Panel: Creating a Gateway for Collaborative Learning

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Abstract: The OWASP Learning Gateway Project proposes developing a platform that is adaptable to the learning needs and user requirements of a global community of technology learners. The gateway will offer learning pathways that connect learners with mentors and knowledge needed to be successful. Our ultimate goal is to be a successful Science Gateways Incubation Project.

1. Introduction

As a global, volunteer-based organization, the OWASP Foundation enjoys the collaboration of a diverse, international community. As such, a mentoring project is being developed which takes into consideration the varied educational backgrounds and learning styles of security professionals around the world. This network includes people who have completed traditional university programs, but also those who have pursued alternative pathways due to various economic, local or personal impacts (such as discrimination and other disability, gender impediments to traditional learning paths). We are developing a learning and mentoring platform to address the needs of individual users in an accessible, safe and affordable online environment.

2. Innovation in Learning

2.1. Changing Learning Environments

A recent report[1] by Deloitte University Press, "Global Human Capital Trends 2016: The New Organization: Different by Design," outlines a framework for a modern organizational learning model. No longer is learning a top-down process. Today, the learner is placed at the center of a new architecture that honors the needs of the student, engages them, gives them control over their own learning, employs design thinking to make the learning experience more efficient and enjoyable and treats learning as a continuous, organizationwide responsibility. In addition, these new learning architectures adopt a development vision that anticipates future development where resources, expectations and culture are aligned to enable users to learn when and where they need to at all stages of their careers.

According to Gauri Reyes[2], freedom of choice in learning is facilitated by a decentralized learning network. Decentralization encourages "self-directed learning, mentoring, social and informal collaboration, learning tailored to specific groups and locales, and on-the-job performance support." The traditional adult learner may also be in need of expertise in obtaining and preparing for certifications in areas that support OWASP and information security topics in general, and may need mentoring since many certification programs were only established within the last five to twenty years, and because not all employers support and/or fund the time and resources required for certification in appropriate areas. An effective learning platform should support long-term professionals who can utilize mentoring while being able to share their experience.

2.2. The Learning Gateway Platform

OWASP's Global Mentor Initiative's Learning Gateway Project[3], currently in incubation, will be a connected, collaborative learning platform to support the OWASP Mentor Initiative. We are building on the resources of OWASP's Global Education Committee and Education Initiative whose educational materials will serve as an initial content set for the initiative. These materials are available globally in an easily consumable form, mapped to a framework that is tied specifically to user needs. Additional collaborations, partnerships and user-generated content and forums for communication, networking and shared learning is the vision.

The Learning Gateway is a "Knowledge and Wisdom" platform for an integrated academic,

industry and applied, real world learning environment. Management Mentors' philosophy [2] is closest to our own: Transformational learning occurs where trusted platforms for mutual sharing allows mentors to empower learners to and develop competency independence. Importantly, these technologies support the development of interpersonal relationships but are subordinate to these relationships. They are adaptable to the organization's core values and reflect the diversity of the learning community. The Learning Gateway will support mentor/mentee and sponsor/protégé relationships for portfolio development, career advancement and to develop successful learning pathways.

Some features may include:

- A forum for developing feedback and constant surveying of student learning, interactions, how they learn and how we can provide them useful tools for mentoring and learning.
- Ability to schedule discussions with mentors that are focused on individualized learning experiences, as well as access to online courses, certifications, and other traditional education platforms (LMSs, MOOCs, LCMSs, etc.)
- A secure environment that allows for 24/7/365 access to communications and is sensitive to the privacy of participants as they seek and provide mentoring.
- A way to collaborate and partner with meetups, educational events and industry, professional and academic conferences for face to face meetings with local learners and to promote regional partnerships for mentoring and learning experiences. (Some potential partners include (ISC)2, ISACA, IEEE, SANS, GitHub with institutional membership.)
- An engaging learning platform, similar to Fitbit for education. It may include an avatar you can interact with and customize, tools to test your progress and speed and a gamification feature that gives rewards and nudges.

3. Session Proposal

We propose a 40-minute panel session involving five participants in the OWASP Learning Gateway Project. Each panelist will submit a one-page description of their role in developing the platform. At the conference, a brief visual presentation about the Learning Gateway will be followed by panelists who will discuss their role from the point of view of learning management, development, product design, information and operations, as well as how other institutions can collaborate. All panelists are members of the OWASP Foundation. Panelist biographies are included in an addendum to this proposal.

4. Conclusion

The OWASP Global Learning Gateway will serve as an exploration of the gateways model for mentoring and collaborative learning. Starting with the OWASP application security community, the learning gateway model will eventually expand to additional technical communities where OWASP partnerships have been developed, including but not limited to information architecture, geospatial information systems, technology transfer and general science and technology learning communities.

5. Acknowledgments

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6. References

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- [4] Management Mentors, Mentoring Minute, February 2016. <u>http://www.management-</u> mentors.com/tbt-our-mentoring-philosophy

Panelist Biographies

Bev Corwin is Director of Technology of DDC, a co-Founder of the Information Architecture Institute and the Enso Center for International Arts. She consults for global non-profit and for profit organizations, serves on advisory boards, is a Chapter Leader of OWASP Foundation's New York City and Brooklyn Chapters, and volunteers for international humanitarian aid, education, and international arts organizations. As a consultant, mentor, and advisor, Bev plays an active role in the development of global web applications, online learning, and international communications. She has worked in the areas of data center management, devops, global legal support services, aerospace, business technology, international health, and language technology services.

Christie Ewen is an AI Developer and entrepreneur, currently serving as President of Vitarch, LLC, creator of Serapthorn. She is a writer/editor of the Quest for Physical Immortality blog. She founded AI Camps at Open Camps at the United Nations. She founded a number of open source communities including PyLadies. She has a BS/BE in CS/EE from NYU/SIT. Christie is currently working on webapps in Meteor JS.

Sean Auriti has skills in web development, engineering and team management. He graduated from NYIT with a BS Electronic Engineering Technology and has since worked as a programmer at several web development firms in NYC. He is an OWASP Brooklyn chapter leader. Has won over 11 hackathons including NYC Bigapps and the BSR sustainability app. Auriti has also founded and managed and built infrastructure for Alpha One Labs makerspace at which he has built prototypes for an LCD hat, Laser scrolling sign, 3D POV display, Smart Recycle Bin, and Robotic Food Exchange. He was on the front page of the New York Times for a space group he was a part of that received DARPA funding.

John Ulmer is a computer enthusiast who has attended a gamut of coding bootcamps. He knows what works and what can improve in the burgeoning field. His interests lie in building online educational platforms as well as physical learning centers for computer and electronics learning.

Janine Medina is a Healthcare Consultant for Dangerous Things. Janine has a Masters of Science in Biomedical and Health Informatics, with a decade of experience in the field at Sloan-Kettering Cancer Center and GMHC. Honorably discharged from the Marine Corps, Janine seamlessly bridges the gap between medical and military worlds, helping the efforts to create military medical applications for Dangerous Things. Janine has also partnered with the NYC Department of Education to bring a college preparation course for high school junior and senior level students. As Project Manager of the BioHacking Village at DEFCON, she brings together inventors, students, community leaders, academics, tech and social bloggers, local businesses and more to enhance our raw abilities, specific skills, overall knowledge of how technology can be applied to humanity.

Noreen Whysel is a User Experience Researcher and Information Architect based in New York City. She is the COO/UX Director for Decision Fish. She serves on the board of GISMO, a NYC regional chapter of the NY State GIS Association, the User Experience Committee of the Identity Ecosystem Steering Group and as an advisor to the Brooklyn SBDC Technology Transfer Days program. She has worked in an operations capacity for many years for the OWASP Foundation and the Information Architecture Institute, as well as other small businesses and nonprofits. She has developed mentoring programs for Columbia College Women, Information Architecture Institute and the OWASP Foundation and has presented on mentoring women in STEM at the United Nations and Union County College, New Jersey. Noreen speaks frequently on mentoring, information architecture, emergency management, and open data. Noreen holds a BA in Psychology from Columbia University and an MSLIS from Pratt Institute's School of Information.