for Action with Approximate Timelines:

*Nursing faculty agreed to continue the current assessment plan. In addition, each cohort will receive the same dosage calculation test at some point later in the fall semester to assess retention. A pre-test, post-test determination to assess retention of the dosage calculation concepts learned. The data will be analyzed. The nursing faculty have set a benchmark of 90% expectation of students will be able to meet the 100% expectation on the post-test evaluation*

Itemized Resource Requests with Budget Amounts (if any): NA

Lead Evaluator Signature: \_\_\_\_\_ Dana Jolly \_\_\_\_\_ Date:  
\_\_\_\_ 3/13/2015 \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_ Carol Stewart \_\_\_\_\_  
Date: \_\_\_\_ 3/13/15 \_\_\_\_\_

Dean Signature: \_\_\_\_\_ Peg Erdman \_\_\_\_\_  
Date: \_\_\_\_ 3/13/15 \_\_\_\_\_

**ACADEMIC ASSESSMENT REPORT**

## NPC ADN Dosage calculation exam results

<b>NUR221 Fall 2014 WMC</b>	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam 3</b>
# Taking exam	<b>30</b>	<b>2</b>	<b>0</b>
# Passed	<b>28</b>	<b>2</b>	<b>0</b>
# Failed	<b>2</b>	<b>0</b>	0
#withdrew from program	<b>0</b>	<b>0</b>	0
Miscalculation of dose	<b>1</b>	<b>0</b>	0
Incorrect medication administration rate	0	0	0
Wrong decimal point placement	0	0	0
Incorrect formula selection	1	0	0
Error in rounding	<b>0</b>	<b>0</b>	0
Incorrect expression of unit of measurement	0	0	0
Failed to finish calculation to end	<b>0</b>	<b>0</b>	0
Remediation offered? Yes/no	<b>yes</b>	<b>n/a</b>	N/A
# Students who Attended remediation	<b>Done individually</b>	<b>n/a</b>	N/A
% Students who attended remediation, then passed next exam	<b>100%</b>	<b>0</b>	N/A
% Students who attended remediation, then failed next exam	<b>0</b>	<b>0</b>	N/A

7 students out of the group of 30 at WMC missed 1-2 questions for miscalculation of the dose, incorrect expression of unit of measurement, or incorrect formula selection. Of these, 5 students were able to successfully fix the errors within the allotted 1 hour testing time frame. One never figured out she had the wrong formula and the other was not able to calculate the correct dosage on the first test. Both of those students were individually remediated and when they took the second dosage calculation test, both successfully passed.

**ACADEMIC ASSESSMENT REPORT**

NPC ADN Dosage calculation exam results

<b>NUR221 Fall 2014 LCC</b>	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam 3</b>
# Taking exam	<b>19</b>	<b>0</b>	<b>0</b>
# Passed	<b>19</b>	<b>0</b>	<b>0</b>
# Failed	<b>0</b>	<b>0</b>	0
#withdrew from program	<b>0</b>	<b>0</b>	0
Miscalculation of dose	<b>4</b>	<b>0</b>	0
Incorrect medication administration rate	0	0	0
Wrong decimal point placement	0	0	0
Incorrect formula selection	1	0	0
Error in rounding	<b>0</b>	<b>0</b>	0
Incorrect expression of unit of measurement	1	0	0
Failed to finish calculation to end	<b>0</b>	<b>0</b>	0
Remediation offered? Yes/no	<b>no</b>	<b>n/a</b>	N/A
# Students who Attended remediation	<b>na</b>	<b>n/a</b>	N/A
% Students who attended remediation, then passed next exam	<b>0</b>	<b>0</b>	N/A
% Students who attended remediation, then failed next exam	<b>0</b>	<b>0</b>	N/A

Four out of nineteen students missed 1-2 questions for miscalculation of the dose or incorrect expression of unit of measurement. Since these four students were able to successfully fix the errors within the allotted 1 hour testing time frame, all successfully met the objectives for the first test. No remediation was required and no other dosage calculation tests were required.

**ACADEMIC ASSESSMENT REPORT**

NPC ADN Dosage calculation exam results

<b>NUR121 Fall 2014 WMC</b>	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam 3</b>
# Taking exam	<b>30</b>	<b>8</b>	<b>1</b>
# Passed	<b>22</b>	<b>6</b>	<b>1</b>
# Failed	<b>8</b>	<b>1</b>	0
#withdrew from program	<b>0</b>	<b>1</b>	0
Miscalculation of dose	<b>4</b>	<b>1</b>	0
Incorrect medication administration rate	0	0	0
Wrong decimal point placement	0	0	0
Incorrect formula selection	0	0	0
Error in rounding	<b>7</b>	<b>0</b>	0
Incorrect expression of unit of measurement	0	0	0
Failed to finish calculation to end	<b>0</b>	<b>0</b>	0
Remediation offered? Yes/no	<b>yes</b>	<b>yes</b>	N/A
# Students who Attended remediation	<b>8</b>	<b>1</b>	N/A
% Students who attended remediation, then passed next exam	<b>75%</b>	<b>100</b>	N/A
% Students who attended remediation, then failed next exam	<b>25%</b>	<b>0</b>	N/A



**ACADEMIC ASSESSMENT REPORT**

NPC ADN Dosage calculation exam results

<b>NUR121 Fall 2014 LCC</b>	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam 3</b>
# Taking exam	<b>11</b>	<b>1</b>	<b>0</b>
# Passed	<b>10</b>	<b>1</b>	<b>0</b>
# Failed	<b>1</b>	<b>0</b>	0
#withdrew from program	<b>0</b>	<b>0</b>	0
Miscalculation of dose  **Incorrect data placed in correct formula	<b>1</b>	<b>0</b>	0
Incorrect medication administration rate	0	0	0
Wrong decimal point placement	0	0	0
Incorrect formula selection	0	0	0
Error in rounding	<b>0</b>	<b>0</b>	0
Incorrect expression of unit of measurement	0	0	0
Failed to finish calculation to end	<b>0</b>	<b>0</b>	0
Remediation offered? Yes/no	<b>yes</b>	<b>n/a</b>	N/A
# Students who Attended remediation	<b>1</b>	<b>0</b>	N/A
% Students who attended remediation, then passed next exam	<b>100</b>	<b>100</b>	N/A
% Students who attended remediation, then failed next exam	<b>0</b>	<b>0</b>	N/A



**ACADEMIC ASSESSMENT REPORT**

7 out of the 11 students missed 1-2 questions on first attempt: 3 from rounding rule, 1 from incorrect data placed in formula (and a rounding rule-accounted for in the above data), 1 student conversion, 1 student wrong decimal placement. Only one student failed with the 're-do' due to placing incorrect data into the formula (could not discern what was extra and what was needed data). This student remediated and went on to pass exam 2.



ACADEMIC ASSESSMENT REPORT

NPC ADN Dosage calculation exam results

<b>NUR122 Spring 2015 LCC</b>	Exam 1	Exam 2	Exam 3
# Taking exam	<b>13</b>	<b>0</b>	<b>0</b>
# Passed	<b>13</b>		<b>0</b>
# Failed	<b>0</b>	<b>0</b>	0
# Required 2 <sup>nd</sup> chance to answer in 1 hour	<b>4*</b>		
#withdrew from program	<b>0</b>	<b>0</b>	0
Miscalculation of dose	<b>0</b>	<b>0</b>	0
**Incorrect data placed in correct formula			
Incorrect medication administration rate	1	0	0
Wrong decimal point placement	0	0	0
Incorrect formula selection	1	0	0
Error in rounding	<b>3</b>	<b>0</b>	0
Incorrect expression of unit of measurement	0	0	0
Failed to finish calculation to end	<b>0</b>	<b>0</b>	0
Remediation offered? Yes/no	<b>n/a</b>	<b>n/a</b>	N/A
# Students who Attended remediation	<b>n/a</b>	<b>N/a</b>	N/A
% Students who attended remediation, then passed next exam	<b>n/a</b>	<b>n/a</b>	N/A
% Students who attended remediation, then failed next exam	<b>n/a</b>	<b>n/a</b>	N/A



**ACADEMIC ASSESSMENT REPORT**

4 out of the 13 students missed 2-4 questions on first attempt: 3 from rounding rule, 1 from incorrect data placed in formula (and a rounding rule-accounted for in the above data) and 1 administration rate. All students were allowed a 2<sup>nd</sup> opportunity to fix the error without being told what the error was and completed the test with correct answer within the 1 hour structure. This is the second semester the nursing program has implemented the following new criteria for this high-stakes exam: 1 hour to complete 15-20 questions, instructors grade the first attempt and hand back to student with wrong answers marked but not conversed about with the student, student has the remainder of the hour to re-do the missed questions.

This semester at LCC all students passed with the first exam; the Fall semester no students had to take the 3<sup>rd</sup> attempt. This method shows consistency with real-world practice in that most calculations will be double checked with another RN or other source (smart pump, pharmacist) allowing for any mistakes to be caught prior to patient care.



ACADEMIC ASSESSMENT REPORT

<b>NUR122 Spring 2015 WMC</b>	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam 3</b>
# Taking exam	<b>29</b>	<b>5</b>	<b>2</b>
# Passed	<b>24</b>	<b>3</b>	<b>2</b>
# Failed	<b>5</b>	<b>2</b>	<b>0</b>
# Required 2 <sup>nd</sup> chance to answer in 1 hour	<b>17*</b>		
#withdrew from program	<b>0</b>	<b>0</b>	<b>0</b>
Miscalculation of dose  **Incorrect data placed in correct formula	<b>1</b>	<b>1</b>	<b>0</b>
Incorrect medication administration rate	<b>0</b>	<b>0</b>	<b>0</b>
Wrong decimal point placement	<b>0</b>	<b>0</b>	<b>0</b>
Incorrect formula selection	<b>6</b>	<b>0</b>	<b>0</b>
Error in rounding	<b>7</b>	<b>1</b>	<b>0</b>
Incorrect expression of unit of measurement	<b>0</b>	<b>0</b>	<b>0</b>
Failed to finish calculation to end	<b>0</b>	<b>0</b>	<b>0</b>
Remediation offered? Yes/no	<b>Yes</b>	<b>Yes</b>	<b>N/A</b>
# Students who Attended remediation	<b>5</b>	<b>2</b>	<b>N/A</b>
# Students who attended remediation, then passed next exam	<b>3</b>	<b>2</b>	<b>N/A</b>
# Students who attended remediation, then failed next exam	<b>2</b>	<b>n/a</b>	<b>N/A</b>

17 out of the 29 students missed 1-4 questions on first attempt: for the reasons listed above. All students were allowed a 2<sup>nd</sup> opportunity to fix the error without being told what the error was and completed the test with correct answer within the 1 hour structure.



**ACADEMIC ASSESSMENT REPORT**

This semester at WMC 24 students passed the first exam, 5 passed 2<sup>nd</sup> exam and 2 went on to the 3<sup>rd</sup> exam and passed. I agree with Michelle, this method shows consistency with real-world practice in that most calculations will be double checked with another RN or other source (smart pump, pharmacist) allowing for any mistakes to be caught prior to patient care.

**Our recommendation is to continue with this method of testing for dosage calculation exams.**

## ASK Report Spring 2015 – Social & Behavioral Sciences Dept

### Review:

As part of Articulation agreements, SBS has been assessing Critical Writing via the “term paper” for many years. In different years, SBS has attempted to address the six outcomes for General Education provided by the ASK committee, including an attempt to address Quantitative Reasoning through a quiz on Moodle. Because the Dept. has preferred to include assessment within the term paper and its scoring “rubric” we have begun to modify the rubric to accommodate further assessment of the six outcomes of General Education.

### Currently:

In an effort to address ASK **GenEd outcome #5, Information Literacy**, SBS is amending its long used term paper rubric to permanently include a specific aspect of this outcome: **Digital Literacy**, which assesses student use of online resources for term papers. Adjustments to “weighted” scoring of the various components were made and the new rubric was introduced for the Fall 2014 semester and is being used this Spring as well.

### Immediate Future:

Assessing the use of the new **Digital Literacy** component of the amended rubric is our first goal. Faculty will now note and assess the quantity and quality of online sources used for term papers, as indicated in the newly amended rubric. The goal of this change is to assure students understand and use appropriate online sources accurately.

### Further Plans:

NPC GenEd outcome #6 is Diversity: “Students will develop knowledge of diverse cultural and natural environments.” This outcome, and its semantics, is directly related to concepts in SBS subject matter. Thus, the SBS department intends to address how “diversity” is presented, assessed and even defined (beyond the GenEd outcome definition). SBS should address the Diversity outcome as its next project.

# CRITICAL WRITING ASSESSMENT FORM

Student ID: \_\_\_\_\_

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

Course & Semester: \_\_\_\_\_

Circle - NAVIT Student? Y or N

Circle - Class Mode: Aud Vid Int Model 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 – 15 points possible** - An “A” paper: Uses evidence appropriately and effectively, providing sufficient evidence and explanation to convince.

Points for **Support** \_\_\_\_\_

Comments:

**Digital Literacy – 10 points possible** – An “A” paper: Uses evidence from a variety of academically appropriate online sources, including .edu, .gov and/or .org websites. Avoids using sources that do not provide authors or sources of their own.

Points for **Digital Literacy** \_\_\_\_\_

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:



**Northland Pioneer College**  
**Assessment of Student Learning in SPANISH**  
**For the 2015-2016 Academic Year**

Submitted March 10, 2015, by Richard Harris, Spanish Faculty

**Assessment Process**

There are many written assessments administered throughout the semester used to measure students' language proficiency. However, many students study a foreign language not to become proficient in writing that particular language (although writing correctly is important), but rather to achieve proficiency with the spoken language. In order to demonstrate students' proficiency in speaking the Spanish language, students are assigned to perform an oral presentation as part of their comprehensive final examination for the semester.

**Assessment Parameters**

Students of all levels of Spanish (SPA101, SPA102, SPA201, and SPA202) were given the opportunity to demonstrate oral proficiency in the Spanish language by performing a 10-minute oral presentation, in the Spanish language, on the topic of their choosing. Each student was evaluated based on his/her ability to effectively communicate denotative meanings of words while preserving the connotative value of context, mastery of the grammatical principles learned in the respective courses, vocabulary manipulation and mastery, articulation, enunciation, and overall fluidity and fluency with which each student was able to speak the Spanish language.

While equal emphasis was placed on the development of reading, writing, listening and speaking skills, consideration was given to the student's ability to master proficiency in the spoken language.

**Assessment Outcomes**

Regarding oral proficiency, students are assessed in the following areas: content, organization (organized expressed thoughts), grammatical structure and mechanical errors (pronunciation), and language (vocabulary).

Content: Maintains clear and obvious purpose. Focuses clearly on one significant main idea or topic. Uses relevant, specific, convincing supporting details. Generates sufficient content (200 – 300 words in Spanish).

Organization: Maintains clear and obvious organization. Demonstrates effective and appropriate transitions with emphasis upon conveying the relationship between ideas.

Grammatical Structure and Mechanical Errors: Uses correct, varied sentences with few, if any, errors with mechanics, grammar, or pronunciation.

Language: Uses language (vocabulary) effectively, with a consistent and appropriate tone for the intended audience.

### **Interpretation of the Assessment Outcomes**

While the results of written assessments reflect a student's level of proficiency regarding the ability to read, write and comprehend the Spanish language, developing proficiency in the spoken language is paramount. The results of the oral presentations given indicate that students who were successful in achieving above-average levels of proficiency in reading, writing, and listening skills likewise largely achieved above-average levels of speaking proficiencies. However, the ability to achieve above-average levels of speaking proficiencies is not limited to equal above-average levels of success regarding reading, writing, and listening skills. Nearly half of the students ranging in the above-average to below-average scale in reading and writing were able to achieve scores of 90% or better when demonstrating oral proficiencies speaking the Spanish language.



ACADEMIC ASSESSMENT REPORT

Department or Unit: Developmental Services – The Learning Cornerstone

Academic Year: 2014-2015

Lead Evaluator: Shannon Newman

Submission Due Date: March 15, 2017

Unit Mission: *(this mission, and your Goals & Objectives below, come from your program & curriculum planning)*

The Developmental Services Department strives to provide students in Northeastern Arizona with a comprehensive and quality developmental education program. The department works directly with agencies across the state to extend this program to all who have the desire to learn. To meet the needs of Northland's diverse student population, the curriculum spans across multiple educational levels, seeking to spur students to both academic and personal growth, and to ready students for higher education and employment opportunities.

Unit Goals & Objectives:

Goals:

Developmental Education: Facilitate students' development of the skills necessary to learn effectively.

Personal Enrichment: To encourage both an awareness and appreciation of social, cultural, political, intellectual, and artistic endeavors and diversity.

Support Services: Assist student successes by offering accessible and comprehensive student services.

Employability: Promote the development of skills useful in occupational Endeavors.

Economic Development: Promote the community's economy by offering programs and activities designed to meet local community needs.

## ACADEMIC ASSESSMENT REPORT

In reviewing the Goals for the Developmental Services Department, the focus for this year's Assessment of Student Knowledge will focus on Developmental Education: Facilitate students' development of the skills necessary to learn effectively.

### Evaluation Team Members:

Rickey Jackson – Director, Developmental Services

Shannon Newman – Lead Evaluator ASK - Faculty, PDC

Kathy Bentley – Distance Education Coordinator - WMC

Cindy Blodgett – Faculty, LCC

Gail Campbell – Staff, PDC

Janice Cortina – Faculty, SCC

Ruth Creek – Faculty, PDC

Dawn Johnson – Faculty, WRV

Steve Mills – Faculty, PDC

Pat Natsway – Navajo Nation Site Coordinator

Joan Valichnac – Faculty, WMC

### Executive Summary of Results (**not more than 3 pages, please**):

*What did you do, how did you do it, and what did you find? You can copy, paste, and fill in the Goals and Objectives as your outline if that is easiest.*

#### 1) What was your question(s)?

The TLC will address the new High School Equivalency Exam (GED®) and attempt to gather information to determine when students are ready to successfully pass each of the four subjects comprising the exam.

#### 2) What was your process?

Staff will gather and analyze student scores from TABE, GED® Ready, PLATO GED® Practice, and actual GED® exams. These scores will be gathered Fall 2014- through Feb. 2015; the Data Analyst, will maintain the data file of all scores and prepare for analysis by the staff. Staff will also review available national and state GED® data. In February 2015 the department will meet to review and analyze accumulated data to better understand the new GED® exam and how to guide students towards successfully passing. Noted below are the data as they relate to these assessments.



## ACADEMIC ASSESSMENT REPORT

3) Present your data summary...longer documents go to the List of Evidence Items below

	Reading/Language Arts	#	Mathematics	#	Social Studies	#	Science	#
PLATO Practice Test – Avg score	66.43%	7	45.4% (passing GED®)	2	63.28%	5	47.75%	4
			23.5% (non pass GED®)	2				
Actual GED® Test – Avg score	161.86	7	157	2	161	5	156	4
			148.5	2				

The “Official” GED® Practice Test results are also limited. The scoring for the practice test is the same as the actual test; however GED® makes recommendations based on score ranges by subject:

	RLA	Math	Soc. Stud.	Sci.
Likely to Pass	152-200	154-200	155-200	152-200
To Close To Call	144-151	144-153	144-154	144-151
Not Likely to Pass	100 - 144			

## ACADEMIC ASSESSMENT REPORT

Noted below are the scores as they relate to the GED® Practice Test and the actual GED® assessment.

	Reading/La nguage Arts	#	Mathe matics	#	Social Studies	#	Science	#
GED® Practice Test – Avg score	157.5	4	147.5	2	165(passing GED®)	2	161.5	2
					157(non passing GED®)	1		
Actual GED® Test – Avg score	158.25	4	159.5	2	162	2	159.5	2
					145	1		

There are however trends developing with regard to the Test of Adult Basic Education (TABE) levels and passing rates for the GED® assessment.

TABE Placement Level	Grade Level
ABE Pre-Lit	0-1.9
ABE I	2.0-3.9
ABE II	4.0-5.9
ABE III	6.0-8.9
ASE I	9.0-10.9
ASE II	11.0-12.9



ACADEMIC ASSESSMENT REPORT

All Testers	# of Test Sections Taken	# of Test Sections Passed	# of Completers	# of Completers who Passed
82	273	141(52%)	34	19 (56%)*
Testers w/o TABE Score				
54	175	71 (41%)	17	8 (47%)
Testers w/TABE Score				
28	98	70(71%)	17	11(65%)**
Testers w/TABE ASEI & ASEII				
17	58	53(91%)	12	11 (92%)
Testers w/any TABE at ABE				
11	40	17 (43%)	4	0

\*Of those who Passed (19), 142 Section tests taken, 97 (68%) passed.

Note: Those “Testers w/o TABE Score” have not had contact with TLC Program; those w/TABE Score have, at a minimum attended an orientation, Opportunities Through Education (OTE).

\*\*Of those who Passed (11), 45 Section tests taken, 44 (98%) passed.

## ACADEMIC ASSESSMENT REPORT

## 4) What did you find? (observations from the data)

As of February 20, there is insufficient data to determine the current passing levels on the PLATO GED® Practice test as they relate to the actual GED®. PLATO makes no recommendation regarding practice test scores and their correlation to the GED® test; PLATO scores are expressed as percent correct. A score of 150 is passing on each of the four sections of the actual GED® assessment. Some generalized statements can be made that the PLATO Practice Test appears to test a higher level of skills in all four areas, but particularly in the areas of Mathematics and Science, but limited numbers prevent any further discussion at this time.

It appears that the practice test is a more reliable predictor of student success on the actual GED® Test, however limited numbers of individuals who have taken the GED® Practice Test and the actual GED® prevent further discussion of the use of the GED® Practice Test as a predictor of student success on the actual GED® assessment at this juncture.

The TABE assessment has initial trends indicating that students must score at the ASE I or ASE II levels across all three subjects to pass the GED®.

## 5) Implications &amp; Conclusions

Because of the limited numbers of data sets collected at this time, no implications or conclusions will be drawn. It is noteworthy that across the country approximately 65% of the students taking the complete GED® pass, and the passing rate for those students who take the Reading/Language Arts section of the test pass the extended response section at a rate of about 85% (information provided by Arizona Department of Education).

## 6) Recommendations &amp; Next Steps

As The Learning Cornerstone transitions to a new curriculum and a new department name (College and Career Preparation), the department will continue to need additional data to validate the changes and assure the instructional approaches move toward meeting the College and Career Readiness Standards and students are prepared to pass the GED® (High School Equivalency Exam) and or succeed in regular college classes as a result of their work with The Learning Cornerstone.



**ACADEMIC ASSESSMENT REPORT**

7) Detail the improvements to student learning that will occur as a result of (6)

New curriculum implementation will be implemented in Fall 2015. Data collected through Summer 2015 will serve as baseline information to evaluate GED® preparation as well as meeting student needs and outcomes.

List of Evidence Items Appended (linked to Goals and Outcomes):

*Label these alphabetically and refer to them as appropriate in your summary above.*

Recommendations for Action with Approximate Timelines:

*What will you continue, discontinue, or change as a result of your planning and reporting efforts this year?*

The Learning Cornerstone will continue to assimilate data to continuously monitor progress toward meeting student needs for attaining their GED and/or success in regular college classes. At the end of each semester the Data Analyst will collect and summarize data for review by TLC faculty.

Itemized Resource Requests with Budget Amounts (if any):



Northland Pioneer College

ACADEMIC ASSESSMENT REPORT

Lead Evaluator Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Department Chair Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Dean Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## 2015 ASK Report Welding Department

### Introduction

For the Assessment of Student Knowledge project of 2013 – 2015 the NPC welding faculty used a Pretest and Posttest of general welding knowledge for each second year NAVIT student. When the cohort first entered the welding program in the Fall semester of 2013 they were given a 50 question test which included the following subjects:

Oxyfuel welding and Cutting (questions 1-10)

Flux Cored Arc Welding (questions 11-20)

Shielded Metal Arc Welding (questions 21-30)

Gas Tungsten Arc Welding (questions 31-40)

General Welding and Weld inspection (questions 41-50)

Most students had little to no exposure to welding theory or techniques when the pretest was administered on the first week of the Fall 2013.

Early in the spring semester of 2015 (after just over 3 semesters of instruction) the cohort was then administered the same test with the following results:

**The numbers represent the total difference improvement from each shop in specific process categories**

#### **St Johns Welding shop with 14 students taking the pretest 8/5/13 and posttest 2/23/15**

OFC 1-10	FCAW 11-20	SMAW 21-30	GTAW 31-40	INSP 41-50	TOTAL
50	64	59	51	42	266

Average improvement per student: 19.00

In the St Johns shop the most improvement was exhibited in the FCAW process with least improvement in the Inspection process.

#### **Holbrook Welding Shop with 11 students taking the pretest 8/5/13 and posttest 2/15/15**

OFC 1-10	FCAW 11-20	SMAW 21-30	GTAW 31-40	INSP 41-50	TOTAL
39	51	57	49	53	249

Average improvement per student: 22.63

In the Holbrook Shop the most improvement was exhibited in the SMAW process with the least improvement in the OFC process though all were relatively close.

**Show Low Welding Shop with 13 Students taking the pretest 8/5/13 and post test 2/19/15**

OFC 1-10	FCAW 11-20	SMAW 21-30	GTAW 31-40	INSP 41-50	TOTAL
34	24	31	27	26	142

Average improvement per student: 10.92

In the Show Low shop the most improvement was exhibited in the Oxyfuel cutting process with the least improvement in the FCAW process

Overall the test results show improvement in all areas in each shop which was expected, the reason for organizing the test questions by process was to show specific areas which we may need improvement.

This is evident in the Show Low shop FCAW process with overall improvement so low.

In the Show Low shop the area of least improvement was the FCAW process with only 24 questions total improvement of the cohort.

In the Holbrook improvement overall was the highest for students averages

We stated a new type of Assessment last year that is a hand on test in the shop (bend test). We have not had great success tracking this yet and still working the process down

Participants in the data collection and analysis are Curtis Casey, Randy Hoskins, Wesley King and Frank Pinnell.