Department of Computer Information Systems & Technology

Detailed Assessment Report
2013-2014

Mission / Purpose
The mission of the Department of Computer Information Systems and Technology is two-fold. First, the mission of Computer Information Systems is to prepare students for entry-level programming, networking, and information processing positions in business, industry and government. Graduates of the Computer Information Systems program also meet minimum academic requirements for admission to graduate studies programs in computer information systems. Second, the mission of Technology is to prepare students for employment in applied engineering, management, and industrial maintenance needed by business, industry, and government.

I. Goals and Student Learning Outcomes/Objectives, with Any Related Measures, Targets, Findings, and Action Plans

A. Goal: Address the major educational issues of the region
Address the major educational, social, cultural, and economic issues of the region and in doing so promote a positive image of the institution and the area

1. Outcome: Graduates will demonstrate understanding of fundamental business principles and functions
Graduates will demonstrate understanding of the fundamental business principles and functions and the relationship of business organizations to individuals, government, and society.

a. Measure: Graduating students will take the MFT
Students graduating in CIS will take the MFT to demonstrate their understanding of fundamental business principles and functions.

1. Achievement Target:
75% of CIS graduates will score 138 or higher on the MFT exam

2. Findings (2013-2014) - Target: Partially Met
Fifty-seven graduating seniors took the MFT during the Fall and Spring semesters. Forty-one graduating seniors scored greater than 138 which states that 72% of a graduating seniors scored 138 or higher on the MFT.

3. Action Plan:
Continue to stress importance of MFT Scores
Professors will continue to stress to students the importance of performing 138 or higher on the MFT exam.
Established in Cycle: 2013-2014
Implementation Status: In-Progress
Priority: High
Implementation Description: Professors will stress importance of MFT of 138 or higher.

2. Outcome: Graduates will demonstrate knowledge and skill appropriate to their chosen major
Graduates will demonstrate knowledge and skill appropriate to their chosen major

**a. Measure: Grade of C or better in CS 480**
In addition to satisfactory completion of the CAP-SIM project, 80% of CIS students will earn a grade of C or better in the CIS capstone course.

1. **Achievement Target:**
   80% of students will score 70% or better on database project in CS472.

2. **Findings (2013-2014) - Target: Met**
   Overall, 100% of students in CS 480 scored 70% or better on project.

3. **Outcome: Students will demonstrate the ability to express ideas through oral and written communication**
Graduates will demonstrate the ability to express ideas clearly, logically, and persuasively in oral and written communications.

**a. Measure: Students will receive rating of 3 or higher on papers and presentations**
Students will receive a rating of 3 or higher (0 to 4 scale) on papers and presentations in MG370, Management Information Systems.

1. **Achievement Target:**
   80% of graduates will earn a grade of C or higher on papers and presentations in selected business core and major courses.

2. **Findings (2013-2014) - Target: Met**
   87% of CIS students scored 3 or higher on papers and presentations as shown in the attached assessment summary

3. **Action Plan:**
   **Assessment rubric development**
   COB departments will develop grading rubrics for papers, presentations, cases, and projects to improve assessment process.
   **Established in Cycle:** 2010-2011
   **Implementation Status:** In-Progress
   **Priority:** High
   **Implementation Description:** Each faculty will develop rubrics for papers, presentations, cases, and projects that students complete as part of the course requirement. Reports from each faculty member are required to identify successful completion rates and recommend changes for improvement
   **Responsible Person/Group:** Dr. Green, Dr. Bedford and COB faculty
   **Additional Resources Requested:** None
   **Implementation Notes:** 9/12/2014 Faculty continue to develop rubrics for class projects and cases.

4. **Outcome: Graduates will illustrate an understanding of leadership**
Graduates will illustrate an understanding of leadership styles, traits, and behaviors; demonstrate understanding of individual and group dynamics including team building and collaborative behaviors in the accomplishment of tasks.

**a. Measure: Students will earn a grade of C or better on team projects**
CIS students will earn a grade of C or better on group/team projects in CS472, Database Management.

1. **Achievement Target:**
80% of students will receive a grade of C or better on team based database project.

2. Findings (2013-2014) - Target: Met
87% of CIS students earned a grade of C or better on team-based projects in CS472.

5. Outcome: Graduates will analyze legal and ethical issues
Graduates will analyze legal and ethical issues; synthesize appropriate proposals for practical business solutions to ethical issues.

a. Measure: C or better on written assignments in CS 310
CIS students will receive a grade of C or better on written assignments in CS 310, Ethics in CIS.

1. Achievement Target:
80% of CIS students will receive a grade of C or better on written assignments in CS 310, Ethics in CIS.

2. Findings (2013-2014) - Target: Met
Faculty report that 96% of students met course expectations for ethical behavior through written assignments.

3. Action Plan:
   Current issues
   This was the first time students were required to investigate, discuss, and arrive at a consensus opinion on a current issue in CIS. This activity will continue until additional data can be collected.
   Established in Cycle: 2010-2011
   Implementation Status: Finished
   Priority: High
   Relationships (Measure | Outcome/Objective):
   Measure: C or better on written assignments in CS 310 | Outcome/Objective: Graduates will analyze legal and ethical issues
   Implementation Description: Continue to collect data
   Responsible Person/Group: Richard Day
   Additional Resources Requested: None
   Implementation Notes: 9/12/2014 This Action plan has been completed.

6. Outcome: Graduates will distinguish the components of business situations
Graduates will distinguish the components of business situations; differentiate among alternative business solutions; critique causes and potential outcomes of selected options

a. Measure: Grade of C or better on CAP-SIM project in CS480
CIS students will receive a grade of C or better on the CAP-SIM project in CS 480, Systems Project (capstone).

1. Achievement Target:
80% of students will receive a grade of C or better on the CAP-SIM project in the capstone course (CS480)

2. Findings (2013-2014) - Target: Met
85% of students in CS480 received a grade of C or better on the CAP-SIM project.

7. Outcome: Graduates will analyze complex, unstructured qualitative and quantitative problems
Graduates will analyze complex, unstructured qualitative and quantitative problems, using appropriate tools and technology.

**a. Measure: Score 70% or better on BA371 chapter cases**
Students will score 70% or better (average) on chapter cases in BA371, Advanced Business Statistics. Grade is determined by rubric.

1. **Achievement Target:**
   80% of students will earn a rating of 3 or better on chapter cases in BA371.

2. **Findings (2013-2014) - Target: Met**
   Overall, 84% of students earned a rating of 3 or better on chapter cases in BQ 371.

8. **Outcome: Demonstrate competency in the use of contemporary information technology**
Graduates will demonstrate competency in the use of contemporary information technology in business decision making processes.

**a. Measure: Grade of C or better in CS 480**
In addition to satisfactory completion of the CAP-SIM project, 80% of CIS students will earn a grade of C or better in the CIS capstone course.

1. **Achievement Target:**
   80% of CIS graduates will earn a grade of C or better in the CIS capstone course.

2. **Findings (2013-2014) - Target: Met**
   100% of students in CS 480 earned a grade of C or better.

9. **Outcome: Demonstrate an understanding of differences in global and international business practices**
Graduates will demonstrate an understanding of differences in global and international business practices; compare and contrast approaches to addressing the domestic and international environments in which business organizations operate.

**a. Measure: Grade of C or better on country analyses in BA 450**
Students will earn a grade of C or better on country analyses in BA 450, International Business.

1. **Achievement Target:**
   80% of students will earn a grade of C or better on country analyses in BA 450, International Business

2. **Findings (2013-2014) - Target: Met**
   96% of students earned a grade of C or better on country analyses in BA 450.

II. Goals and Other Outcomes/Objectives, with Any Related Measures, Targets, Findings, and Action Plans

A. **Goal: Address the major educational issues of the region**
Address the major educational, social, cultural, and economic issues of the region and in doing so promote a positive image of the institution and the area

1. **Objective: Provide students with quality programs and services**
The Department of Computer Information Systems and Technology will provide quality programs and services to meet the needs of students enrolled.

a. Measure: Determine need/desire for additional programs and/or services
The Department of Computer Information Systems and Technology will determine the need and/or desire for additional programs/services by students. The need will be determined by conducting focus groups and other research to determine any gaps in program offerings.

1. Achievement Target:
   Establish new programs/services identified by research and focus groups.

2. Findings (2013-2014) - Target: Met
The department of CIS and Technology made several changes in 2013-2014:
Developed and implemented Automotive Certificate program in Fall 2013.
Developed and implemented Welding Certificate program in Spring 2014.
Developed and implemented Bachelor of Science (B.S.) degree in Engineering Technology in Fall 2013 and was approved by ACHE in December 2013. Deleted the B.S. degree in Industrial Technology from the catalog.

3. Action Plan:
   New PLC Programming course
Implement new course in Programmable Logic Controller Programming.
Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High
Implementation Description: Purchase equipment and software for PLC programming
Responsible Person/Group: Dr. Gokaraju, Dr. Bedford
Additional Resources Requested: 1746-A7 I/O Chasis (10), 1746-BAS SLC Basic Module, 1746-C16 I/O Chasis Interconnect Cable - 4ft (20)
Budget Amount Requested: $7,000.00 (one time)
Implementation Notes:
12/8/2013 As part of the DOL grant, ordered and received FESTO flexible manufacturing system, 10 Allen-Bradley PLCs with software, and 12 Siemans PLCs with software. Programming classes commence with TY281, Spring 2014.
1/28/2013 DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for developing new PLC programming courses.

2. Objective: Faculty will participate in a continuous cycle of academic improvement
Faculty will participate in a continuous cycle of academic improvement with the utilization of curriculum mapping for each course in the Business professional Component (BPC) and for each major in the COB degree program.

a. Measure: Faculty will participate in a continuous cycle of academic improvement
The College of Business faculty will participate in a continuous cycle of academic improvement with the utilization of curriculum mapping for each course in the Business Professional Component (BPC) and for each major in the COB degree program.

1. Achievement Target:
   Faculty will submit assessment summaries for each course they teach every semester. The summaries are based on curriculum maps matching the courses with the COB student learning outcomes.

2. Findings (2013-2014) - Target: Met
All faculty submitted assessment reports for all classes taught fall 2013 and spring 2014 based on previous development of curriculum map.

b. Measure: Professional Activities
CIS and Technology faculty will be involved in at least one professional activity each year such as: Active involvement in professional organization (administration, committee, conference chair); Publication of articles in academic and professional journals; Book publication; Active involvement in accreditation organization (ACBSP, ATMAE, ABET).

1. Achievement Target:
Faculty will report involvement in at least one professional activity each year on their Faculty Service Report and/or Faculty Achievement Report.

2. Findings (2013-2014) - Target: Met
100% of CIS/Technology faculty report participation in professional activities, research, publishing, and other activities. See CIS and Technology Faculty Achievement Report.

III. Other Plans for Improvement

A. Assessment rubric development
COB departments will develop grading rubrics for papers, presentations, cases, and projects to improve assessment process.
Established in Cycle: 2010-2011
Implementation Status: In-Progress
Priority: High
Relationships (Measure | Outcome/Objective):
Measure: Students will receive rating of 3 or higher on papers and presentations | Outcome/Objective: Students will demonstrate the ability to express ideas through oral and written communication
Implementation Description: Each faculty will develop rubrics for papers, presentations, cases, and projects that students complete as part of the course requirement. Reports from each faculty member are required to identify successful completion rates and recommend changes for improvement
Responsible Person/Group: Dr. Green, Dr. Bedford and COB faculty
Additional Resources Requested: None
Implementation Notes: 9/12/2014 Faculty continue to develop rubrics for class projects and cases.

B. Current issues
This was the first time students were required to investigate, discuss, and arrive at a consensus opinion on a current issue in CIS. This activity will continue until additional data can be collected.
Established in Cycle: 2010-2011
Implementation Status: Finished
Priority: High
Relationships (Measure | Outcome/Objective):
Measure: C or better on written assignments in CS 310 | Outcome/Objective: Graduates will analyze legal and ethical issues
Implementation Description: Continue to collect data
Responsible Person/Group: Richard Day
Additional Resources Requested: None
Implementation Notes:
9/12/2014  This Action plan has been completed.

C. Chapter Cases
Review chapter case requirements and associated rubrics for improvement. Continue to stress importance of interpretation of statistical evidence and reporting requirements
Established in Cycle:  2012-2013
Implementation Status:  In-Progress
Priority:   High
Implementation Description:  Earlier introduction of case requirements
Responsible Person/Group:  Bedford, Gokaraju, Ahmed, Lawson
Additional Resources Requested:  None
Implementation Notes:  9/12/2014  Continue to stress importance of interpretation of statistical evidence based on classroom cases.

D. Reinforcement of BPC requirements
Continue to stress the importance of taking MFT exam seriously. MFT results greater than desired goal carry bonus points for Strategic Management course. Create mini-courses for topic review.
Established in Cycle:  2012-2013
Implementation Status:  In-Progress
Priority:   High
Implementation Description:  Conduct reviews as part of MG490
Responsible Person/Group:  Dr. Allen, Dr. Gregg, Chairs
Additional Resources Requested:  None
Implementation Notes:  9/12/2014  Faculty continues to stress the importance of taking MFT exam seriously. MFT results greater than desired goal carry bonus points for Strategic Management course. Create mini-courses for topic review.

E. Continue to stress importance of MFT Scores
Professors will continue to stress to students the importance of performing 138 or higher on the MFT exam.
Established in Cycle:  2013-2014
Implementation Status:  In-Progress
Priority:   High
Relationships (Measure | Outcome/Objective):
Measure: Graduating students will take the MFAT | Outcome/Objective: Graduates will demonstrate understanding of fundamental business principles and functions
Implementation Description:  Professors will stress importance of MFT of 138 or higher.

F. Convert old machine shop to PLC lab/classroom.
Convert the old machine shop in Hunt Technology building into 2 classrooms/labs and office/storage space for use as facilities for PLC programming courses.
Established in Cycle:  2013-2014
Implementation Status:  Finished
Priority:   High
Implementation Description:  Physical Plant contract to convert old machine shop.
Budget Amount Requested:  $25,000.00 (one time)
Implementation Notes:  1/28/2013  DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for converting old machine shop to PLC labs. Created one classroom/PLC lab and student resource center.

G. New Microprocessor/Microcontroller Programming course
Implement new Industrial Maintenance course in microprocessor/microcontroller programming to increase depth of knowledge in PLCs.

Established in Cycle: 2013-2014
Implementation Status: In-Progress
Priority: High
Implementation Description: Purchase controllers, power supplies, and programming kits for new PLC lab
Responsible Person/Group: Dr. Gokaraju, Dr. Bedford, Dr. Cobb
Additional Resources Requested: PIC 24F Microcontroller (20), DV003001 PicoStart Plus Programmer (20), AC002014 9v Power Supply (20), DV164037 MPLAB ICD 3/w Explorer 16 Kit
Budget Amount Requested: $11,200.00 (one time)
Implementation Notes:
12/8/2013 TY282 planned for implementation in Fall 2014.
1/28/2013 DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for purchase of equipment and supplies for a new Microprocessor/Microcontroller Programming course

H. New PLC Programming course
Implement new course in Programmable Logic Controller Programming.
Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High
Relationships (Measure | Outcome/Objective):
Measure: Determine need/desire for additional programs and/or services
Outcome/Objective: Provide students with quality programs and services
Implementation Description: Purchase equipment and software for PLC programming
Responsible Person/Group: Dr. Gokaraju, Dr. Bedford
Additional Resources Requested: 1746-A7 I/O Chasis (10), 1746-BAS SLC Basic Module, 1746-C16 I/O Chasis Interconnect Cable - 4ft (20)
Budget Amount Requested: $7,000.00 (one time)
Implementation Notes:
12/8/2013 As part of the DOL grant, ordered and received FESTO flexible manufacturing system, 10 Allen-Bradley PLCs with software, and 12 Siemens PLCs with software. Programming classes commence with TY281 Spring 2014.
1/28/2013 DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for developing new PLC programming courses.

I. Purchase PLC Simulation software
Purchase RS Logix Simulation Software (recurring subscription)
Established in Cycle: 2013-2014
Implementation Status: Finished
Priority: High
Implementation Description: Purchase and install simulation software on lab computers. Requires annual subscription ($6,000).
Responsible Person/Group: Dr. Gokaraju
Budget Amount Requested: $6,000.00 (recurring)
Implementation Notes:
1/28/2013 DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for purchase of PLC simulation software. Software and hardware purchased and received.

J. Upgrade electronics lab computers
Upgrade existing computers in electronics lab to accommodate new PLC simulation software.

**Established in Cycle:** 2013-2014  
**Implementation Status:** Finished  
**Priority:** High  
**Implementation Description:** Purchase new computers from Dell  
**Responsible Person/Group:** Dr. Gokaraju, Dr. Bedford  
**Additional Resources Requested:** Min required - 2.5GHz Core 2 Duo Processor, 4GB RAM  
**Budget Amount Requested:** $16,000.00 (one time)  
**Implementation Notes:**  
9/12/2014 The upgrade of computers for the Electronics and PLC lab has been completed.  
1/28/2013 DOL Workforce Development Grant awarded for FY2013-FY2016. Budget for this grant includes funds for upgrading computers in the Electronics/PLC labs

IV. Analysis Questions and Analysis Answers

A. What specific strengths did your assessments show? (Strengths)
Increase in student enrollment and retention due to faculty recruiting, workshops, community services, and grants. Due to publicity and partnerships with industries, students are obtaining more internships and job opportunities. Diversity in faculty cultures, educational disciplines, and professional experiences

B. What specific weaknesses or challenges did your assessments show? (Weaknesses)
Although enrollment for CIST is up, low numbers still mandate course offerings once per year. There is limited space to accompany students in the labs. There is a lack of funds to renovate or build additional facilities to accommodate new equipment. The fluid power equipment is old and out of date. There are limited funds to purchase additional equipment pertinent to the growth of the department (computers, robotics, electrical, PLC’s, Hydraulics/Pneumatics). There is a lack of release time and funds for Academic Research. Student growth is a challenge in an economically depressed region

C. What plans were implemented?
1. Implementation of the following programs: a. Level I Industrial Maintenance Certificate; b. Level II Industrial Maintenance Certificate; c. Programmable Logic Controls (PLC) Certificate; d. CompTIA A+ Certification; e. CompTIA Network+ Certification; f. Automotive Technician Certification; g. Welding Certification; and h. BS Engineering Technology  
2) Facilities renovated: a. Hunt Annex for Automotive Technician Certification; b. New Era Facility in Demopolis, AL for Welding Certification; and c. Hunt facility for mechatronics, PLC, and robotics equipment

D. What plans were not implemented?
Department was not able to pursue ATMAE accreditation. Due to lack of funds, department was not able to develop welding certificate program in Hunt Annex on campus. Because of lack of funds, department could not purchase new hydraulics/pneumatics equipment

E. How will assessment results be used for continuous improvement?
Department will pursue accreditation with ATMAE and ABET. Continue to work with industry partners to increase student internships and job opportunities. Continue recruiting to increase student growth. Continue to acquire grants that will help purchase new equipment which assists in attracting and retaining students.

V. Annual Report Section Responses
A. Key Achievements
This past year the CIST department completed renovation of Hunt Annex building for Automotive Certificate program and hired faculty to teach automotive courses. Also, UWA's CIST department completed renovation of the New Era facility in Demopolis, Alabama for the welding program and hired faculty to teach welding courses. The automotive and welding certificates were approved by ACHE this past year. ACHE also approved UWA's Bachelor of Science degree in Fire Science. The University of West Alabama and the Alabama Fire College confirmed an agreement where fire college graduates may attend UWA in pursuit of the Bachelor's Degree in Technology. Three courses within the CIST curriculum were revised to include certifications. The CS 215 PC Maintenance and support, CS 285 Network Maintenance and Support, and the CS 381 Network Administration I courses were revised to include certification exams provided by the company "Testout." Students complete exams at the end of the semester, and if the students successfully pass the exams, the student will receive "Testout" certifications in those areas. The CIST department also joined the CompTIA organization. CompTIA is another nationally known certification organization that tests students and their abilities. This membership allows students who have completed equivalent courses and training at UWA to take the CompTIA exams at half price. The CIST department continues to fulfill its responsibilities to the 2.2 million dollar DOL grant by training the unemployed in Level I and Level II Industrial Maintenance. To date, 27 people have successfully completed the Level I Industrial Maintenance certificate, and 7 people have successfully completed the Level II Industrial Maintenance certificate. These numbers do not include the fall 2014 students.

B. Faculty Achievements
Faculty Achievement Reports for all CIST faculty can be found in the Document Management section.

C. Public/Community Service
Public/Community Service can be found in Faculty Achievement Reports in the Document Management section.
Planning and Assessment Approval

Department or Division: Computer Information Systems and Technology
Chair or Director: Dr. Donnie Cobb
Dean or Vice President: Dr. Ken Tucker

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<tr>
<th>ANNUAL PLAN Item</th>
<th>Approved</th>
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| **Goals**
Goals are broad statements describing what the unit wants to accomplish. Goals relate to both the unit’s mission and the University’s mission. The goal(s) is stated as the University goal(s) a unit is attempting to meet.
| YES ✓          |         |
| NO             |         |
| **Outcomes/Objectives**
Outcomes and objectives are statements that describe in some detail what the unit plans to accomplish. Outcomes/objectives are associated with all applicable goals, strategic plans, standards, and institutional priorities.
| YES ✓          |         |
| NO             |         |
| **Objectives**
Objectives are active-verb descriptions of specific points or tasks the unit will accomplish or reach. Outcomes are active-verb descriptions of a desired end result related to student learning and the unit’s mission.
| YES ✓          |         |
| NO             |         |
| **Measures**
Measures are statements to judge success in achieving the stated outcome or objective. Measures contain information on the type of evidence and assessment tool that a unit will use to verify if stated outcome/objective has been met.
| YES ✓          |         |
| NO             |         |
| **Achievement Targets**
Achievement targets are the thresholds that the measures must meet for the unit to determine that it has been successful in meeting its specified outcomes/objectives. Achievement targets are measurable statements.
| YES ✓          |         |
| NO             |         |
### SELF-STUDY

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<thead>
<tr>
<th>Item</th>
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<th>Remarks</th>
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<tbody>
<tr>
<td><strong>Findings</strong></td>
<td>YES</td>
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<tr>
<td>Findings are indications whether an outcome/objective was met or not. Findings are put into the system under each achievement target. Findings include an interpretation of results, possible uses of results, reflection on problems encountered, indicated improvements/changes and strengths or weaknesses.</td>
<td>NO</td>
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<td><strong>Action Plans</strong></td>
<td>YES</td>
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<td>Action plans are detailed plans created by the unit to meet an outcome/objective that was only partially met or not met or to make improvement to those outcomes/objectives that were met but still need some strengthening. The plan includes a projected completion date, implementation description, responsible person(s)/group, resources required, and budget amount (if applicable).</td>
<td>NO</td>
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<td>Action plans created in previous cycles have been updated with implementation notes.</td>
<td>YES</td>
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<td><strong>Annual Report</strong></td>
<td>YES</td>
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<td>The Annual Report section contains information on key achievements, faculty and/or staff achievements, and community/public.</td>
<td>NO</td>
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<td><strong>Analysis Report</strong></td>
<td>YES</td>
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<td>The unit has reflected on and created narratives for each of the following areas: specific strengths and progress made on outcomes/objectives, specific weaknesses or challenges, plans that were and were not implemented, and how assessment results will be used for continuous improvement.</td>
<td>NO</td>
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Approved by: ________________________________ Date: 12/12/2014

Received by OIE: ________________________________ Date: 12/12/14