Analysis of a Training Package for Law Enforcement to Conduct Open Source Research

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ABSTRACT

Law enforcement officials (LEOs) in the UK conduct open source research (OSR) as part of their routine online investigations. OSR, in this instance, refers to publicly available information that is accessed via the Internet. As part of the research, identifying and tracing the electronic suspect (RITES) course provided by the UK’s College of Policing, LEOs are introduced to the open source internet research tool (OSIRT); a free software tool designed to assist LEOs with OSR investigations. This article draws on analyses from questionnaires and observations from a RITES course; mapping them to Kirkpatrick’s evaluation model. Results showed the positive impact the RITES course had in transferring knowledge back on-the-job, with LEOs applying knowledge learned to real-life investigative scenarios. Additionally, results showed OSIRT integrated both in the RITES course and into the LEOs investigative routine.

KEYWORDS

Kirkpatrick’s Evaluation Model, Online Investigations, Online Research, Open Source Intelligence

INTRODUCTION

The World Wide Web plays host to a veritable breadcrumb trail of potential evidence which could provide intelligence to Law Enforcement Officials (LEOs). From Facebook posts to Tweets, all are avenues that may prove useful and warrant exploration. One tool to help navigate these routes is Open Source Research (OSR). OSR is concisely defined by the Association of Chief Police Officers (ACPO) as “The collection, evaluation and analysis of materials from sources available to the public, whether on payment or otherwise, to use as intelligence or evidence within investigations” (ACPO, 2013, p.8).

To aid digital investigators in conducting OSR, the UK’s College of Policing, a professional training body for police in England and Wales, runs a five-day Researching, Identifying and Tracing the Electronic Suspect (RITES) course. The RITES course provides an opportunity for LEOs, regardless of skill-level, to gain proficiency in lawfully obtaining intelligence and artefacts from the web. In addition to investigatory skills, the RITES course adopts the usage of the free and open source investigative software package Open Source Internet Research Tool (OSIRT); a tool designed specifically to assist in conducting OSR.

A growing trend for the use of OSR is continuously expanding among UK law enforcement agencies. In order to conduct rigorous OSR investigations, law enforcement require a multitude of tools and techniques. A problem surrounding OSR is the cost associated with software tools, along
with the legal, ethical, and procedural issues that are exacerbated by the reduction in police funding. It is imperative, then, that the training LEOs receive is robust and applicable in the digital age. The objective of this study is to offer an insight into how LEOs are trained to conduct OSR and whether the training package, in conjunction with OSIRT, is effective for those officers both during the course and when they are back on the job.

BACKGROUND

Designing Training Courses for Law Enforcement and Applying Learning Styles

Similarly to courses structured for training law enforcement in digital forensic investigations (Genoe, Toolan, & McGourty, 2014; Stephens, 2012), the RITES course requires an ability to problem solve, pay attention to detail, and have a mindset for investigation and intelligence. Considerations are directed by course aims “to provide investigating officers with the skills necessary to obtain, evaluate and use online information … apply[ing] best practice in respect of proper authorization and recording processes for online investigations” (College of Policing, 2017, para. 3).

For a number of years, police training programs adopted a “militaristic environment” (Birzer, 2003, p.30) which a number of authors (Birzer, 2003; Haberfeld, Clarke, & Sheehan, 2011; Vodde, 2009) state is not conducive to learning, as “it is essential that training is conducted in such a way as to be as meaningful as possible to the adult participants” (Birzer & Roberson, 2007, p. 226). The RITES course adopts both andragogic (i.e. self-directed learning and sharing of experiences) and pedagogic (i.e. dictating learning in the form of traditional lectures) approaches to learning which seemingly prove efficacious when training police officers (Birzer, 2003; Haberfeld et al., 2011; Queen, 2016). Tong, Bryant, & Horvath (2009, p.210) state that “training and learning styles need to reflect that uncertainty of police work and the principles that should inform practice.” Traditionally, lecture style approaches to educating learners are “almost always the most inefficient way of learning” (Grace, 2001, p.125), and while it is unlikely for the RITES course to accommodate every style of learning, a concerted effort is made to engage their audience. By embracing modern approaches, College of Policing trainers afford the officers a better chance of applying their acquired skills to real-life scenarios.

Design of the RITES Course

The course is split into one to two-hour chunks of key topic areas, covering approximately five topic areas a day (Figure 1). Each topic area is then either proceeded or injected with practical sessions or discussion from the cohort, which is facilitated by the instructors. Practical sessions also include building upon a fabricated case using OSIRT over the five days. On the final day, the group members are examined by means of an unseen open source investigation. The artefacts they obtain through OSIRT from the ‘investigation’ are then applied to answer questions on a computer-aided, open book, multiple-choice examination. The course is then concluded with a reflection of the previous five days. Figure 2 represents the layout of the learning environment.

Using Software for Investigative Work

In an ever-growing digital age, and with changing expectations in police competencies, LEOs require essential skills and abilities to conduct online investigations. However, the skill-level of officers requiring such training is diverse with many not being, or having had the need to be, skillful with computers during their daily roles. The requisite for software-based solutions has a crucial element to aid the proficiency of conducting OSR and go some ways towards making “officer[s] more efficient, more effective, more knowledgeable, and better able to spend [their] time … and by improving reporting capabilities” Roberts (2011, as cited in Hess et al., 2013, p.16).

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