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## Defining Learning Communities

Sue Kilpatrick, Margaret Barrett and  
Tammy Jones



### Contact:

Doctor Sue Kilpatrick  
Director, CRLRA  
University of Tasmania  
Locked Bag 1313  
Launceston TAS 7250  
Ph: 03 6324 3018  
Fax: 03 6324 3040  
Email: [Sue.Kilpatrick@utas.edu.au](mailto:Sue.Kilpatrick@utas.edu.au)  
Website: <http://www.CRLRA.utas.edu.au>

# Defining Learning Communities

## Abstract

The beginning of the twenty-first century heralds a shift in emphasis from learning with the focus on the individual to learning as part of a community. The concept of “learning communities” is currently one that is to the fore of much educational and organisational literature and discussion. In the literature, however, the term “learning communities” is being defined and used in diverse and flexible ways. As well as learning communities that are geographically defined, there has been growth in accessing learning through participation in “communities of common purpose”. Information and communication technologies have facilitated the emergence and rapid growth of learning communities whose members interact from remote corners of the globe to form online learning communities.

This paper explores the ways in which learning communities are defined, and the commonalities, blurred boundaries and close associations that are apparent between learning communities and other contemporary areas of interest, such as lifelong learning, social capital, communities of practice and distributed cognition. The Faculty of Education at the University of Tasmania has acknowledged the potential that learning communities offer for the new century, and the benefits that can flow from an improved understanding of the concept, by adopting learning communities as the key metaphor of its research. It is apparent that learning communities can be a powerful means of creating and sharing new knowledge.

## Introduction

In educational theory and practice, the twentieth century has been described as the ‘century of the individual’ a description that builds on Piaget’s developmental theories where the learner is viewed as a ‘lone seeker of knowledge’ (Feldman, 2000, ix). By contrast, the growing influence of Vygotsky’s theory of social constructivism points to a move away from an individualistic focus, to one that recognises the contribution of others to every individual’s learning. In short, a movement from the ‘Age of the Individual to the Era of Community’ (Feldman, 2000, xiii). Learning communities are a manifestation of this movement and aim:

to strike a balance between individuality and social connectedness.... [as we begin to] see the essential role that relationship, participation, reciprocity, membership, and collaboration must play in any theory of human development that aspires to guide us.... (Feldman, 2000, p. xiii)

The philosophy underpinning learning communities is most commonly attributed to Dewey and his recognition of the importance of the social nature of all human learning (see, for example, Brown & Duguid, 2000; Salomon, 1993; Smith, 2003). Other writers propose that similar philosophies have existed, in one form or another, since at least the first century A.D. (Lenning & Ebberts, 1999), or far earlier than this, in the time of Plato (Longworth, 2002). By the end of the twentieth century, although learning communities were neither well understood, nor well defined, they were among the most often discussed concepts in higher education circles (Kezar, 1999, p. ix). This discussion continues today, with the definition of learning communities continuing to evolve in response to the diverse needs of learners and the communities in which they work.

This paper examines definitions of learning communities that arise from the literature, identifies common features of these definitions and interrogates the theoretical work that underpins these common features. The paper concludes with a proposal for the employment of learning communities as a means for the creation and advancement of the theory and practice of education and the attendant research enterprises.

### **What are learning communities?**

The term learning communities is used variously within the literature, often without explicit definition. Two major uses can be discerned. The first focuses on the human element of communities, and the profits that accrue from building on the synergies of individuals in common locations or with common interests as they work towards sharing understandings, skills and knowledge for shared purposes. The second is focused on curricular structures (i.e. an inanimate structure) as the means to developing 'deeper' learning of (implied) pre-determined curricular content.

#### *Learning communities: profiting from synergies*

The broadest and most inclusive use of learning communities is to describe situations where an array of groups and institutions have united forces to promote systematic societal change and share (or jointly own) the “risks, responsibilities, resources and rewards” (Himmelman, 1994, p. 28). In geographically-bound examples, the partners typically include educational institutions, government bodies, industry partners and community groups. This phenomenon of partnership between public, private and non-profit organizations that increases community capacity to shape and manage its own future is said to be “collaborative empowerment” (Himmelman, 1994, p. 27).

Yarnit (2000) asserts that the rise in popularity of this view of learning communities, in the UK, was a response to world change in the late 1980s including: global economic change; the advent of the knowledge economy; and the widespread availability of information and communications technology. These changes had a profound impact upon urban communities, which faced: the prospect of rising unemployment, due to non-competitiveness in a global economy; cut-backs in government spending; the population pressures on inner city areas due to employment and housing demands, and emigration from developing and ex-communist countries; and a destabilised political arena (Yarnit, 2000). A typical definition is:

A learning community addresses the learning needs of its locality through partnership. It uses the strengths of social and institutional relationships to bring about cultural shifts in perceptions of the value of learning. Learning communities explicitly use learning as a way of promoting social cohesion, regeneration and economic development which involves all parts of the community. (Yarnit, 2000, p. 11)

Much of this literature is from Europe and emphasises learning towns, learning cities and learning regions. There is a growing Australian literature (e.g. Keating, Badenhorst & Szlachetko, 2002) on the notion of learning communities. However, whilst the European definitions tend to identify geographical location as a binding element in learning communities, Australian definitions tend to define learning communities as applying to communities of common interest as well as geography. This focus on common interests that transcends geography may reflect Australians' recognition of the need to deal with the

'tyranny of distance' in a country that is at times defined by distance. For example, from a vocational education and training viewpoint, learning communities have been defined as:

any group of people, whether linked by geography or some other shared interest, which addresses the learning needs of its members through proactive partnerships. It explicitly uses learning as a way of promoting social cohesion, regeneration and economic development. (Kearns, McDonald, Candy, Knights & Papadopoulos, 1999, p. 61-62)

Other definitions also recognise the need for 'locating' a learning community in ways beyond the geographic, and emphasise the benefits that may accrue to society through the promotion and support of learning communities.

Learning communities are developed where groups of people, linked geographically or by shared interest, collaborate and work in partnership to address their members' learning needs. Learning communities facilitated through adult and community education are a powerful tool for social cohesion, community capacity building and social, cultural and economic development. (Department of Education, 2003, p. 12)

Learning communities, in this first use, not only facilitate the sharing of knowledge, but have the potential to create new knowledge that can be used for the benefit of the community as a whole and/or its individual members. This broad view contrasts with the use of learning communities as enhancers of individuals' learning, usually in educational settings. However, even when applied in a narrower sense to single institutions, it is recognised that "[b]uilding communities of learners creates an environment that can potentially advance a whole society" (Lenning and Ebbers 1999).

### *Learning communities in educational settings*

This body of work draws on concepts from organisational learning and management literature, and applies them to curricular structures (i.e. the inanimate structure, rather than the human aspect of institutions/organisations) as the means to developing 'deeper' learning of pre-determined curricular content (implied). In professional teaching and learning communities "staff, students, and administrators value learning, work to enhance curriculum and instruction, and focus on students" (Peterson, 2002, Positive vs. toxic cultures section, ¶ 1).

The growth of interest in learning communities within schools has been accredited to the findings of research in the 1970s and 1980s conducted into "effective schools" (Larrivee, 2000). The characteristics brought to light by this research contributed to an inventory of outcomes that were considered desirable in shaping the "concept of school as community" (Larrivee, 2000, p. 18). Included among these desirable attributes is the student's ability to be able to identify as a member of the school community. This is consistent with a condition considered by Dreikurs (1968) as essential to healthy emotional development: the need to belong. Typifying this concept within a classroom, school or campus setting, is this definition:

A learning community is any one of a variety of curricular structures that link together several existing courses—or actually restructure the curricular material entirely—so that students have opportunities for deeper

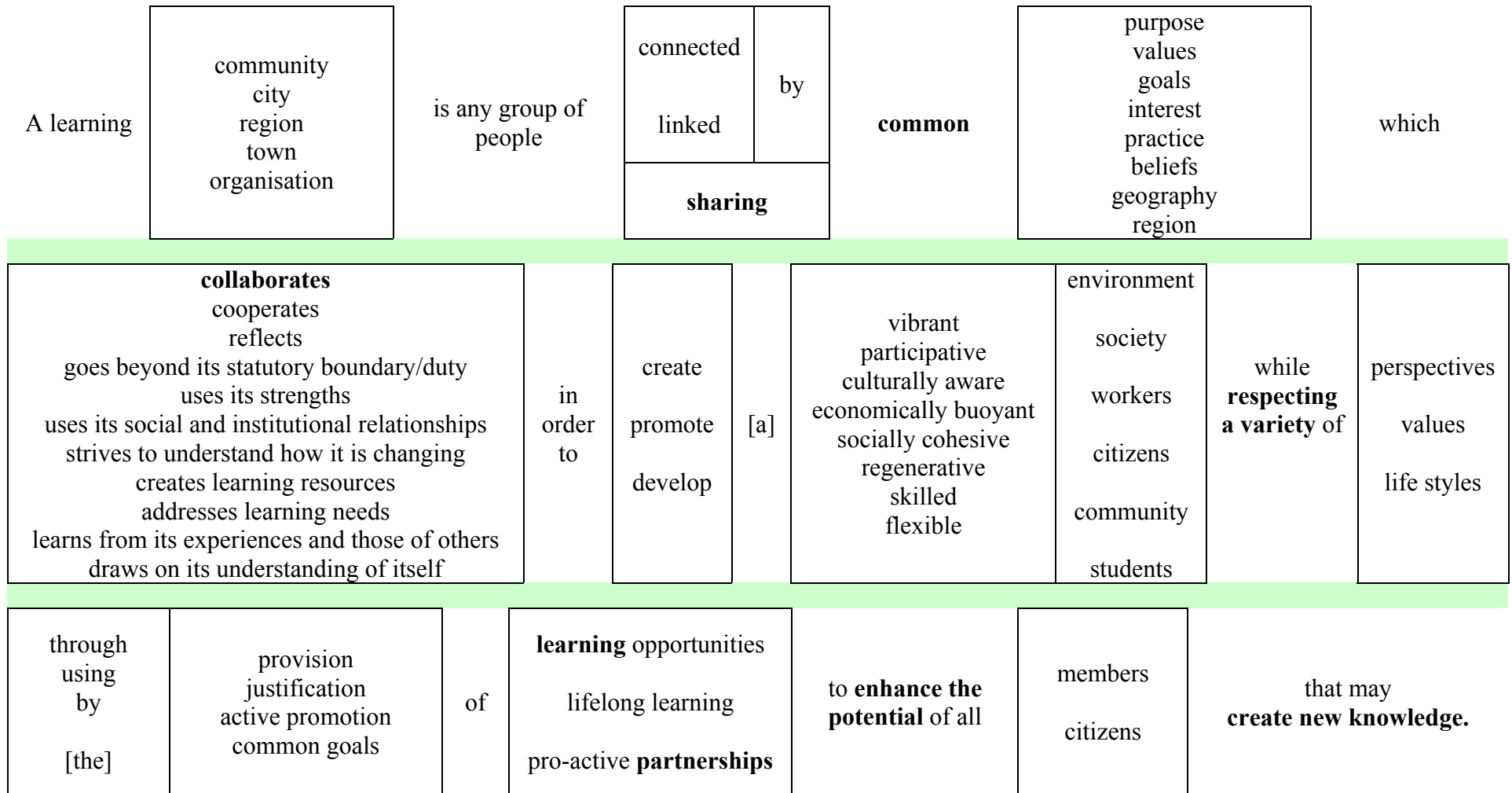
understanding of and integration of the material they are learning, and more interaction with one another and their teachers as fellow participants in the learning enterprise. (Gabelnick, MacGregor, Matthews & Smith, 1990, p. 19)

In a Tasmanian policy context, the document, *Essential Learnings* (Department of Education, 2002), is consistent with this conceptualisation of learning communities, for example in its promotion of learning for deeper understanding.

Learning communities, in this second use, then, are primarily seen as benefiting individual learners, rather than the collective. There is less emphasis on sharing knowledge and skills, and the potential to create new knowledge tends not to be acknowledged.

Regardless of the model investigated, there are common themes that link the definitions and uses. These include: common or shared purpose, interests or geography; collaboration, partnership and learning; respecting diversity; and enhanced potential and outcomes. The following composite definition draws together these common threads. It forms the basis for the remainder of the paper, which examines how the concept of learning communities can fit with related bodies of work.

**Figure 1: Composite definition of learning communities**



Compiled from: Adult Learning Australia, 2000; DfEE, 1998; Graves, 1992; Kearns, et al., 1999; Landry & Matarasso, 1998; Longworth, 1999; Kilpatrick et al., 2002.

### **Common or shared purpose/interests/geography**

Both definitional ‘schools’ hold that members of a learning community share a stake or interest in a particular outcome, very broadly defined. Such outcomes range from economic development of their community (e.g. Longworth, 2002) to successful education of children. For example:

In schools with professional learning communities, the culture possesses:

- A widely shared sense of purpose and values;
- Norms of continuous learning and improvement;
- A commitment to and sense of responsibility for the learning of all students... (Peterson, 2002, Positive vs. toxic cultures section, ¶ 1, adapted from Stein, 1998, Lambert, 1998, Fullan, 2001, DuFour & Eaker, 1998, Hord, 1998)

Within learning communities, the shared interest in certain outcomes parallels with the phenomenon of shared interest observed in theoretical bodies of work such as communities of practice (e.g. Wenger, 1998). References to communities of practice tend to be found in the organisational studies and management literature, however, application of the term to educational, cross-institutional and geographic community settings is increasing. One such example defines a community of practice as one characterised by “individuals with common expertise participating in an informal relationship to resolve a shared problem or situation that impacts upon their shared futures” (Bowles, 2002).

### **Collaboration, partnerships and learning**

Learning communities are operationalised through collaboration, cooperation, and/or partnerships. The shared goals are achieved through working together and potentially building or creating new knowledge, as Watkins and Marsick point out: “[l]earning helps people to create and manage knowledge that builds a system’s intellectual capital” (1999, p. 81). While there are many tasks that can be undertaken by an individual, “collaboration is called for when an individual’s charm, charisma, authority, or expertise just aren’t enough to get the job done” (Schrage, 1990, p. 6). While successful communication is often seen as being essential to many human endeavours, according to Schrage (1990), collaboration is a far more powerful tool for use when working within teams or groups. Schrage defines “the act of collaboration [as] an act of shared creation and/or shared discovery” (1990, p. 6). To truly collaborate, however, requires a high level of cognitive involvement by participants, as well as a preparedness by them to contribute to the creation of a shared understanding (Schrage, 1990).

Schrage (1990) suggests that this preparedness to contribute is essential in an age where specialisation is so evident in many areas of human endeavour. In a newly complex age, an age of rapid technological advancement, specialisation is seen as one of the only ways to survive. When specialisation flourishes however, there is a consequence: the loss of the ability to have a good understanding of the big picture. Collaboration amongst/between specialists, then, is seen as vital, for it is not possible for an individual to understand all the complexities of this modern age without drawing on and accepting the contributions of others (Schrage, 1990).

Again, there are parallels between learning communities and communities of practice where:

reciprocity is strong. People are able to affect one another and the group as a whole directly. Changes can propagate easily. Coordination is tight. Ideas and knowledge may be distributed across the group, not held individually. These groups allow for highly productive and creative work to develop collaboratively. (Brown & Duguid, 2000, p. 143)

Brown and Duguid (2000) note that online communities or ‘networks of practice’ allow for efficient communication of information relating to a shared practice to large numbers of members, however there is little reciprocity; while information is passed on, there is little chance of action being taken or knowledge being produced as a consequence of the existence of the network.

The field of distributed/socially shared cognition, like the fields of learning communities and communities of practice, takes the view that “knowledge is commonly socially constructed, through collaborative efforts toward shared objectives or by dialogues and challenges brought about by difference in persons’ perspectives” (Pea, 1993, p. 48).

#### *Learning and sharing available expertise of the community*

Sharing knowledge through collaboration is the core business of learning communities. The adage, “two heads are better than one” embodies the beneficial nature of knowledge when socially distributed, instead of being solely the property of an individual intellect (Brown, Collins & Duguid, 1989). The fields of distributed cognition and socially shared cognition have, as their foundation, the constructivist approach to learning (Resnick, 1991; Salomon, 1993). A constructivist view of learning holds that learning cannot be taught, but must be constructed by the learner. The learner, in making sense of experiences, tests previously held values and attitudes against those of others (opportunities for which are enhanced in a learning community). This assists in changing the learner’s values and attitudes. Change in values and attitudes is essential if learning is to result in new behaviour (Candy, 1991; Kilpatrick, Bell & Falk, 1999).

There is debate about the effectiveness of online learning communities compared to ones that meet face-to-face, however knowledge construction remains a social experience even in an online environment. In examining knowledge construction in online learning communities, Tu and Corry (2002) claim that,

[f]rom a social learning aspect, learning community is defined as a common place where people learn through group activity to define problems affecting them, to decide upon a solution, and to act to achieve the solution. As they progress, they gain new knowledge and skills. All of these activities and interactions occur in an online environment. (Tu & Corry, 2002, Introduction section, ¶ 1)

These claims must be balanced against the previously noted queries concerning the difficulties of achieving reciprocity in online environments.

Learning through interactions with others in a learning community can build social capital (defined as norms, values and networks that can be used for mutual benefit) (Falk & Kilpatrick, 2000; Field & Spence, 2000). Social capital, in turn, facilitates learning by fostering trust, shared values, personal development, a sense of identity and access to the

knowledge of others through networks that form a sound basis for sharing knowledge and skills; that is for collaboration and learning together (Kilpatrick et al., 1999).

The relationship between social capital and learning has been recognised in recent strategic educational policy documents. For example, Tasmania's *Essential Learnings* policy document states:

Social capital is the level of trust and mutual understanding and the shared values and behaviours that bind the members of human networks and communities and make cooperative action possible. This commitment to collaboration influences the quality of our personal lives and the quality of life in our communities. (Department of Education, 2002, p. 31)

Community of practice literature describes a very similar social learning process to the social capital literature, where attitudes, the learners' identity and networks are central. For example, in discussing learning as a newcomer, Wenger asserts:

We wanted to broaden the traditional connotations of the concept of apprenticeship—from a master/student or mentor/mentee relationship to one of changing participation and identity transformation in a community of practice. The concepts of identity and community of practice were thus important in our argument... (Wenger, 1998, p. 11-12)

Although Himmelman (1994) suggests that sharing the available expertise from within the community is seen as increasing the feeling of self-determination and empowerment of the community, it is important to note that learning communities are not closed systems. Learning through collaboration with people and groups external to the community introduces new ideas, raises awareness of new practices and exposes community members to new norms and value sets. External networks have been shown to improve the capacity of communities to learn to manage change in geographic (CRLRA, 2001) and school-community partnership (Kilpatrick et al., 2002) contexts.

### **Respecting diversity**

Respect for diversity enhances the learning capacity of a community. This is apparent from the literature that links learning communities and community development (the broader definition). Acceptance of diversity is an indicator of willingness to entertain new ideas and accept change, both prerequisites for community development (Flora, Flora & Wade, 1996) and learning. Organisational structures that include representatives of all affected sections of the community, including women, minority and less powerful groups, have been found to be more effective for community development in Europe (Geddes, 1998) and the United States (Aigner, Flora & Hernandez, 1999).

In the learning communities within educational institutions perspective, respecting diversity fosters learning by building a climate of trust and encouraging risk-taking:

Before teachers will collaborate on student learning in an authentic way, they must trust their principal and one another. Collaborative teamwork is too risky to happen without a culture of trust. They must believe that it will

be OK if they make a mistake or try something new and it doesn't work out. (Taylor, 2002, p. 43)

This feature has also been evidenced in creative collaborations where a key advantage of collaboration is that "...by spreading the risk a little bit, it encourages you to take more chances" (Gruber in John-Steiner, 2000, p. 19).

### **How can the benefits of a learning community be realised?**

Learning communities can provide benefits to individual members and the community as a whole by developing the capacity or enhancing the potential of members, as our composite definition above suggests. Research into the outcomes from learning communities reveals benefits as diverse as economic prosperity (Adult Learning Australia, 2000; Yarnit, 2000) and improved student academic and social achievement (Calderwood, 2000; Gabelnick et al., 1990). A series of intermediate benefits enable these higher order benefits to be realised. In educational institutions, research has identified benefits, for staff, related to diminished isolation, collaboration among colleagues, increased curricular integration, a fresh approach to academic disciplines, and increased satisfaction with students' learning (Kezar, 1999; Collier, 2002).

The benefits of learning communities are enhanced if there is a professional learning culture that values professional development (Peterson, 2002), and a climate of openness that promotes sharing of knowledge, dialogue, inquiry and risk-taking, and gives constructive feedback to people at all levels (Taylor, 2002; Watkins & Marsick, 1999). The establishment of trust is also essential to the success of working collaboratively. A reciprocation of trust needs to be built between peers or between peers and leaders (e.g. the principal). Without a "culture of trust" (Taylor, 2002, p. 43), team members will find it difficult to experiment or attempt to put into place new ideas.

Learning communities can be deliberately fostered. Here, there is a special role for leaders and a range of approaches to leadership: "Leaders ... set the vision, but cannot enact it without the cooperation of the hearts, minds, and wills of the people who must make this significant change in the way they work" (Watkins & Marsick, 1999, p. 79). Those in formal leadership roles are best placed to build learning communities by providing human, physical and financial resources and opportunities to build trust, and a shared culture and vision (Taylor, 2002; Kilpatrick, Johns, Mulford, Falk & Prescott, 2002).

Formal leaders must be aware that all community members can and should be encouraged to contribute to the collective learning process regardless of formal status:

... in getting the job done, the people involved ignored divisions of rank and role to forge a single group around their shared task, with overlapping knowledge, relatively blurred boundaries, and a common working identity .... [and] whether the task is deemed high or low, practice is an effective teacher and the community of practice an ideal learning environment. (Brown & Duguid, 2000, p. 127)

Brown and Duguid (2000) note that the size of a given community may be a limiting factor, and that "the demands of direct coordination inevitably limit reach. You can only work closely with so many people" (p. 143).

## Conclusion

The concept of learning communities draws on a wide body of theory related to learning and sociology. Learning communities have much to recommend them in an increasingly complex world where we cannot expect any one person to have sufficient knowledge and skills to confront the complexities of institutions, our society and individuals and the tasks these face. They are consistent with a constructivist approach to learning that recognises the key importance of interactions with others, and the role of social interactions in the construction of values and identity.

Learning communities are a fertile field for research. Some of the questions that remain to be answered are:

- how do we foster learning communities?
- what makes a learning community work?
- what is the role of formal and informal leaders in learning communities?
- how do learning communities interact with each other?
- how do learning communities interact with external groups? And especially,
- HOW do learning communities create new knowledge?

## References

- Adult Learning Australia. (2000). Learning around town. Retrieved April 16, 2003, from <http://www.ala.asn.au/learningcities/LearningAroundTown.pdf>
- Aigner, S., Flora, C. & Hernandez, J. (1999). *The premise and promise of citizenship and civil society for renewing democracies and empowering sustainable communities*. Edinburgh, UK: International Association of Community Development.
- Bowles, M. (2002). *Forming a community of practice in North/North East Tasmania on responsive and flexible VET*. Launceston, Tasmania: TAFE.
- Brown, J. S., Collins, A. & Duguid, P. (1989). Situated cognitions and the culture of learning. *Educational Researcher*, 18, pp. 32-42.
- Brown, J. S. & Duguid, P. (2000). *The social life of information*. Boston, Massachusetts: Harvard Business School Press.
- Calderwood, P. E. (2000). *Learning community: Finding common ground in difference*. New York: Teachers College, Columbia University.
- Candy, P. (1991). *Self-Direction for Lifelong Learning: A Comprehensive Guide to Theory and Practice*. San Francisco: Jossey-Bass.
- Collier, C. F. (2002). A snapshot of the Center for Inquiry. *Primary Voices K-6*, 10(3), 2-7.
- CRLRA (2001). *Building dynamic learning communities: Ten regional case studies*. Launceston: Centre for Research and Learning in Regional Australia, University of Tasmania.
- Department of Education. (2002). *Essential Learnings: Framework 1*. Hobart, Tasmania: Department of Education.
- Department of Education. (2003, March). *Adult and community education: A strategy for post-compulsory education and training in Tasmania*. Retrieved April 15, 2003, from <http://www.education.tas.gov.au/stateoflearning/issuespapers/aceissuespaper.doc>
- DfEE. (1998). *Practice progress and value. Learning communities: Assessing the value they add*. Retrieved April 14, 2003, from <http://www.lifelonglearning.co.uk/learningcities/>

- Dreikurs, R. (1968). *Psychology in the classroom: A manual for teachers* (2<sup>nd</sup> ed.). New York: Harper & Row.
- Falk, I. & Kilpatrick, S. (2000). What is social capital? A study of rural communities. *Sociologia Ruralis*, 40(1), pp. 87-110.
- Feldman, D. H. (2000). Forward. In V. John-Steiner, *Creative collaboration* (pp. ix-xiii). New York: Oxford University Press.
- Field, J. & Spence, L. (2000). Informal learning and social capital. In F. Coffield (Ed.), *The Necessity of Informal Learning* (pp. 32-42). Bristol: Policy Press.
- Flora, C. B., Flora, J. & Wade, K. (1996). Measuring success and empowerment. In N. Waltzer (Ed.), *Community Strategic Visioning Programs* (pp. 57-74). London, UK: Praeger.
- Gabelnick, F., MacGregor, J., Mathews, R. & Smith, B. L. (1990). Learning communities: Building connections among disciplines, students and faculty. *New Directions in Teaching and Learning No. 41*. San Francisco: Jossey Bass.
- Geddes, M. (1998). *Local Partnership: a successful strategy for social cohesion?* Dublin: European Foundation for Improvement of Living and Working Conditions.
- Graves, L. (1992). Cooperative learning communities: Context for a new vision of education and society. *Journal of Education*, 174(2), 57-79.
- Himmelman, A. T. (1994). Communities working collaboratively for a change. In M. Herrman (Ed.), *Resolving conflict: Strategies for local government* (pp. 27-47). Washington, DC: International City/County Management Association.
- John-Steiner, V. (2000). *Creative collaboration*. New York: Oxford University Press.
- Kearns, P., McDonald, R., Candy, P., Knights, S. & Papadopoulos, G. (1999). *VET in the learning age: The challenge of lifelong learning for all* (Vol. 2: Overview of international trends, and case studies). Canberra: National Centre for Vocational Education Research Ltd.
- Keating, J, Badenhorst, A & Szlachetko, T. (2002). *Victoria as a learning region: Background report, OECD Victoria learning Cities and Regions Conference*, Melbourne 14 and 15 October, Melbourne: Victorian Department of Education and Training.
- Kezar, A. J. (1999). Forward. In O. T. Lenning & L. H. Ebbers. *The powerful potential of learning communities: Improving education for the future* (Vol. 26, pp. ix-xi). Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Kilpatrick, S., Bell, R. & Falk, I. (1999). The role of group learning in building social capital, *Journal of Vocational Education and Training*, 51(1), pp. 129-144.
- Kilpatrick, S., Johns, S., Mulford, B., Falk, I. & Prescott, L. (2002). *More than an education: Leadership for rural school-community partnerships*. Canberra: Rural Industries Research and Development Corporation.
- Landry, C. & Matarasso, F. (1998). *The learning city-region: Approaching problems of the concept, its measurement and evaluation – A discussion document*. Stroud, UK: Comedia.
- Larrivee, B. (2000). Creating caring learning communities. *Contemporary Education*. 71(2), 18-21.
- Lenning, O. T. & Ebbers, L. H. (1999). *The powerful potential of learning communities: Improving education for the future* (Vol. 26). Washington, D.C.: The George Washington University, Graduate School of Education and Human Development.
- Longworth, N. (1999). *Making lifelong learning work: Learning cities for a learning century*. London: Kogan Page.

- Longworth, N. (2002). *Learning cities for a learning century: Citizens and sectors - stakeholders in the lifelong learning community*. Retrieved May 15, 2003, from <http://www.library.cqu.edu.au/conference/papers/Longworth.pdf>
- Pea, R. D. (1993). Distributed intelligence and designs for education, pp 47-87. In G. Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 47-87). Cambridge, UK: Cambridge University Press.
- Peterson, K. D. (2002). Positive or negative? *Journal of Staff Development*, 23(3), 1-6.
- Resnick, L. B. (1991). Shared cognition: Thinking as social practice. In L. B. Resnick, J. M. Levine & S. D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp. 1-20). Washington, DC: American Psychological Association.
- Salomon, G. (Ed.). (1993). *Distributed cognitions: Psychological and educational considerations*. Cambridge, UK: Cambridge University Press.
- Schrage, M. (1990). *Shared minds: The new technologies of collaboration*. New York: Random House.
- Smith, B. L. (2003). Learning communities and liberal education. *Academe*, 89(1), 14-18. TAFE Tasmania.
- Taylor, R. T. (2002). Shaping the culture of learning communities. *Principal Leadership*, 3(4), 42-45.
- Tu, C.-H. & Corry, M. (2002). Research in online learning community. *E-journal of Instructional Science and Technology*, 5(1).
- Watkins, K. E. & Marsick, V. J. (1999). Schools as learning communities: Sculpting the learning community: New forms of working and organizing. National Association of Secondary School Principals. *NASSP Bulletin*, 83(604), 78-87.
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, UK: Cambridge University Press.
- Yarnit, M. (2000). *Towns, cities and regions in the learning age: A survey of learning communities*. Retrieved April 16, 2003, from <http://www.ala.asn.au/learningcities/LGALearningLayout.pdf>