

# **Health Sciences Pathways**

A Regional Perspective

# Career Technical Education Health Sciences Pathways

**Qualified Teachers NEEDED!** 

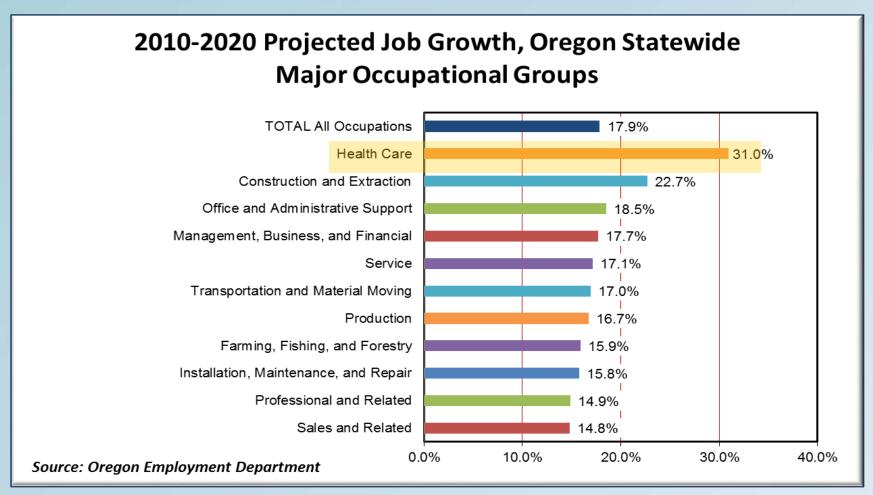
**BUDGET CUTS!** 

TEACHER RETIREMENT!

HIRED BY COMMUNITY COLLEGES



# Lane County Healthcare Workforce Crisis





# Collaborative Structure Steering Committee

- Lane Education Service District
- CTE Endorsed Health Sciences Instructor
- \* ODE Health Sciences Specialist
- \* Lane Community College, Dean, Health Professions
- ❖ Lane Community College, Dean, Cooperative Education
- Lane Community College, Director, High School Connections
- Area Health Education Center of Southwest Oregon (AHECSW), Executive Director



# STRATEGIC PLANNING RETREAT

## **CONVENER** ~ AHECSW

- Needs addressed
- Group dynamic (what made us unique)
- What are we changing?
- Guiding principles



## **MODEL DESIGN**

## FLEXIBLE, SCALABLE & REPLICABLE



Healthcare

# **Mutual Benefits**

#### **STUDENTS**

Dual Credits
Work Ready Skills
Internships

#### **INDUSTRY**

Trained Workforce
Community Awareness

#### **COMMUNITY**

Quality Healthcare Economic Vitality



College Dollars

#### **SCHOOLS**

CTE Programs
Teacher Training



# **CTE Revitalization Grant Award**

## Regional Healthcare Pathways: Innovation in Education (Lane County, OR) Lane Education Service District

Award amount: \$455,208 Anticipated Matching Funds: \$114,800

Fiscal Agent – Lane Education Service District

This award will enable Lane Education Service District to develop and implement an innovative, regional healthcare pathway of study which includes a two-year healthcare career evidence-based curriculum, extended internships, a hospital based Teen Volunteer Program and a variety of healthcare career education opportunities for middle and high school students in nine Lane County school districts: Bethel, Creswell, Crow-Applegate-Lorane, Junction City, Lowell, Oakridge, Pleasant Hill, South Lane and West Lane Technical Learning Center in Elmira. The broad-based 25-member regional collaborative also includes healthcare industry leaders, Lane Community College educators, Area Health Education Center of Southwest Oregon and other community partners. The program will offer multiple delivery options designed to meet the unique needs of each district and will include regional, local, virtual and on-line classes supported by on-site personnel. One focus of the program is the Lane Community College, Health Records Technology, Basic Health Care Career Pathway Certificate of Completion (BHC). Scholarships are included for the BHC and other healthcare certifications and trainings.





Lane Community College

**Teacher to Teacher Training** 

# **Teacher to Teacher Training**

Curriculum Developed By Lane Community College Health Professions

- Summer program-Total of 24 hours
- Pre-requisites for teachers Must have taken and passed anatomy and physiology in college and taught biology or chemistry for at least 1 year in high school
- ➤ Teachers given college course syllabi and all course materials for each of 4 Basic Health Care Certification health science courses
- Emphasis on adapting college courses to high school classroom
- ➤ If passing T to T class, high school teacher could then apply to college Dean for certification in all four health science courses

Outcome: 9 teachers, 36 Health Occupations Classes



## **Basic Health Care Certificate**

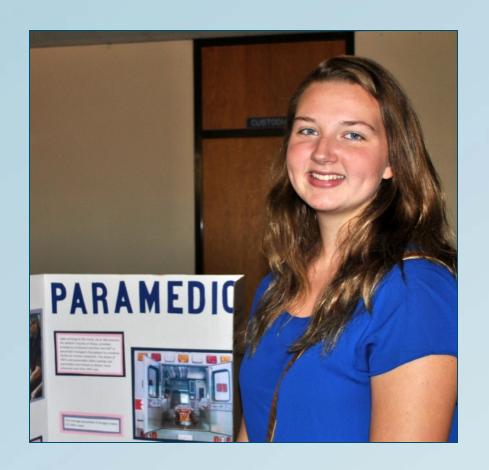
Helps entry level employment in health care and prerequisite to several college programs

### Includes:

- ✓ Writing
- ✓ Math
- ✓ Computer Fundamental Skills (3 Options)
- ✓ Medical Terminology
- ✓ Health Office Procedures
- ✓ Human Body Systems 1
- ✓ Human Body Systems 2

Health Science Classes in Red





Curriculum

# **Student Registration**

Registration Form





Race (select one) ☐ American Indian/ Alaska Native ☐ African American/ Black

□Male □ Female

☐ Native Hawaiian or Other Pacific Islander

☐ Asian

☐ White

#### Lane Healthcare Pathways Registration Application

Dear Parent/Guardian.

Congratulations! Your student has indicated an interest in healthcare careers and therefore has the opportunity to participate in Lane Healthcare Pathways, a Lane Education Service District health careers education program funded by an Oregon Department of Education grant. As a program participant, your student will have access to dual-credit classes, career focused activities, advanced healthcare training (CNA, EMR & More) and scholarships.

Registration is required for your student to have full program access. Please have your student complete and return this Registration Application.

So that we may monitor the success of the program, we will be asking for feedback during the school year. We will utilize a Satisfaction Survey for this purpose. These surveys will be emailed directly to you. Please take the time to complete so that we may monitor the effectiveness of the program make improvements if needed!

Thank you,

Janet Golden, Lane Healthcare Pathways Coordinator Lane Education Service District

#### Student Information: PLEASE PRINT AND USE PEN. DOUBLE CHECK APPLICATION FOR

Name	Date of Birth	
Address		
City	Zip	
Home Phone	Cell Phone	
Email Address		
Best way to contact you: Home Phone	eCell PhoneUS MailEmail	

	Father/
	Cell Pho
Anticipated Year of Graduation:Cumulative GPA	
es Pathways Courses: If completed, enter final grade. If currently enrolled, check.	
ysiology Medical Terminology Health Occupations	
r Interest(s):	
n/would like to work with medically underserved populations (people who face economic, curriers to healthcare) Yes No	iltural,
n/would like to work in rural areas (not big cities) Yes No	
to apply this activity to a certification for example Community Health Worker, Certified Nurtal Assistant, CPR, 1st Responder, or other? Yes No	se
rently enrolled in a health professions program such as those listed above? Yes No	
n/would like to enter a healthcare career in primary care (for example as a family medicine d oner, physician assistant, or community health worker, etc.). Yes No	octor,
er yes to any of the following questions? YesNo	
re you or will you be the first generation in your family to attend college?	
ave you received in the past or currently receive a Scholarship or Loan for Disadvantaged St	udents?
Vhile growing up, have you or your family ever used federal or state assistance programs (suree or reduced lunch, subsidized housing, food stamps, Medicaid etc.)?	ch as
While growing up, have you lived where there were few medical providers at a convenient dis	stance?
bers in Household: Annual Family Income (optional):	

Mother	r / Guardian 1: Name	Work Phone
Cell Ph	oneEmail Address	
Best wa	ay to contact Mother: Home PhoneCell Phone	US MailEmail
	r/ Guardian 1: Highest Level Education Completed:	
Father	/ Guardian 2: Name	Work Phone
Cell Ph	one Email Address	
	y to contact Father: Home PhoneCell Phone	US MailEmail
	Guardian 2: Highest Level Education Completed:	
	ist 2 other people that do not live with you that will kn	•
tural,	t 1- Name: Relat	ionship:
,	Email Address	
2	t 1- Name: Relat	ionship:
	Email Address	
octor,	rticipant in the Lane Healthcare Pathways program tion into the program data base to allow us to stay in oused for us to track your participation in our healthca in providing you information when you apply for schounity that will benefit you in your pursuit of your desire ur data base at any time.	contact with you in the future. This information can re programs and will serve as a beneficial tool to plarships, schools, or when we are made aware of an
dents?	y permission for	toparticipate in the Lane Healthcare Pathways Scholarships, Internships, and additional program
h as	Guardian Signature (if under 18):	Date:
tance?	t Signature:	Date:

Parent and/or Guardian Information (PLEASE PRINT)



# **Program Forms**



Name (please print)

Address (if different from above)



### Image Release Form

#### 2014-2015 Image Release Form

I give Lane Education Service District (LESD) and its assignees the right to use all audio, photographic or other visual images of me captured in the Lane Heathcare Pathways Program, or during any event or function associated with LESD, without any restriction, for any educational, advertising, trade, promotional, exhibition, or other lawful purpose related to the business of the LESD. I waive any right to inspect or approve the image, or final materials that incorporate the image.

I release LESD and its assignees from any liability for any distortion or alteration that may occur in capturing or processing the image, unless it can be shown that the images or publications thereof were maliciously produced.

I agree that Lane Education Service District owns the copyright for these images and I waive all claims resulting from the dissemination or use of such images, including, without limitation, any claims of invasion of privacy or defamation.

Address			
City/State/Zip			
Phone	E-mail Address		
As the individual nar release.	ned above, I am at least	18 years of age and com	petent to sign this
assignees. I have rea		on me, my legal represen ully familiar with its conter oned information.	
year's of age. As his that this release shal	or her legal guardian, I a I be binding on the perso	image has been request m signing this form with t on named above, as well read this release and am	he understanding as his/her legal
Signature		Date	
Name (please print)			



## Oregon Department of Education Health Sciences Skill Sets

**Health Sciences** ~ Cluster careers focus on careers that promote health, wellness, and diagnosis as well as treat injuries and diseases.

- Health Administration and Support Services
- Health Diagnostic Services
- Health Informatics
- Health Promotion and Wellness
- Health Research and Biosciences
- Health Therapeutic Services



# **Health Therapeutic Services**

**Health Therapeutic Services** careers are focused primarily on changing the health status of the patient over time. Health professionals in this focus area work directly with patients: they may provide care, treatment, counseling and health education information.

**Sample careers:** Registered Nurse, Respiratory Therapist, Physical Therapist, Dental Hygienist, Paramedic, Pharmacy Technician, Dental Assistants, Licensed Practical Nurses, Certified Nursing Assistants, Medical Assistants, Emergency Medical Technician\*

\* All of the above are offered by Lane Community College



## Regional Instructors

Lane Healthcare Pathways Regional Instructors

❖3 Part Time Instructors ~ 1.2 FTE Total

Lane Community College Articulation

CTE Endorsement

❖5 Health Professions Courses & GWE180



# **Course Descriptions**

## **❖** HO 100 Medical Terminology ~ 3 credits

Basic medical terminology, derivation, pronunciation, and meaning.

## **❖** HO 110 Administrative Medical Office Procedures ~ 3 credits

Principles of records medical facility management, confidentiality & privacy. Fundamentals of client reception, appointment scheduling, telephone techniques, and letter composition.

## ❖ HO 150 Human Body Systems 1 ~ 3 credits

Fundamental concepts of the anatomy and physiology of the cell and skin, musculoskeletal, nervous, sensory, endocrine and circulatory-lymphatic systems.



## **Course Descriptions**

## ❖ HO 152 Human Body Systems 2 ~ 3 credits

Designed to help the student identify selected fundamental concepts of the anatomy and physiology of the respiratory, digestive, urinary, and reproductive systems. A basic introduction to microbiology is included.

## \* HO 120 Introduction to Health Occupations ~ 2 credits

This course explores the health care system and a variety of health careers.

## ❖ GWE 180 General Work Experience ~ 36 Hours, 1 credit

Provides on-the-job learning experiences with healthcare providers and organizations. Students earn college credit that may be applied toward a certificate or degree.



## **Best Practices**

## Lane Community College Cooperative Education Internship Agreement

COOPERATIVE EDUCATION Buses, (68 97485-656)  Community College - (68 97485-656)  Fax: (541) 463-4168  TERM: F   W   Sp   Sr   Today's Date  CRN  Student Name  Student Name of Company or Agency  Supervisor at Work Site  Agency Brasil  Address  City  Supervisor at Work Site  Agency Brasil  Description of learning experience (work assignments & duties)  Weekly schedule: Su Wage per Unpaid   Ce-op Coordinator:  Workers compressation insurance paid by:  Special notes:	Community College = C  Standont Name  Standont Malling Address but the Commission to confiner	TERM: F   W   Sp   Sn   Today's Des   CRN    Student L # Major Student Email   Student Email   Student Email   Student Email   Student Email   House per week) upon successful completion of the work experience with the conference with the conferen
Workers compensation insurance paid by:	ng Address City State Zip Student Email	Work Site No Coverage Work Study College
I agree to participate in the Cooperative Education experience as shown above to receive Co-op credit. I will keep the Co Coordinator informed of any change in my work status. I understand that most LCC two-year programs allow a maximum 18 Co-op credits toward graduation. Individual department requirements may vary.  In compliance with the Federal Pamily Education Rights and Privacy Act of 1974, I authorize release of school records other records maintained by the Cooperative Education office and Human Resources in connection with the Coopera Education program. It is understood that such information will be discussed only with College faculty and/or a potential wexperience supervisor who will agree not to release the information to any third party.  "If an injury occurs while on the job. students covered by the College must complete a College SAIF form and return." the Cooperative Education Division within five (5) days.  Unemployment  Under certain circumstances, a student who has been placed in a Co-op position that has a beginning and ending work per may be denied unemployment benefits. Unpaid students are not eligible for unemployment benefits.  Work Site Supervisor  I will supervise the student as described in accordance with company rules and regulations. This is not an employ agreement. The work site reserves the right to take immediate corrective action should an issue arise with a student and a green than the confinance of any such measures. It is also recognized that the work site has full authority in regards to taking measures to resolve the problem to our satisfaction. It is my responsibility to comply with all applicable state and fed employment, health, and safety regulations. I agree to maintain a safe work environment, free from discrimination harrassment on the grounds of age, handicap, disability, national origin, marital status, parental status, religion, or sex. I as that I will not release school records and work experience information to any third party without the express written consent	Clay   State   Zip   Phone   Fax	COMMENTS  Commen
student. Co-op students have general liability coverage under the College's insurance policy. If the student is participating non-paid work experience, the College may provide workers compensation insurance coverage for work-related injury of Students will be accepted into this program without regard to age, handicap, disability, national origin, race, marital staparental status, religion or sex. The College is an equal opportunity/affirmative action institution.	n a	Coordinator Signature Date  Print Name
Work Site Supervisor Signature Cooperative Education Coordinator Signature Student Signature	provement:	Cooperative Education Coordinator Signature Student Signature
Print Name Date Print Name Date Print Name Date		Date Print Name Date Print Name Date
Lane	itional comments (may use back or additional pages):  this student learned and demonstrated appropriate skills to be competitive for future employment in this field?   Yes  No	

**Pathways** 

# Lane Healthcare Pathways Other Certifications

**Certified Nursing Assistant** 

**Phlebotomy** 

**Pharmacy Technician** 

**Emergency Medical Responder** 



## **Best Practices**

## **Scholarship Application**

Supporting excellence in education	Healthcare Pathways		
Lane Healthcare Pathway	s Scholarship Application		
Name of Scholarship:			
Please complete all sections of the application. The	deadline for submission is (DATE).		
Section 1 – Personal Information			
Applicant Name:	Date of Birth:		
Student ID Number:	Community College Number:		
Home address:	Name/s Parent/Guardian:		
Cell Phone:	Home Phone:		
Email address:			
SECTION 2 – ACADEMIC INFORMATION			
Name of High School:			
Current GPA: Cumulative	e GPA: Graduation Year:		
Health Services Pathways Courses: If completed, enter final grade. If currently enrolled, please check.			
Anatomy & Physiology Medical Term	ninology Health Occupations		
Did you receive college credit for any of the above of	lasses?		

SECTION 3 –ACTIVITIES AND IN	NTERESTS		
A. List and briefly describe your high school extracurricular activities (e.g. memberships in organization sports, etc.):			
Organization Involved	Position Held	Date of Involvement	
B. List and briefly describe	volunteer activities in which yo	u have been involved:	
B. List and briefly describe Organization	volunteer activities in which you Activity	u have been involved:  Dates of Involvement	
Organization			

## **Best Practices**

Award/Honor	Institution/Organization	Date

#### Section 4 - HEALTHCARE CAREER INTERESTS

- 1. I intend/plan/would like to work with medically underserved populations (people who face economic, cultural, or linguistic barriers to healthcare) Yes \_\_\_\_ No\_\_\_
- 2. I intend/plan/would like to work in rural areas (not big cities) Yes \_\_\_\_ No\_\_\_
- Do you plan to apply this activity to a certification for example Community Health Worker, Certified
   Nurse Assistant, Dental Assistant, CPR, 1st Responder, or other: Yes No Specify
- 4. Are you currently enrolled in a health professions program such as those listed above? Yes\_\_\_\_ No\_\_\_\_
- 5. I intend/plan/would like to enter a healthcare career in primary care for example as a family medicine doctor, nurse practitioner, physician assistant, or community health worker, etc.). Yes\_\_\_\_\_No\_\_\_

#### SECTION 5 - SHORT ESSAYS

Maximum word count: 250 words; please attach.

- A. Please describe any relevant experiences that you have had that relate to your interest in healthcare Examples: classes (example: anatomy, medical biology, etc.), job shadows, career days, camps,
- B. How will this scholarship impact your healthcare career goals?
- C. Is there any other information that we should know about you? This is your opportunity to include information that is not contained in other areas of the application. Please be specific.

### **Scholarship Application**

#### Submitting your application

Please submit all of the following to be considered for the scholarship:

- 1. Completed application form
- 2. Letters of recommendation from your high school faculty or counselor (2 required)
- 3. Essavs

#### This application is due on (DATE).

#### Return applications to:

Lane Education Service District Lane Healthcare Pathways Amy Davis, Program Assistant 1200 Highway 99 North Eugene, Oregon

Email: adavis@lesd.k12.or.us

Phone: 541-461-8221

#### Please direct any questions to:

Janet Golden, Lane Healthcare Pathways Coordinator

Email: jgolden@lesd.k12.or.us

Phone: 541-461-8224

# **Emergency Medical Responder**

Lane Healthcare Pathways ~ Partners with Rural Fire Districts

Outcome: 17 student certifications



## **Best Practices**





#### Lane Healthcare Pathways Emergency Medical Responder Scholarship

**Acceptance Commitment Agreement** 

#### Student Statement of Commitment

By accepting this scholarship, I commit to:

- · Attending all classes as designated by Pleasant Hill Fire & Rescue (PHFR)
- · Fulfilling all requirements as outlined in each class syllabus
- · Being responsible for transportation to and from PHFR
- · Taking, completing, and passing the mandatory courses
- · Consulting with PHFR staff regarding any absences
- Sharing information regarding my progress and activities within the Lane Healthcare Pathways Program and my school district

My EMR scholarship will end once I have completed the course.

Student Signature

udent Signature	
inted Name of Student	
ate	
rent/Guardian Statement of Commitment	
y son/daughter has my permission and support to accept this scholarship and atte	en

Signature	
Printed Name Parent/Guardian	
N-1-	





# HOSA Health Occupations Students of America

# HOSA Health Occupations Students of America

- Lane County HOSA
- New Chapters
- 110+ Members
- 50+ Students attending State Leadership Conference
- \* 1 District attending/competing in National Conference



# **HOSA Skills Practice Day @ LCC**











# Lane County HOSA Winners!

EVENT	CHAPTER	OVERALL RANK
Biomedical Laboratory Science	Creswell High School	2
Creative Problem Solving	Willamette High School	1
Creative Problem Solving	Willamette High School	1
Creative Problem Solving	Willamette High School	1
Creative Problem Solving	Willamette High School	2
Creative Problem Solving	Willamette High School	2
Creative Problem Solving	Willamette High School	2
Creative Problem Solving	Creswell High School	3
Creative Problem Solving	Creswell High School	3
Creative Problem Solving	Creswell High School	3
Dental Science	Cottage Grove High School	4
Dental Science	Cottage Grove High School	5
Extemporaneous Health Poster	Willamette High School	5
Forensic Medicine	Springfield High School	3
Forensic Medicine	Springfield High School	3
HOSA Bowl	Willamette	3
KT Human Growth & Development	Cottage Grove High School	2
KT Nutrition	Crow High School	2
KT Pathophysiology	Cottage Grove High School	1
KT Pathophysiology	Cottage Grove High School	4
Medical Terminology	Crow High School	4
Sports Medicine	Willamette High School	1
Sports Medicine	Springfield High School	3
Sports Medicine	Springfield High School	4
Sports Medicine	Springfield High School	5





**Out-of-School Programs** 

# Health Careers Day @ RiverBend





# Middle School Health Careers Day







## **AHEC Programs**

Area Health Education Center of Southwest Oregon Partners with Lane Healthcare Pathways

**\*OHSU Experience** 

Diagnosis Day

High School Internship Program (HSIP)

Bright Works Oregon

\*MedQuest



# Who is involved in the regional approach?

### **Steering Committee**

- ➤ Lane Education Service District
- Oregon Department of Education, Health Sciences Specialist
- Lane Community College, Dean, Health Professions
- Lane Community College, Dean, Cooperative Education
- ➤ Lane Community College, Director, High School Connections
- ➤ Area Health Education Center of Southwest Oregon, Executive Director
- > CTE Endorsed Health Sciences Instructors

**Education Advisory Board** ~ Educators, Industry, Community, Students

**Lane County School Districts** ~ 9 initially, 11 Currently, More Interest

**Industry Partners** ~ 150+ Healthcare Providers



# How is the regional program managed?

#### LANE COUNTY REGIONAL TEAMS

- Steering Committee
- Education Advisory Committee
- LESD & District Superintendents

#### LANE HEALTHCARE PATHWAYS TEAM

- Regional Coordinator ~ .8 FTE
- 3 PT Regional Instructors: ~ 1.2 FTE
   Cooperative Education Advisor ~ .4 FTE
- Program Assistant ~ .3 FTE
- Student Registration & Regional Tracking Program

#### SCHOOL DISTRICTS

- ➤ Healthcare Education Coordinators ~ .2 -.4 FTE Each School
- Regional Team Site Visits
- Continuous Communication



# What "binds" the separate schools together? **□**Education Advisory Board ☐ Healthcare Education Coordinators ☐ Health Occupations Students of America ☐ 7 New Lane County Chapters ☐ Over 110 New Members **□**Regional Events ☐ Health Careers Days: Middle & High School ☐ Regional EMR Training – 18 Participants/6 districts ☐ HOSA Skills Practice Day ☐ Oregon HOSA State Leadership Conference ☐ OHSU Experience ☐ Diagnosis Day ■ MedQuest



Successes, Challenges, and The Future

### **Evaluation Plan**

# Oregon Healthcare Workforce Institute (OHWI)

OHWI's focus includes accurate supply and demand data, educational program and clinical expansion, development of public policy and connection of interested parties for problem solving, funding and information sharing.



## **Tracking Program Participation**

Students must register to participate in any Lane Healthcare Pathways program or to be eligible to receive a scholarship:

- Registration Application
- Image Release Form

Information from the Registration Application is entered into a data base used to track a students' participation in all LHP healthcare programs. Data is utilized for ~

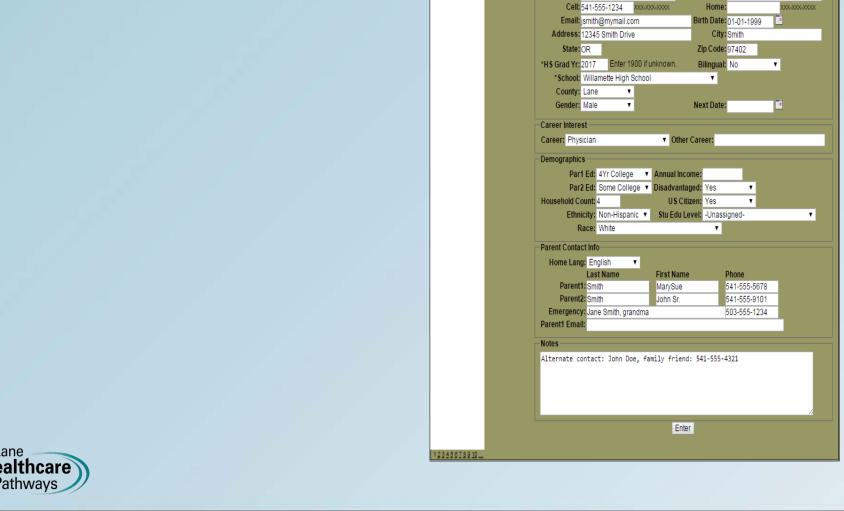
- Student Scholarships & College Applications
- Evaluation of Program
- Sustainability

Demographics: 254 Registered Program Participants

- 61% Self Identified as Underserved
- 25.6% Self Identified as Hispanic



#### **AHEC Tracker**



Student Name

**AHEC Tracker** 

Area Health Education Centers of Oregon

Enter Reset Size 45 Show Deleted

AHEC Region: Southwest Oregon ▼

Student Info-\*Last: Smith

| What's New | Search | Student | Register | My Events | My Info | Logout | Reguest | Admin |

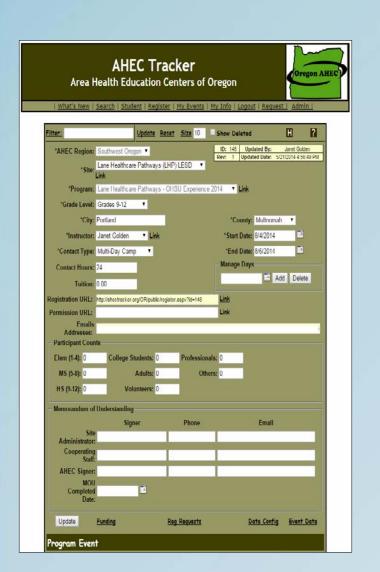
Oregon AHEC

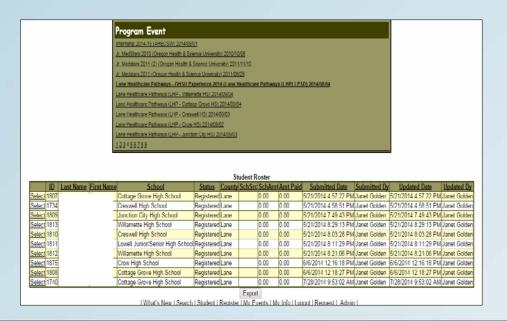
Updated Date:

\*First: John



### **AHEC Tracker**





- Efficient Student Tracking
- **Online Applications**
- Profiles that Students can independently update Volgistics:
  - Customizable to ensure that you can get the information that your organization needs.



Skills (check all that apply)						
Associates/Bachelors/Graduate Degree Customer Service Skills High School Diploma/GED Organizational Skills Research/Writing Skills		<ul> <li>✓ Computer Skills</li> <li>☐ Healthcare Certification</li> <li>✓ Leadership Skills</li> <li>✓ People Skills</li> <li>✓ Teamwork Skills</li> </ul>		♥ Creative/Artistic Skills     │ Healthcare Degree     │ Medical Terminology     │ Public Speaking Skills		
Potential rural healthcare wo	rker?					
I am unsure about where I will work	☐ I current	☐ I currently work in a rural area		<ul> <li>I intend/plan to work in a rural area.</li> </ul>		
N/A I am a professional	No, I pla city	n to work in a mid-size				
What I hope to gain?						
	☐ Health-	Health-related service hours				
Knowledge of more healthcare careers	Leader	ship skills	More contacts in the healthcare field			
□ N/A I am a professional	Opport others	unities to mentor	Ø Organizational skills			
People skills	□ Project	Project management skills		Public speaking skills		
Certification						
N/A I am a professional		□ No		<b>⊘</b> Yes		
Family Annual Income						
35,000 and under 75,000+	₹ 36,0	₹ 36,000-50,000		<u>51,000-75,000</u>		
Family size						
	3	<u>      4                              </u>				
<b>□</b> 5 €	6	□ 7÷				
First in family						
I was the first in my family to attend		the first to attend colleg	ge 🗍 Iwo	n't be the fi	rst to attend college	



## Best Practices ~ Assessment Career & Technical Education of Consortium of Sates

Assessment: Lane Health Pathways Assessment Standard Set: Healthcare Pathways Filters: Assessment Date (Oct 22, 2014 - Nov 7, 2014) All Standards Accumulating results Number tested: 137 Healthcare Pathways 1) Anatomy and Physiology 57.73% 81.75% 1) 1. Correctly describe anatomy and physiology 5) 5. Correctly describe the structure of a cell membrane 41.61% 8) 8. Correctly identify at least 25 bones in the human body. 91.97% 9) 9. Correctly describe the functions of the muscular system and identify at least 25 37.23% 10) 10. Correctly list the divisions of the nervous system and describe the characteristics of each. 59.12% 11) 11. Correctly describe the anatomy and physiology of the eye. 73.72% 40.15% 12) 12. Correctly describe the anatomy and physiology of the ear. 13) 13. Correctly describe the functions of the endocrine system. 64.72% 54.26% 14) 14. Correctly describe the different substances in blood and their functions. 15) 15. Correctly describe the structure and function of the heart. 16.06% 16) 16. Correctly describe the structure and function of veins, arteries and capillaries. 51.82% 18) 18. Correctly describe the structure and function of tonsils, lymph nodes, the 57.66% spleen and thymus. 19) 19. Correctly describe the anatomy and physiology of the respiratory passages. beginning at the nose and ending at the alveoli. 63.26% 20) 20. Correctly list the pulmonary volumes and capacities and define each of them. 24.09% 21) 21. Correctly list the organs that make up the digestive tract. 72.26% 23) 23. Correctly list specific enzymes and hormones produced by accessory organs and stomach. 48.91% 24) 24. Correctly describe the dietary sources of carbohydrates, proteins and fats, 47.45% their uses in the body and the daily recommended amounts in the diet. 25) 25. Correctly list common vitamins and minerals and give a function for each. 64.96% 26) 26. Correctly list the structures that make up the urinary system and describe the overall functions in performs. 68.98%

Assessment: Lane Health Pathways Assessment Standard Set: Healthcare Pathways Filters: Assessment Date (Apr 2, 2015 - Jun 5, 2015) · All Standards Accumulating results Number tested: 110 Healthcare Pathways 1) Anatomy and Physiology 61.87% 1) 1. Correctly describe anatomy and physiology 83.18% 5) 5. Correctly describe the structure of a cell membrane 45% 8) 8. Correctly identify at least 25 bones in the human body. 97.27% 9) 9. Correctly describe the functions of the muscular system and identify at least 25 muscles. 49.09% 10) 10. Correctly list the divisions of the nervous system and describe the characteristics of each. 74.55% 11) 11. Correctly describe the anatomy and physiology of the eye. 82.73% 12) 12. Correctly describe the anatomy and physiology of the ear. 56.36% 62,42% 13) 13. Correctly describe the functions of the endocrine system. 14) 14. Correctly describe the different substances in blood and their functions. 61.21% 15) 15. Correctly describe the structure and function of the heart. 11.82% 16) 16. Correctly describe the structure and function of veins, arteries and capillaries 30.91% 18) 18. Correctly describe the structure and function of tonsils, lymph nodes, the 65.45% spleen and thymus. 19) 19. Correctly describe the anatomy and physiology of the respiratory passages, beginning at the nose and ending at the alveoli. 64.85% 20) 20. Correctly list the pulmonary volumes and capacities and define each of them 40% 21) 21. Correctly list the organs that make up the digestive tract. 81.82% 23) 23. Correctly list specific enzymes and hormones produced by accessory organs and stomach. 59.09% 24) 24. Correctly describe the dietary sources of carbohydrates, proteins and fats, their uses in the body and the daily recommended amounts in the diet. 52.73% 25) 25. Correctly list common vitamins and minerals and give a function for each. 66.36% 26) 26. Correctly list the structures that make up the urinary system and describe the overall functions in performs. 74.55%

## Challenges

- Diverse Needs of Multiple Districts
  - Semesters, Trimesters
  - Traditional vs. Proficiency Educational Approaches
  - Hybrid Curriculum Tailored for Each District
  - Designated Class Period for Regional Courses
- Education Management System (EMS): ObaWorld vs. Moodle
- Online Curriculum Development: Time Consuming
- Limited Teacher/Student Contact: On Site Coordinators Key!
- Internship Requirement for Introduction to Health Occupations
- Basic Healthcare Certification: Writing 121 Requirement
- Coordination & Communication: Sheer Volume of Details & Follow Up
- Sustainability
  - District Buy In: Matching Funds in Real Budget Dollars
  - Funding Sources



#### Successes

- Teacher to Teacher 2014 ~ 9 teachers, 36 Health Occupations Classes
- Teacher to Teacher 2015 ~ 11 Registrants
- **❖** CTE Health Sciences Endorsement ~ 4 New Instructors
- Student Participation ~ Projected @ 85/Enrollment 254
- Health Sciences Curriculum ~ Hybrid & On Line: 15 credits
- Health Sciences Courses ~ Increase from 38 to 69 (81.6%)
- Health Professions Dual Credits ~ Increase from 2051 to 3048 (48.6%)
- General Work Experience ~ 42 Student Internships
- \* HOSA ~ 7 New chapters, Members 110+
- 27 Full Scholarships ~ EMR, CNA, Phlebotomy, WR121
- Text Books, Models and Life Size Simulation Manikin
- Health Sciences Regional Programs ~ Career Days & Others
- ❖ PeaceHealth Teen Volunteer Program ~ Cottage Grove & Florence



## The Future ~ Sustainability

- Committed Partners ~ Education
  - School Districts
  - Lane Community College
  - Oregon Health Sciences University & Other Medical Schools
- Committed Partners ~ Industry
  - PeaceHealth Oregon West Network Volunteer Services
  - Lane County Community Health Clinics
  - Cascade Health Solutions
  - > Volunteers in Medicine
- Expansion ~ Inside & Outside Lane County
- Funding ~ State & Federal
  - Oregon CTE Revitalization Grants
  - Carl Perkins
  - HRSA ~ Health Careers Opportunity Program



#### COLLECTIVE IMPACT MODEL

The commitment of a group of people from different sectors to a common agenda for solving a specific social problem, using a structured form of collaboration.

- US Department of Education
- Oregon Legislature & Department of Education
- Universities, Colleges & Community Colleges
- Education Service Districts & Boards
- School Districts & Boards
- **Educators: Administrators & Teachers**
- Labor Force Growth & Demand
- Oregon Employment Department
- **▶** Industry Partners
- Community Members & Parents





## **Health Sciences Pathways**

A Regional Perspective