



# HEALTHCARE WORKFORCE QUALITY WITH DIGITAL BADGE TECHNOLOGY

**A SYNED ROUND-TABLE DISCUSSION**  
**WITH SPECIAL GUEST – ASSEMBLY MEMBER DAS WILLIAMS**

Convened At  
**Antioch University**  
**Santa Barbara, California**  
**October 8, 2014**

**synED**

# ABSTRACT

## EXECUTIVE SUMMARY

Select healthcare leadership in the Santa Barbara region and special guest Das Williams, Assembly Member and Chair of the CA Assembly Higher Education Committee met at Antioch University on October 8, 2014 at a meeting convened by SynED, an educational non-profit futures group, to discuss a unique solution for access to relevant training for the healthcare workforce.

Attendees participated and heard presentations by the Open Badge Alliance, Pearson/Acclaim, Cottage Health System and the Veterans Health Administration which were interspersed with group discussion among regional WIBs, Healthcare providers and educators. After thoughtful consideration, a recommendation was made to continue the discussion and plan a pilot or trial of the digital badge approach among several of the entities represented.

As traditional access to education is positively disrupted by new technologies like digital badges and gamefication, it is incumbent upon civic leadership – elected and voluntary – to lead the discussion to ensure that the changes are inclusive and effectively meet the changing needs of the workforce ecosystem. SynED’s involvement statewide in similar efforts will continue to inform the group’s efforts.

## RATIONALE

Projecting future trends in healthcare may involve policy, technology, management and a diversity of disease challenges that continue to evolve. It is technology that has enabled greater change for good when appropriately applied. Through technology the ‘circle of care’ continues to expand closer to the home, virtually to any remote device and systematically to provide data enhanced support services.

People, however, are the face of healthcare. To enable this technology expansion, the healthcare licensed workforce will increasingly be augmented 60% by allied health professionals and an additional untold number of service offerings that will interact with the public in a health or wellness related manner. Future healthcare workers will increasingly need skills from a variety of backgrounds including IT, Customer Service and management to name a few.

**“THE FUTURE IS HERE – IT’S JUST NOT EVENLY DISTRIBUTED”  
(WILLIAM GIBSON, ECONOMIST, 2003)**

In addition to the licensed pathways for the healthcare workforce, there are many hybrid experiences and training opportunities that integrate well into the future healthcare worker; however, traditional ivory tower, inflexible and established systems often delay articulation, recognition and resist the exchange-ability or credit for valuable skills obtained in other contexts.

Ultimately, an ecosystem failure to provide integrated quality training, access to training and optimization of skills in the healthcare workforce would lead to higher cost and a gradual separation of quality and security to citizens based upon affordability.

Strategically, Digital Badges, or standardized micro credentials, represent a disruptive technology in learning measurement that could resolve many of these issues by creating opportunities to empower and provide access to learners, provide relevant skills to employers, and allow greater flexibility in education.

## ATTENDEES

Das Williams	California State Assembly Member, District 37
Hillary Blackerby	Senior Field Representative (Das Williams)
Darcel Elliott	Field Representative (Das Williams)
Anett Hurtado	Field Representative (Das Williams)
Carol Henderson	Training (Cottage Hospital)
Patrice Ryan	Vice President, Human Resources (Cottage Health System)
Guillermo Gonzalez	Director, Government Affairs (Gold Coast Health Plan)
Dave Oliver	Vice President, HR (Wilshire Health & Community Services, Inc.)
John Cordova	Deputy Sector Navigator, Healthcare (CA Community Colleges)
Paula Hodge	Deputy Sector Navigator, ICT-DM (CA Community Colleges)
Steve Wright	Statewide Sector Navigator, ICT-DM (CA Community Colleges)
Linda Zorn	Statewide Sector Navigator, Healthcare (CA Community Colleges)
Melissa Moreno	Dean, Instruction (Santa Barbara City College)
Alan Price	Dean, Educational Programs (Santa Barbara City College)
Renah Wolzinger	Field Director for Data Tools (WestEd)
Carla Casilli	Open Badge (Mozilla Foundation)
Peter Janzow	Pearson VUE
Leslie Dubow	Director SimLEARN Project (Veterans Administration)
Guy Smith	President (SynED)
Scott Young	Director (SynED)
Trula Breuninger	CEO (Santa Barbara Neighborhood Clinics)
Scott Black	Executive Director (American Indian Health & Services, Inc.)
Paul Jaconette	Chief Operating Officer (CenCal Health)
Patricia Duffy	Administration Manager (Ventura County WIB)
Raymond McDonald	Executive Director (Santa Barbara County WIB)
Jessica McLernon	Business Services Coordinator (Santa Barbara County WIB)

## WHAT HAPPENED

In opening comments, Guy Smith cited a recent survey conducted by Gallup in partnership with the Lumina Foundation<sup>1</sup> which indicates that just 11% of business leaders ‘strongly agree’ that today’s graduates have the skills and competencies that their businesses need. In contrast, the same survey found that 96% of college and university chief academic officers said they were ‘extremely or somewhat confident’ in their institution’s ability to prepare students for work-force success. With an 85% difference of opinion, it can be reasoned that there is a material gap in understanding the needs of business, and the gap seems to be getting wider. Closing this communication gap may be logistically addressed by a more specific definition of the changing skills that are required.

<sup>1</sup> Weathers, Lucia A., and Lauren Kannry. “Today’s business leaders say, ‘It’s what you know, not where you go’ when making hiring decisions, new study shows | Lumina Foundation.” Lumina Foundation/Gallup. Last modified December 16, 2013. [http://www.luminafoundation.org/newsroom/news\\_releases/2014-02-25.html](http://www.luminafoundation.org/newsroom/news_releases/2014-02-25.html).

Digital badges are a new methodology to recognize learning that happens anywhere and share it in the places that matter. They are a form of micro-credential that allows individuals to validate and demonstrate learning. There is a learning ecosystem behind digital badges that makes them powerful, connected credentials. This ecosystem is made up of badge “issuers,” badge “earners” and badge “consumers.” Both Mozilla’s Open Badge Initiative and Pearson’s Acclaim have demonstrated significant expansion in their collaborating partners and clients.

Promising work is being done with badges at the state and local levels through schools, informal education providers, colleges, universities and businesses. More than 14,000 independent organizations are already issuing badges to document formal and informal learning and workplace training providing more ways for students and workers to get verifiable recognition that can lead to increased access to opportunities for further education and career success.

Earlier this summer, SynEd officers met with Assembly member Das Williams, Representing the 37th California Assembly District. The discussion included technological changes which have the potential to change the way in which students can validate learning and demonstrate to employers both traditional and non-traditional learning – specifically digital badges. Assembly Member Williams noted the gap in access to healthcare training for workers and the possibility of using digital badges as a means to facilitate a solution. This roundtable was designed to discuss these specific issues. Diverse stakeholders made up this roundtable discussion: higher education, workforce training, employers, and healthcare professionals.

Presentations from badge providers and healthcare providers focused on the potential for validating soft skills in combination with technical and professional qualifications.

The roundtable meeting and discussion was facilitated by Steve Wright, SynED Board Chair and State Director for the ICT workforce - business alignment of the Community College System.

Assembly Member Das Williams provided opening comments for the presentations and ensuing discussions. His comments focused on the potential for technology to help connect the right people with the right set of skills to the right job. Key points that Mr. Williams highlighted were:

- The rapid adoption of technology in the healthcare industry has created a job/skill mismatch or gap.
- Finding new ideas and approaches, like digital badges, may help match the appropriately skilled individuals with the right jobs.
- Encouraging government, educators and business leaders to work together is necessary to find solutions.
- Providing a more diverse array of skill acquisition methodologies is needed so students interested in a career in healthcare are not discouraged due to lack of access to training opportunities.

# THE PRESENTATIONS

## Open Badges:

Carla Casilli, Director of Design + Practice, Badge Alliance

### Key points from Carla's presentation:

Badges are...

- Personal social currency.
- A representation of achievements, learning, skills, interests, competencies.
- Stackable lifelong credentials.
- They are part of a map of learning pathways.
- Formal and informal learning through a shared infrastructure.
- A universal standard.

Carla was there at the beginning with Mozilla when the Digital Badge idea was hatched. She has nurtured the concept over the past three years and is thrilled by the avid and diverse interest that it has generated over that time. Carla's presentation described a network of organizations and individuals based on shared values, building and enhancing an open badges ecosystem focused on openness, learner agency and innovation. There are several tenets that drive the Open Badge Alliance.

- **FREE AND OPEN:** Mozilla Open Badges is not proprietary. It's free software and an open technical standard any organization can use to create, issue and verify digital badges.
- **TRANSFERABLE:** Collect badges from multiple sources, on-line and off, into a single backpack. Then display your skills and achievements on social networking profiles, job sites, websites and more.
- **STACKABLE:** Whether they're issued by one organization or many, badges can build upon each other and be stacked to tell the full story of your skills and achievements.
- **EVIDENCE-BASED:** Open Badges are information-rich. Each badge has important meta-data which is hard-coded into the badge image file itself that links back to the issuer, criteria and verifying evidence.

In defining the open badge concept, Carla identified five characteristics that drive an open badge ecosystem.

1. They capture the learning path.
2. They signal learning to key stakeholders like employers.
3. They build reputation and communicate identity.
4. They highlight new learning pathways providing new insight into advancement opportunities.
5. They foster an environment where learning is connected across contexts - and lifetimes.

Open Badges, as presented by the Badge Alliance can be awarded by anyone for anything from participation acknowledgment to proficiency proof. Standards set forth by the Badge Alliance make a “Badge” more than just a graphic representation of accomplishment. Each badge file has meta-data “baked” into the file and can be shared with others. The Open Badge standard defines that the following data be included in each badge:

- Issuer information
- Earner information
- Description
- Criteria URL
- Evidence URL
- Standards Alignment
- Taxonomy/Tags

## Enterprise Badging:

Peter Janzow, Sr. Director Business and Market Development, Pearson VUE

### Key Point From Peter’s Presentation:

The Badge is not the **THING**. The Badge **REPRESENTS** the THING.

As a leading global provider of computer based testing solutions, Pearson VUE is deeply involved in the business of validating learning. Peter Janzow works with the Acclaim Enterprise Badging team at Pearson where his role is to find the delicate balance between the broad vision of the Open Badge movement and the pragmatism of enterprise needs surrounding skills gaps, job qualifications and learning credentials. Peter began by identifying a few differences between Open Badges and “Enterprise-class” badges.

Like all Open Badges, Enterprise-class badges are standardized, digital, easily shared, and verifiable. They can also be granular and stackable, but a “badge” does not automatically imply a “micro” achievement. “Enterprise” badges add to this the idea of external validation, and they also conform to a few basic rules:

1. They are issued by recognized brands with an investment in the learning achievements that are represented in the form of enterprise badges;
2. They are backed by a rigorous assessment process that represents best practices;
3. They represent valuable, marketable skills that are required to qualify for further learning or job opportunities.

In short, enterprise badges must have resume potential, and be suitable for an individual’s permanent record.

The Enterprise Badging Ecosystem is aligned around the idea of using Open Badges to represent job-ready skills and learning credentials, and responsive to the needs of the key players in the education-employment:

- Colleges, who want to help learners get better jobs through learning and discover career pathways
- Businesses, who want to identify qualified candidates and develop their workforce efficiently
- Industry leaders, who want to promote best practices and minimum qualifications through pathways toward professional certification
- Learners, who want to improve their lives through learning and easily share their verified credentials

Using the common language of Enterprise-class Open Badges each of these ecosystem stakeholders can benefit, and some of the inefficiencies surrounding skill gaps and unemployment can be alleviated.

### **Point of View From the Healthcare Industry:**

Patrice Ryan, Vice President Human Resources for Cottage Health Systems, former chair of the California Hospital Association's (CHA) Workforce Committee

Patrice expressed optimism on the use of badges by employers despite her original reservations relating several examples of how she, from an employer's point of view, could see credible badging as a benefit – from a hiring tool to a workforce development tool.

“I absolutely see where badging would be an extraordinary tool from an employer's point of view in quickly assessing competence of applicants. Badging has the potential to stimulate the thought process of the interviewer to explore additional areas of expertise of candidates, thus allowing employers to do a better job in hiring.”

Patrice took the group on a tour of how she could see a Badging ecosystem have many and varied positive effects on her organization and in general. Specifically, she expressed employer frustration with the fact that current degrees and certifications from existing healthcare educators are “black boxes” that don't give employers a good view of what was learned and where a person's competencies truly exit. Using Open and Enterprise badges would give a more granular view of an applicant's learning and demonstrated proficiencies along with clues to their interests and passions.

Badging could also be a window of opportunity for the under-served and under privileged to gain entry into the job market by getting credit for their practical skills and experience. Increasing costs are forcing employers to become more efficient and effective in hiring the right people for the right jobs. Badges can make that process easier for employers by more closely matching applicant profiles to job profiles.

## **The Army and the VHA: A Gaming and Simulation View:**

Leslie Dubow, Associate Director, Educational Gaming | Veterans Health Administration

Leslie provided a fascinating view into the future of healthcare by taking the group through the virtual reality medical center being developed by the Veterans Administration. While this was a view over the horizon for most in the room, it did show the importance of Badging at both the professional and consumer level. To help give veterans an incentive to monitor and manage their health needs, the VA is establishing badges of accomplishment for managing insulin levels, weight management, fitness, and other activities identified as important for long term wellness. This has the added benefit of potentially reducing costs to the VA by helping their patients live healthier longer.

Key Discussion Points and Critical Concerns of the group were:

- Verification
- Micro-certification
- Hybrid Certification
- Disaggregation of learning

# DISCUSSION POINTS

- Informal learning & disaggregation of education
- Endorsement of a badge class
- Augmentation of credentialing – transcript
- Micro-Credentials – soft skills;
- Augmentation of INTERVIEWING
- Badging can inform curriculum and align key business drivers
- Badging – STUDENT LEARNING OUTCOMES
- Development of the criteria to make assessments
- VERIFICATION
- Open Badges Flexibility
- Pilot on admissions, coding
- Healthstream
- Interoperability
- Open badges

This is not an unusual list. Digital Badge conversations and conferences throughout the nation reflect these same critical learning steps. As awareness of the types and uses of Digital Badges evolves, there will be more clarity. Having these discussions and asking the questions is a more gentle ‘community of interest’ way to deal with change. We applaud the group for attending with an open mind and speaking frankly. SynED, as convener of this group, has a simple agenda on sharing these future alternatives in a manner that can be honestly and directly processed by the very real and uninhibited intelligence in the room.

# NEXT STEPS

The group collectively endorsed the concept of a local pilot project to further explore the feasibility of using this technology for workforce training.

Santa Barbara Workforce Investment Board will convene a focus group to design and implement a pilot project in the Santa Barbara area. Stakeholders include:

- SynED
- Santa Barbara City College Professional Development Center – Soft Skills
- Workforce Investment Board
- Cottage Health Systems

Presumably, the first steps will be to identify prospective skills to be badged and why. This organic evolution of badge criteria and selection should be based upon shared needs. Diverse training providers in the region can then offer to train or validate the competency of the student for the badge, which makes for a more accessible tool for the student, clear direction for training institutions and established competencies for business's to hire.

Similarly, SynED is aware of many similar Digital Badge pilots throughout California and will strive to keep the participants current in awareness of effective deployments elsewhere.

As this Santa Barbara effort and others mature, a body of practical knowledge will be available to inform our elected officials in their challenging duty to guide the public education system toward a more open and accessible resource for the state's students and businesses. Digital Badging complements these goals and is an effective use of trained faculty. We are particularly grateful that Das Williams found time in his schedule to learn and share with the group.

# SPEAKER BIOGRAPHIES

## **Carla Casilli, Director of Design + Practice | Badge Alliance**

Carla is the Director of Design and Practice at the Badge Alliance where she stewards five topic-specific working groups: Policy; Research; Endorsement; Workforce and Digital & Web Literacy. She collaborates with each working group team to tackle important issues, resolve complex questions and create dynamic opportunities that result in a variety of deliverables that benefit all Badge Alliance members and the open badges community at large. Examples of those deliverables include policy responses, messaging and communication recommendations, exemplar badge systems and white papers.

Previously at Mozilla, Carla explored, examined and documented badge systems. Earlier in her career she was a Creative Director for a telecommunications company, owned and operated her own consulting firm, worked for Frog design and was a VP of Simplified Communications at Siegel & Gale. Carla holds an MA in Media Psychology from Fielding University and a BFA in Graphic Design + Professional Writing from Carnegie-Mellon University.

## **Peter Janzow, Business Development Executive | Acclaim / Pearson**

Peter Janzow is a Business Development Executive in support of Acclaim, an enterprise class badging platform backed by Pearson. Janzow has actively contributed to education for many years in roles that include executive management, global market development and entrepreneurship for educational publishing and technology companies.

With a keen interest in STEM education, Janzow continues to work actively in the fields of workforce development, professional credentialing, and engineering education. Janzow is a former Director of the American Society for Engineering Education.

## **Patrice Ryan, Vice President, Human Resources | Cottage Health System**

Patrice Ryan joined Cottage Health System (CHS) in July, 2001 as Vice President, Human Resources for each of the employers within the Health System (Santa Barbara Cottage Hospital, Goleta Valley Cottage Hospital, Santa Ynez Valley Cottage Hospital and Pacific Diagnostic Laboratories). In that capacity, she oversees: Recruitment, Workforce Development, Benefits, Compensation, Employee Relations, Organizational Development, Employee Health and Safety, Volunteer Services and Childcare Services.

Ms. Ryan has actively participated on the California Hospital Association's (CHA) Workforce Committee, serving as Chair of the Committee from 2010 – 2012. During her tenure as Chair, the Committee focused its efforts in:

- Identifying workforce shortages for key clinical/healthcare occupations and creating workforce need projections for those jobs.
- Creating task forces who partnered with governmental, public and educational agencies in identifying solutions for increasing the pipeline of interested students for the identified workforce shortage of healthcare careers.

Additionally, Ms. Ryan actively participates on the CHA Human Resource Advisory Committee and on the Board of the Coastal Housing Partnership.

Prior to joining CHS, Ms. Ryan served as Vice President, Human Resources at Glendale Memorial Hospital and Health Center and Holy Cross Medical Center in Mission Hills. A native of St. Paul, Minnesota, she holds a degree in Sociology from Hamline University in St. Paul, Minnesota.

## **Leslie Dubow, Associate Director, Educational Gaming | Veterans Health Administration**

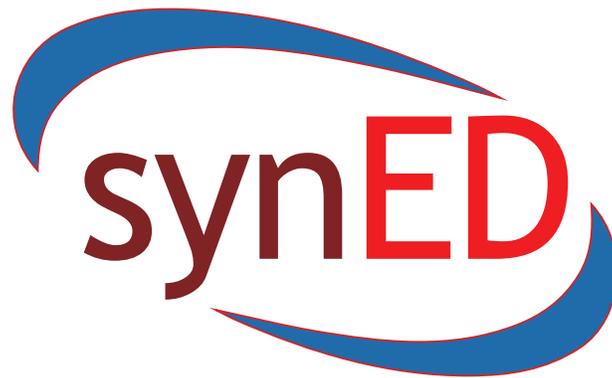
Leslie Dubow is the Associate Director of Educational Gaming at the Veterans Health Administration Simulation Learning Education and Research Network. She is chartered with establishment of a new gaming program and expanding the use of gaming technology to enhance educational experiences for healthcare providers, Allied health professionals and Veterans across the Veterans Administration. Most recently, Ms. Dubow served as the Project Director and founder, Games for Training Program, United States Army Program Executive Office for Simulation, Training and Instrumentation, Orlando, Florida.

Ms. Dubow started her career with the military after commissioning in the U.S. Army Field Artillery. She held positions of increasing responsibility in the Army before starting work in modeling and simulations, managing constructive simulations for the Army in Europe. This first M&S opportunity led to a successful post-Army career in acquisition and program management of training simulation solutions for the Army, other services and Foreign Military Sales. She subsequently coordinated development of Training Aids, Devices, Simulators and Simulations for new and conceptual combat platforms across the Army. In 2005, Ms. Dubow launched what would be the Army's new Games for Training (GFT) program of record initially in support of training for deployment and counter IED defeat. While developing the new program Ms. Dubow also planned and hosted the first Defense Gametech Users' Conference and is a founding member of the Serious Games Showcase and Challenge IPT. Both of these world-class activities have continued as annual events for over 10 years. Ms. Dubow was instrumental in building the GFT project into a vital Army acquisition program of record that still trains thousands of Soldiers every day and is the most used M&S product in the Army.

## **Steve Wright, Meeting Host and Facilitator**

SynED Board Chair, State Director ICT-Digital Media CA Community Colleges.

Steve Wright is a veteran communications technology executive specializing in market strategy, economic and business development. Steve's current role as California Statewide Director Information and Communication Technologies/Digital Media in the Doing What Matters program allows him to combine his business experience with the California Community College system to meet the human resource needs of hi-tech workforce. Steve holds an MBA, Pepperdine, an MS Telecommunications, SMU, and a Project Management Professional certification.



### **About SynED**

Guy Smith, President SynED, and Scott Young, Director SynED, completed this report based upon notes and observations of the Healthcare Roundtable Meeting at Antioch University on October 8, 2014.

SynED has no commercial affiliation or product related to Digital Badges. SynED avoids advocating any particular point of view. Part of SynED's non-profit mission is to identify and instigate balanced discussion and thoughtful critique among stakeholders of issues affecting education. SynED also serves as an independent project and grant manager for your open education initiatives and pilot programs.

More about SynED here ([www.syned.org](http://www.syned.org)).