Cyber Security Essentials

I chose Cyber Security Essentials as the topic for this CPD training exercise as it relates most to the security unit that we're covering. I am also most aware of what goes into CSE compared to the ISO27001 spec, as well as Amazon Web Services.

Training Objectives

What are some potential training objectives for a training event on cyber security essentials? What would important to convey?

- Individuals must come out of the event knowing more about the risks and solutions surrounding cybersecurity, as well as an understanding of problem-solving techniques and how to identify security risks.

- ISO27001 fundamentals, including how to use a specification such as ISO27001 to diagnose security problems and solve them. Possibly worth focussing on how specs that solve these problems exist and provide some examples.

- Inform the individuals about what the result of cyber security problems can be and give some examples of prior attacks and losses.

- Network Security vs Device Security, and the different scales they operate on (individuals compared to corporations and governments).

Audience

The format of the presentation relies on the number of individuals attending. On top of this, there are considerations to be taken regarding learning styles and prior knowledge.

According to the brief, "[The] audience will have some basic knowledge of the training topic." This may vary from person to person, so having a catchup segment with the fundamentals being brought back up may help to remind or
re-teach. A good example of how this prior knowledge could benefit the

group is having question and answer phases, where the more knowledgeable individuals could assist the rest of the class.

According to a 2014 U.S. Census, “Over half of employed IT workers fall within [the ages of 25 and 44]”, and that 75% of people working in IT are male. This information might be useful in tailoring the content delivered, as knowledge of cybersecurity incidents may rely on age, for example. (Beckhusen, 2016)

The ideal group size for this event, in my opinion, would be 15 or more, as having the ability to divide the group into smaller groups and retain age and gender diversity may be an asset for group tasks. On top of this, dividing into groups allows for stations that everyone rotates through, and additionally allows for tasks that involve the three teams competing (i.e. coming up with the best solution for a given problem).

Format and Techniques

I think that, given the potential wide range of ages in the audience of this event, it would be useful to integrate younger people with older people in group tasks, so that everyone can be at the same level of understanding. As mentioned above, maintaining age and gender diversity within each subgroup may be important as it could help provide different perspectives within each subgroup.

Depending on whether the group gets up to a size of 25 or so, dividing into three teams for tasks and a short competition sounds like a good idea. Additionally, having stations that each team rotate through sounds beneficial for content delivery, as it allows for smaller groups to be taught at a time, affording them more one to one support and information.

Providing each group with an identity and having them compete at the end of the training event would help provide a competitive sense to the event as a whole and may help utilise potential existing workplace competitiveness. Possibly keep a points system. Otherwise have a questionnaire at the end based on what is being taught and score each team.

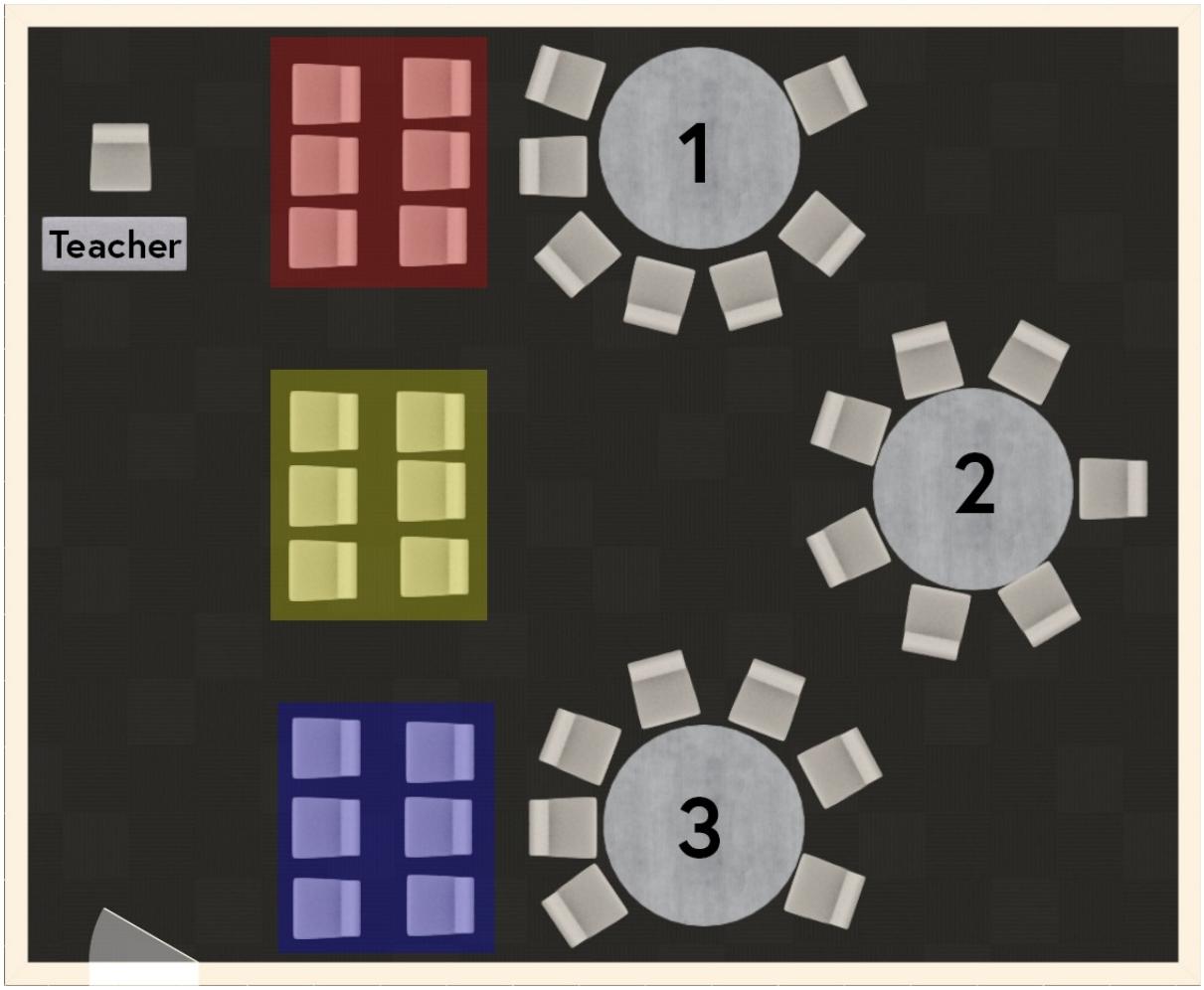
Team 1	Team 2	Team 3
~5 members Red colour	~5 members Yellow colour	~5 members Blue colour

As well as the team process, the specific information delivery methods will include presentations (PowerPoint), informative videos, and informational

stations that the teams rotate through. Having the team sections would allow for content deliverers to go around and talk to individuals informally and help them catch up with the rest of the team or the class.

Room Layout

Given the team configurations, having the room split into thirds (chairs and tables) will allow for team communication as well as the three stations for rotation later in the event.



In this diagram, there's 6 seats for each team, as well as each station. The teacher has a desk at the front, and it's presumed there will be a projector at the front of the class (the left side) to show a presentation, a timer, etc.

Feedback (Formal and Informal)

Informal feedback could be given during the station tasks, as it allows for a direct conversation between event providers and individuals. On top of

this, having a segment at the end (two or three minutes) to write down feedback and deposit it in a box, allowing for anonymity, would be a good formal solution.

Uses of IT in the event

The core uses of IT within the event will relate to timekeeping, event organisation, and displaying the presentation itself. On top of this, the stations may rely on a digital workspace, with laptops or a screen facing the group training at each station. Overall, IT plays a core function of the event as it supplements the primary presentation and provides organisational support, as well as providing the core functionality for each station

Presentation Time Plan

(Annotation is included in .docx comments) [removed for archiving]

Name	Length	5	10	15	20	25	30	35	40	45
Introduction	5 Minutes									
Station 1	10 Minutes									
Station 2	10 Minutes									
Station 3	10 Minutes									
Quiz	10 Minutes									

This Gantt chart represents the total time in the training event, dedicating 15 minutes to the station section, a 10-minute questionnaire at the end, and a 5-minute of introduction. The Questionnaire is 10 minutes long as it allows for the introduction and any of the stations to run over for a few minutes, allowing for contingencies should any technical issues or delays come up. Depending on the amount of questions, it may be possible to extend the time for each station by a few minutes.

Bibliography

Beckhusen, J. (2016). *Occupations in Information Technology*. [online] Census.gov. Available at: https://www.census.gov/content/dam/Census/library/publications/2016/acs/acs-35.pdf [Accessed 22 Oct. 2019].