Health Science Learning Exchange
Year End Report 2015

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Introduction to the Health Science Learning Exchange

What is the Health Science Learning Exchange?

Our History
The Health Science Learning Exchange (HSLE) was formed in 2012 after the Illinois State Board of Education selected the University of Illinois at Chicago as one of the Science, Technology, Engineering, and Math (STEM) Learning Exchanges to improve the coordination and delivery of resources, work-based learning opportunities, career guidance, and partnerships that support local STEM programs. Illinois Pathways supported the launch of these new and innovative public-private partnerships known as STEM Learning Exchanges. Under the direction of Dr. Paula Allen-Meares, Chancellor at the University of Illinois at Chicago, Dr. Bruce Neimeyer, Associate Vice Chancellor for Special Programs serves as the University’s lead entity representative for the Health Science Learning Exchange and coordinates the statewide member network of businesses, employer associations, education partners, and other stakeholders. These networks provide to the school districts of Illinois various resources to support students and their teachers in their pursuit of careers and the development of curriculum respectively in the health science field. Initially funded through a Race-To-the-Top grant, the HSLE membership seeks investments and commitments from public-private partners to sustain their statewide efforts.

Our Mission
The Health Science Learning Exchange (HSLE), which is part of the Illinois Pathways strategy for student college and career readiness, is focused on supporting school districts, community colleges, universities, employers, and other stakeholders to build local career pathway systems that empower learners to explore their academic and career interests in the health science field. Student success depends on partnering with education and the private sector, and the HSLE is committed to improving how public and private investment is coordinated across the health science sector in Illinois. More specifically, the Health Science Learning Exchanges is charge to pursue the following nine core functions:

- Explore e-learning curriculum resources, including on-line courses, assessments and feedback systems, reference materials, databases, and software tools.
- Pursue the availability of classroom and laboratory space, equipment, and related educational resources necessary to support programs of study through regional partnerships and other strategies.
• Support for student organizations and their major activities, including conferences, internships and professional networking experiences, competitions, and community projects that build leadership, communication and interpersonal skills and provide professional and peer support networks.

• Foster internships and other work-based learning opportunities that connect students with adult mentors.

• Sponsor challenges and project management resources for students to work in collaborative teams addressing real-world interdisciplinary problems.

• Pursue professional development resources for teachers and school administrators integrated and aligned across middle school, high school, and community college instruction, including STEM externships, support for web-based networks, and integrated professional development for academic and CTE instructors.

• Enhance career development and outreach resources to expand awareness of STEM-related programs and careers to K-12 students.

• Support the coordination of tools and resources to assist students and schools with implementing personalized education plans and transitions to post-secondary academic and training programs, including establishing course articulation and dual credit opportunities.

• Review performance of STEM Programs of Study through assessments and work with school partners to continuously improve performance.

Our Approach
Since January 2013, the HSLE has focused on expanding membership, building technical support, and expanding physical resources with education and industry partners to create an infrastructure that can support coordination with student college and career development. The ultimate goal and vision of the Exchange is to positively impact the development of the state of IL health science workforce that can be competitive and successful in tomorrow’s economy.

During the 2014-2015 cycle the Health Science Learning Exchange focused on the following core functions to address our mission:

• Develop grant opportunities that would facilitate more health science opportunities throughout the educational pathway.

• Continue to support student challenges across the state through our partnership with IJAS.

• Provide additional professional development for teachers with webinar training sessions on our health science curriculum and lesson plans.

• Support and promote the implementation of InSpire platform across the state of IL.

• Begin aggressive work toward better sustainability on the learning exchange in anticipation or seed funding ending after this fiscal year.
This report provides an overview of the HSLE initiative and outcomes from July 2014 through June 2015.

**Our Collective Impact**

During the past year our involved membership grew from 147 individuals to 160. The collective impact of our work has engaged 312 individual institutions during the course of the year and we have reached 214 individual high schools. Assuming a 10% student body impact with either their involvement with IJAS or an improved health science curriculum our efforts will have impacted over 25,000 students in the state of IL.

**Membership**

A representative membership of key community members is a cornerstone to our success. We continue to review our membership by category and make targeted efforts to grow strategic groups so that our work is informed by all sectors. Currently, we have 214 high schools, 35 four-year universities or colleges, 19 private business, 9 community based boards and/or non-profit organizations, 8 community colleges, 7 industry associations, 5 workforce investment boards, 4 STEM education organizations, 4 state education economic development agencies, 3 museums, 2 labor unions and 2 professional associations that are engaged or have been recipients of the HSLE work this past year.
% Of Member and Entities Impacted by Category

- IL High Schools: 69%
- 4 Year Universities or Colleges: 11%
- Community Colleges: 6%
- Community Based Boards/Non-Profits: 3%
- Workforce Investment Boards: 2%
- State Educ and Econ Dev Agencies: 2%
- Industry Associations: 2%
- STEM Education Organizations: 2%
- Museums: 2%
- Labor Unions: 1%
- Private Businesses: 1%
- State Educ and Econ Dev Agencies: 1%
- Labor Unions: 1%
- Community Colleges: 1%
- Workforce Investment Boards: 1%
- Community Based Boards/Non-Profits: 1%
- 4 Year Universities or Colleges: 1%
- IL High Schools: 1%

**Development of Grant Opportunities**

Sustainability of our work through projects that improve opportunity for students to pursue educational pathways toward meaningful healthcare careers has been a focus of the HSLE membership since the beginning. Starting with our successful acquisition of the $1.4 million dollar NIH Bridges to Baccalaureate Grant it was clear that external funding could support our structure and push us closer toward closing the workforce gap within our sector.

This past year we have actively engaged in grant writing work. Through various partnerships among the learning exchange members we successfully submitted grant applications to the Coke...
Foundation, the Illinois Department of Economic Development, the Department of Labor, ACT, iHEAL and the Robert Wood Johnson Foundation. Not all were funded but it has solidified within the HSLE a working group that can successfully submit meaningful project that support our goals.

We are please to note that the AHIMA Foundation was selected for a $4.6 million dollar Department of Labor Apprenticeship grant that will work with community groups across IL to provide internships in this field for students. In addition, our partnership also resulted in a $100,000 grant to support a graduate student who will develop curriculum with a gaming component by December 2015.

**Student Challenges, Faculty Mentorship, and Access to Equipment & Labs**

The HSLE established a relationship with the Illinois Junior Academy of Science (IJAS) two years ago based on our shared interest in supporting an environment where students are mentored by teachers and industry experts, engage in industry focused challenges and research and present their research projects at regional and statewide competitions where they are judged by industry experts. In the second year of this shared work our learning exchange membership recommitted itself to the following goals in partnership with IJAS:

- Support collaborative scientific research
- Improve high school faculty mentorship
- Provide better access to labs and equipment
- Increase the number of qualified judges from employers

This past year we accomplished:

- A second year of financial support for 44 health science awards focused on areas of high workforce need across the state of IL helping to direct students toward these careers through early scientific exploration.
- Provided 6 industry experts as judges at the statewide competition.

**Curriculum and Lesson Plans**

Now that we accomplished the construction of 16 high school curriculum modules and their out-of-the-box lesson plans, it was clear that we needed to provide on-line modules that could be recorded and viewed by high school teachers to learn various ways they could use and incorporate these plans into their curriculum or use them in their entirety. Webinars were hosted throughout the academic year for teachers to participate in an on-line learning meeting on how to accomplish this. These webinars were recorded and now are available on OER and the HSLE.
website for individual teachers to view anytime and anywhere as we continue to promote their use throughout the state. Our curriculum has even helped improve education for high school students out-of-state such as Washington, Indiana, Massachusetts, New Mexico and Connecticut just to mention a few. The 16 modules focus on:

- Mental Health
- Nutrition & Fitness
- Drugs & Addiction
- Sexual Health
- Public Health
- Rural Health
- Violence
- Pharmacy
- Epidemiology
- Environmental Health
- Health Policy
- Health Disparities
- Global Health
- Anatomy & Physiology
- Health Careers
- Capstone

Another curriculum was also created by one of our members at Northwestern University. Dr. Melissa A. Simon, through a grant from the Provost Office created a MOOC high school course that allows students to explore healthcare career options. Career 911 – Healthcare was re-launched by Dr. Simon and her group this fall. The official announcement follows.

**Career 911 - Health Care MOOC (Massive Open Online Course)**

This fall, Northwestern University Feinberg School of Medicine re-launched its first massive open online course, Career 911: Your Future Job in Medicine and Health Care, which aims to help high school students, recent graduates and anyone considering career transitions explore health care career options and learn strategies for getting job opportunities in medicine and healthcare.

Taught by Dr. Melissa Simon, skills that are covered in the course include articulating a personal story, resume and cover letter writing, job search, interviewing, professional networking and professional communications. Topics are packaged into short modules designed to be taken at your own pace. Career 911 features short lecture videos, personal career stories, day in the life videos, a resource toolkit, and introduction to medical terminology. Career 911 can also be a wonderful resource for educators, parents, and career counselors.

To learn more, visit Career 911 at [www.coursera.org/course/healthcarejobs](http://www.coursera.org/course/healthcarejobs).
Career Cruising / InSpire
This past year the HSLE contributed some of its financial resources to begin to address mentorship experiences in various communities across the state of IL by partially funding the purchase of a statewide site license for Career Cruising’s InSpire module. CCInspire is a platform that provides our Learning Exchanges and regional education-industry intermediaries a prime venue for informing and connecting with the future workforce. The HSLE and regional partners all receive access to the CCInspire administrative portal. Key admin portal functionality includes:

- Tools for adding and maintaining employer profiles
- Tools for adding and managing Career Coach mentors
- Reporting tools for understanding users’ (students and career changing adults) career aspirations and for tracking system usage
- A content management system for uploading articles, featuring employers, sharing videos, etc.
- A message center for sending messages to students and career advisors

The staff at Career Cruising also works with the Learning Exchange membership and regional partners to identify additional functionality they may need to provide adequate visibility for the information they would like to share. Some of the ideas discussed to date include:

- Creating personalized information feeds for students
- Modifying key CCInspire pages (users’ landing page, the CCInspire main page, industry profile pages, etc.) to support tailored local and Learning Exchange content
- Creating content pages for each of the Learning Exchanges

IMPACT BY THE NUMBERS

Early Impact Opportunities

Promotion and Communications
For us to be successful, the HSLE understands that clear communication and promotional materials were necessary. To that end we continually revisit the content of our web site. We continue to work on the development of this site and use it to spread the word about our work.

We have created a library of resources, a calendaring widget and webinar/video repository in partnership with ISLE platform creators at IOER as a part of the greater Illinois Pathways project and embedded those in the HSLE website.
We have developed both print and electronic publications to support:

- Membership recruitment
- Fund solicitations
- Awareness of HSLE work

Finally, Dr. Bruce Neimeyer has attended and presented about the HSLE work at over 13 meetings and conferences during the year. These included the 60-25 Conference, Grundy County Growth Conference, IMD Day, and ICCB Forum for Excellence just to mention a few.

**Contributions from our members**

We continue to look for opportunities to financially support the wonderful work of the Health Science Learning Exchange. Over the years we have $16,500 in cash support from the membership and specifically the DeVry Foundation; one of our largest gift supporters. We also successfully secured a $6.1 million dollar in grant support for various projects.

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The **DeVry Foundation**

$6.1 MILLION DOLLARS

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**Our Future**

**Continuance of IJAS Partnership**

This year we will look to increase the number of volunteers for the IJAS event both at the regional level and statewide competition.

We will continue to financially support the work of the volunteers in this organization and our sponsorship of 44 awards leading students toward research reflective to the health science workforce needs across the state.

**Career Cruising / InSpire**

This year we anticipate moving into implementation phase for the InSpire platform. We have targeted launch events in Rockford, Aurora/Chicago, Quad Cities and East St. Louis and through a
coordinated effort between Career Cruising, the HSLE membership and the local education-industry partners we will begin our work.

**Sustainability and HSLE Structure Assessment**

After the conclusion of three years of work growing this organization and its work, the membership has expressed the desire to take stock in our progress, evaluate it in relation to our changing environment and draw conclusions about how to effectively move the organization forward. Upon this decision, the membership would like to then assess the structure of the organization to better understand if it still supports the work we seek to do or if some other support structure might more efficiently accomplish those same goals. We are currently working to secure an approved vendor who will guide us in this exercise so that by the conclusion of this year we will have a new plan with an infrastructure to support the work.