



# Investing in Iowa's HIT Workforce- The HITECH Act and Kirkwood Community College

*Iowa HIMSS Chapter Meeting  
May 19, 2011  
Iowa City, Iowa*

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# Disclosures

- *The speaker has no financial relationships to disclose relevant to the content of this continuing education activity.*

# Presentation Objectives

- *Review the history of the American Recovery and Reinvestment act (ARRA) and the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009*
- *Discuss the role of the community college in training healthcare IT workers*
- *Discuss the training currently being provided by Kirkwood Community College*
- *Discuss how this training articulates with the REC and HIE*

# The American Recovery and Reinvestment Act (ARRA)

- *An economic stimulus package enacted by the 111th United States Congress in February 2009.*
- *Intended to create jobs and promote investment and consumer spending during the late-2000s recession*
- *The Act includes domestic spending in **education**, **healthcare**, and infrastructure*

# The Health Information Technology for Economic and Clinical Health Act of 2009

- *A component to healthcare reform*
- *Encompasses interoperable EHRS*
  - *Ordering Tests*
  - *Ordering Medications*
  - *Clinical decision-making support systems*

*Includes development of a nationwide health information exchange (HIE) network*

*Estimated that adoption rates will increase, leading to an increased need for a skilled HIT workforce*

***The incentive mechanisms in the HITECH Act will increase HIT adoption rates from 45 percent to about 70 percent for hospitals and from 65 percent to approximately 90 percent for physicians.***

- Congressional Budget Office estimate- 2010

# 51,000

*The number of additional healthcare IT workers that will be needed in the U.S. over the next five years\**

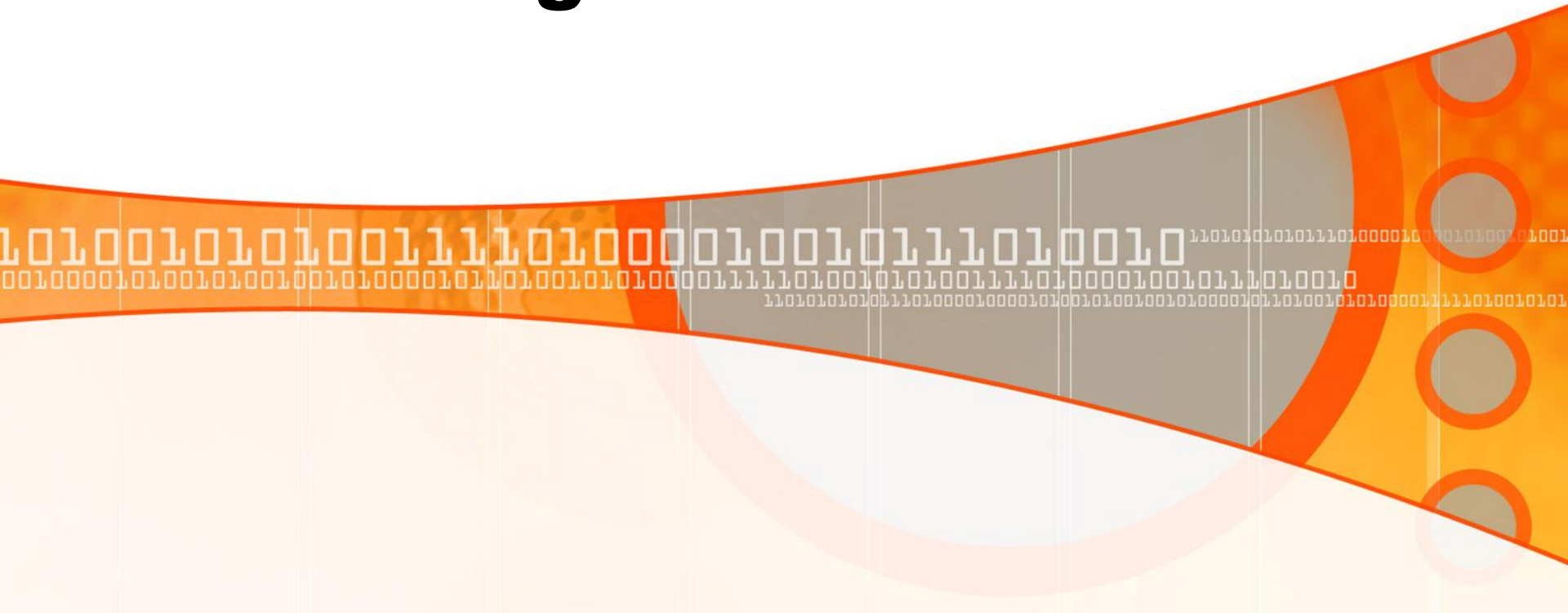
# Where are these jobs?

- *One full time healthcare IT worker for every **five** hospital beds in the U.S.\**
- ***155,000** full time healthcare IT workers*
- ***45,000** more than the estimate of current numbers of healthcare IT workers in the U.S.\*\**

- *\*- Accenture study 2010*
- *\*\* - Gartner Research 2011*



# Midwest Community College HIT Training Consortium



# The purpose of the grant

- *“...to provide assistance to institutions of higher education, or consortia thereof, to establish or expand medical health informatics education programs to ensure the rapid and effective utilization and development of health information technologies.”*

# Grant Criteria

- *Two one-year grants – April 2010 – April 2012*
- *5 regional consortia*
- *Lead institution for each consortium plus member colleges covering region*
- *Train in 6 roles (competencies defined)*
  - *Training must be completed in 6 months or less (customized to individual needs)*
  - *Credit bearing – non degree*
  - *Certificate awarded*
  - *Training must begin by September 30, 2010*
    - *Not locked into semester or quarter system*
  - *All 6 roles must be available in all parts of the region*
  - *Rapid deployment of training*

# The Midwest Consortium

- *10 States*
  - *Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio and Wisconsin*
- *17 Member Colleges- Cuyahoga CC- Lead*
  - *Moraine Valley, Des Moines Area, **Kirkwood**, Johnson County, Delta, Lansing, Macomb, Wayne County, Normandale, St. Louis, Metropolitan, Cincinnati State Technical, Columbus State, Cuyahoga, Sinclair, Madison, Milwaukee Area Technical*
- *\$14.6 Million over 2 years*
- *2,700 trainees per year*
- *Average 150 students per school/academic year*

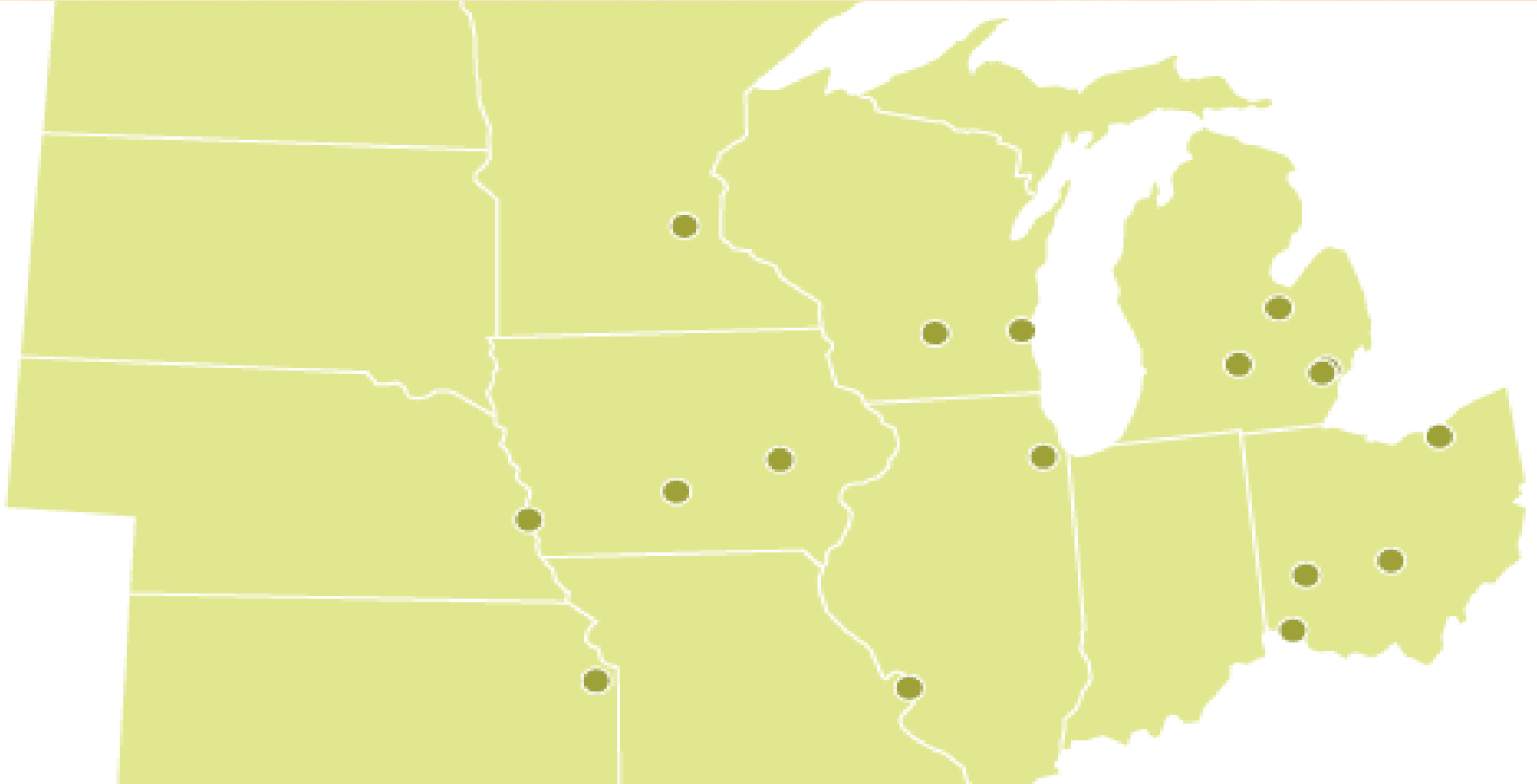
# Consortium Goals

- *Develop and sustain a **regional network of community colleges** providing HIT educational programs*
- *Create **standardized, short-term certificate training programs in HIT** for the 6 roles identified by the ONC*
- ***Train** current & dislocated health career and information technology professionals, students, recent graduates & veterans **to become HIT professionals** equipped to implement, support and integrate electronic health care information systems into diverse healthcare practice settings*
- *Provide **placement services** for trained HIT professionals into the workforce across Region C*

# Why Community Colleges?

- *Community colleges are agile and can create and implement new curriculum and courses quickly*
- *Community colleges have a commitment to workforce development*
- *Community colleges can focus on career and technical education*

# Region C



# Within Region C

- *Approximately 23,388 people employed in HIT-related occupations*
- *There is an estimated need for 10,304 more trained HIT professionals to achieve Stage 4 EMR adoption (computerized practitioner order entering capability)*

## Sources

[http://www.himssanalytics.org/hc\\_providers/stage6Hospitals.asp](http://www.himssanalytics.org/hc_providers/stage6Hospitals.asp) and  
[http://www.wiche.edu/info/ice/WICHE\\_HIT\\_Workforce\\_2pp.pdf](http://www.wiche.edu/info/ice/WICHE_HIT_Workforce_2pp.pdf)

# Six HIT Roles

## *Mobile Workforce*

- ***Practice Workflow and Information Management Redesign Specialists***
- *Clinician/Practitioner Consultants*
- ***Implementation Support Specialists***
- *Implementation Managers*

## *Onsite Support Personnel*

- ***Technical/Software Support Staff***
- ***Trainers***



# Curriculum Development Centers

- *Consortium of 5 universities*
- *A separate grant*
- *Johns Hopkins, Oregon Health and Science University, Columbia University, Duke University, University of Alabama at Birmingham*
- *Content delivered in September 2010 (very rough form)*
- *Concurrent to this is a **National Competency Exam** being developed by Northern Virginia Community College. Ready in June 2010*

# Curriculum Components (20)

- *Introduction to Health Care and Public Health in the U.S.*
- *The Culture of Health Care*
- *Terminology in Health Care and Public Health Settings \*\*\**
- *Introduction to Information and Computer Science*
- *History of Health Information Technology in the U.S.*
- *Health Management Information Systems*
- *Working with Health IT Systems*
- *Installation and Maintenance of Health IT Systems*
- *Networking and Health Information Exchange*
- *Fundamentals of Health Workflow Process Analysis and Redesign*
- *Configuring EHRs*
- *Quality Improvement*
- *Public Health IT*
- *Special Topics Course on Vendor-Specific Systems*
- *Usability and Human Factors*
- *Professionalism/Customer Service in the Health Environment*
- *Working in Teams*
- *Planning, Management and Leadership for Health IT*
- *Introduction to Project Management*
- *Training and Instructional Design*

# Practice Workflow and Information Management Redesign Specialists

- *Individuals in this role will support implementation at specific locations for a period of time and, when their work is done, move on to new locations. Workers in this role might be employed by regional extension centers, providers, vendors or state/local public health agencies, and would work together in teams to assist in reorganizing the work of a provider to take full advantage of the features of health IT to improve health and care*

# Clinician/Practitioner Consultants

- *These are individuals who have administrative or managerial experience in health or IT environments may seek additional training to oversee and manage the transition to health IT for providers*

# Implementation Support Specialists

- *These individuals will provide support services, above and beyond what is provided by the vendor, to ensure the technology functions properly and is configured to meet the needs of the redesigned practice workflow. Individuals training for this role will have a general background in information technology or health information management.*

# Implementation Managers

- *These are individuals who have administrative or managerial experience in health or IT environments and seek additional training to oversee and manage the transition to health IT for providers*

# Technical/Software Support Staff

- *Individuals in this role will support on an ongoing basis the technology deployed in clinical and public health settings. Workers in this role maintain systems in clinical and public health settings, including patching and upgrading of software. They also provide one-on-one support, in a traditional help desk model, to individual users with questions or problems. Individuals training for this role will have a general background in information technology or health information management.*

# Trainers

- *Individuals in this role design and deliver training programs using adult learning principles to employees in clinical and public health settings. The previous background of workers in this role includes experience as a health professional, health information management specialist, or medical librarian. Experience as a trainer in the classroom is also desired*

# Kirkwood College- Milestones and Accomplishments to Date

- *Full time program manager hired*
- *Curriculum delivered by universities and adapted for Kirkwood's on-line learning management system*
- *First enrollment- September 2010*
- *97 students enrolled in one or more of the four courses (Goal- 150 total by April 1 2012)*
- *All students with full tuition provided by the grant (over \$175,000 dollars in training)*

HIT: Practice Workflow & Inform... +

kirkwood.edu https://elearning.kirkwood.edu/section/default.asp?id=ID1292

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## HIT: Practice Workflow & Information Mgmt Win 2011 - CHHO-2700-14466

- Course
- Syllabus
- Calendar
- Lessons
- Resources
- Communicate
- Report
- Manage

Home > Course

Michael McLaughlin



### What's New

- last logon
- + Content (337)
- + Discussions (26)
- + Mail (1)
- + Submissions (24)

## Health Information Technology Grant Program: Practice Workflow and Information Management Redesign Specialists

This ANGEL use guide should be reviewed before beginning any course assignments [http://elearning.kirkwood.edu/AngelUploads/Content/ID1128/StudentQuickStart\\_pdf.zip](http://elearning.kirkwood.edu/AngelUploads/Content/ID1128/StudentQuickStart_pdf.zip).

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New Students,

Components can be completed primarily in numerical order; however, the labs (Components 7, 8, and 11) are completed at the end of the courses they are associated with instead of in order.

There is a survey that all new students need to complete upon admission to the program. If you have not already done so, please complete the survey at [www.surveymonkey.com/s/HIT\\_Training](http://www.surveymonkey.com/s/HIT_Training).

The discussion board is set up to have students read and respond to other student posts. Since the course has so much material, we decided to eliminate the requirement to respond to other student posts, but it is still a good idea to read them to get different perspectives. When another student posts a discussion that you have not read, it will say you have unread posts. If you are done with a component and have read several posts by other students, you have performed your obligation to the course and need not keep going back to read new posts.

If you complete your first course and would like to take another class to receive a second certificate, tuition is \$300 and it is not covered by the grant.

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Map What's New Tasks Search About

PDA

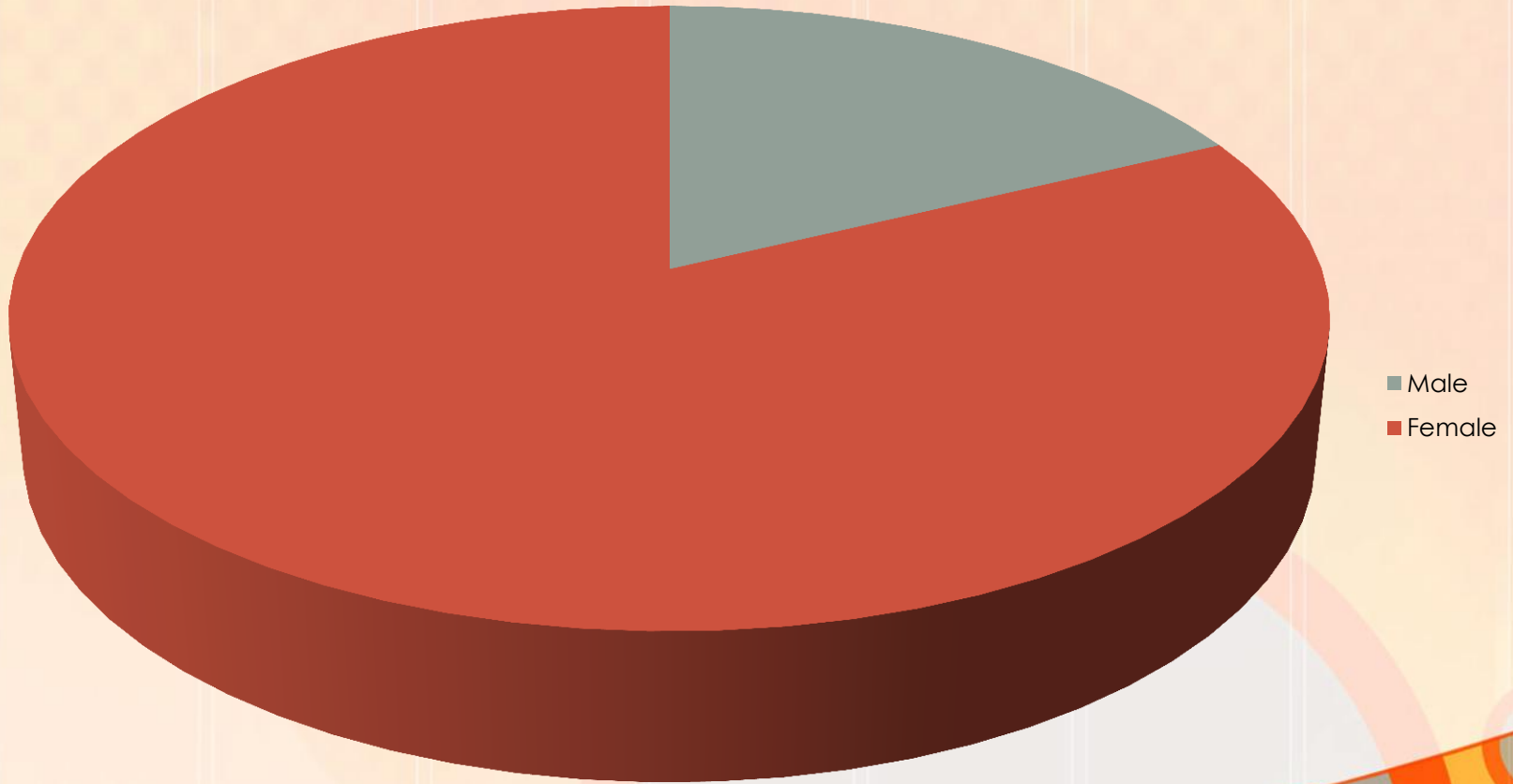


# Demographic Snapshots of Our Students

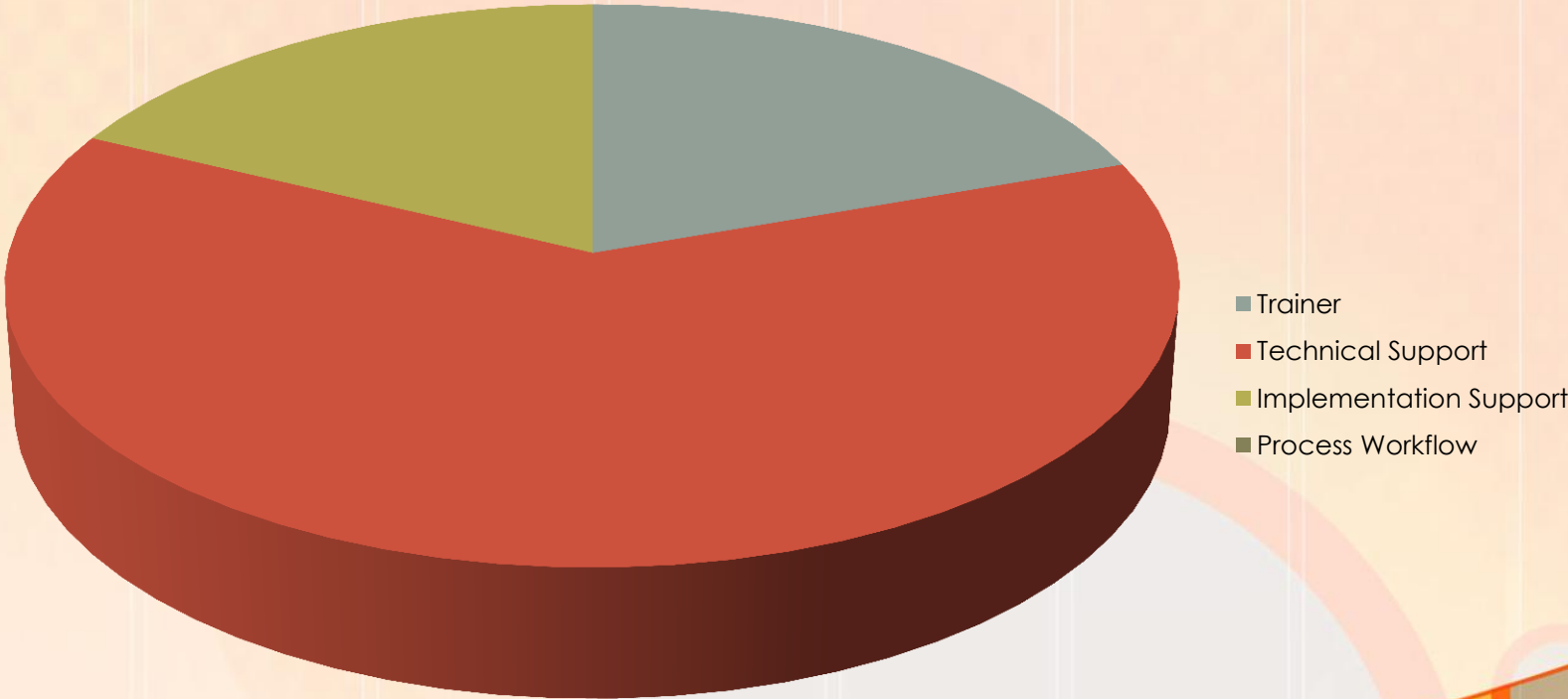


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# Gender

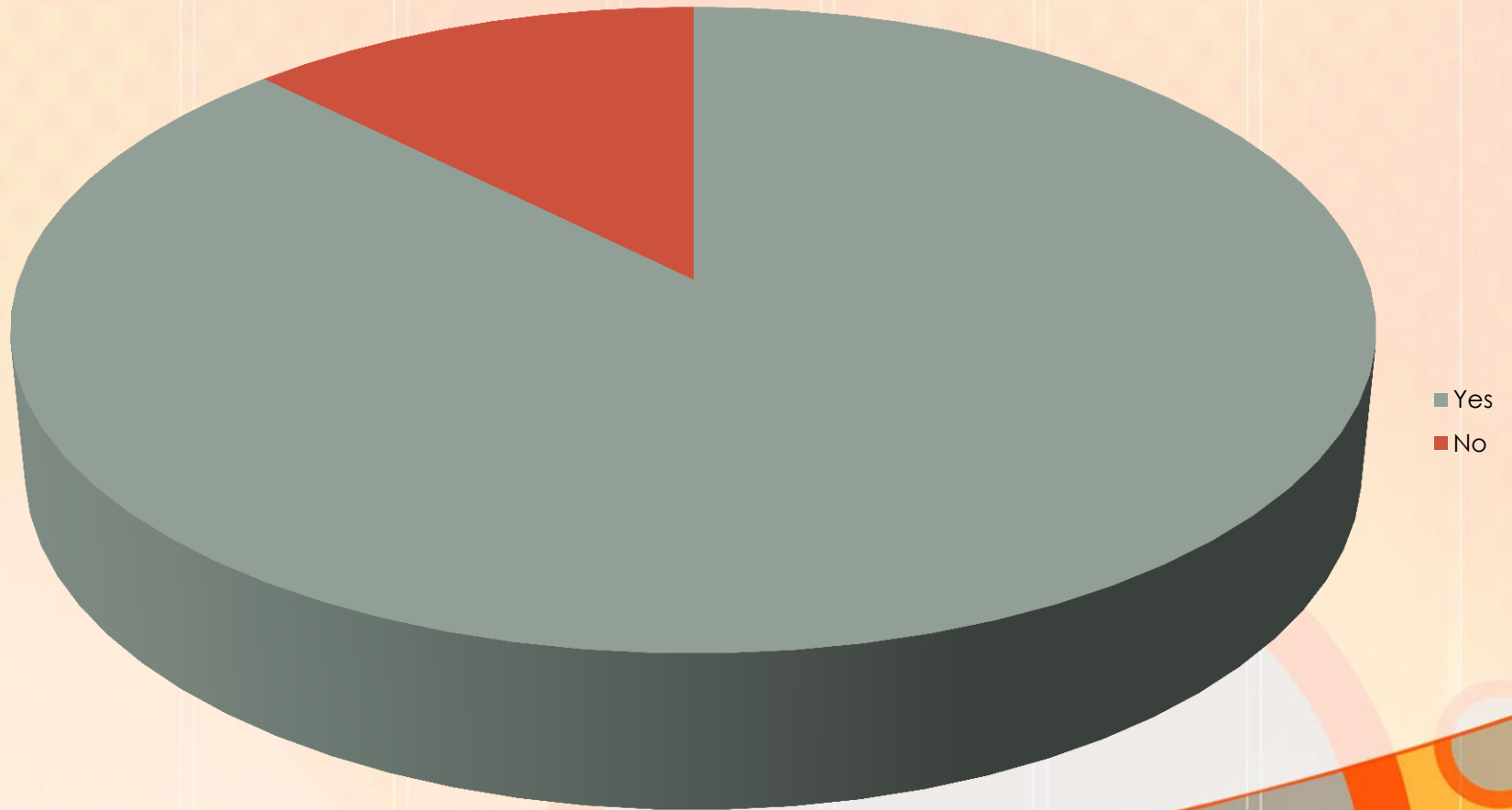


# Course Enrolled In

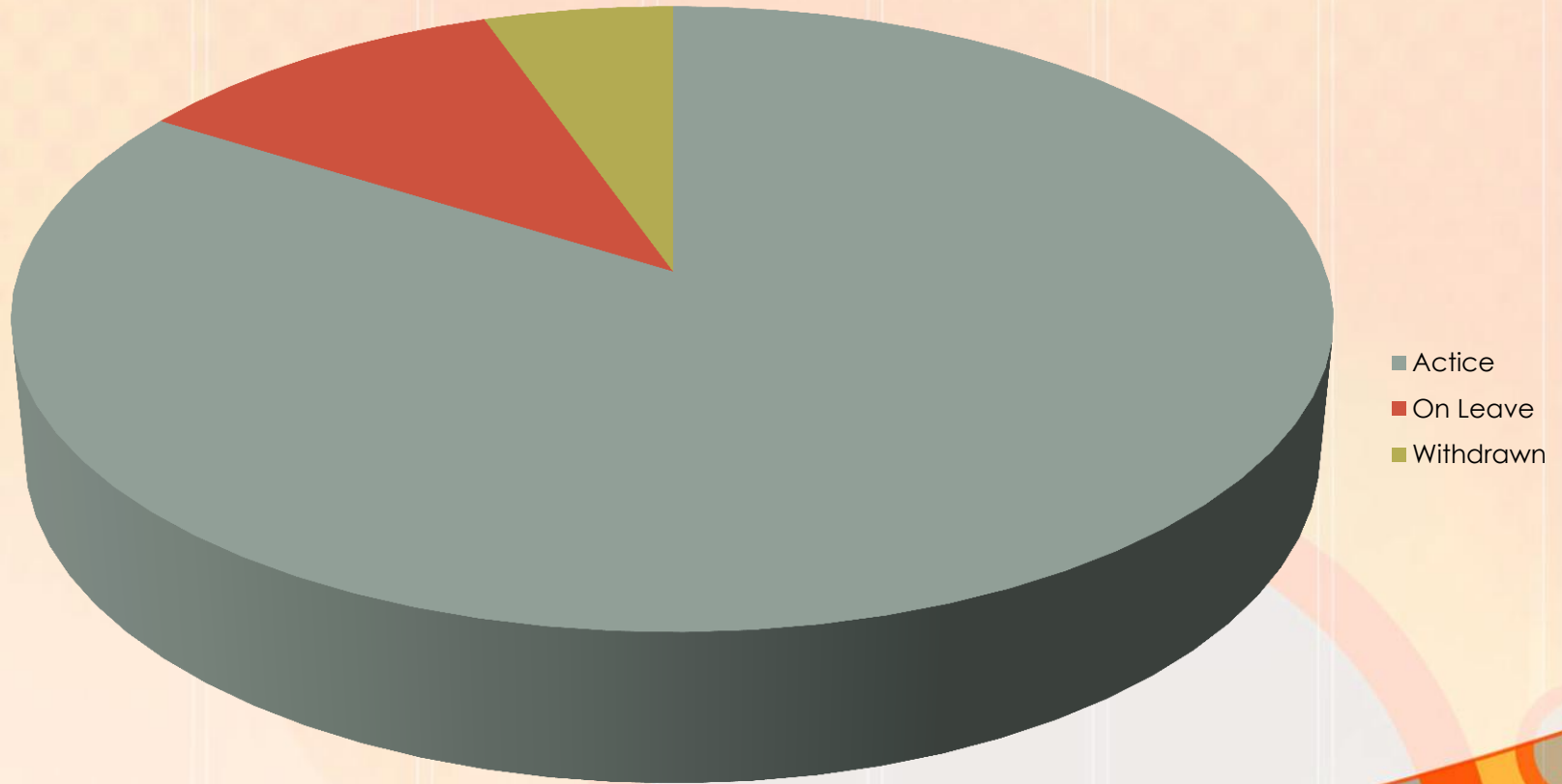


- Trainer
- Technical Support
- Implementation Support
- Process Workflow

# Currently Employed?

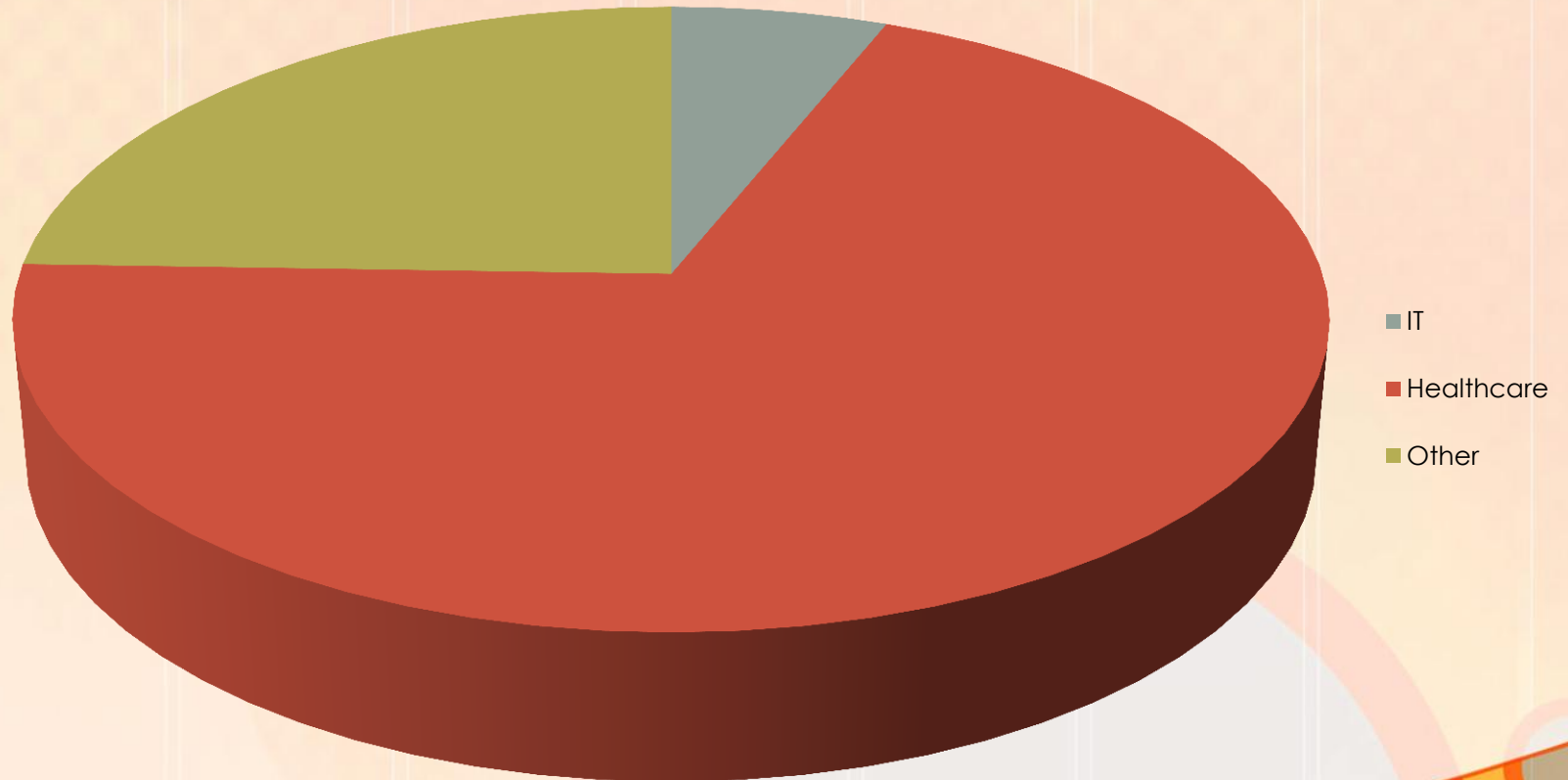


# Status in Course





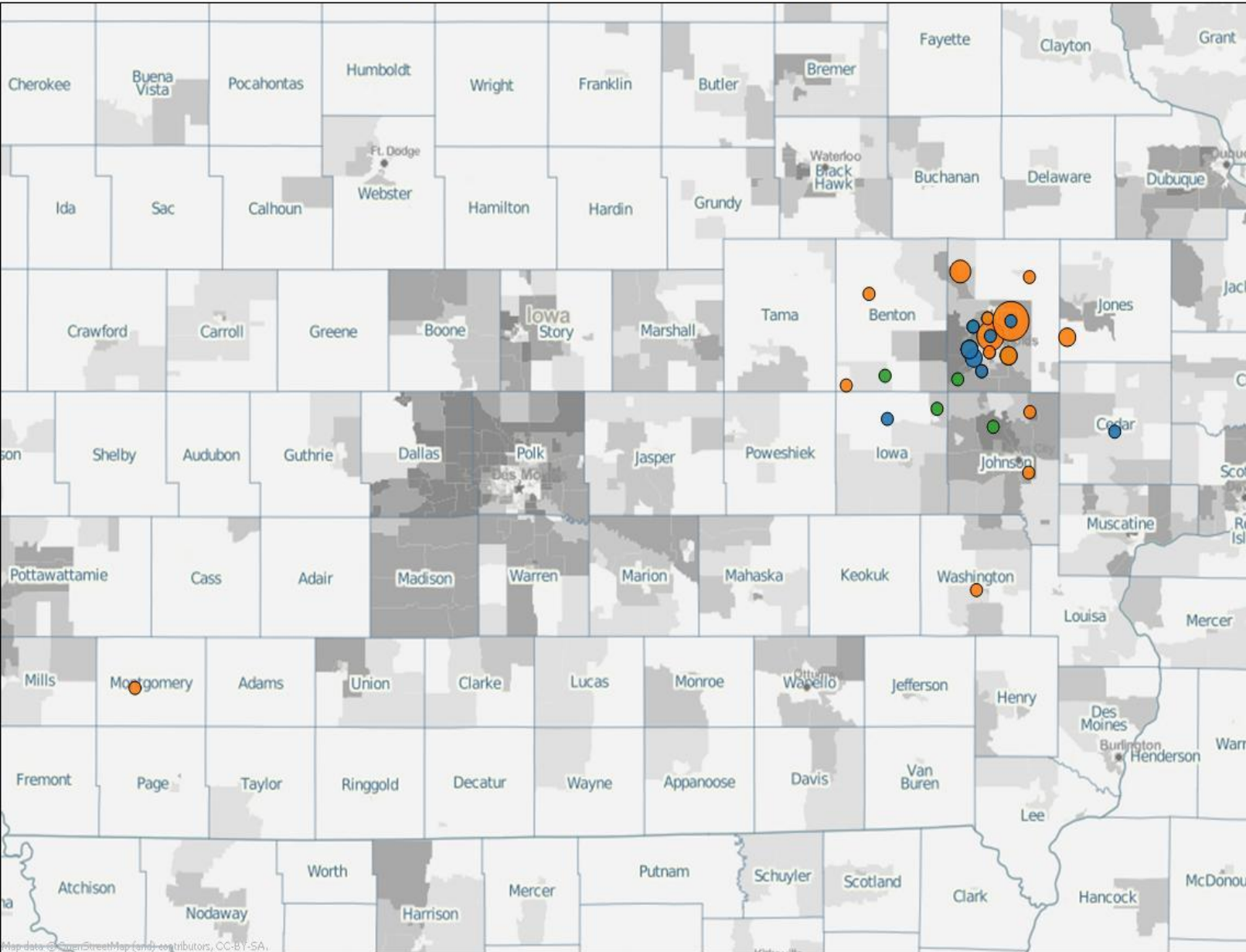
# Job Responsibility





# Roles by Population Density

Kirkwood Community College HIT Students by Workforce Role by County by Population Growth % 2009-2014



**Number of Records**

- 1
- 2
- 4
- 6
- 8
- 9

**Role Trained For**

- Implementation Support Specialist
- Technical Software Support Staff
- Trainer

**Population Growth % 2009-2014**

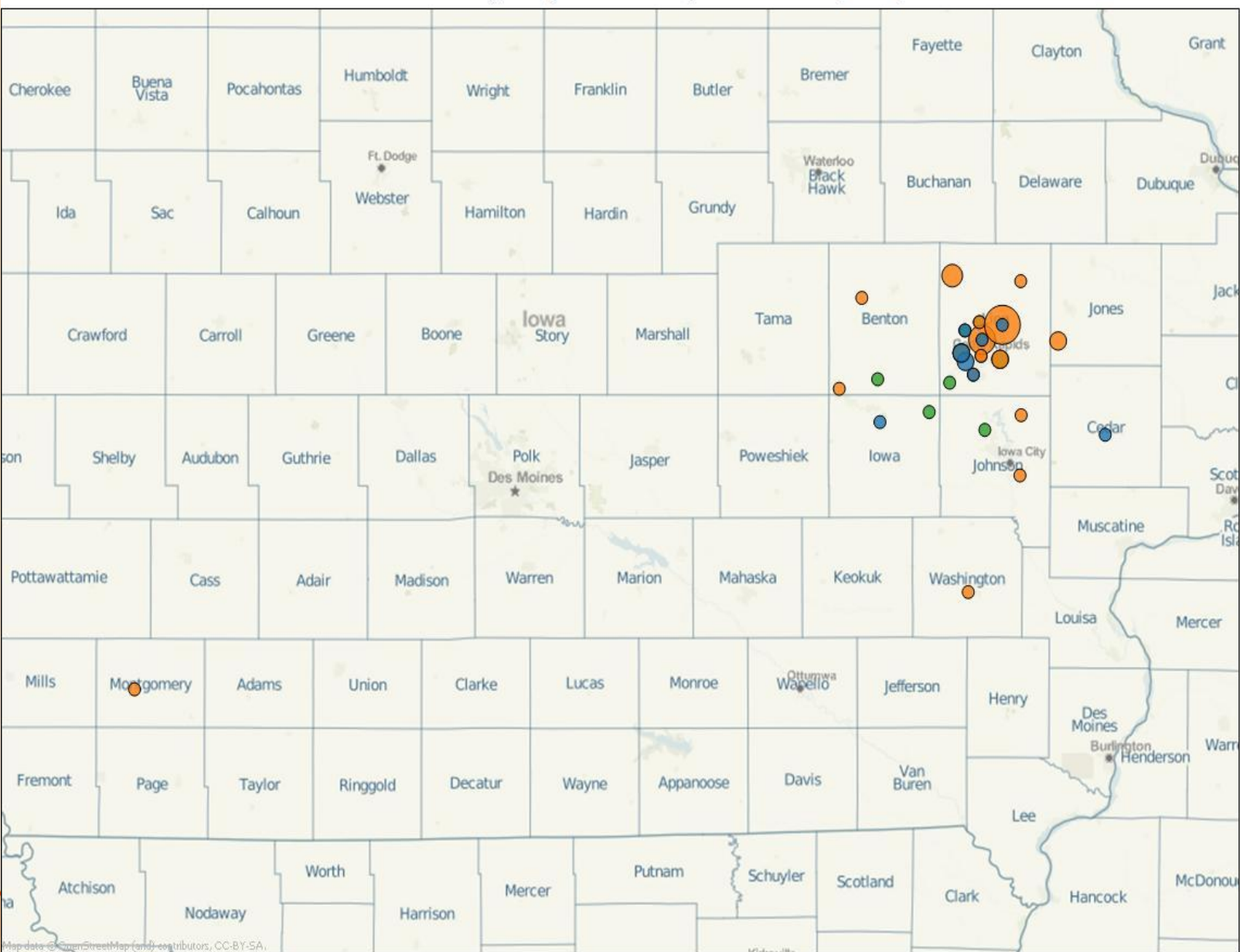
- 100.000 to -0.740
- 0.740 to 1.390
- 1.390 to 4.190
- 4.190 to 10.680
- 10.680 to 400.000

Map data © OpenStreetMap (and) contributors, CC-BY-SA.

Map based on Longitude (generated) and Latitude (generated). Color shows details about Role Trained For. Size shows sum of Number of Records. Details are shown for Zip Code. The view is filtered on Zip Code, which excludes 62333.

# Role by County

Kirkwood Community College HIT Students by Workforce Role by County



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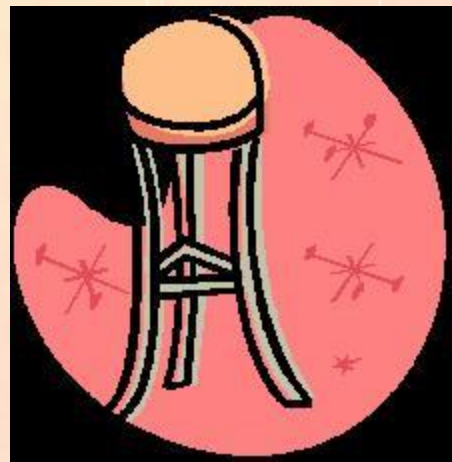
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# Partnership in HIT Education

*Community Colleges*

*The Regional Extension  
Center for HIT*

*The Iowa Department of  
Public Health*



# Questions or Comments?

