

Best Practices in Using Technology in HAZMAT Training

inXsol

Henry Ryng 29 March 2017

How Data and Tracking Enable Learning Applications



Certification

Technology role in Building a Certification Program



On Job Performance

Connecting real world performance with training



MOOCs/Social

Massive Open Online Courses and Social Learning



Records Management Role in a Certification Program



John Brunacini



Activities



Data Storage



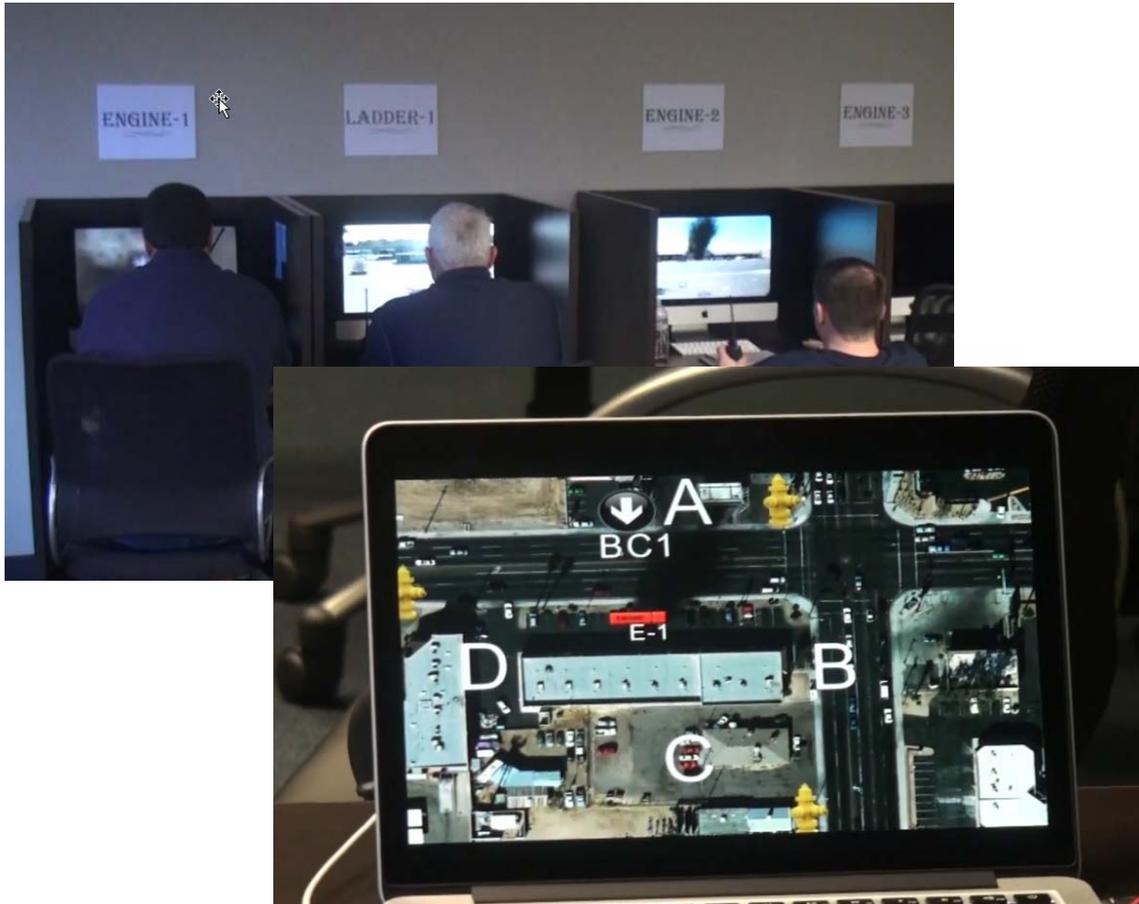
Instructors



Learners



BlueCard – Video Summary

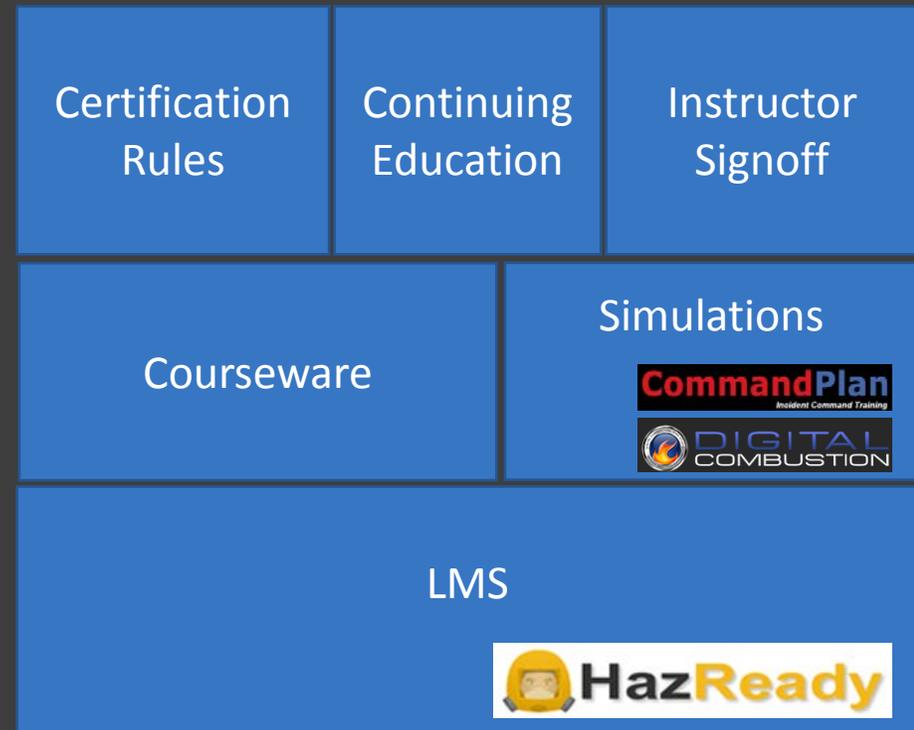


- For a certification program a solid LMS foundation is needed. Certification policies and rules need to be enforced and managed by the platform to be scalable
- BlueCard has 25000 certified Incident Commanders (IC's) and 1400 certified instructors. A training program and support package is needed for Instructors
- Certification and training cannot all be computer based. Instructor observation of candidates demonstrating proficiency is the method to assure competency. This meshes well with Continuing Education (CE) accreditation.
- Technology plays a role in quality and scalability of a training program.



Key Takeaways Technology in HAZMAT Training

- Learning Management System (LMS) is one necessary component of a certification system
- American Council on Education CREDIT eligibility includes review of courseware and systems
- Learner and Instructor tools simplify process and offer scalability



Using xAPI/CMi5 Case Examples



Art Werkenthin



Activities



Data Storage



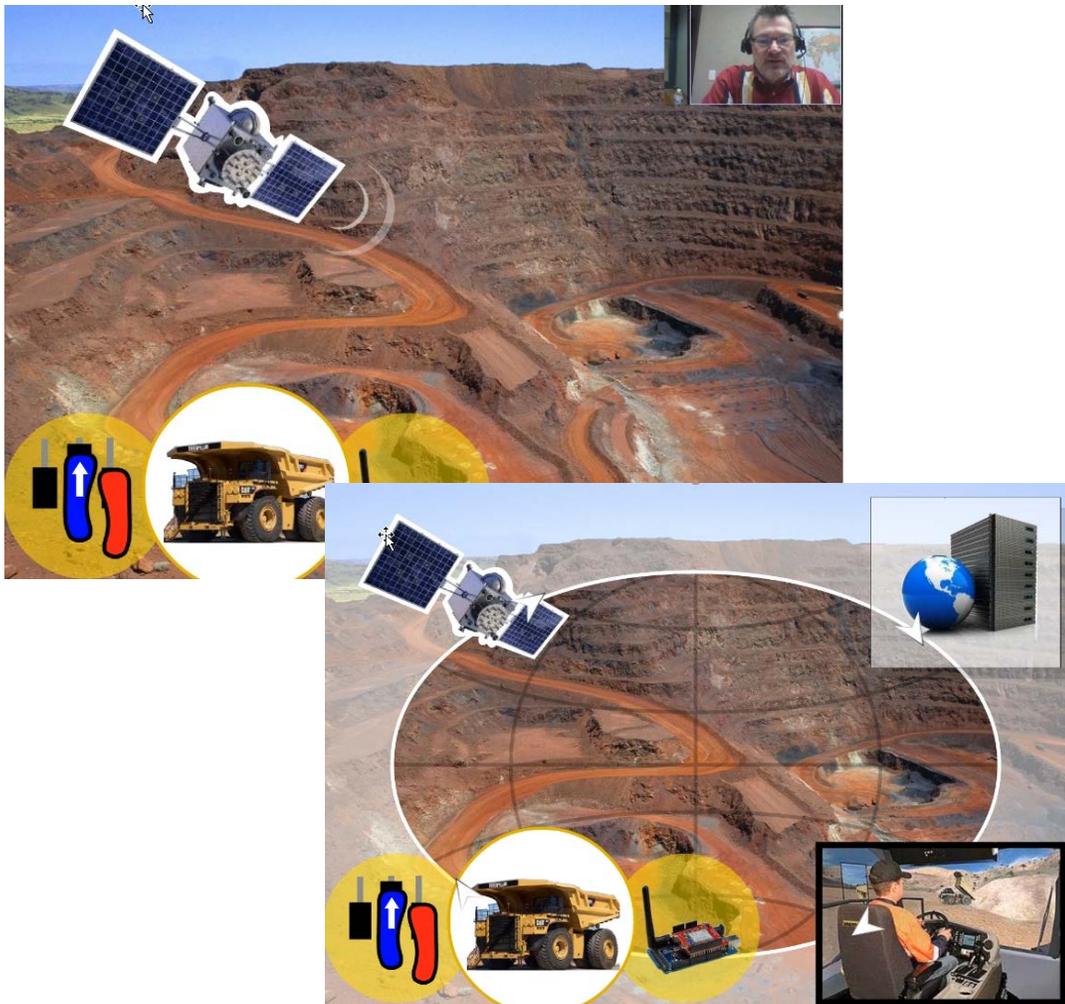
Instructors



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RISC xAPI/CM15 - Video Summary

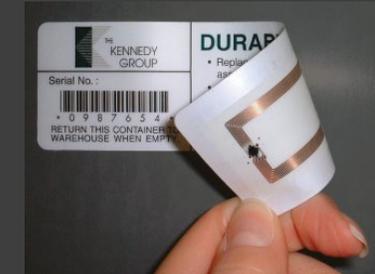


- The xAPI learning record standard enables innovative methods to validate on the job performance against training prescriptions.
- The Internet of Things (IOT) and ubiquitous presence of smart phone or wifi enable on the job just in time aids.
- The CM15 profile over the xAPI standard enables Learning Management Systems to construct blocks of training along with competencies which can have test out criteria informed by performance.



Key Takeaways Technology in HAZMAT Training

- Environmental sensors – can be paired with LMS credentials to screen or alert for individuals who are trained to work in certain conditions
- RFID's or QR Codes on certain equipment or geofencing can combine into training records revealing on the job performance
 - Frequency of procedures or equipment used
 - Credit/Test out
- As we saw on BlueCard Eval sheets can capture post incident performance



MOOC and Social Learning



Ben Betts



Badging



Structure



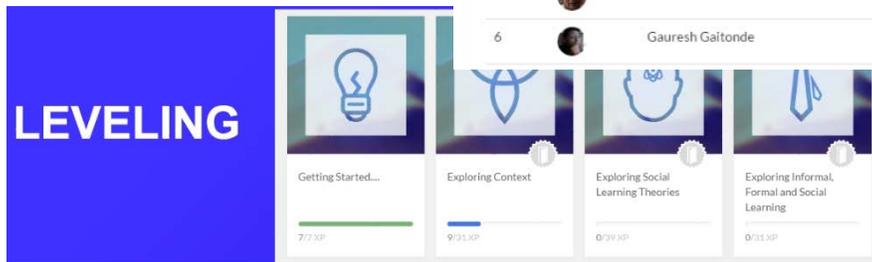
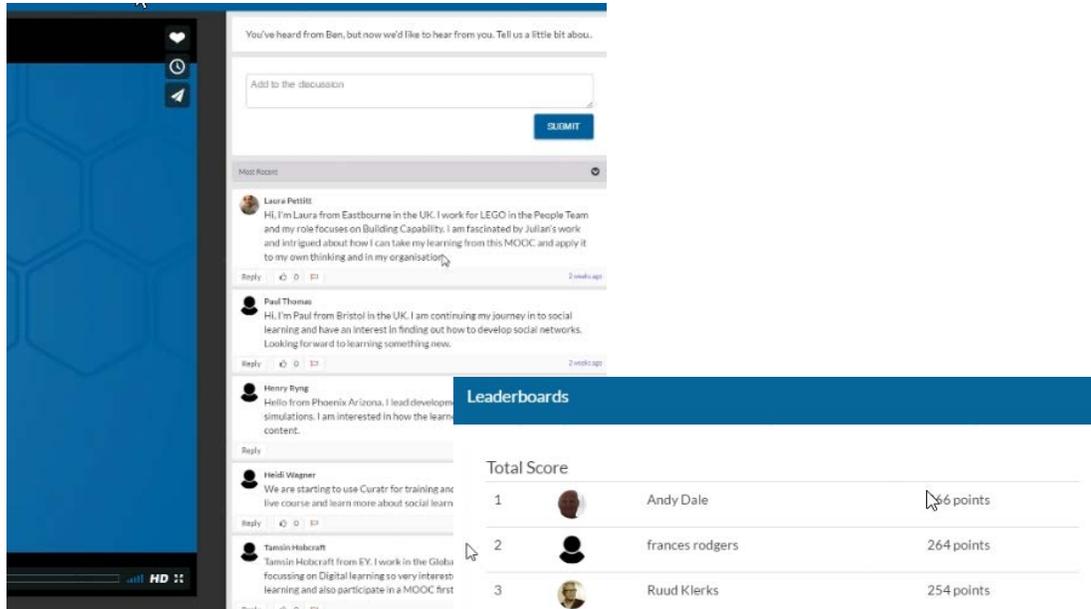
Content



Learners



Curatr – Video Summary



- An effective learning experience can come from the curation of internet available resources.
- Social features like discussions, vote up/down, moderation and leaderboards can enrich a learners experience
- Gamification in the form of points for content areas or participation contribute to learning and user experience.
- MOOCS are generally more cost effective to assemble new content..



Key Takeaways

Technology in HAZMAT Training

- A MOOC can thread through web content in a coherent thread of learning.
- Social Interactions like discussion threads provide the interactions and interaction with your peers
 - Can be moderated
 - Cadres of students or cumulative base of interaction
- The concepts of Badging and Micro Credentialing can be applied to training you are currently doing
- **inXsol's next Phase 1 SBIR is to create a social learning platform with some interesting geo localization to advance this form of learning**

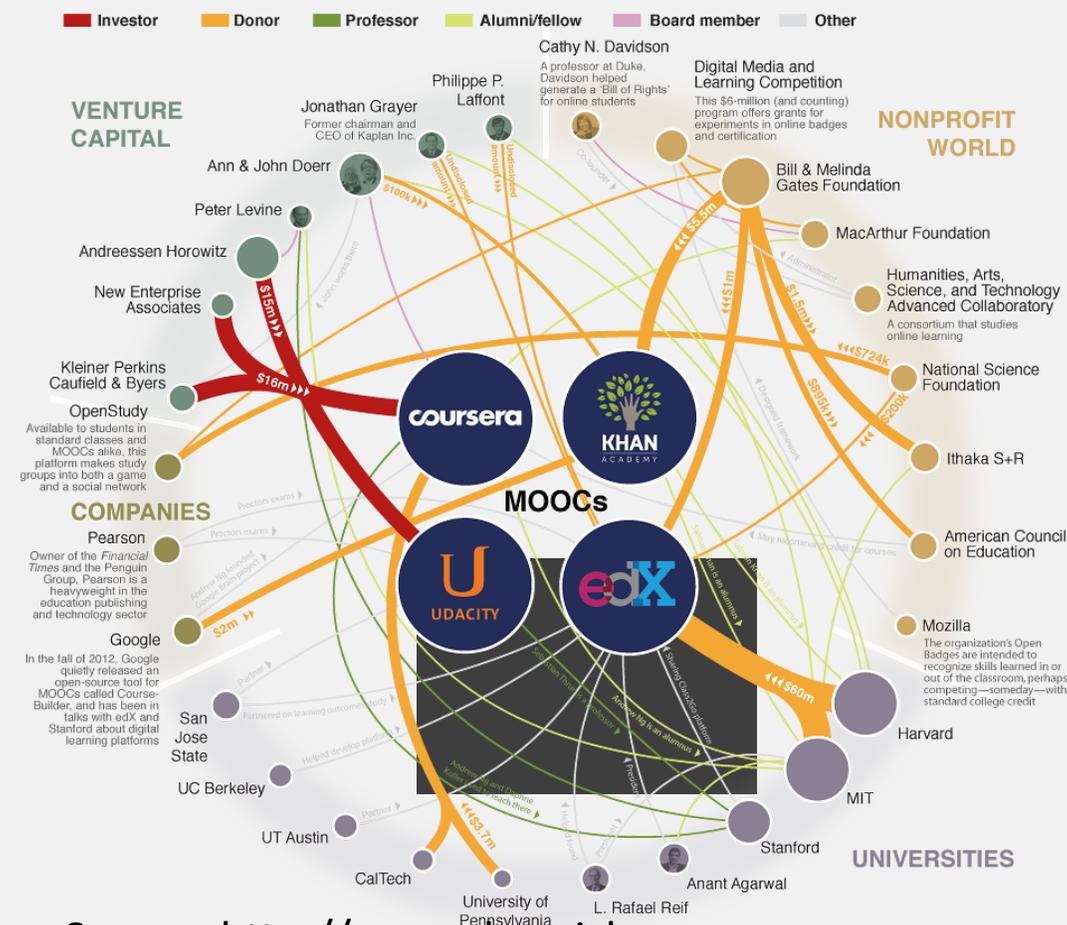


Image Source: <http://www.chronicle.com>

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Thank You



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