Assessment Report Worksheet #3

Academic Programs

Electronic & Telecommunication Technology Programs	Fall 2007 to Spring 2008
Academic Program	**Assessment Period Covered**
( ) Formative Assessment	October 2008
( ) Summative Assessment	**Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):

Are students practicing safety and occupational health procedures based on industry standards as required in the trade?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:
During a semester, a series of tasks (practical lessons) are identified from various courses to form a safety assessment checklist.
Safety assessment checklist is used by instructor to monitor and rate student safety performance on four major safety categories:

- Use of personal protection equipment
- tool/equipment use safety
- Compliance of workshop/facility safety rules
- Compliance of safety procedures required in assigned specific task

However, it must be noted that prior to assessing student performances, all lessons are structured in which each lessons are first introduced to students, proper practices are demonstrated by instructors, and then each students were given time to practice.

Student performance is rated by instructor using a rubric which indicates three levels of performance rating: **exemplary (E), developing (D), and unacceptable (U).**

- Exemplary refers to student performance that exceptionally meets all requirements based on checklist with no assistance from instructor
- Developing refers to student performance that satisfactorily meets all requirements based on checklist with limited assistance from instructor
- Unacceptable refers to student performance that failed to meet most requirements based on checklist

All data are tabulated at the end of the assessment period as indicated above.

1a. Summary of Assessment Data Collected:
Assessment process formed two groups: Group 1 - 1st year students and Group 2 - 2nd year students

Assessment data for group 1 were collected from the following courses:
- VEE103 Electronic Fundamentals I
- VEE100 Soldering & Termination Techniques
- VEM110 Workshop Fabrication

Assessment data for group 2 were collected from the following courses:
- VEE223 PC Hardware & Software
- VEE224 Video Systems & Product Servicing
- VEE225 Business Machine Servicing

The following table outlines the assessment result for the two groups.

Group 1

Group 2
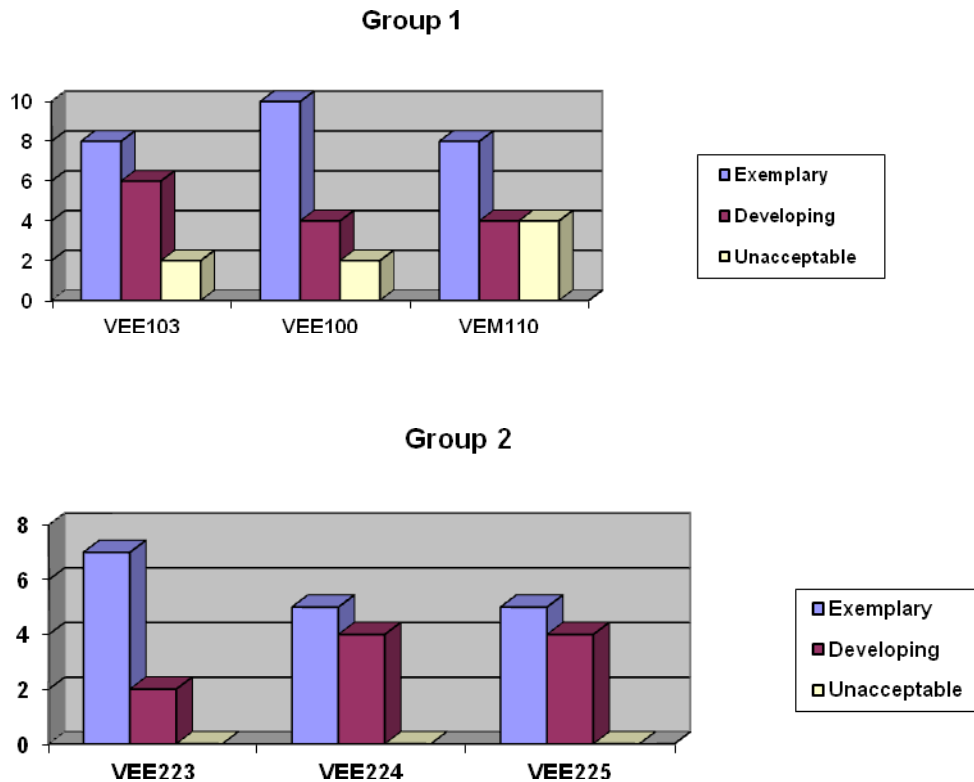
1a: Use of Results to Improve the Program:

Overall, results shows that majority of students are competently practicing safety and occupational heath procedures in the workshop/workplace as required in each course learning outcomes. However, in addition to the current instructional techniques used to assess student performance on safety, the following recommendations will be implemented to assist students to improve performances to the exemplary level:

1. Peer mentoring – students with exemplary performance will be assigned to students with developing and unacceptable performance ratings to guide and mentor them to improve their safety performance.
2. Student critique – instructor will record various student performances and have students to watch videos to assess/critique their performances.

The current methodology and instructional techniques will be maintained and continuously will introduce and adapt to new practice and development as set by the industry.

Assessment Report Worksheet #3

Academic Programs

Electronic Technology	Fall 2007 to Spring 2008
Academic Program	**Assessment Period Covered**
( ) Formative Assessment	October 2008
( ) Summative Assessment	**Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):

Are students competently demonstrating safe and proper use of electronic tools and test equipment based on industry standards as required in the trade?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:
During a semester, a series of tasks (practical lessons) are identified from various courses to be utilized to assess students' level of performance in using various common tools of the trade.
Tool use assessment checklist is used by instructor to monitor and rate students performance levels while using the following tools (hand & power) and equipment:
- Use of hand tools (e.g., drivers, cutters, crimpers, strippers)
- Use of soldering workstation & heat gun
- Use of multi-meters (volt meter, ohm meter, continuity tester, amp meter)
- Use of electronic testing instruments (e.g., oscilloscope, function generator, frequency counter)
- Use of ESD (electrostatic discharge) devices

However, it must be noted that prior to assessing student performances, all lessons are structured in which each lessons are first introduced to students, required and proper practices are demonstrated by instructors, and then each students were given amble time to practice.

Student performance is rated by instructor using a rubric which indicates three levels of performance rating: **exemplary (E), developing (D), and unacceptable (U).**
- Exemplary refers to student performance that exceptionally meets all requirements based on checklist with no assistance from instructor
- Developing refers to student performance that satisfactorily meets all requirements based on checklist with limited assistance from instructor
- Unacceptable refers to student performance that failed to meet most requirements based on checklist

All data are tabulated at the end of the assessment period as indicated above.

1a. Summary of Assessment Data Collected:
Assessment process formed two groups: Group 1 - 1st year students and Group 2 - 2nd year students
Assessment data for group 1 were collected from the following courses:
- VEE103 Electronic Fundamentals I
- VEE104 Electronic Fundamentals II
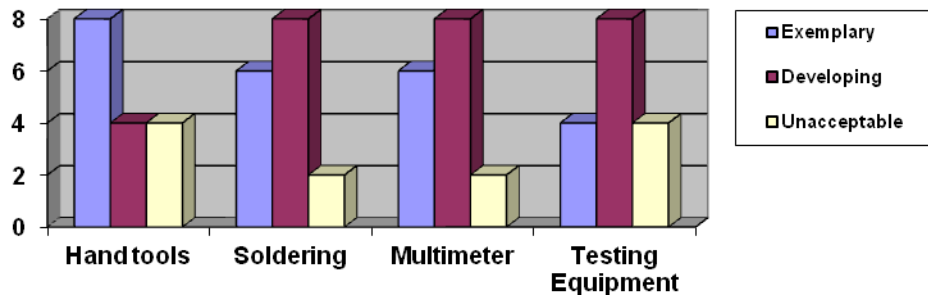- VEE100 Soldering & Termination Techniques

- VEM110 Workshop Fabrication

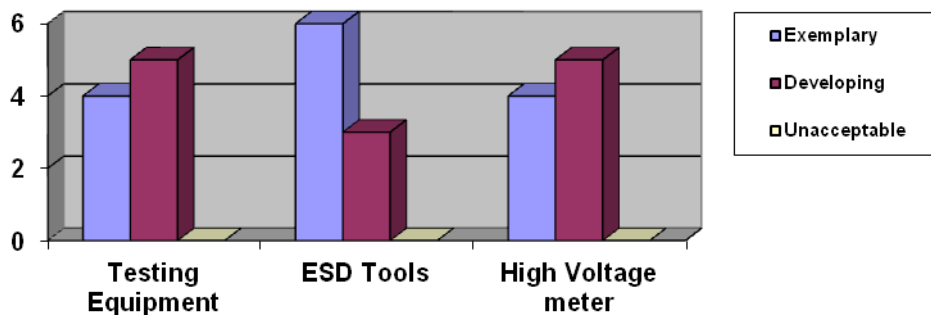Assessment data for group 2 were collected from the following courses:
- VEE223 PC Hardware & Software
- VEE224 Video Systems & Product Servicing
- VEE225 Business Machine Servicing

The following charts outline the assessment result for the two groups.

Group 1

Group 2

1a: Use of Results to Improve the Program:
Overall, results show that majority of students in group 1are still developing their skills in most of the areas. The following recommendation has been suggested by instructors to help improve students performance outcomes:
- Modify courses to increase more time for students to practice and master skills

According to the findings on group 2, the following recommendations will be implemented to assist students to improve performances to the exemplary level:
- Peer mentoring – students with exemplary performance will be assigned to students with developing and unacceptable performance ratings to guide and mentor them to improve their safety performance.
- Student critique – instructor will record various student performances and have students to watch videos to assess/critique their performances.

The current methodology and instructional techniques will be maintained and continuously will introduce and adapt to new practices and development as set by the industry.

Assessment Plan Worksheet # 2

Academic Programs

Electronic Technology	*Fall 2009 to spring 2010*
Academic Program	**Assessment Period Covered**
( ) Formative Assessment	*October 2010*
( ) Summative Assessment	**Date Submitted**

Institutional Mission/Strategic Goal:
Mission: Historically diverse, uniquely Micronesian and globally connected, the College of Micronesia-FSM is a continuously improving and student centered institute of higher education. The college is committed to assisting in the development of the Federated States of Micronesia by providing academic, career and technical educational opportunities for student learning.

Strategic Goal (*which strategic goal(s) most support the services being provided***)**:
 	
    (1) Promote learning and teaching for knowledge, skills creativity, intellect and the abilities to seek and analyze information and to communicate effectively.
    (9) Provide for continuous improvement of programs, services and college environment

Academic Program Mission Statement :
The Electronic Technology Program will provide much needed vocational and technical training to all the Nation's States. Its primary purpose is to provide students with marketable entry-level skills in the electronic industry or any related field/career. The program qualifies students to take external licensure, vendor-based, or skill standards examinations in the field. If standardized external exams are not available in the field of study, the program prepares students at skill levels expected of employees in an occupation found in the workforce. The academic and technical coursework will also prepare students to pursue advanced training in the area at higher institution

Academic Program Goals (*General Statements about knowledge, skills, attitudes, and values expected in graduates***).**
1. *Demonstrate entry level skills that are needed to pursue a career as a technician in the field of electronic or related areas.* 2. *Demonstrate intellectual skills and critical thinking skills to become effective learners and well informed citizen.*

Academic Program Outcomes:
1. *Practice Safety and occupational health procedures in the workplace.* 2. *Use electronic tools and test equipment competently.* 3. *Interpret schematic diagrams and waveforms.* 4. *Build electronic projects to a given specification.* 5. *Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.* 6. *Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.*

Evaluation questions	Data sources	Sampling	Analysis
Are students demonstrating the required skills and knowledge to competently interpret schematic diagrams and waveforms?	Performance & Written exams	All first year students enrolled in VEE104	Percentage based on exam score and performance rubric
Are the students demonstrating the required skills and knowledge to build an electronic project to a given specification?	Performance & Written Exams	All first year students enrolled in VEE100	Percentage based on exam score and performance rubric
Are the students demonstrating the troubleshooting skills to maintain, diagnose, and resolve hardware/software related problems in a personal computer system?	Performance & Written Exam	Second year Electronic students enrolled in VEE223	Percentage based on exam score and performance rubric

Timeline

Activity	Who is Responsible?	Date
VEE100 – Soldering project [telephone kit]	Edgar	Fall 09
VEE223 – Skills-based exams [build, install, and configure a personal computer system]	Edgar	Fall 09
VEE104 – Mid & final exams [embedded questions]	Edgar	Spring 10

Comments:

Assessment Report Worksheet #3

Academic Programs

Electronic Technology

Academic Program

( ) **Formative Assessment**

( ) **Summative Assessment**

Fall 09 to Spring 10

Assessment Period Covered

October 2010

Date Submitted

Academic Evaluation Question (Use a different form for each evaluation question):

Are students demonstrating the required skills and knowledge to competently interpret schematic diagrams and waveforms?

Are the students demonstrating the required skills and knowledge to build an electronic project to a given specification?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:

Students were assessed based on written exams and performance exams. Initially, assessment on students' understanding of interpreting circuit schematics & symbols were delivered using written exams. Later, students performed the skills in circuit construction by assembling a telephone kit following its circuit schematic. Finally, through the study of analyzing alternating current and filter circuits, students were assessed on the skills of interpreting various waveforms.

Student performances are rated by instructor using a rubric: Three levels of performance, Exemplary, Developing, and Unacceptable.

- *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or minimum assistance from instructor to successfully complete assigned tasks.*
- *Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.*
- *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table outlined the results of data as collected:

Course	# of students	Exemplary	Developing	Unacceptable	
VEE100	30	5	21	4	
VEE104	24	5	16	3	

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.

Electronic Technology   Fall 09 to Spring 10
        Academic Program   **Assessment Period Covered**
( ) **Formative Assessment**   October 2010
( ) **Summative Assessment**   **Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):
Are the students demonstrating the troubleshooting skills to maintain, diagnose, and resolve hardware/software related problems in a personal computer system?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:
Students were assessed based on written exam (on-line) and performance exams. Students were assessed based on the following skills:

- *Disassemble and assemble of PC system*
- *System BIOS configuration*
- *OS (XP) installation and system drivers*
- *Hardware & Software maintenance tasks*
- *Configuring and optimizing a computer operating system*
- *Design and implement a basic computer network system (peer to peer)*
- *Perform troubleshooting techniques to diagnose and repair PC hardware and Software*
- *Implement software security measures*

Student performances are rated by instructor using a rubric: Three levels of performance, Exemplary, Developing, and Unacceptable.

- *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or minimum assistance from instructor to successfully complete assigned tasks.*
- *Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.*
- *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:
The following table outlined the results of data as collected:

Course	*# of student*	*Exemplary*	*Developing*	*Unacceptable*
VEE223	*10*	*2*	*6*	*2*

1a: Use of Results to Improve the Program:
Students who were as Developing need more time to practice the skills. Students who were Unacceptable had difficulty in the reading material.

Assessment Plan Worksheet # 2

Academic Programs

Academic Program	**Assessment Period Covered**

(   ) Formative Assessment   *November 2011*

( ) Summative Assessment	**Date Submitted**

Institutional Mission/Strategic Goal:

Mission: Historically diverse, uniquely Micronesian and globally connected, the College of Micronesia-FSM is a continuously improving and student centered institute of higher education. The college is committed to assisting in the development of the Federated States of Micronesia by providing academic, career and technical educational opportunities for student learning.

Strategic Goal (*which strategic goal(s) most support the services being provided*):

(2) *Promote learning and teaching for knowledge, skills creativity, intellect and the abilities to seek and analyze information and to communicate effectively.*

(9) Provide for continuous improvement of programs, services and college environment

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Academic Program Mission Statement :

The Electronic Technology Program will provide much needed vocational and technical training to all the Nation's States. Its primary purpose is to provide students with marketable entry-level skills in the electronic industry or any related field/career. The program qualifies students to take external licensure, vendor-based, or skill standards examinations in the field. If standardized external exams are not available in the field of study, the program prepares students at skill levels expected of employees in an occupation found in the workforce. The academic and technical coursework will also prepare students to pursue advanced training in the area at higher institution.

The Telecommunication technology program prepares students to advance in the career of telecommunication It provides training in wired and wireless technology through theory and hands-on using the latest technology parallel to the technology use in telecommunication industry. Moreover provides manpower workforce for nation building.

Academic Program Goals (*General Statements about knowledge, skills, attitudes, and values expected

in graduates).

3. *Demonstrate skills that are needed to pursue a career as a technician in the field of electronics and telecommunication technology.*
4. *Demonstrate intellectual skills and critical thinking skills and become effective learners and well rounded citizen.*

Academic Program Outcomes:

7. *Practice Safety and occupational health procedures in the workplace.*
8. *Use electronic tools and test equipment competently.*
9. *Interpret schematic diagrams and waveforms.*
10. *Build electronic projects to a given specification.*
11. *Perform troubleshooting techniques to maintain and resolve hardware/software related problems in a personal computer system.*
12. *Perform troubleshooting techniques to maintain, diagnose, and repair electronic equipment and devices.*
13. *Practice career in telecommunication industry.*
14. *Troubleshoot microwave, fiber optic, radio communication and telephone system*

Evaluation questions	Data sources	Sampling	Analysis
Are students practicing safety and occupational health procedure in the workplace properly?	Hands-on workshop activities and written test.	All first year students enrolled in VEE100	Performance test score and written test score.
Are the students competently use electronic tools and equipment?	Hands-on workshop activities and written test.	All second year students enrolled in VEE 135, VEE 235 ,VEE103, VEE222	Performance test score and written test score.
Are the students following the correct procedure in project making according to the specification?	Hands-on workshop activities and written test.	All first year students enrolled in VEE100 (Soldering)	Performance test score and written test score.

Evaluation questions	Data sources	Sampling	Analysis
Are the students were able to perform servicing, troubleshooting and repair on electronics equipment and products?	Hands-on workshop activities and written test.	Second year Electronic students enrolled in VEE 224 and VEE 225	Performance test score and written test score.
Are the student practice career in telecommunication?	Hands-on workshop activities or on-the-job training	Second year Electronic students enrolled in VEE 230 and VEE240	Performance test score and written test score.
Are the student were able to troubleshoot wire and wireless telecommunication system?	Hands-on workshop activities and written test.	Second year Electronic students enrolled in VEE 230 and VEE240	Performance test score and written test score.

Timeline

Activity	Who is Responsible?	Date
VEE100 – Soldering project (telephone kit assembly)	Permitez	Fall 2010
VEE130 –DC circuits experiments	Permitez	Fall 2010
VEE222- Analog circuits experiments	Permitez	Fall 2010
VEE235 – Digital 2 circuits experiments	Permitez	Fall 2010
VEE240-Signal processing circuits experiments	Permitez	Fall 2010
VEE135- Digital 1 circuits experiments	Permitez	Spring 2011
VEE230 – Radio communication experiments and	Permitez	Spring 2011

troubleshooting		
VEE224 – Video servicing and repair (hands-on troubleshooting)	Permitez	Spring 2011
VEE225 – Business machine servicing and repair (hands-on troubleshooting)	Permitez	Spring 2011

Comments:

Assessment Report Worksheet #3

Academic Programs

Electronic Technology

Fall 2009 to Spring 2010

Academic Program	**Assessment Period Covered**

( ) **Formative Assessment**

October 2010

( ) **Summative Assessment**

Date Submitted

Academic Evaluation Question (Use a different form for each evaluation question):

Are students practicing safety and occupational health procedure in the workplace properly?

Are the students following the correct procedure in project making according to the specification?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:

Students were assessed based on written exams(quizzes and exams) and performance test (telephone kit assembly).

The assessment tool use in performance is the rubric rating Exemplary, Developing and Unacceptable. Where;

    ✓ *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or*

       minimum assistance from instructor to successfully complete assigned

       tasks.

    ✓ *Developing – students who passed written exams with a score between 70 and 89.*

	And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.
	✓ *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table summarized the results of data as collected:

Course	# of students	Exemplary	Developing	Unacceptable
VEE100	40	4	36	0

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.

Assessment Report Worksheet #3

Academic Programs

Electronic Technology   *Fall 2009 to Spring 2010*

<div style="text-align:center">

Academic Program   **Assessment Period Covered**

</div>

( ) Formative Assessment   *October 2010*

( ) Summative Assessment   **Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):
Are the students competently use electronic tools and equipment?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:
Students were assessed based on written exams(quizzes and exams) and performance test (digital circuits experiments).
The assessment tool use in performance is the rubric rating Exemplary, Developing and Unacceptable. Where;

   ✓ *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or*

      minimum assistance from instructor to successfully complete assigned

      tasks.

   ✓ *Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.*
   ✓ *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table summarized the results of data as collected:

Course	# of students	Exemplary	Developing	Unacceptable
VEE103	11	2	9	0
VEE135	29	2	27	0
VEE222	12	3	9	0
VEE235	13	0	13	0

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.

Assessment Report Worksheet #3

Academic Programs

Telecommunication	*Fall 2010 to Spring 2011*
Technology	
Academic Program	**Assessment Period Covered**
( ) Formative Assessment	*October 2011*
( ) Summative Assessment	**Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):

Are the students competently use electronic tools and equipment?

Are the student were able to troubleshoot wire and wireless telecommunication system?

Are the student practice career in telecommunication?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:

Students were assessed based on written exams(quizzes and exams) and performance test (radio communication experiments).

The assessment tool use in performance is the rubric rating Exemplary, Developing and Unacceptable. Where;

- ✓ *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or*

    minimum assistance from instructor to successfully complete assigned

    tasks.

- ✓ *Developing – students who passed written exams with a score between 70 and 89.*

	And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.
	✓ *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table summarized the results of data as collected:

Course	# of students	Exemplary	Developing	Unacceptable
VEE230	10	4	6	0
VEE240	12	4	8	0

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.

Assessment Report Worksheet #3

Academic Programs

Electronic Technology   *Fall 2010 to Spring 2011*

| **Academic Program** | **Assessment Period Covered** |

( ) Formative Assessment   *October 2010*

( ) Summative Assessment   **Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):

Are the students competently use electronic tools and equipment?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:

Students were assessed based on written exams(quizzes and exams) and performance test (servicing and repair video products).

The assessment tool use in performance is the rubric rating Exemplary, Developing and Unacceptable. Where;

     ✓ *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or*

         minimum assistance from instructor to successfully complete assigned

         tasks.

     ✓ *Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.*

     ✓ *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table summarized the results of data as collected:

Course	# of students	Exemplary	Developing	Unacceptable
VEE224	13	5	8	0

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.

Assessment Report Worksheet #3

Academic Programs

Electronic Technology	*Fall 2010 to Spring 2011*
Academic Program	**Assessment Period Covered**
( ) Formative Assessment	*October 2010*
( ) Summative Assessment	**Date Submitted**

Academic Evaluation Question (Use a different form for each evaluation question):

Are the students were able to perform servicing, troubleshooting and repair on electronics equipment and products?

First Means of Assessment for Evaluation Question Identified Above (from your approved assessment plan):

1a. Means of Unit Assessment & Criteria for Success:

Students were assessed based on written exams(quizzes and exams) and performance test (servicing and repair of business machine).

The assessment tool use in performance is the rubric rating Exemplary, Developing and Unacceptable. Where;

> ✓ *Exemplary – students who passed written exams with a score of 90 or higher. And students who performed practical tasks with no or*
>
>   *minimum assistance from instructor to successfully complete assigned*
>
>   *tasks.*
>
> ✓ *Developing – students who passed written exams with a score between 70 and 89. And students who performed practical tasks with some assistance from instructor to successfully complete assigned tasks.*
> ✓ *Unacceptable – students who failed [60 or below] written exams and performed poorly in completing tasks or never completed tasks.*

1a. Summary of Assessment Data Collected:

The following table summarized the results of data as collected:

Course	*# of students*	*Exemplary*	*Developing*	*Unacceptable*
VEE225	*11*	*0*	*11*	*0*

1a: Use of Results to Improve the Program:

Students who were rated as Developing need more time to practice. Students who were rated as Unacceptable are students who never put in enough effort to learn the subject.