

## A matrix for sustainable online community development

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In supporting the development of an online community of practice, the uniqueness of a community and its situation need to be recognised in both its design and growth. The matrix outlined in this paper and poster draws from both guidelines and frameworks in the literature, and the study of one developing online community of practice. The perspective it provides will be of particular value to those seeking to grow and sustain an online community of practice, for a relatively small community of educators.

Online community, Matrix, Framework, Design, Community of practice, Adult education

### Designing for an online community

An online community of practice (OCoP) for professional development has much to offer. In designing and creating such an environment Stuckey and Barab (2007) note that a “community-based approach holds great promise for learning, as it does not simply support content acquisition but is focussed on transforming practices ... by putting the power of this transformation in the actions of its members” (p.443). Developing an OCoP, however, requires careful consideration and planning, and takes time and attention to implement and grow (Stuckey & Barab, 2007). As stated often in the literature, a community of practice cannot be designed, but it can be designed for.

In creating an environment for an online community, the community itself needs to be considered. While focussing on design for online learning communities Riel and Polin (2004) explain that, “a community differs from a mere collection of people by the strength and depth of the culture it is able to establish and which in turn supports group activity and cohesion” (p.18). It is a combination of the environment, community members, and the activities which they undertake within it, which help to create a community. The activities in which a community involves its members need to be meaningful and linked to their practice. As Schlager and Fusco (2003) found, “simply having the ability to interact more frequently and for longer durations online than face-to-face does not translate directly into high-quality learning experiences or sustainable communities” (p.127). Not all efforts to create an online of community of practice for teachers have been successful. Schlager and Fusco (2003) also observed that “few professional development projects ... resulted in online communities ... sustainable enough to support teachers as they engage in the extended process of classroom reform” (p.127). Schwen and Hara’s (2003) research observations and review of CoP literature reported that none of the fully functioning CoPs in their study had been designed. All had evolved naturally over several years.

The apt analogy of plant growth has been used for community development. Designing for an OCoP for one organisation’s distributed community of adult educators was akin to preparing the soil and planting the seeds. From its beginnings, this OCoP, like a living entity, continued to change. Stuckey and Barab (2007) explain that a community is “continually evolving according to the relationships between members and the maturing practices of the community” (p.441). There are many conditions which need to be considered in designing for a community, and these must be kept in balance for healthy growth to take place. The matrix in this poster paper outlines the different elements needed by this community as it grew through the phases in its development.

### A matrix of elements for developing online communities

As Stuckey and Barab (2007) point out, “No one who has tried to develop a Web-supported community in the service of learning could deny the challenges in doing so” (p.456). However, there are some helpful examples, frameworks and guidelines available in the literature. Riel and Polin (2004) structure their view of the community through the four dimensions of; membership, task features and learning goals, participation structures, and mechanisms for further growth and reproduction. In her meta-analysis of guidelines Stuckey (2004) uses Hillery’s (1955) four common components of community; common ties, people, social interaction and place. Preece (2001) offers purpose, people and policy as the three design criteria for sociability and dialogue and social support, information design, navigation, and access as the four design criteria for usability. In developing the matrix from this study, all these dimensions/components/criteria have been combined to form three components of the online community, namely Environment, Engagement and Stakeholders.

Each of these components is considered in terms of the elements which have encouraged the development of the online community within the three phases of this study. These phases loosely align with what Stuckey (2004) calls “areas of influence and action”, where the developers seek to design, implement and sustain the community. Elements within the full matrix are drawn both from the literature and from the study of the design, implementation and growth of the online community designed for the organisation of adult educators. Following an initial coding of the data using constant comparison to distil grounded theory on the elements of the community’s development, the data was re-coded using the elements of Stuckey’s (2004) meta-analysis. This re-coding highlighted existing elements of Stuckey’s framework which were relevant, and some which were not appropriate for this community, as well as new elements distinct to this community’s development. From this a matrix of elements for developing an online community relevant to a distributed single organisation’s OCoP was created. The community specific elements contributed to the framework by this research are displayed in Table 1 and the full matrix can be viewed in the poster.

**Table 1: Summary of additional community specific elements**

<b>Sustain</b>	*Maintain flexibility of design	*Maintain the value added	*Encourage more community members to provide leadership, impetus, and inspiration *Encourage members to run subgroups
<b>implement</b>	*Be open to community input *Develop both whole community and small group spaces	*Highlight the value added *Keep it relevant to the professional practice *Encourage a critical mass of engagement *Provide the means for collaboration to take place *Encourage member connections through communication and community awareness *Create new rituals	*Find well respected community members to provide coordination, leadership, impetus, and inspiration
<b>Design</b>	*Situate the community in the practice *Fulfil existing community needs *Design with simplicity *Ensure appropriate IT infrastructure is in place	*Keep it relevant to the professional practice *Develop connections	
	<b>Environment</b>	<b>Engagement</b>	<b>Stakeholders</b>

While all components; environment, engagement and stakeholders, needed to be considered throughout the community’s development, the emphasis of the developer activity fell on different components as the community developed through the phases. The environment was most important during the design phase. In the implementation phase, engagement was most important and in the sustain phase, the emphasis moved to the stakeholders. Because the community in this study is comparatively young and still very much under development, some of the elements in the sustain phase are still to be verified. These elements are based on data of what has sustained the community so far, and the missing elements which may be holding it back from further growth. The matrix as a whole should provide focussed support for community development in a similar context, throughout the design and implementation phases and on towards sustainability.

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