Learning Communities and Support

Transformation Framework

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Introduction

This paper examines one of ten critical components of effective transformation in schools and education systems. Each paper is produced by an expert author, who presents a global perspective on their topic through current thinking and evidence from research and practice, as well as showcase examples. Together, the papers document the contributions of 'anytime, anywhere' approaches to K-12 learning and explore the potential of new technology for transforming learning outcomes for students and their communities.

Learning Communities and Support

Learning communities offer a powerful strategy for supporting teacher professional development and educational achievement. As an organizational structure they share a collective responsibility for the growth and development of all members of the school and school system. This structure provides a means for bringing together and supporting all educational stakeholders – families, policy makers, administrators, teachers, students, school system and supporting staff members – with the shared goal of increasing effective learning and teaching in every classroom and throughout each school. This white paper examines the current state of teacher professional development and student learning, define learning communities with a specific focus on the Community of Practice model, and how such a model can be effective in supporting teachers and students alike. It also explores how cloud and mobile technology can be used to productively support learning communities.

What is the Education Transformation Framework?

The Microsoft Education Transformation Framework helps fast track system-wide transformation by summarizing decades of quality research. It includes a library of supporting materials for ten components of transformation, each underpinned by an executive summary and an academic whitepaper detailing global evidence. This provides a short-cut to best practice, speeding up transformation and avoiding the mistakes of the past. Microsoft also offers technology architectures and collaborative workshops to suit your needs.

About the author

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Putting a stop to teacher attrition

What a learning community looks like and how it functions is dependent on intentions, its design and structure, and the activity that takes place.

Where is the professional development?

Studies suggest that the lack of professional support for many teachers is a major factor underlying teacher attrition rates, with nearly 50 percent of new teachers exiting the field within their first five years of stepping into a classroom.[1] As such, many teachers have become confounded and disappointed by professional development as it is regularly regarded as ineffective and requiring sacrifices unequal to the perceived improvement it affords.[2]

In many countries, professional development opportunities – whether formal or informal – are not sufficiently provisioned to meet the needs and demand of teachers.[3] Similarly, educators feel ill-equipped to work together to insure that all learners have access to the skills and experiences needed to participate fully online and offline. This includes skills like working together in groups to collaborate on projects and assignments, learning how to interact and appropriately negotiate with peers, and learning how to manage their own time and resources (self-regulate) effectively.[4]

Therefore, it is critical for educational professionals and the students and families they serve that an appropriate model for collaboration, communication, reflection, and active learning is made open and available to adopt, adapt, and deploy.

The desperate need for learning communities

One way to enhance teacher professional development and student learning is through the notion of a learning community. Learning communities can be formal, informal, face-to-face or virtual, operating both inside and outside the physical school environment.[5] The idea behind this organizational structure stems from management and business literature that defines a learning community as one where participants with common interests continually expand their capacity to create the results they desire.

As an organizational structure, learning communities are designed to provide a space where new and extensive patterns of thinking are nurtured, and where community members are continually learning how to learn together.[6] What makes the notion of learning communities so important for educators and students are the essential factors that underlie such communities.

These factors include the idea that (1) knowledge is situated in the experiences of teachers and students in the context of their workplace, (2) that such knowledge is best understood when shared and critically reflected upon with others sharing the same experience, and (3) that when teachers, students, and other educational stakeholders (including administrators, families, staff, and members of the local community-at-large) actively engage in a learning community, they increase their knowledge and action capacity which ultimately leads to greater achievement.[7]

Learning communities can provide an organizational structure that is capable of fostering growth and development among its members by creating the capacity to (1) share their knowledge and their wonderings; (2) develop communication, time management and teamwork skills; (3) expose members to others' questions, thinking, strategies and tactics; (4) provide peer support; and (5) gain intercultural perspectives.[8]

What is a Community of Practice?

Educational theorist, practitioner, and co-creator of the Community of Practice concept, Etienne Wenger, suggests that a school must be more than a place of instruction – it must also be a place of inquiry, a place that produces knowledge, as well as transmits knowledge. As such, successful learning communities should be designed with the intention of helping members systematically understand and improve their own practice. Yet, what a learning community looks like and how it functions is dependent on community members' intentions, the design and structure of the community, and the activity that takes place among community members.

The term "community of practice" as we use it today was introduced in the early 1990s in a seminal text by Jean Lave and Etienne Wenger called Situated Learning: Legitimate peripheral participation.[9] Their research looked deeply into how we learn as individuals. What they found was that despite the fact that schools have a beginning and an end point and separate us from the rest of our other worldly activities, learning is going on all around us, all of the time. What we are really doing, whether we are at work, at school, at home, engaging in our civic and leisure interests, is participating in a number of communities of practice where we are all collectively learning together. In other words, "being alive as human beings means that we are constantly engaged in the pursuit of enterprises of all kinds, from ensuring our physical survival to seeking the most lofty pleasures. As we define these enterprises and engage in their pursuit together, we interact with each other and with the world and we tune our relations with each other and with the world accordingly. In other words we learn."[10] Wenger goes on to note that over time "these practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise. It makes sense, therefore to call these kinds of communities 'communities of practice.'"[11]

While the characteristics of such communities of practice range in size and scope, what they share in common is that members are brought together by joining in common, shared activities and by what they learn through mutual engagement. Some communities of practice are formal organizations; others are fluid and informal. Some communities of practice have names, though many do not. In this respect, a community of practice is different from a community of interest or a geographical community in that it involves a shared practice.

Community of Practice versus Community of Inquiry

At this point it is worth noting the difference between a community of practice and a community of inquiry. As we have been discussing, a community of practice refers to a group of people (i.e., the community) involved in practice (e.g., teaching, baking, accounting) that actively seeks to develop knowledge in a particular domain (e.g., best practices, innovative techniques, quality assurance). In this sense, the term serves as an organizational framework for discussing or examining the ways people learn together. A community of inquiry on the other hand is a theoretical framework that refers to a group of people collectively focused on resolving a specific problematic situation.

Learning communities provide a space where new and extensive patterns of thinking are nurtured, and where members are learning how to learn together.

1 Dede, 2006.
2 Ibid.
3 OECD, 2009.
4 Jenkins, et al., 2009.
5 Dede, 2004.
6 Senge, 1990.
7 Buysee, Sparkman, and Wesley, 2003.
8 Anderson, Annand, & Wark, 2005.
9 Lave & Wenger, 1991.
10 Wenger, 1998, p. 45.
11 Ibid.

Putting theory into practice

Innovative communities for learning require thoughtful guidance, scaffolding, and social support.

How can communities meaningfully engage?

How do communities of practice help members solve authentic problems? Can the community of practice concept be applied broadly to a "community of learning" and a "community of scholars" so that people of all stripes can meaningfully engage in cooperative learning together?

First, it is important to note that all communities of practice are focused on a shared practice, be it a community of scholars or a community of learners. Within these two examples, scholars and learners, there are three elements that distinguish each community: the domain, the community, and the practice.[12]

- The domain is where members of a community share a specific area of expertise or focus. All communities of practice share this feature. Membership precludes being an active member of this shared space.
- The community is where members of an area of expertise (the domain) engage each other in questions of practice. In this regard, the community is mission-focused, practice-centered, where information sharing and knowledge sharing can readily take place.
- The practice is what members of the community who share a common domain do. Whether it's conducting research on how people learn or teaching 12 year olds how to divide and multiply fractions. The practice is what members of a community of practice share in common.

Practitioners (those engaged in a particular domain) in a community of practice work together to develop a shared repertoire of resources: experiences, stories, tools, ways of addressing recurring problems. This process takes time and sustained interaction. This is what makes a community of practice different from a group of scholars or students that get together to simply share stories of their experiences. A community of practice has a clear intention of serving as a formal entity with a specific set of member-defined goals.

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A Community of Practice is more than a shared goal. Members are involved in a set of relationships over time.

Consequently, all communities of practice maintain a practice-centered identity. They are subject to their own set of procedures and rules and members serve both explicit and implicit roles. All successful communities of practice offer social and organizational support to members that follow a set of identified goals and outcomes. In this sense, communities of practice as an organizational unit offer clear, accountable, explicit measures for success.

How are communities organized?

For Lave and Wenger, a community of practice is more than a collection of members sharing a similar domain of practice.[13] Members are involved in a set of relationships over time. As such, a community of practice develops around the ideas and activities that matter most to members. A sense of joint enterprise evolves giving members a shared identity. And as a community coalesces and takes on a formal identity, a need to document routines, resources, accumulated knowledge, skills and vocabulary, arises.

From this perspective, communities of practice have a certain bottom-up, organic organizational quality; that is, the formal organization of a community is not dictated by any organizational authority but often develops from individuals of their own accord. While this idea is present throughout the early works of Lave and Wenger, it is not necessarily steadfast and true in all cases.

Can a community of practice be engineered?

Can it function at a high, meaningful level and be a top-down enterprise? The reality is, a community of practice is a practice-centered learning organization with clear goals and intentions. Learning within a community of scholars or learners is about helping each other accomplish tasks, share challenges, passions, and interests. Innovative communities for learning require thoughtful guidance, scaffolding, and social support. They require structures that will permit members the autonomy to share, communicate, collaborate, as well as space for them to reflect on actions and outcomes associated with participation.

12 Wenger, 2007.
13 Lave & Wenger, 1991.

How to setup a learning community

Get ready to manage and exchange knowledge

Communities of practice are essentially involved in knowledge management, knowledge exchange, and attention to details. By this, we want to suggest that a truly effective community of practice involves the art of caring, that is, it is regulated by personal interest, personal responsibility, and concern for one's self and others. Whether your community of practice involves scholars, administrators, educators, parents, staff, students, or a combination of all of the above, they should be comprised of building ways to support meaningful interactions that involve trust, cooperation, and the ability to undertake larger complex activities. Whether they are organized from the top-down or the bottom-up, effective communities of practice are organizational systems built to support networks of social capital. Innovative communities for learning require thoughtful guidance, scaffolding, and social support.

Generally speaking, communities of practice go through a series of stages as they grow and develop. In their bestselling guidebook on knowledge management, authors Chris Collison and Geoff Parcell offer a set of steps on launching, enriching and sustaining communities of practice in an organization which have been updated and adapted below.[14] These steps are designed to offer those interested in building and maintaining a healthy community of practice a set of descriptive guidelines without being overly prescriptive. The steps outlined below offer an overview to help you think about what is required to manage building a community.

Steps for building a healthy community

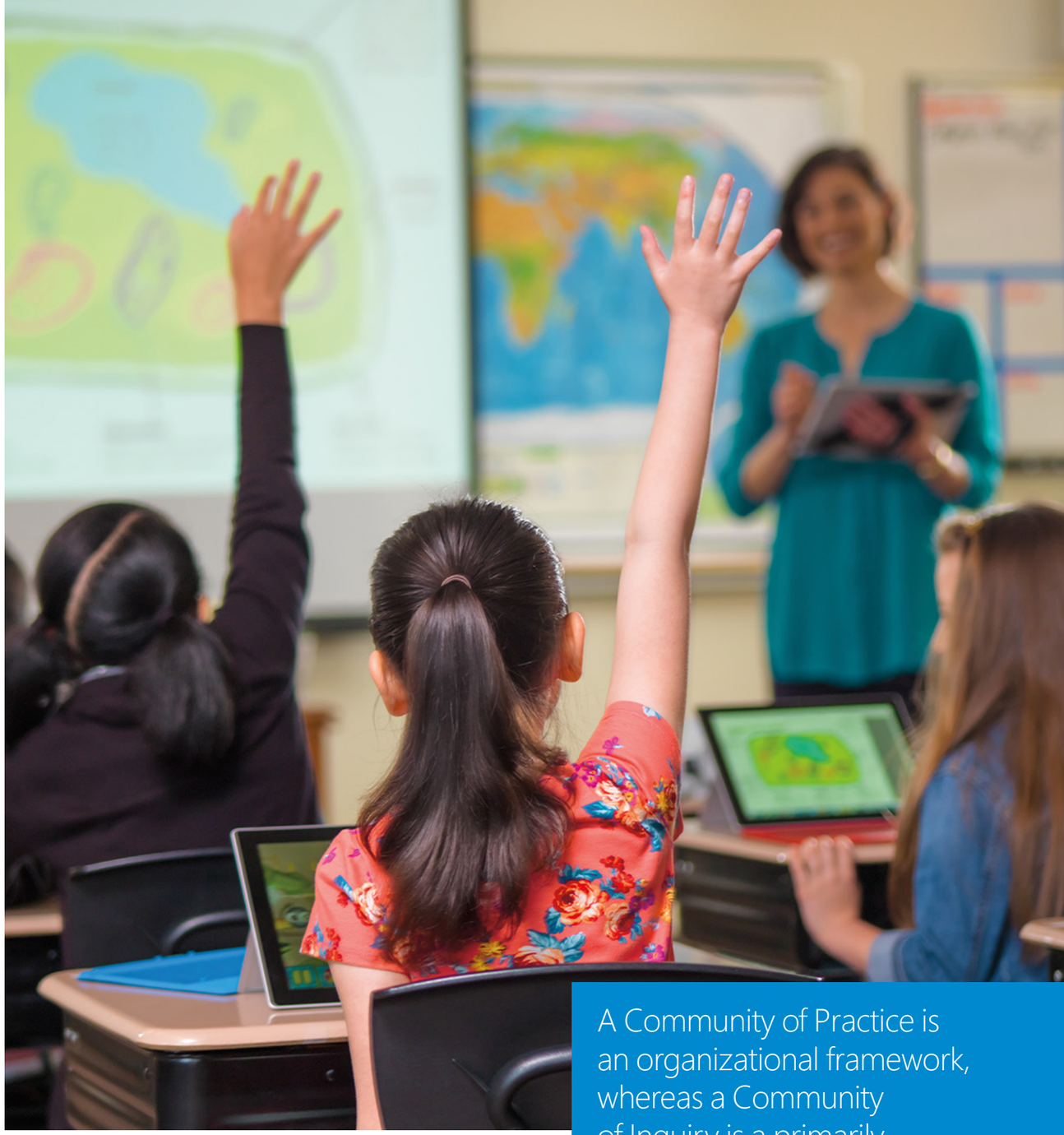
Any successful community of practice starts with 1) initial planning around the goal or intention of the community as well as 2) deciding who should lead and who should be a member. Once you've determined the focus and membership of your community, it's recommended that you 3) hold a face-to-face meeting or workshop that includes activities designed to build relationships and trust among members. During this initial workshop, it is important for the group to 4) draft a simple charter that includes such items as:

- The rationale and scope of the group
- Roles for group members (e.g., facilitator, sponsor)
- Expectations for members including time commitments
- A set of ground rules outlining how members will work together
- A general definition of what success looks like and how the community will measure such success.

Given the many tools available to support group work synchronously and asynchronously in the cloud and on the go, it is important for the group to decide 5) which tools will work best to support the community and that they easily cross organizational boundaries.

To successfully manage a community of practice, 6) a lead facilitator is necessary. This leader can be designated before the community is formalized or can be appointed when the group meets for the first time. Responsibilities for the lead facilitator include

- Organizing meetings;
- Maintaining shared knowledge resources
- Monitoring the success of the community
- Prompting and guiding members when appropriate
- Serving as a focal point for the community, both internally and for those outside the community.



A Community of Practice is an organizational framework, whereas a Community of Inquiry is a primarily theoretical framework.

14 Chris Collison and Geoff Parcell, 2004.
15 Sessums, 2009.

Lack of professional development is a major factor underlying teacher attrition rates.

Depending on the scope and nature of the community's work, responsibilities can be subdivided and shared among others in the group. It is also important to note that the lead facilitator does not need to be the community's subject matter expert. The learning community lead facilitator can be a student, a teacher, an administrator, or a thoughtful parent. Most importantly, this person needs to be highly organized, work well with others, and be able to get members to act when necessary.

In a personal conversation with Etienne Wenger in 2009, we talked about the leadership qualities necessary to run a community. Wenger described this type of learning community leader as a "social artist," that is, one who can create spaces for learning, one who uses their identity as a leader to elicit social energy; someone like an anthropologist who knows how social systems work and who can create the conditions necessary to support the community's activities; someone willful, collaborative, social, but not manipulative; someone whose passion is contagious.

Once the community is established, the lead facilitator should be ready to 7) call members to action. This call can take the form of starting a conversation or seeding the community with questions critical to meeting the community's goals. For example, using an online discussion forum, the lead facilitator can post a set of questions designed to elicit critical responses to issues faced by the community. Sometimes these initial posts by the lead facilitator are referred to as "ice-breakers," designed to get the conversation flowing among members. Once a discussion begins to develop, it is important for the lead facilitator to keep the energy flowing within the group by posing follow up questions or pressing members to add more detail to their posted thoughts and comments. In addition, the lead facilitator needs to provide timely reminders regarding critical dates and objectives pertinent to the community's goals. 8) Modeling participation behavior is essential for effectively managing a learning community.[15]

Depending on the goals of a particular community, other key activities that help build momentum can include 9) promoting the community so that others can know more about the goals and activities and 10) celebrating wins by announcing when milestones are reached and acknowledging contributions of members. As time passes and the community matures, it is important for 11) community members to renew their commitment. At this stage, the lead facilitator can communicate with members to determine who would like to stay and who would like to depart. Here as well it is a good idea to hold another face-to-face meeting to both renew relationships, allow members to network, and introduce new comers to the group.

It also wise at this stage to conduct 12) a performance review. It is important to recognize that communities of practice are only as effective as members make them ("Garbage in, garbage out," as my programmer colleagues like to say). If the community has met its goals and members see no need to continue meeting, then the community can be dissolved and brought to rest. If members see legitimate value and wish to continue serving the community's interests, then a meeting to discuss next steps and future goals is clearly warranted.

Summary of the twelve steps for a successful community of practice

1 Have a goal or intention	**2** Decide on leaders and members	**3** Face-to-face meeting to meet everyone	**4** Draft a charter
5 Select tools that will facilitate the community	**6** Choose a lead facilitator	**7** Call members to action	**8** Model participation
9 Promote the community	**10** Celebrate wins	**11** Renew your commitments	**12** Have a performance review

Supporting your community

Create a Focus for the Community

As noted previously in step 4, when drafting a charter or set of goals, expectations, and responsibilities for a learning community, it is important to determine a clear focus. As in any human organization, it is easy to get off track or experience what is often called mission creep –i.e., expanding the learning community's focus beyond its original intent or capacity. For example, let's say a learning community is established to enhance technical support in the classroom –making sure people and resources are available to assist with any technical issues and malfunctions that arise when using equipment or software.

It is important to ensure a clear focus for each learning community that includes a manageable mission and expectations.

After initial success the community then decides to take on a professional development role by offering training for faculty, staff, and parents on the new equipment and software. Is this the best use of this particular learning community? Would training be better managed by a different community – one with a different set of skills and expertise? What's important to consider here is that learning communities can be created around different areas of school life like curriculum, application support, technical support, parent support, and so on. No one community has to manage it all. Thus it is important to ensure a clear focus for each learning community that includes a manageable mission and expectations.

As outlined, these guidelines offer a formal way to organize and manage a community of practice. They are offered here as a means of helping you think about what might work best for you and your organization. Next, let us examine specific tools that can be useful in helping support and sustain a community.

Support your community with technology

Technology has changed everything. Digital applications are currently available to support a wide range of communication and interaction among communities of practice in an online environment that can serve as an efficient and effective medium for people to communicate, socially network, find and aggregate information, and expand individual and collective knowledge bases.[16]

Applications like weblogs, wikis, and social networking sites offer a variety of ways to support knowledge building networks and provide space for recording and documenting individual and collective research and activities. Social learning applications are designed around principles of fostering cooperation, collaboration, sharing and dialogue between members of multiple learning communities and networks. Such social software applications offer practitioners an opportunity to connect virtual practice to physical practice, i.e., to support everyday practice beyond that which exists online.

Social software offers a rich conduit between virtual and physical realities for learning communities.

Educators who are researching, reflecting, and discussing issues and practice online can enact what they are researching and discussing online directly in their daily practice. In this sense social software offers a rich conduit between virtual and physical realities for communities of practice to grow and prosper.

Fold in some professional learning

When learning communities live partly online, they may need levels of support for professional learning (teachers) and learning the curriculum (students). For example, you may need to offer:

- Support in locating and learning with content media would require someone knowledgeable in information literacy skills or a library media specialist available to the community
- Support in the development and demonstration of 21st century (non-cognitive) skills would need peer support (class/school Genius bar) and apps and examples that can help scaffold these skills (such as a YouTube library of how-to videos)
- Support in learning together with technology in ways that make the most of new learning environments and that go beyond substitutive approaches toward redefinition of learning requires coaches and instructional designers
- Support with the technology, including the installation of software, repairing broken monitors, and other technical glitches would require a responsive Help Desk or IT staff.

Embed IT staff and specialist support

Initially, support for online community elements may come from outside sources, that is, people not originally thought of as natural or appropriate members of a learning community. However, once the community identifies such a need, steps can be taken to either incorporate new members or community members can opt to acquire needed skills through advanced training. To be most effective, determining what steps are appropriate are best left to community members themselves, as they are always the largest and most important stakeholders in the learning community.

Embedding specialists like IT staff and librarians into the learning community offers a unique opportunity for schools to create proactive support systems rather than reactive ones. An embedded librarian, for example, allows the librarian an opportunity to become more fully engaged with the needs of the team. As he or she develops deeper relationships within the group, the embedded librarian can provide highly focused, highly targeted research and information that might have been overlooked or more difficult to obtain. In this sense, learning communities can serve as a space that can create opportunities for new kinds of partnerships that permit non-traditional or non-academic role players a way to add value and align their services with the needs of the learning organization.

In schools where the services of these professionals are limited, embedding them in the learning community via ubiquitous technology extends their impact and reach (Francis, 2012).

Digital environments and tools like SharePoint and Yammer, as well as Office 365 Education and OneDrive, offer communities of practice the means to organize and share information and resources, as well as communicate and collaborate in real-time and asynchronously (outside of any fixed time requirements). The benefit of these tools allows a community of practice a virtual hub that can support community members any time, any place. Synchronous tools such as Lync and Skype can also be used to enable live interaction between community members either around specific scheduled topics, or through informal one-to-one discussions.

Goal of community member	Type of support
Locating and learning with digital content	Librarian or information specialist able to enhance search skills and have overview of material
Development of 21st century skills	Peer support plus relevant videos/ apps/examples to scaffold skills
New forms of teaching making best use of technology	Experienced coaches and instructional designers to share experience
Overcoming technical obstacles using online community tools (e.g. Fixing broken equipment, bugs)	IT or helpdesk available for users on demand

Embedding specialists like IT staff and librarians into the learning community offers a unique opportunity for schools to create proactive support systems.

16 Shirky, 2003

Summary

For years learning was considered to be an individual act when in fact it has always been tremendously social. The work of Jean Lave and Etienne Wenger has shown how learning within communities of practice offer new ways to look at how education professionals and learners of all shapes and sizes can organize and support their growing knowledge and skill development. Through Lave and Wenger's work we can better understand that learning happens within a relationship between people. As such it is important for education leaders to create conditions that support the ability for scholars, teachers, and students to create their own communities of practice.

Education leaders need to support the conditions that allow scholars, teachers, and students to collaborate and inquire more into problems of practice, problems of understanding, and challenges associated with acquiring critical habits of mind. In this regard, learning and problem-solving are activities that require real applications of knowledge. We need to create conditions that allow practitioners to be deeply involved with real-world problems, using real-world tools, in as close to real-world conditions as possible. Otherwise, what are we preparing scholars, teachers, and students for?

The community of practice model offers a framework for leaders, scholars, teachers, students and families to engage with other like-minded peers to organize, share, communicate, collaborate, and address meaningful problems associated with their specific practice. Whether you are attempting to learn the best way to be a student, a scholar, an administrator, a parent, or staff member, an effective community of dedicated peers can enhance the ability of each of its members in achieving the goals set forth by the community.

We need to create conditions that allow practitioners to be deeply involved with real-world problems, using real-world tools, in as close to real-world conditions as possible.

Further examples for your consideration

Microsoft Educator Network

Teachers all over the globe sharing teaching and learning strategies & resources.

Silverton Primary School, Australia

Teacher coaching program for teachers at the school.

Pepperdine University, USA

Links distant students to academic advisors at the School of Business via Yammer.

Catholic Education Diocese of Parramatta, Australia

78 schools share student records & resources via SharePoint.

Technologies schools can use to support change

Technology is an important glue for a learning community, allowing its members to communicate and collaborate freely – in real-time and asynchronously. Here is how some schools are using it:

- Members are collaborating socially and create content with Microsoft Office
- Microsoft OneDrive enables document and content storage
- Yammer and Edmodo enable self-created communities for social conversation, blogging and knowledge
- Opportunities for support and skills acquisition via Microsoft IT Academy and the Answer Desk.

Developing your own change strategy

Guiding questions for learning communities

- How are our communities of practice and inquiry supported and enabled?
- Do educators have access to personal learning networks in school, region, country and the world?
- What continuity of learning on and off school or campus is provided?
- Is the support for teachers and students both technical and learning focused? Is it enabled face to face and virtually?
- Is the current allocation of resources and budgets appropriate for the vision? Is the mix right?
- What guidelines and timelines are needed to achieve our goals?
- Are we ready for future expansion?
- What insourcing or outsourcing of personnel, including ICT management and services are needed?
- What curriculum and learning coaches are required to ensure full utilization of services?

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