Foreword | *Online communities are increasingly being recognised as a way of sharing ideas and knowledge among different practitioner communities, particularly when practitioners are not able to meet face to face. This paper explores the considerations associated with establishing online communities for crime prevention practitioners, drawing on research from across the community of practice, online community and knowledge management sectors.*

The paper provides an overview of the administrative considerations of online community development, as well as the key barriers and enablers to practitioner engagement in an online community, and the potential implications for a crime prevention-specific practitioner community. As such, it is a useful tool for those in the crime prevention sector wanting to maximise the influence of an existing online community or to guide those contemplating the implementation of an online community of practice in the future.

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Online communities: Utilising emerging technologies to improve crime prevention knowledge, practice and dissemination

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Communities of practice (CoPs) are 'groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly' (Wenger 2006: 1). In recent years, online technologies have emerged as an important way of disseminating good practice and have often been developed to support CoPs. Online CoPs allow the transmission of tacit knowledge, which can form a crucial part of learning (Harman & Koohang 2005), particularly in relation to areas such as crime prevention (Ekblom 2010; Teng & Song 2011). From a technical perspective, online CoPs are relatively straightforward to establish, although in reality, the ongoing time and effort required to attract and sustain members can be resource intensive. Key considerations for the planning and establishment of online CoPs are explored in this paper, with a particular focus on the effective implementation of such communities for crime prevention practitioners. In some cases, CoPs emerge without external planning and establishment and this paper's exploration of issues that may affect ongoing participation can be applied to situations where a CoP is identified and supported, rather than specifically being established.

What is an online community of practice?

In this paper, the understanding of online communities (OLCs) is based on broader CoP research that focuses on the links between likeminded professionals. There are three characteristics that define a CoP from other day-to-day interactions:

- there must be a shared interest in an area;
- members interact and learn together but do not necessarily work in the same organisation or work together on a regular basis; and

- they are practitioners that can draw on their experiences to provide solutions to issues (Wenger 2006).

CoP activities can include:

- problem solving;
- requests for information seeking experience, reusing assets (eg adapting existing reports, lessons etc to other activities);
- coordination and synergy;
- discussing developments;
- recording project information/lessons learned and mapping knowledge; and
- identifying gaps (Wenger 2006).

Similar to the CoP definition, OLCs are often characterised by shared interests and goals, where members are involved in active, repeated participation that can establish emotional ties and shared activities, and where resources are shared—albeit with protocols framing the use of these resources (Whittaker, Issacs & O'Day in Preece & Maloney-Krichmar 2003). OLCs are also characterised by reciprocity of services, support and resources, and shared language, conventions and protocols (Whittaker, Issacs & O'Day in Preece & Maloney-Krichmar 2003).

Online communities and crime prevention

Internationally, crime prevention practitioner CoPs are emerging (see Table 1) and long-established practitioner groups have incorporated web-based tools such as OLCs into their knowledge dissemination practices (eg International Society of Crime Prevention Practitioners http://www.iscpp.org/). 'The Crime Prevention Website' (http://thecrimepreventionwebsite.com/), recently established in the United Kingdom, has developed an OLC discussion forum for practitioners. At the time of writing, there has been limited activity on the forum, however, OLC forums can take years to gain traction. Previously, in the United Kingdom, the Home Office hosted an online discussion forum on its crimereduction.gov.uk website (see archived file http://webarchive.nationalarchives.gov.uk/20100413151441/http://crimereduction.homeoffice.gov.uk/discuss_index.htm). Three discussion themes were provided:

- a 'Practitioners Board' aimed at professionals;
- a 'Learning Board' for those providing learning and education resources; and
- a 'Neighbourhood Watch Board' for Neighbourhood Watch coordinators.

It is not possible to determine whether the forum was evaluated for its effectiveness in knowledge exchange.

A similar national crime prevention OLC has not yet been established in Australia, nor have specific national practitioner websites (although international OLCs are open to Australian practitioners). Further, Australian practitioners, particularly within local governments, have begun forming online social networks to improve knowledge dissemination. These are generally invitation-only networks and can include a dedicated site to post comments (eg Local Government Community Safety Online Network in Western Australia) or rely on a dedicated email distribution list to disseminate relevant knowledge (eg Local Government Community Safety and Crime Prevention Officer Network Research in New South Wales). Membership of these groups is principally limited by the jurisdiction in which the networks operate and is generally populated by local government employees, although there are exceptions (eg inclusion of academics, police and researchers).

Potentially, crime prevention OLCs have much to contribute to enhancing knowledge dissemination. In particular, OLCs could be a useful vehicle for improving dissemination and learning to more remote or isolated practitioners and providing support that may not have been as readily available in the past.

Considerations for creating a crime prevention online community

While there is no prescriptive formula for establishing an OLC, there are guiding principles and models that have been identified to support OLC development (Kosta & Sofos 2012). Stuckey (2004)

Table 1 Sample of existing practitioner-focused crime prevention communities of practice		
Name	Established	More information
International Society of Crime Prevention Practitioners	-	http://www.iscpp.org/
The Crime Prevention Website	2012	http://thecrimepreventionwebsite.com/
Designing Out Crime Association	1999	http://www.doca.org.uk/intro.asp
Californian Designing Out Crime Association (Cal-DOCA) (formally known as Law Enforcement Environmental Planning Association of California (LEEPAC))	1989	http://www.caldoca.org/default.htm
Police One (Law enforcement focused)	-	http://www.policeone.com/
LGPro Community Safety Special Interest Group (Victoria)	2008	http://www.lgpro.com/community-safety
Local Government Community Safety and Crime Prevention Officer Network Research (New South Wales – hosted by Sydney University)	2009	http://ses.library.usyd.edu.au/handle/2123/8637
Local Government Community Safety Online Network Group (Western Australia)	2012	-
Home Office Crime Reduction web portal	(archived since 2010)	http://webarchive.nationalarchives.gov.uk/20100413151441/http://crimereduction.homeoffice.gov.uk/discuss_index.htm

conducted a meta-analysis of OLC models and summarised the key elements. These fall broadly under three interrelated action areas—design, implementation and sustainability (see Table 2).

In addition to these considerations, there are three key factors that should shape each element of the design, implementation and sustainability of a crime prevention OLC:

- OLC administration—is there the time, resources and expertise for OLC implementation?
- OLC purpose—what knowledge should be disseminated?
- OLC audience—who is the OLC trying to engage?

The considerations associated with each of these factors are discussed further below. These considerations have been sourced from the OLC and knowledge dissemination literature, and while their applicability to crime prevention practitioners is still to be determined, it is reasonable to assume they have relevance to crime prevention.

Online community administration: Is there the time, resources and expertise for online community implementation?

Determining whether to establish an OLC may be a relatively simple decision, based on an identified need, or it may be a natural next step for an existing face-to-face CoP. Otherwise, the level of interest among practitioners needs to be ascertained via broad consultation to ensure the OLC will be of interest and used by the key target audience. Practitioners should also be mindful not to duplicate existing crime prevention OLCs. Even if a face-to-face CoP already exists and the participants wish to move it online while still possessing the same purpose and/or functions, OLCs require different operational management, as well as different design considerations (Kostas & Sofos 2012). It should not therefore be assumed that existing practitioner CoPs can move online seamlessly, especially if they fail to add value to existing social support networks (McPherson et al. 2002).

An OLC host must be prepared to invest in fostering social interaction and face-to-face contact to support dissemination aims. Successful OLCs should have a balance of both the supply of new information and the demand for it (Ardichvili, Page & Wentling 2003)—without this balance, a crime prevention OLC is unlikely to become an established, well-utilised resource.

An OLC evolves organically and requires ongoing nurturing, updating and management. A six month trial of a Closed-Circuit Television OLC by the Australian Institute of Criminology highlighted the importance of effective development and management of an OLC, and the recruitment and ongoing engagement of practitioners (Anderson & McAtamney 2010). Although only a short-term trial (6 months), maintaining interest in the site was time and resource intensive, involving considerable effort to regularly evolve and update content based on practitioner needs. The trial also highlighted the importance of a moderator taking a leadership role in an OLC.

Table 2 Key principles and elements of online community development

Design	Implement	Sustain
Situatedness	Reinforce the community's focus	Focus on topics important to the business and community members
Concentrate on communities that matter	Focus on value	Harness the power of a personal connection
Define and articulate your purpose	Find a well-respected community member to coordinate the community	Play on all motives for participation
Design for a range of roles	Create meaningful and evolving member profiles history and context	Build personal relationships among community members
Get key thought leaders involved	Develop an active passionate core group	Do not be too strict in judging
Create Executive awareness	Develop a strong leadership program	Actively generate content
Make sure people have time and encouragement to participate	Acknowledge the voluntary nature of participation	Prime the pump with communication
Collect and use feedback from members	Invite different levels of participation	Encourage appropriate etiquette
Develop interdependency	Create critical mass of functionality	Create dialogue about cutting edge issues
Create a rhythm	Provide the materials that collaboration requires	Facilitate member-run subgroups
Integrate the rituals of community life	Make it easy to contribute and access	
Combine familiarity and excitement	Rely on the fun factor	
Keep it fresh (first in community)	Fit the tools to the community	
Form communities around people, not applications	Develop both public and private spaces	
Create forums for thinking together as well as systems for sharing information	Open a dialogue between inside and outside	
Design for evolution (flexible, extensible)		

Source: Adapted from Stuckey 2004: np

Selecting a moderator and/or knowledge broker

Moderators are considered crucial to an OLC's success, both in terms of maintaining OLC sustainability and in facilitating the learning of the participants (Conrad 2002; Gray 2004). The role of the moderator is likely to vary from OLC to OLC. However, in general, a moderator would provide oversight of the administration, communication and knowledge sharing on the OLC site. This could include managing user subscriptions, providing user support on the OLC, continuously checking that OLC website functions are working and are user-friendly, ensuring content disseminated on the OLC is appropriate, up-to-date and relevant (including publications, comments and questions on discussion forums, or suggested links), as well as driving and leading discussions when necessary.

Dedicated 'knowledge brokers' (who may or may not be the same person as the moderator) can also be useful in sustaining OLCs. According to Ward, House and Hamer (2009c, 2009b), knowledge brokers can provide one or more of the following approaches:

- creation, diffusion and use of knowledge ('knowledge manager');
- providing an interface between 'creators' and 'users' of knowledge ('linking agents'); and
- providing better access to training and other resources ('capacity builders').

Specific tasks of a broker can include:

- 'helping participants identify, refine and reframe their key issues, questions and needs;
- finding, synthesising and feeding back relevant research and other evidence;
- finding appropriate experts to inform and assist the participants;
- facilitating interactions and mediating between participants and relevant experts; and
- transferring information searching and other skills to participants' (Ward, House & Hamer 2009b: np)

In addition to these functions, knowledge brokers should be proficient in research interpretation and application, including how it all fits in relation to the 'bigger picture', tailoring key messages to suit local perspectives and ensuring the language used to convey messages is adapted to suit the audience (Dobbins et al. 2009). Structured dissemination should also be complemented with access to training workshops, professional development opportunities, various communications mediums and face-to-face engagement (Ward, House & Hamer 2009c). In order to provide an effective knowledge brokerage role, it has also been suggested that access to research databases, journals and information management software would be required (Ward, House & Hamer 2009c). However, the extent to which access is required will depend on the scope and objectives of the OLC.

As the above list implies, knowledge brokering is not a simple task (Dobbins et al. 2009; Ward, House & Hamer 2009c) and coordinating an OLC is likely to have significant organisational and administrative pressures similar to those that Iaquinto, Ison and Faggian (2011) documented for CoPs in general. Identifying resources, relationship building and building capacity to undertake brokering activities can take a long time to establish (Dobbins et al. 2009). Therefore, OLC moderators and/or knowledge brokers should be carefully identified to ensure they have the appropriate capacity and time to fulfil their role.

Sharing the responsibilities of OLC management with community members is considered good practice. Even with a moderator or knowledge broker, agencies adopting an OLC should also be prepared to let content and OLC evolution be shaped by direct practitioner input, as active involvement in OLC decisions and moderation activities can facilitate self-sustaining communities (Andrews, Preece & Turoff 2001; Wolf, Späth & Haefliger 2011). However, the primary OLC owner still should maintain a degree of responsibility for the site. This is particularly pertinent

for ensuring the content, moderation and technical operation of the site is functioning appropriately. Engagement with respected practitioner groups is also essential, as their support and affiliation with an OLC can engender trust in the OLC (Andrews, Preece & Turoff 2001) and subsequently improve the chances of the OLC being utilised.

Legal and other obligations

OLCs have a number of legal and other obligations. Subocz (2007) identified five areas with which OLC moderators should be familiar:

- copyright infringement;
- defamation;
- religious or racial vilification;
- Australian privacy laws, in particular on how personal information is collected and stored; and
- disclosure of confidential information.

OLC participants should be alerted to their responsibilities when using an OLC by agreeing to conditions of use prior to participating.

The purpose of online communities: What knowledge should be disseminated?

An OLC should always have a purpose grounded in some form of knowledge dissemination practice. Knowledge dissemination is defined here as:

- sharing lessons and knowledge (eg peer-to-peer, academic-practitioner) that can be unidirectional, linear, cyclical or dynamic-multidirectional (Ward, House & Hamer 2009a);
- transferring knowledge from one person/agency to another;
- allowing individuals/organisations to interpret available knowledge and apply or adapt it to their local context; and/or
- creating new knowledge and practices based on available evidence.

Most dissemination literature concentrates on the process of transferring research to practice. Knowledge can be used to influence changes in opinions or behaviour, or used to support existing beliefs and/

or approaches (Contandriopoulos et al. 2010). It is important to be clear on the different types of knowledge that will be disseminated via an OLC to ensure that the OLC is designed to allow for the appropriate capture, storage and retrieval of different forms of knowledge.

Ultimately, the type of knowledge to disseminate in a crime prevention OLC should be guided by the purpose of the OLC. Potential objectives would most likely include one or more of the following:

- facilitating knowledge dissemination between practitioners;
- sharing experiences and solutions in crime prevention with practitioners;
- offering networking and professional development opportunities;
- improving the uptake of crime prevention evidence-based practices and good practices;

- providing an opportunity for those implementing crime prevention strategies to seek advice from other practitioners, industry experts and academics;
- improving the collection of evidence based practices and lessons learned on the practical implementation of these initiatives; and/or
- offering relevant and practical resources that can assist with crime prevention implementation.

The purpose of the OLC needs to be clear to practitioners and its aims should be aligned with their needs. This can be a balancing act. The previous OLC trial undertaken by the Australian Institute of Criminology suggested that having a very narrow focus (in this case closed circuit television) may have contributed to reduced engagement of practitioners (Anderson & McAtamney 2010). However, having no clear purpose or boundaries can leave

participants feeling that a CoP is too broad (Iaquinto, Ison & Faggian 2011), which may make it difficult for participants to identify its relevance to their work.

Online communities' audience: Who is the online community trying to engage?

Ascertaining the key practitioner audience is perhaps the most complex consideration for implementing a crime prevention OLC. Consideration must be given to the potentially diverse range of practitioners who are being targeted, limitations specific to their role, different skill levels and their different needs.

Who are crime prevention practitioners?

Crime prevention practitioners are not a homogenous group with easily definable needs. Therefore, selecting a specific audience for an OLC may be difficult. Although some local government areas

Table 3 Enablers and barriers in knowledge dissemination	
Enablers	**Barriers**
Individual level	
• Ongoing collaboration	• Lack of experience and capacity for assessing evidence
• Values research	• Mutual mistrust
• Networks	• Negative attitude towards change
• Building of trust	
• Clear roles and responsibilities	
Organisational level	
• Provision of support and training (capacity building)	• Unsupportive culture
• Sufficient resources (money, technology)	• Competing interests
• Authority to implement changes	• Research incentive system (ie peer review publishing, grant selection swayed to more academic rather than applied research)
• Readiness for change	
• Collaborative research partnerships	• Frequent staff turnover
Related to communication	
• Face to face exchanges	• Poor choice of messenger
• Involvement of decision makers in research planning and design	• Information overload
• Clear summaries with policy recommendations	• Traditional, academic language
• Tailored to a specific audience	• No actionable messages (information on what needs to be done and the implications)
• Relevance of research	
• Knowledge brokers	
• Opinion leader or champion (expert, credible sources)	
Related to time or timing	
• Sufficient time to make decisions	• Differences in decision makers' and researchers' timeframes
• Inclusion of short-term objectives to satisfy decision makers	• Limited time to make decisions

Source: Adapted from Mitton et al. 2007: 737

can have specific community safety or crime prevention officers employed, it is not uncommon for crime prevention projects to be led by professionals in a range of other roles, including community engagement officers (Anderson & Tresidder 2008; Clancey, Lee & Crofts 2012), council rangers (Anderson & Tresidder 2008), health and wellbeing officers, engineers, or town planners. While local governments tend to provide the principal role of coordinating and facilitating community crime prevention strategies (Clancey, Lee & Crofts 2012; DCPC 2012), other agencies, including the police, NGOs and other government agencies, play an important role in crime prevention (DCPC 2012; National Crime Prevention 1999).

Many practitioners who are responsible for the implementation of crime prevention projects could also be classed as transient practitioners because often, their primary work is not directly concerned with crime prevention activities. On completion of a given project, they may cease to have an interest and/or ongoing role in crime prevention, having satisfied their need for certain knowledge acquisition. This characteristic could affect their motivation and capacity to locate and use available crime prevention knowledge when developing and implementing crime prevention activities.

Both transient and non-transient practitioners are likely to share a basic need for greater knowledge exchange and connection with other practitioners (Anderson & McAtamney 2010). Given the disparate mix of practitioners with different motivations for participating in crime prevention, it may prove difficult to meet all their knowledge dissemination needs through a single OLC. It may therefore only be feasible to target one practitioner group (such as the existing local government crime prevention practitioner networks outlined in Table 1) with the potential to expand the audience if viable.

Motivating practitioners: Identifying and addressing enablers and barriers to online participation

Once the purpose of an OLC is established and the key audience is identified, the next step is to start identifying ways to engage practitioners to use the OLC and where possible, sustain their engagement. The diverse nature of crime prevention practitioners could mean more proactive recruitment and engagement of OLC members is necessary in order to keep the OLC site sustainable. How much effort this entails would have to be explored, but consideration should be given to the different professions that participate in crime prevention and their roles, as described above.

Practitioner interest in an OLC being developed does not always equate to a willingness to engage (eg Anderson & McAtamney 2010). Engagement in dissemination activities is likely to increase if the perceived benefits of participation are greater than the perceived cost of participating (Contandriopoulos et al. 2010). Further, perceived costs will be reduced if the OLC is considered easy to use (Sharratt & Usoro 2003).

There are different types of participant in OLCs. These include those who only read posts ('lurkers'), those who only ask questions, as well as active contributors who post new information, drive discussions and do not need to be solicited to post (Bishop 2007; Wang & Yu 2012). In addition, participant behaviours can change over time (ie from lurker to active contributor). Lurking is normal behaviour in an OLC (Preece, Nonnecke & Andrews 2004), with most participants only reading most of the time, which is often all they need to do to get what they want from the OLC (Seddon, Postlethwaite & Lee 2011). A significant proportion of lurkers are sustainable if there is a sufficient number of contributors to maintain new content and discussions. While lurking derived from a choice to not participate is acceptable, a lack of contribution due to other barriers should be minimised (eg technological, not knowing what to post; Seddon, Postlethwaite & Lee 2011).

Enablers and barriers to participation can occur on multiple levels (Mitton et al. 2007). Identifying factors that inhibit OLC participation is essential because it can interfere with new information being understood and interpreted (Paulin & Suneson 2012). In an assessment of 83 research papers on dissemination across health care, Mitton et al. (2007) summarised the key facilitators and barriers (see Table 3). All factors determine the sustainability of the project and each factor influences participants differently, often shaped by their professional views and practices (Lilleoere & Holme Hanson 2011).

Participation drivers for individuals

Motivations for OLC participation have been documented widely within the literature, although this is primarily sourced from the education field. What users expect to derive from joining an OLC varies not only between different forums and users, but also depends on the varied needs and motivations of each OLC member (Shi et al. 2009). Knowledge sharing can have an emotional driver, with pride and empathy being linked to eagerness and willingness of individuals to share knowledge (van den Hooff, Schouten & Simonovski 2012). Personal factors, such as being willing to work with others, being aware of political and value issues, and how the participants perceive the quality of relationships with other CoP members can also contribute to the willingness to engage (Bowen, Martens & The Need to Know Team 2005). Individuals tend to determine what knowledge to use based on how they perceive its relevance, accessibility and legitimacy (Contandriopoulos et al. 2010). Demographic differences (such as age and gender) can also influence willingness to engage in an online environment (Andrews, Preece & Turoff 2001).

In a study of successful and unsuccessful CoPs within one organisation, where

all had access to similar resources, the more successful CoPs 'created personal networks, fostered discussions of relevant topics and created standards of practices [that were] perceived by its members as worth participating [in]' (Wolf, Späth & Haefliger 2011: 35). Participants from successful groups also had more influence in the decision-making processes (Wolf, Späth & Haefliger 2011).

Most importantly, trust was found to be essential for encouraging ongoing communication, with the enhanced communication in turn fostering trust (Ardichvili, Page & Wentling 2003; Bowen, Martens & The Need to Know Team 2005; Contandriopoulos et al. 2010; De La Rue 2008; Lilleoere & Holme Hanson 2011; Sharratt & Usoro 2003; Teng & Song 2011). This trust can relate to the integrity of other participant(s) in their knowledge, expertise and motivation for posting a reply (De La Rue 2008). Trust is built at an interpersonal rather than organisational level (White-Cooper et al. as summarised by Miller et al. 2012). In their study of knowledge dissemination between researchers and practitioners for violence against women research, Wathen et al. (2011: 11) highlighted the importance of the 'three T's—talk, trust and time' to facilitate knowledge dissemination. Complementing any knowledge base/OLC with the potential to meet fellow community members to help create both social and formal links could improve engagement and learning (eg Andrews 2002; Conrad 2002; De La Rue 2011, 2008). There have also been suggestions that adding a degree of social element to OLCs can help to develop a sense of community, particularly for participants who may be isolated from other OLC members (Conrad 2002). However, it has been noted that this is not always appreciated by participants, so a balance should be established between the topic/theme-focused communications and more social communication (Conrad 2002). McInnerney and Roberts (2004: 78) also suggest three protocols to aid online social interaction:

- 'use of synchronous communication;
- the introduction of a forming (ie warm-up, get to know you) stage; and
- the adherence to effective communication guidelines'.

In addition, it is suggested that improved uptake could be embedded in making OLC participation a 'vital part of the job' of crime prevention (de la Rue 2011; Li 2010) and should be considered part of crime prevention responsibilities. This may be difficult to introduce for crime prevention practitioners, particularly as their role in crime prevention is often an adjunct to their main profession.

Individuals will not necessarily engage in OLCs even if they know and engage with the same practitioners offline. Certain demographic groups may prefer face-to-face engagement and OLCs do not offer the visual clues that are an important part of communication (Andrews, Preece & Turoff 2001).

Cultural differences in how knowledge is exchanged on an OLC can exist, such as preferences for visual versus verbal ways to communicate (Ginsburg, Posner & Russell in Ardichvili et al. 2006). However, differences are not restricted to cultures and nationalities—different learning styles can exist within the same cultural group or agency (Li 2010). As such, identifying the most appropriate method for engaging with a disparate mix of crime prevention practitioners is further complicated.

Improving the knowledge and performance of groups (which in this case are the varied crime prevention practitioners) has been suggested to include the group having diverse membership, ability for members to have independent thought and a way to collate knowledge (Surowiecki summarised by De La Rue 2011). Collectivism and reciprocity combined were the most common motivation to engage in knowledge sharing in a study across three different OLC professional practices (nursing, web development and literacy education; Hew & Hara 2007). A study of a six year online collaboration between European teachers

found that the following additional motivational factors contributed to the longevity of the OLC and participant engagement:

- sense of belonging;
- approval via collaboration;
- opportunities for negotiation and problem solving;
- clear, feasible mastery goals (ie goals that focus on growth of knowledge/skills rather than solely goals that showcase current proficiencies); and
- content built on appreciation of wider issues related to the issues being discussed (Seddon, Skinner & Postlethwaite 2008).

In addition, the simple pleasure found in learning can be a contributing factor (Seddon, Skinner & Postlethwaite 2008).

Occupational influences

Dissemination practices may also be influenced by job roles, with individuals who do not consider dissemination as part of their duties less likely to participate than those who do. Motivation to participate can be strongly influenced by participants seeing the value of dissemination to their job (Li 2010). Organisational support of an OLC is also important, as is the ability to provide career advancement opportunities (Sharratt & Usoro 2003). This can be enhanced if the OLC values are in line with personal or organisational goals (Sharratt & Usoro 2003).

Wariness of posting 'permanency' could exist for some potential OLC participants (ie once a comment is posted, it is then available to anyone and cannot be taken down; Conrad 2002; Preece, Nonnecke & Andrews 2004). This could be an inhibiting factor for many practitioners in government agencies in particular, as they may risk posting information that may be contrary to the agency's position. In such cases, closed forums may help facilitate greater engagement. Similarly, certain information may not be able to be shared among different practitioners (eg police information with non-law enforcement agencies). Depending on the OLC's size and purpose, this could be overcome by creating different

levels of access within an OLC and/or restricting some discussion forums for sensitive content. This will be contingent on whether the technology is available to implement these conditions.

The role of incentives

Incentives may be a way to promote engagement of the key target audience. Indeed, promoting incentives has been raised by some OLC participants as a way to encourage participation (McPherson, Baptista Nunes & Harris 2002; Preece, Nonnecke & Andrews 2004). Identifying appropriate incentives is an essential component of the process (Sharratt & Usoro 2003), particularly within crime prevention if the audience is a disparate mix of practitioners rather than specific practitioner groups (eg local government crime prevention and community safety officers). In addition, Wenger (1998) cautions that using incentives in a CoP, which relies on self-sustaining participation by practitioners, could in fact have the potential to hinder community development. That is, the very nature of the OLC is more likely to be sustainable if founded on the desire of the practitioners to engage in the community for its intrinsic value, rather than being reliant on a moderator's ability to entice participation.

Every crime prevention OLC will be different, so there is no simple answer to how to address each enabler and barrier. What is essential is that OLC moderators understand their target audience and become familiar with their needs.

Crime prevention online communities: Worth the effort?

OLCs are not necessarily difficult to establish, but ongoing maintenance and sustainability may prove challenging. Their benefit is their potential to facilitate greater knowledge dissemination within what is typically a fragmented and diverse crime prevention sector and to therefore play a significant role in improving the uptake of evidence-based strategies and good practice. One risk may be that misinformation, bad knowledge and ineffective practices are disseminated that

will then need to be unlearned (Nutley, Walter & Davies 2007). Despite this risk, ineffective practices have already proliferated in crime prevention without OLCs (see Grabosky 2006; McCord 2003). An OLC may provide an opportunity for the reinvention of these 'flat tyres' (Ekblom 2001) to be picked up and addressed by attentive moderators and other community members. This highlights the appeal of including experts such as academics in OLCs who have the expertise to identify whether actions are good practice or may cause unintended harms.

In light of the growing number of crime prevention practitioner networks, it is timely to consider whether it is worthwhile investing in a national crime prevention OLC. Establishing a national crime prevention OLC is attractive for numerous reasons. First, as mentioned above, no online network linking practitioners across Australian jurisdictions exists. Second, existing networks appear primarily limited to local government practitioners; thus practitioners from other fields or areas are likely excluded from accessing similar networks. This is not to infer that existing local government networks should expand to include others. However, crime prevention is widely recognised as interdisciplinary (Homel 2009) and some studies have indicated that diversity in participants may positively expose practitioners to potentially innovative practices (De La Rue 2011, Malik 2004).

This paper provides a useful starting point for understanding how to approach OLC development in crime prevention in that it has briefly described the factors required to enhance dissemination and engage practitioners in functioning, useful OLCs. The broader knowledge management field has examined these issues more comprehensively and is a useful source for more detailed material. However, given the paucity of crime prevention OLCs and research on their effectiveness, further lines of enquiry should include:

- investing in a greater understanding of who crime prevention practitioners are and their dissemination needs;
- identifying why crime prevention

practitioners participate in an OLC, what facilitates their engagement and how their interest can be maintained;

- ensuring that crime prevention OLCs do, in fact, promote good practice;
- creating a framework for evaluating the effectiveness of OLCs; and
- identifying characteristics of effective OLCs specific to crime prevention practitioners.

As existing OLC and CoP literature focuses on communities that are qualitatively different from crime prevention practitioners, there may be some lessons that are not transferrable from CoP research. With the emergence of OLCs in the crime prevention sector, there is potential to start investigating this further.

References

All URLs correct at January 2014

Anderson J & McAtamney A 2010. Review of factors involved in CCTV implementation using Safer Suburbs grants recipients: Final report. Unpublished

Anderson J & Tresidder J 2008. *A review of the Western Australian Community Safety and Crime Prevention Partnership Planning process: Appendixes to the final report.* Canberra: Australian Institute of Criminology. http://www.aic.gov.au/publications/previous%20series/other/61-80/western%20australian%20community%20safety%20and%20crime%20prevention%20partnership%20planning%20process.html

Andrews DC 2002. Audience-specific online community design. *Communications of the ACM* 45(4): 64–68

Andrews D, Preece J & Turoff M 2001. *A conceptual framework for demographic groups resistant to online community interaction.* Proceedings of the 34th Hawaii International Conference on Systems Sciences: 3–6 January 2001

Ardichvili A, Maurer M, Li W, Wentling T & Stuedemann R 2006. Cultural influences on knowledge sharing through online communities of practice. *Journal of Knowledge Management* 10(1): 94–107

Ardichvili A, Page V & Wentling T 2003. Motivation and barriers to participation in virtual knowledge-sharing communities of practice. *Journal of Knowledge Management* 7(1): 64–77

Bishop J 2007. Increasing participation in online communities: A framework for human-computer interaction. *Computers in Human Behaviour* 23: 1881–1893

Bowen S, Martens P & The Need to Know Team 2005. Demystifying knowledge translation: Learning from the community. *Journal of Health Services Research and Policy* 10(4): 203–211

Clancey G, Lee M & Crofts T 2012. 'We're not Batman'—Roles and expectations of local government community safety officers in New South Wales. *Crime Prevention and Community Safety: An International Journal* 14(4): 235–257

Conrad D 2002. Deep in the hearts of learners: Insights into the nature of online community. *Journal of Distance Education* 17(1): 1–19

Contandriopoulos D, Lemire M, Denis J-L & Tremblay É 2010. Knowledge exchange processes in organizations and policy arenas: A narrative systematic review of the literature. *The Milbank Quarterly* 88(4): 444–483

De La Rue K 2011. The art of conversation: All of us are smarter than any of us. *Online Currents* 25(2): 55–61. http://delarue.net/blog/wp-content/uploads/2008/08/OLC-April-2011_DeLaRue_Art-of-Conversation.pdf

De La Rue K 2008. The theory and practice of communities: Without clear thinking, valuable work may grind to a halt. *KM Review* 11(5): 22–25. http://delarue.net/blog/wp-content/uploads/2009/03/de-la-rue-theory-and-practice-of-communities-pub.pdf

Dobbins M et al. 2009. A description of a knowledge broker role implemented as part of a randomized control trial evaluating three knowledge translation strategies. *Implementation Science* 4: 23

Drugs and Crime Prevention Committee (DCPC) 2012. Inquiry into locally based approaches to community safety and crime prevention—Final report. Melbourne: DCPC, Parliament of Victoria

Ekblom P 2010. *Crime prevention, security and community safety using the 5Is framework.* United Kingdom: Palgrave Macmillan

Ekblom P 2001. *The conjunction of criminal opportunity: A framework for crime reduction toolkits.* London: Policing and Reducing Crime Unit Research Home Office

Grabosky PN 2006. Unintended consequences of crime prevention. The politics and practice of situational crime prevention. *Crime Prevention Studies*, vol 5. Monsey, NY: Criminal Justice Press. http://www.popcenter.org/library/crimeprevention/volume_05/02_Grabosky.pdf

Gray B 2004. Informal learning in an online community of practice. *Journal of Distance Education* 19(1): 20–35

Harman K & Koohang A 2005. Discussion board: A learning object. *Interdisciplinary Journal of Knowledge & Learning Object* 1: 67–77. http://dmc.utep.edu/blackboard/CE8/11/media/db-learning_object.pdf

Hew KF & Hara N 2007. Knowledge sharing in online environments: A qualitative case study. *Journal of the American Society for Information Science and Technology* 58(14): 2310–2324

Homel P 2009. Improving crime prevention knowledge and practice. *Trends & Issues in Crime and Criminal Justice no.* 385. Canberra: Australian Institute of Criminology. http://aic.gov.au/publications/current%20series/tandi/381-400/tandi385.html

Iaquinto B, Ison R & Faggian R 2011. Creating communities of practice: Scoping purposeful design. *Journal of Knowledge Management* 15(1): 4–21

Kostas A & Sofos A 2012. Internet-mediated communities of practice: Identifying a typology of critical elements, in Daradoumis T, Stavros D & Xhafa F (eds), Intelligent adaptation and personalization techniques in computer-supported collaborative learning. *Studies in Computational Intelligence* 408: 311–334

Li W 2010. Virtual knowledge sharing in a cross-cultural context. *Journal of Knowledge Management* 14(1): 38–50

Lilleoere A-M & Holme Hanson E 2011. Knowledge-sharing enablers and barriers in pharmaceutical research and development. *Journal of Knowledge Management* 15(1): 53–70

Malik K 2004. Coordination of technological knowledge flows in firms. *Journal of Knowledge Management* 8(2): 64–72

McCord J 2003. Cures that harm: Unanticipated outcomes of crime prevention programs. *The Annals of the American Academy of Political and Social Science* 587: 16–30

McInnerney JM & Roberts TS 2004. Online learning: Social interaction and the creation of a sense of community. *Educational Technology & Society* 7(3): 73–81

McPherson M, Baptista Nunes M & Harris L 2002. It is an inertia thing, no one uses it, so no one uses it: The failure of a virtual social space (VSS) intended to create a learning community. *Winds of change in the sea of learning: Charting the course of digital education. Australasian Society for Computers in Learning in Tertiary Education Annual Conference.* UNITEC, Auckland New Zealand December 8–11. http://www.ascilite.org.au/conferences/auckland02/proceedings/papers/180.pdf

Miller AL, Krusky AM, Franzen S, Cochran S & Zimmerman MA 2012. Partnering to translate evidence-based programs to community settings: Bridging the gap between research and practice. *Health Promotion Practice 13(4): 559–66*

Mitton C, Adair CE, McKenzie E, Patten SB & Waye Perry B 2007. Knowledge transfer and exchange: Review and synthesis of the literature. *The Milbank Quarterly* 85(4): 729–768

National Crime Prevention 1999. *Crime prevention: Training needs assessment.* Canberra: National Crime Prevention, Attorney-General's Department

Nutley S, Walter I & Davies TO 2007. *Using evidence: How research can inform public services.* Bristol: The Policy Press, University of Bristol

Paulin D & Suneson K 2012. Knowledge transfer, knowledge sharing and knowledge barrier—Three blurry terms in KM. *Electronic Journal of Knowledge Management* 10(1): 81–91

Preece, J & Maloney-Krichmar D 2003. Online communities, in Jacko J & Sears A (eds), *Handbook of human–computer interaction.* Mahwah: NJ: Lawrence Erlbaum Associates: 596–620. http://www.ee.oulu.fi/~vassilis/courses/socialweb10F/reading_material/1/Preece03-OnlineCommunities-HandbookChapt.pdf

Preece J, Nonnecke B & Andrews D 2004. The top five reasons for lurking: Improving community experiences for everyone. *Computers in Human Behaviour* 20: 201–223

Seddon K, Postlethwaite K & Lee G 2011. Understanding the experience of non contributory online participants (readers) in National College for School Leadership online communities. *Education and Information Technologies* 16: 343–363

Seddon K, Skinner NC & Postlethwaite KC 2008. Creating a model to examine motivation for sustained engagement in online communities. *Education and Information Technologies* 12: 17–34

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Sharratt M & Usoro A 2003. Understanding knowledge-sharing in online communities of practice. *Electronic Journal on Knowledge Management* 1(2): 187–196

Shi X, Zhu J, Cai, R & Zhang L 2009. *User grouping behavior in online forums*. *KDD '09 Proceedings of the 15th ACM SIGKDD international conference on Knowledge discovery and data mining.* Paris: 28 June–1 July. http://research.microsoft.com/pubs/131116/forumuserbehavior_kdd09.pdf

Stuckey B 2004. *Making the most of the good advice: Meta-analysis of guidelines for establishing an internet-mediated community of practice* (draft only). IADIS Web Based Communities Conference. Lisbon, Portugal: March 2004. http://www.bronwyn.ws/publications/papers/good_advice.pdf

Subocz C 2007. Internet discussion forums: Eternal vigilance or the price of freedom? *Internet Law Bulletin* 10(3): 32–35

Teng JTC & Song S 2011. An exploratory examination of knowledge-sharing behaviours: Solicited and voluntary. *Journal of Knowledge Management* 15(1): 104–117

Van den Hooff B, Schouten A & Simonovski S 2012. What one feels and what one knows: The influence of emotions on the attitudes and intentions towards knowledge sharing. *Journal of Information Management* 16(1): 148–158

Wang X & Yu Y 2012. Classify participants in online communities. *International Journal of Managing Information Technology* 4(1): 1–13

Ward V, House A & Hamer S 2009a. Developing a framework for transferring knowledge into action: a thematic analysis of the literature. *Journal of Health Services Research and Policy* 14(3): 156–164

Ward V, House A & Hamer S 2009b. Knowledge brokering: Exploring the process of transferring knowledge into action. *BMC Health Services Research* 2009: 9: 12. http://www.biomedcentral.com/1472-6963/9/12

Ward V, House A & Hamer S 2009c. Knowledge brokering: The missing link in the evidence to action chain? *Evidence & Policy* 5(3): 267–279

Wathen CN, Sibbald SL, Jack SM & MacMillan HL 2011. Talk, trust and time: A longitudinal study evaluating knowledge translation and exchange processes for research on violence against women. *Implementation Science* 6: 102. http://www.implementationscience.com/content/pdf/1748-5908-6-102.pdf

Wenger E 2006. *Communities of practice: A brief introduction*. https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/11736/A%20brief%20introduction%20to%20CoP.pdf?sequence=1

Wenger E 1998. Communities of practice: Learning as a social system. *Systems Thinker* (June). http://www.co-i-l.com/coil/knowledge-garden/cop/lss.shtml

Wolf P, Späth S & Haefliger S 2011. Participation in intra-firm communities of practice: A case study from the automotive industry. *Journal of Knowledge Management* 15(1): 22–39