Advisory Committee Fall 2024 Minutes
HVAC
October 14, 2024 – 9:00am
Vernon College Skills Training Center - Multipurpose Room 400

Members Present	**Vernon College Faculty/Staff**
Robb Havens	Bettye Hutchins
Eddie Johnson	Zachary Nguyen-Moore
Sammy Brooks	Nick Pruitt
Tom Ostovich	Mark Cisneros

Members Not Present
Ryan Ellett
Chris Johns
Darren Kirkpatrick

Welcome and Introductions .....Nicholas Pruitt
Nick Pruitt welcomed committee members and invited all to introduce themselves.

Purpose of Advisory Committee .....Bettye Hutchins
Bettye Hutchins reviewed the purpose and importance of advisory committees and the role they play at Vernon College.

Election of Vice-Chair, and Recorder .....Bettye Hutchins
Bettye Hutchins explained the roles of vice chair and recorder and invited the committee to volunteer or nominate others for these roles.
Volunteer for Vice Chair – Robb Havens
Volunteer for Recorder – Tom Ostovich

Chair……... Robb Havens

Old Business/Continuing Business.....Robb Havens
With no old business to review, Robb Havens moved on to discuss new business.

New Business .....Robb Havens

A. **<u>Review program outcomes, assessment methods/results, and workplace competency</u>**
Robb Havens asked Nick Pruitt to review the program outcomes listed below.

Program outcomes

1. Analyze airflow, refrigerant flow, and electron flow to evaluate the operating efficiency of air conditioning systems; diagnose problems/inefficiencies, make necessary adjustments, and/or perform service repairs as needed.

2. Analyze airflow, refrigerant flow, and electron flow to evaluate the operating efficiency of heat pumps; diagnose problems/inefficiencies; and make necessary adjustments and/or perform service repairs as needed.
3. Analyze airflow, gas flow, and electrical flow to evaluate the operating efficiency of gas-fired heating systems; diagnose problems/inefficiencies, make necessary adjustments, and/or perform service repairs as needed.
4. Evaluate the installation of air conditioning and heating units and associated ductwork as well as understand unit loads for optimum efficiency.
5. Recover charge and vacuum refrigeration systems to proper levels.
6. Understand and apply current laws and procedures associated with section 608 of the Clean Air Act

Program: Heating, Ventilation, and Air Conditioning							
Award: Heating, Ventilation, and Air Conditioning Associate in Applied Science (AAS) Degree							**Credential: Associate in Applied Science (AAS) Degree**
Cip: 15.0501							
LIST OF ALL COURSES REQUIRED AND OUTCOMES							
OUTCOMES						**Course Number**	**Course Title**
1	**2**	**3**	**4**	**5**	**6**		
		X	X	X	X	HART 1401* or ELPT 1411*	Basic Electricity for HVAC or Basic Electrical Theory
X	X	X	X	X	X	HART 1403*	Air Conditioning Control Principles
X	X	X		X	X	HART 1407*	Refrigeration Principles
X	X	X			X	HART 1441*	Residential Air Conditioning
		X	X	X		HART 1445*	Gas and Electric Heating
X	X	X	X	X	X	HART 2436** or HART 2468**	Air Conditioning Troubleshooting or Practicum (or Field Experience) - Heating, Air Conditioning, & Refrigeration Technology/Technician
X	X	X	X		X	HART 2441**	Commercial Air Conditioning
x	x	x	x	x	X	HART 2445**	Residential Air Conditioning Systems Design
x	x	x	x	x	x	HART 2438**	Air Conditioning Installation and Startup
		x				HART 1310	HVAC Shop Practices and Tools
x						HART 1256**	EPA Recovery Certification Preparation
x						BUSI 1301	Business Principles

x						LEAD 1100*	Workforce Development with Critical Thinking
					6. Analyze airflow, refrigerant flow, and electron flow to evaluate the operating efficiency of air conditioning systems; diagnose problems/inefficiencies, make necessary adjustments, and/or perform service repairs as needed.		
				5. Analyze airflow, refrigerant flow, and electron flow to evaluate the operating efficiency of heat pumps; diagnose problems/inefficiencies; and make necessary adjustments and/or perform service repairs as needed.			
			4. Analyze airflow, gas flow, and electrical flow to evaluate the operating efficiency of gas-fired heating systems; diagnose problems/inefficiencies; and make necessary adjustments and/or perform service repairs as needed.				
		3. Evaluate the installation of air conditioning and heating units and associated ductwork as well as understand heat loads for optimum efficiency.					
	2. Recover charge and vacuum refrigeration systems to proper levels						
1. Understand and apply current laws and procedures associated with section 608 of the Clean Air Act							

Courses with an * are part of the certificate level 1
Courses with an ** are part of the advanced certificate level 1
Courses with an (*) you can take either for the certificate but both are required for A.A.S

1. **Approve program outcomes:**

Robb asked if there were any questions or comments. With no additional discussion, he asked for a motion to approve the program outcomes as presented.
Eddie Johnson made a motion to approve.
Sammy Brooks seconded the motion.
The motion passed and the committee approved the program outcomes as presented.
Robb then moved on to assessment methods.

B. Approve assessment methods and results

Robb Havens asked Nick Pruitt to review the assessment methods. There have been no changes, so Nick gives a brief reminder of his assessment methods.

1. **Approve assessment methods and results**

After review, Robb asked if there were any questions or comments. With no additional discussion, Robb asked for a motion to approve the assessment methods as presented.
Sammy Brooks made a motion to approve.
Eddie Johnson seconded the motion.
The motion passed and the committee approved the assessment methods as presented.
Robb then moved on to workplace competency.

C. Workplace competency (course or exam)

Robb Havens asked Nick Pruitt to review the following workplace competency information.

Verification of workplace competencies:

Certificate and A.A.S.
Capstone Experience: HART 2436 Air Conditioning Troubleshooting or HART 2468 Practicum (or Field Experience) – Heating, Air Conditioning, and Refrigeration Technology/Technician

The lab competencies are attached to the program outcomes.

1. Analyze airflow, refrigerant flow, and electron flow to evaluate the operating efficiency of air conditioning systems; diagnose problems/inefficiencies, make necessary adjustments, and/or perform service repairs as needed.
    a. Lab competency to be followed is – comp 1-a, air conditioner system performance worksheet.
2. Analyze airflow, gas flow, and electrical flow to evaluate the operating efficiency of gas-fired heating systems; diagnose problems/inefficiencies, make necessary adjustments, and/or perform service repairs as needed.
    a. Lab competency to be followed is – lab 1-b, gas furnace jobsite information sheet.
3. Evaluate the installation of air conditioning and heating units and associated ductwork as well as understand heat loads for optimum efficiency.
    a. Lab competency to be followed is – lab 1-c, HVAC system QI checklist.
4. Recover charge and vacuum refrigeration systems to proper levels.
    a. Lab competencies to be followed are – comp 55, active method of recovery and comp 60, evacuating and air conditioning system.
5. Understand and apply current laws and procedures associated with section 608 of the Clean Air Act

Program Outcome	Number of students who took a course or licensure exam	Results per student	Use of results
1. See above	11	All Passed	Continue what is being done.
2. See above	11	All Passed	
3. See above	11	All Passed	
4. See above	11	All Passed	
5. See above	11	All Passed	

1. **Approval of workplace competency**

After review, Robb asked if there were any questions or comments. With no additional discussion, Robb asked for a motion to approve the workplace competency as presented.
Tom Ostovich made a motion to approve.
Sammy Brooks seconded the motion.
The motion passed and the committee approved the workplace competency as presented.
With no applicable program specific accreditation, Robb then moved on to review program curriculum/courses/degree plans.

D. Program Specific Accreditation Information and Requirements (if applicable)

N/A

E. Review program curriculum/courses/degree plans

Robb Havens asked Nick Pruitt to review the curriculum, courses, and degree plan. Nick reminds the committee of changes implemented from last year and goes on to discuss the possibility of adding OSA's (Occupational Skills Awards) for either advanced/basic or installation/service as well as the reasoning behind this.

Basic Heat, Ventilation, and Air Conditioning, Level 1 Certificate

CIP 15.0501

Instructional Location - Skills Training Center
CERTIFICATE OF COMPLETION (Probable Completion Time – 9 months or 32 weeks)

Major Requirements (24 SH)

HART 1401 or	Basic Electricity for HVAC	4
ELPT 1411	Basic Electrical Theory (A)	
LEAD 1100	Workforce Development with Critical Thinking	1
HART 1441	Residential Air Conditioning	4
HART 1403	Air Conditioning Control Principles	4
~~TECM 1303~~	~~Technical Calculations~~	~~3~~
HART 1407	Refrigeration Principles	4
HART 1445	Gas and Electric Heating	4
	Total Credit Hours:	24

Workplace Competency: HART 1441

Proposed Basic Heat, Ventilation, and Air Conditioning, Level 1 Certificate

CIP 15.0501

Instructional Location - Skills Training Center
CERTIFICATE OF COMPLETION (Probable Completion Time – 9 months or 32 weeks)

Major Requirements (24 SH)

HART 1401 or	Basic Electricity for HVAC	4
ELPT 1411	Basic Electrical Theory (A)	
LEAD 1100	Workforce Development with Critical Thinking	1
HART 1441	Residential Air Conditioning	4
HART 1403	Air Conditioning Control Principles	4
HART 1310	HVAC Shop Practices and Tools	3
HART 1407	Refrigeration Principles	4
HART 1445	Gas and Electric Heating	4
	Total Credit Hours:	24

Workplace Competency: HART 1441

Advanced Heat, Ventilation, and Air Conditioning, Level 1 Certificate

(No proposed changes)

CIP 15.0501

Instructional Location - Skills Training Center
CERTIFICATE OF COMPLETION (Probable Completion Time – 9 months or 32 weeks)

Major Requirements (18 SH)

HART 2441	Commercial Air Conditioning	4
HART 2436 or	Air Conditioning Troubleshooting	4
HART 2468	Practicum (Field Experience) HVAC and Refrigeration Technology/Technician	
HART 2445	Residential Air Conditioning Systems Design	4
HART 2438	Air Conditioning Installation and Startup	4

HART 1256	EPA Recovery Certification Preparation	2
	Total Credit Hours:	**18**

(A) Course included on the State's Advanced Technical Credit list. (See Advanced Technical Credit.) Workplace Competency: HART 2436

Heat, Ventilation, and Air Conditioning, A.A.S.

CIP 15.0501
Instructional Location - Skills Training Center
ASSOCIATE IN APPLIED SCIENCE DEGREE (Probable Completion Time - 2 years)

General Education Requirements (15 SH)

ENGL 1301	Composition I	3
GOVT 2305	Federal Government (Federal Constitution and Topics)	3
MATH 1314	College Algebra	3
SPCH 1315	Public Speaking	3
Humanities	Language, Philosophy, and Culture or Creative Arts Elective	3

Major Requirements (45 SH)

HART 1401 or	Basic Electricity for HVAC	4
ELPT 1411	Basic Electrical Theory (A)	
LEAD 1100	Workforce Development with Critical Thinking	3
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4
HART 2436 or	Air Conditioning Troubleshooting	4
HART 2468	Practicum (or Field Experience) - Heating, Air Conditioning, and Refrigeration Technology/Technician	
HART 2441	Commercial Air Conditioning	4
HART 2445	Residential Air Conditioning Systems Design	4

HART 2438	Air Conditioning Installation and Startup	4
~~TECM 1303~~	~~Technical Calculations~~	3
HART 1256	EPA Recovery Certification Preparation	2
BUSI 1301	Business Principles	3
	Total Credit Hours:	**60**

> To be selected from the following: ARTS 1301, DRAM 1310, DRAM 2366, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, HIST 2311, HIST 2312, MUSI 1306
Verification of Workplace Competencies: HART 2436 or 2468
***(A)** Course included on the State's Advanced Technical Credit list. (See Advanced Technical Credit.)*

Proposed Heat, Ventilation, and Air Conditioning, A.A.S.

CIP 15.0501
Instructional Location - Skills Training Center
ASSOCIATE IN APPLIED SCIENCE DEGREE (Probable Completion Time - 2 years)

General Education Requirements (15 SH)

ENGL 1301	Composition I	3
GOVT 2305	Federal Government (Federal Constitution and Topics)	3
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Major Requirements (45 SH)

HART 1401 or	Basic Electricity for HVAC	4
ELPT 1411	Basic Electrical Theory (A)	
LEAD 1100	Workforce Development with Critical Thinking	3
HART 1403	Air Conditioning Control Principles	4
HART 1407	Refrigeration Principles	4
HART 1441	Residential Air Conditioning	4
HART 1445	Gas and Electric Heating	4

HART 2436 or	Air Conditioning Troubleshooting	4
HART 2468	Practicum (or Field Experience) - Heating, Air Conditioning, and Refrigeration Technology/Technician	
HART 2441	Commercial Air Conditioning	4
HART 2445	Residential Air Conditioning Systems Design	4
HART 2438	Air Conditioning Installation and Startup	4
HART 1310	HVAC Shop Practices and Tools	3
HART 1256	EPA Recovery Certification Preparation	2
BUSI 1301	Business Principles	3
	Total Credit Hours:	**60**

> To be selected from the following: ARTS 1301, DRAM 1310, DRAM 2366, ENGL 2322, ENGL 2323, ENGL 2327, ENGL 2328, ENGL 2332, ENGL 2333, HIST 2311, HIST 2312, MUSI 1306
Verification of Workplace Competencies: HART 2436 or 2468
***(A)** Course included on the State's Advanced Technical Credit list. (See Advanced Technical Credit.)*

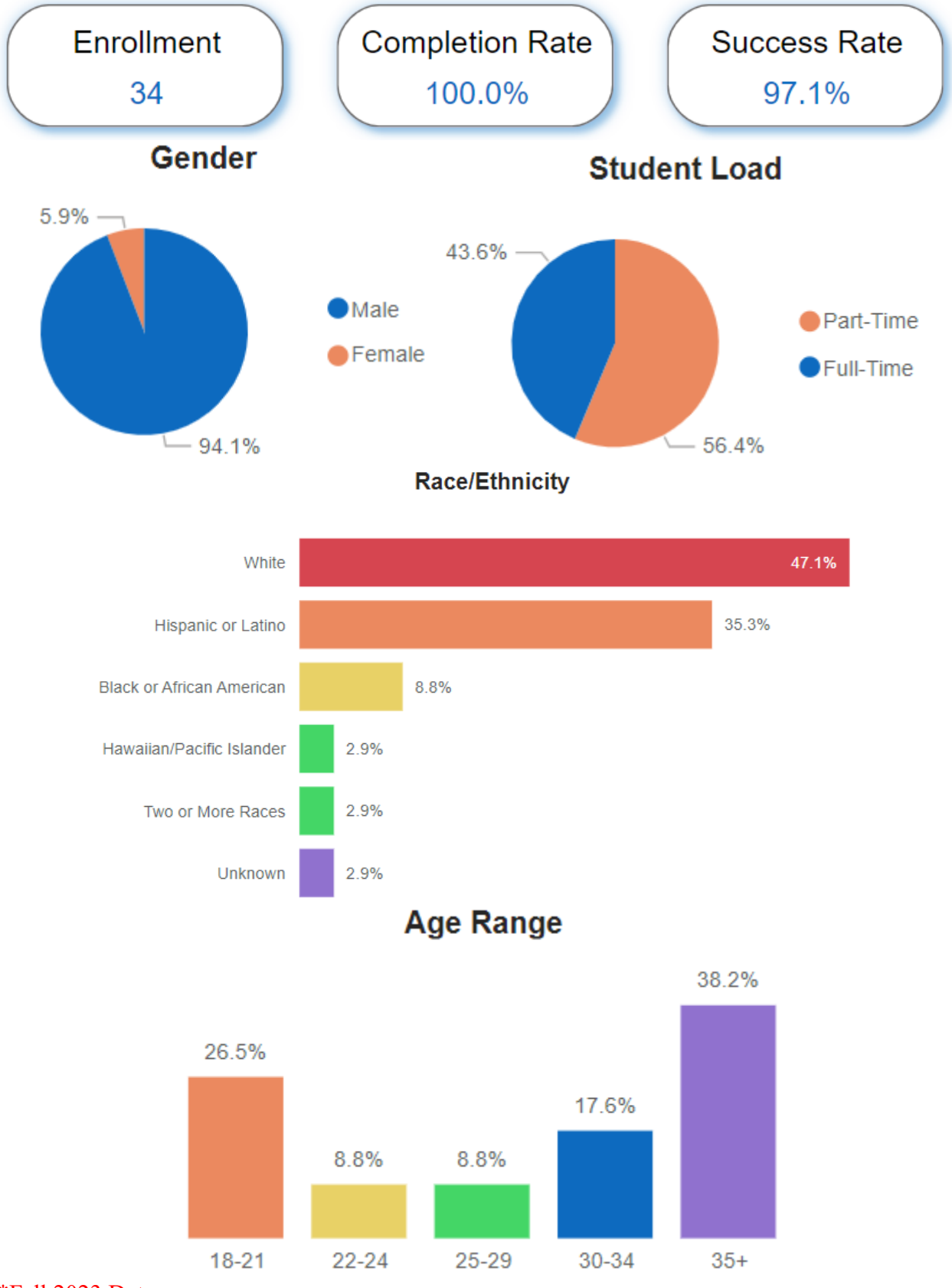
1. **Approve program revisions (if applicable, if no revisions skip)**

After review, Robb asked if there were any questions or comments. With no additional discussion, Robb asked for a motion to approve the curriculum/courses/degree plans as presented.
Sammy Brooks made a motion to approve.
Tom Ostovich seconded the motion.
The motion passed and the committee approved the curriculum/courses/degree plans as presented.
Robb then moved on to statistics.

F. Statistics

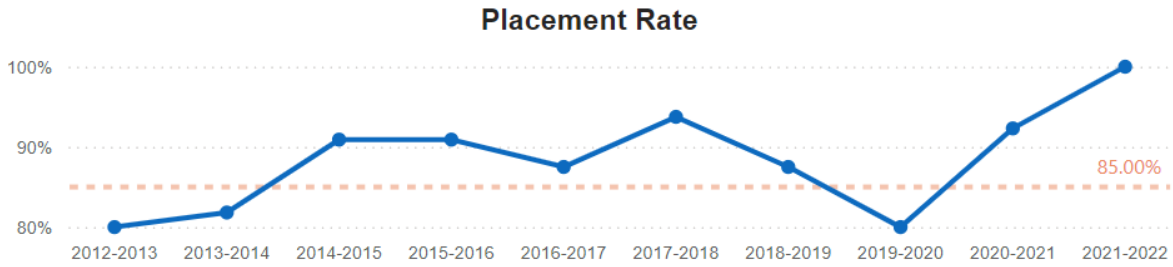
Robb Havens asked Nick Pruitt to review the following statistics:

- Graduates 2023-2024: 16 Graduates
- Enrollment Summer 2023: 0
- Majors Fall 2023-2024: 33 Majors
- Enrollment Fall 2024: 32 Enrollments

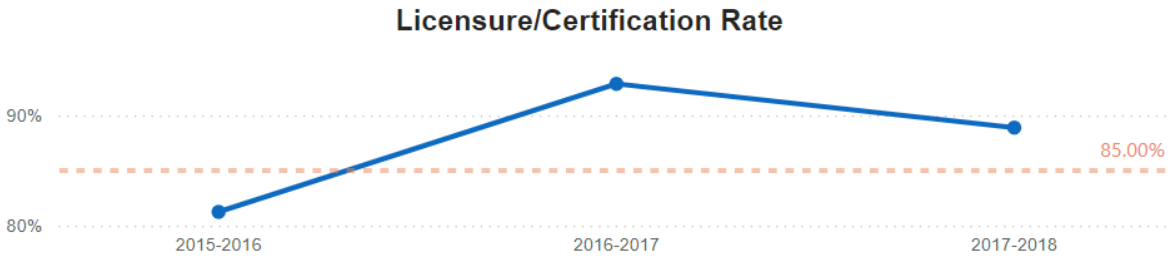


*Fall 2023 Data

Program Completer Placement Rate - % of program completers who are employed or pursuing additional education within one year of graduation.



Licensure/Certification Rate - % of students who successfully passed a licensure/certification examination in a given academic year.



After reviewing statistics, Robb moved on to Local Demand/CLNA Survey.

G. Local Demand/CLNA Survey

Robb Havens asks Bettye Hutchins to review the following labor market outlook information and questions whether the data provided is accurate. Bettye next asks questions from the Comprehensive Local Needs Survey, collecting information used in reporting to the state.

Occupation	National Median Wage	State Median Wage	Local Median Wage	Current /Projected Job openings (annual)	Projected Growth (annual)
HVAC Mechanics & Installers	$27.63/hr $53,049/annual	$24.90/hr $47,808/annual	$27.67/hr $53,139/annual	3,719 (state) 255 (local)	1.9% (state) 2.43% (local)
HVAC Naubtebabce & Repair Workers	$22.66/hr 43,507/annual	$19.93/hr $38,265/annual	$19.05/hr $36,588/annual	14,105 (state) 91(local)	1.80% (state) 2.89% (local)

*Labor Market Outlook (
O*NET)

After the CLNA survey, Robb then moved on to review facilities, equipment, and technology.

H. **Evaluation of facilities, equipment, and technology. Recommendation for the acquisition of new equipment and technology**.

Robb Havens asked Nick Pruitt to review the following information regarding facilities, equipment, and technology.

No new equipment last year

After review, Robb asked if there was any suggested equipment to look into for the program. With no further discussion to be had, Robb moved on to professional development.

I. Professional development of faculty and recommendations

Robb Havens asked Nick Pruitt to review professional development. Nick reviewed his latest professional development opportunities and discussed upcoming possibilities. Nick asked for any suggestions, then with no further discussion, moved on to promotion and publicity.

Instructor will attend ASHRAE Conference in spring of 2025.

J. Promotion and publicity (recruiting) about the program to the community and business and industry

Robb Havens asked Nick Pruitt to review promotion methods. Nick reviewed promotion and publicity/recruiting practices. Bettye Hutchins added information regarding marketing efforts funded by the Office of Instructional Services as well as the duties of the CTE Navigator in visiting area junior highs, high schools, and community events. After review, Robb asked if there were any comments or suggestions. With no further discussion, he then moved on to special populations.

Completed an Externship for Workforce Solutions North Texas
I attended the CEC Career Fair

K. Serving students from special populations:

Robb Havens asked Nick Pruitt to review the definitions of special populations and the services available to those who apply. Bettye Hutchins goes on to expand on the services covered by the college and it's various departments, including emergency aid funding and a new food pantry located in each campus.

Vernon College is an open-enrollment college. The Proactive Assistance for Student Services (PASS) department offers many services for documented disabilities such as but not limited to quiet testing, longer testing times, interpreters, and special equipment.

Vernon College has a program titled "New Beginnings" for students who qualify to receive transportation, childcare, and/or textbook loans. Perkins funding is also offering assistance to break down barriers such as uniform, supply, and equipment costs.

Peer to Peer mentoring, tutoring (online and in-person), resume building, student success series, and counseling are just a few of the other options/services available to students.

1. Special population's new definitions:
    a. Individuals with disabilities;
    b. Individuals from economically disadvantaged families, including low-income youth and adults;
    c. Individuals preparing for nontraditional fields; 32 males / female1
    d. Single parents, including single pregnant women;
    e. Out-of-workforce individuals;
    f. English learners;
    g. Homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a);
    h. Youth who are in, or have aged out of, the foster care system; and
    i. Youth with a parent who—
        i. is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10, United States Code);
        ii. is on active duty (as such term is defined in section 101(d)(1) of such title).

Robb Havens asked if the committee had any further action, discussion or recommendations. It was suggested that Nick consider adding a requirement for students to procure their own tool sets so they may be covered by reimbursement vouchers funded by the Carl D. Perkins CTE Grant or other funding methods.

With no further discussion to be had, Robb adjourned the meeting at 10:21am.

Recorder Signature *Thomas Ostovich*	Date 4/7/2025	Next Meeting: Fall 2025