Community and Learning

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COMMUNITY AND LEARNING

1.0 INTRODUCTION

Some words can beguile us with their positive associations, words like community and learning. Community has a comforting feel, almost nostalgic. It awakens feelings of longing for familiarity, closeness, common experiences, shared pleasures, and networks of mutual support. We commune in our comfort zones, and we seek community in times of distress and danger. In contrast to the reassurance we sense in community, learning has associations of progress, of overcoming challenges and creating new futures. We learn in our zones of growth, or what Lev Vygotsky (1934/1987) called our zones of proximal development. Learning points to a hopeful future, suggesting that we can intervene proactively to create sustainable, fulfilling and cohesive ways of life. A key aspect of our role as educators is to devise educational programs that reconcile the needs to commune and grow, to conserve and create – needs for community and learning.

Community as lived experience in contemporary society is elusive and threatened by interrelated forces of mobility, transitoriness, economic and commercial interests, growing mutual suspicion, and an increasing sense of fear and insecurity in public places (Bauman, 2001).[1] Numerous social projects have been proposed to respond to this sense of alienation. Here at Griffith University the Vice-Chancellor has signalled a commitment to building partnerships with the local community by establishing a PVC for Equity and Community Partnerships. The theme of International Teachers Day (25th October) *Teachers Create Dialogue Every Day,* highlighted the key role of educators in building communities through dialogue, understanding, mutual respect and solidarity. Teachers in Queensland are being urged by EQ to join professional learning communities in order to improve student outcomes. Classrooms are being theorised as local communities of practice, and schools are being conceived as learning communities with nodes and networks that extend into the immediate neighbourhood as well as nationally and internationally via *the web* to create virtual communities that extend across borders of time and space. Students in their local classrooms in different parts of the world are being connected via the internet to each other and provided with access to experts working in companies and universities, thereby creating a community of learners that resembles the authentic activity of scientific and scholarly communities (DEST, 2001).

The power of these communication systems to connect people to each other and to diverse sources of information is seen as enhancing learning in quite profound ways. From a social justice perspective, however, disparities between and within nations in the distribution of educational resources and opportunities appear to be amplified by the new technologies rather than

reduced, so accessibility remains a pressing concern. The vision of a global learning community, nonetheless, is a seductive one – a fusion of desire for security and growth, for community and learning – and it has been readily exploited by media and telecommunication companies in their advertisements. However, web-mediated learning and the virtual communities created across time and space, are also regarded with suspicion, as 'unruly', 'out of control' and 'dangerous' because they enable instant access to information from diverse sources across the globe, information that may be unreliable, malevolent, myopic or misleading. I begin this lecture, then, with these double-sided reflections on the beguiling words – learning and community - and suggest that as educators we need to explicate in words and in practice, a vision of *community* that is worth *learning* towards.

2.0 LEARNING

Learning is particularly prominent in contemporary discussion of possible futures (see Renshaw, 2002). Politicians, business executives, community leaders, as well as peak academic and professional bodies such as the Australian Council of Deans of Education (2001), and the Australian Council for Educational Research (Masters, 1999) have positioned *learning* as key to our collective future. Education Queensland envisions students becoming active citizens in a 'learning society'. Clearly, *learning* is crucial because currently we do not have solutions to the challenges of either sustainability, or authentic democratic social structures. We need to learn - to survive, to live together in diversity, and to provide a sense of hope to our children and to the generations that follow.

2.1 Lifelong Learning

It's intriguing to recall in the current enthusiasm for 'learning', that learning and its partner play were regarded until recent decades as the exclusive domains of childhood, activities of the developmentally immature, activities 'to be grown out of', activities that ceased upon reaching maturity where the very serious work of adulthood took over. Adulthood was considered to be, as it were, a theatre or stage where the knowledge and skills acquired in childhood could be performed and displayed. Then, adult learning was regarded as predominantly remedial or compensatory – necessary only for those whose childhood circumstances, or specific events such as the Second World War or the Great Depression, had prevented them from mastering the basics or getting the education they would normally have had as youngsters. Now, learning along with associated concepts such as development and socialisation are regarded as lifelong on-going processes.

Participation in formal education, even to university level, is seen today as just the beginning of ones learning journey. Graduates leave universities to enter workplaces increasingly represented as dynamic learning organisations (Senge, 1991). In this context 'learning' conveys the sense that organisations should be flexible, adaptive, and capable of responding to rapidly changing

environments. Employees of such learning organisations need to be problem solvers, multi-skilled to enable them to work across portfolios and capable of learning new skills and strategies as required. Nonetheless, the anticipated length of employment in any organisation will possibly be no longer than five years or so, before employees move on, willingly or not, to enter other learning organisations where new skills, knowledge and dispositions may need to be acquired. Jack Welch, a recent CEO of General Electric suggested that success at GE entailed building a learning culture that was borderless. The assumption was made, Welsh maintained, that someone, somewhere had a better idea; "so the compulsion is to find who has that better idea, learn it, and put it into action – fast" (Abernathy, 1999, p.40). From this perspective, lifelong learning whether at home or work is not so much a quest for personal growth, wisdom and fulfilment, as an endless struggle for survival in a competitive market where being 'first and fast' is all that counts.

Regardless of our current level of attainment and position – even that of *Professor* - there are constant reminders that the skills and knowledge we laboured to master in our youth often are no longer relevant to the complexity of living in the rapidly changing present. While there can be great satisfaction in mastering new knowledge and skills, the declining relevance of ones established knowledge and skills can provoke feelings of loss and anxiety. Learning takes on a quality of breathlessness – a ceaseless process of adaptation to what seems like inevitable and accelerating change. James Gee (2000) recently dubbed the generation of the new millennium the 'portfolio generation' because from early childhood there is now an expectation that individuals keep cumulative records of their engagement in learning and re-skilling activities. Without such a record, employment prospects diminish because successful workers in the new fast capitalist economy are not defined by fixed qualities such as intelligence or qualifications *per se* but by a capacity to compete and thrive on new experiences and projects. Framed within this discourse of competition where survival depends on new learning, we don't so much choose lifelong learning, but like the convicts sent from England, we are condemned to it for the term of our natural lives.

2.2 Lifelong Learning and Alternative Futures

This rather bleak notion of lifelong learning – enforced re-skilling and devaluing of attained skills - is not the only available perspective. We can learn, collectively and individually, to make wise choices between competing agendas for our future. We can learn to rediscover, to preserve, and to resist (unnecessary regressive or unjust) change. This thought was partly triggered by perusing George Negus' recent light-hearted reflections on his family's year in Italy, in which he referred to the slow food movement begun by Carlo Petrini. Carlo's vision of the future is more relaxed, less breathless, more conversational and convivial than the image of relentless commitment to lifelong learning that I sketched briefly above. His manifesto for the slow food movement includes the following paragraph:

> *To be worthy of the name, Homo sapiens should rid themselves of speed before it reduces them to a species in danger of extinction. A firm defence of quiet material pleasure is the only way to oppose the universal folly of the Fast Life. May suitable doses of guaranteed sensual pleasure and slow long-lasting enjoyment preserve us from the contagion of the multitude who mistake frenzy for efficiency. Our defence should begin at the table with Slow Food. Let us rediscover the flavours and savours of regional cooking and banish the degrading effects of Fast Food. In the name of productivity, Fast Life has changed our way of living and threatens our environment and landscapes. So, slow food is now the only truly progressive answer. That is what real culture is all about: developing taste rather than demeaning it. And what better way to set about this than an international exchange of experiences, knowledge, projects? Slow food guarantees a better future (quoted in Negus, 2001, p.93).*

Petrini's eloquent promotion of slow food as the only truly progressive answer for a better future echoes other similar movements of recent decades where local knowledge, skills and habits of life have been threatened by what is called development or progress[2]. Paolo Freire, for example, promoted a dialogic form of education in Brazil as a strategy to enable local people to appreciate their current funds of knowledge, to value their established skills, and to empower them to engage with progress on their terms and in their way. Dialogue for Freire was not simply the description of an interactive exchange between people, but a definition of how human relationships should be formed – namely, on the basis of equality, respect and a commitment to the authentic interests of participants. Importantly, 'participants' were not theorised as universal human subjects detached in time and space, but living members of communities with histories and cultural resources that needed to be understood and respected[3]. These attempts to strategically resist change and transform the impact of progress, highlight that *learning* is as much about making individual and collective value judgements and choosing between alternative futures, as it is about inventing new (faster, more consuming) forms of cultural life. The new, the faster, the more efficient and consuming are not necessarily better.

2.3 Worthwhile Learning

Simply to advocate learning *per se* as an end in itself, as an inherently valuable process, is problematic because it omits consideration of the values that establish the criteria for worthwhile learning. The history of research on learning during the last century has demonstrated that learning occurs constantly from our observations, our conversations, our everyday experiences, in our workplaces, from incidental occurrences and contingencies, as well as from instruction within formal institutions. To draw on an analogy with air, learning is everywhere, it envelops us and pervades

our everyday life. Depending on where you are, who you are with, and for what purpose, learning like air: can stink or smell like roses; it can be fresh or stale; can poison you or enliven you; it can allow you to soar with insight and perspective or it can suck you down and restrict your understanding; you can draw it in deeply or puff shallowly on the surface.

The analogy conveys the point, I hope, that to promote learning *per se* is to promote any kind of change as a valuable goal. By privileging some general notion of *learning* as a universal good, we remove our responsibility to make judgements of what is worthwhile learning, and the kind of future that it is worth learning towards. To simply advocate learning is to become a trainer and technician rather than an educator and teacher. The latter are required by their profession to enter into debate and critical reflection about what is being learned, by whom, in what context, and for what purpose, and to reflect on *who* has the opportunity to learn *what*. I don't want to question the importance of learning – I want to advocate a questioning approach to what is worth learning for a sustainable and socially just future.

3.0 NEW LEARNING, NEW LEARNING THEORY

New Learning was the title recently chosen by The Australian Council of Deans of Education to launch their 'Charter for Education in Australia' (October 2001). The title resonates not only with themes of lifelong learning, but also with policy slogans such as the 'Smart State' and 'Knowledge Society'. I use the term 'slogan' because in fact, as shown by Considine Marginson Sheehan and Kumnick (2001), Australia has fallen behind other OECD countries in investment in knowledge – particularly in terms of public investment in education[4]. The Deans' manifesto on *New Learning* was produced as a strategic move to capture the attention of politicians and the public at the last Federal election (2001), and to promote a policy of reinvestment in education. I have selected their Charter as a representation of the current view of *learning* among educators in Australia. The following passage is indicative of this view.

> *The new learning is less about imparting defined knowledge and skills and more about shaping a kind of person: somebody who knows what they don't know; knows how to learn what they need to know; knows how to create knowledge through problem solving; knows how to create knowledge by drawing on informational and human resources around them; knows how to make knowledge collaboratively; knows how to nurture, mentor, and teach others; and knows how to document and pass on personal knowledge. In sum, this kind of person is open to autonomous, assisted and collaborative learning. (2001, p.62)*

Where does this vision of new learning come from? As explored immediately below I suggest that the Deans' vision is an amalgam that incorporates hints of behaviourist shaping (*"shaping a kind of person"*), constructivist invention ("*knows how to create knowledge"*), and metacognitive reflection *("knows*

what they don't know"). Predominantly, however, it draws upon recent sociocultural theorising of the learning process. The key phrases that indicate a reliance on sociocultural theorising include the following: *"knows how to make knowledge collaboratively; knows how to nurture, mentor, and teach others; and knows how to document and pass on personal knowledge"*. The concordance between this recent theoretical construction of the 'new learner', with the social economic and political imperatives of the present moment is an issue I will address further below. First, a brief overview of the theoretical underpinnings of the new learner and new learning is required.

4.0 A SHORT HISTORY OF LEARNING

The evolution of learning theory is framed typically as a discourse of scientific progress beginning with the investigation of conditioning by Pavlov, Skinner and the behaviourists. Alternative paradigms such as that of Jean Piaget, focussed on the adaptive and constructive activity of the individual across developmental stages, rather than the moulding influences of the outside environment. With the invention of computers, learning theorists were gifted a powerful metaphor that has continued to inspire research into the learning process – a process determined by informational load and inputs interfacing with processing modes and strategies to deliver variable outputs or performances. In last two decades of the 20th century, learning has been framed as a reflective meta-cognitive process, and as a sociocultural process. This overview is summarised in Table 1.

Table 1: Selected theories of learning in the 20th century

Theory of Learning	**Central Metaphor**	**Key Process**
Behaviourist	Shaping & Moulding	Conditioning
Developmentalist	Adaptive Organism	Equilibration
Information Processing[5]	Computer	Information Capacity
Meta-Cognitive	Executive Manager	Self Regulation
Sociocultural	Community Participant	Appropriation

Research on learning related to each of the major paradigms in Table 1 continues today, and there are myriad hybrid theories and local variations that cannot be captured in the summary presented in Table 1. Vigorous debate also continues between advocates for different paradigms. My claim is not that sociocultural theory is dominant, or necessarily recognised as the most adequate theory of learning, only that it has come to be recognised, come to the fore in the last decade or so and been added to introductory textbooks for students to consider in their teacher education programs. These textbooks

now contain terms like cultural apprenticeship, community of practice, scaffolding, socially supported performances, distributed cognition, collective memory, mentoring, and legitimate peripheral participation in community practices. These sociocultural concepts have been coined in recent years by researchers elaborating and extending Vygotsky's writings, as well as drawing upon sources from anthropology and cultural studies (see Renshaw 1998a, 1998b). These various concepts suggest that to research learning we have to research the human relationships within which it occurs, and the social contexts within which it is appropriated and used (see Table 2).

4.1 Sociocultural Theory of Learning

Sociocultural theory frames learning as an aspect of interrelated historical, cultural, institutional, and communicative processes. To adopt this theory means to view social activities as constitutive of learning not merely supportive or ancillary – over time the social comes to constitute the individual. In contrast with the dominant individualistic perspective on learning, where learners are constructed as natural subjects who can be observed, measured, and compared across cultures and time, sociocultural theory provides a conception of learners as cultural and historical subjects embedded within and constituted by a matrix of social relationships and processes. As suggested by the contrasts in Table 2, social activity in face to face dialogue is regarded as only the smallest scale of the social. Research on learning needs to be situated within larger-scale social organisations and institutions such as the family, the school, the church, community centre, professional organisation, and so on. Social interaction within these institutions and communities gives us the tools for making sense of the world; tools such as ways of speaking, conventions for representing experience, as well as beliefs and values. These social semiotic systems are both appropriated in communities and provide the resources to maintain and transform the communities in which we live. Thus, learning is conceived as a dual process involving transmission and reproduction as well as creativity and transformation. Either/or theorising of learning processes is avoided by sociocultural theorists who seek rather to elucidate the interplay and irreducible tensions that occur between individual and social processes, reproduction and creativity, centripetal and centrifugal forces, transmission and construction.

4.2 Tool-Mediated Collective Activity

A key theoretical claim of sociocultural theory is that human action, including mental action, is mediated by material and semiotic tools, and that such mediation not only changes the relationship of people to the world by extending their capacity to interpret and transform it for their own purposes, but tool use also transforms individuals, incorporating them into new functional systems of collective action that are culturally and historically situated. This distinctive tool-mediated nature of human action challenges the notion of the natural subject that has been fundamental to our notions of learning and development. Categories such as cognition and learning, that

have traditionally been located within the individual, as features of the individual per se, need to be reconsidered from the sociocultural perspective, as features of social practice, as part of a functional system that is stretched across the individual-in-interaction-with partners, their mediational tools, the activity, and the context (Lave & Wenger, 1991; Cole & Engestrom, 1995). Mediational means or tools do not simply amplify existing cognitive processes or provide a more efficient way to complete existing tasks - they fundamentally change the nature of the task, the required processes, and the subjects who are the actors.

Table 2: Contrasting core claims of individualistic and sociocultural theoretical perspectives on the learner[6]

Individualistic perspectives	**Sociocultural perspectives**
The learner is a natural subject whose essential features transcend culture and history.	Learners are embedded in and constituted by cultural and historical processes .
Structures and processes of the mind are the focus of research.	Cultural tools, activities and social processes are the focus of research.
Structures and processes of the mind emerge in a series of universal developmental stages.	Different patterns of engagement in cultural activities mark changes in development.
An optimal stage of development can be described and used as a metric for comparing learners across contexts.	Development is relative to culture and history, and open to new transformations.
The self can be known (as a concept) and is constructed through a series of developmental stages leading to greater stability and consistency.	The self is constituted by engagement in cultural activities - it is a discursive phenomenon that is changing and contradictory.
Cognitive processes and states of mind are revealed by speech and other forms of representation	Speech and other sign systems are appropriated to enable individual engagement in cultural activities
The goal of teaching is the development of non-contradictory and rational systems of thought.	The goal of teaching is to engage learners more fully and critically in cultural activities.

I recently observed such a transformation while videotaping a group of upper secondary mathematics students using graphics calculators to solve complex matrix algebra problems[7]. These students were able to achieve in a few minutes solutions to the problems that would have taken them many hours of

individual work by hand. Beyond efficiency, however, the graphics calculators transformed the task in various ways. For example, students held up the screens of the calculators to show their progress to nearby students; some students who were confused moved around the classroom to watch a fellow student work through the process on the screen; students engaged in quiet conversation with the calculator as they considered the next procedure to enter into the sequence of moves; students expressed strong emotions when they made mistakes or when the procedure worked well - I observed students hitting their heads on the calculator in mock punishment (of themselves and the calculator), or hugging the calculator when it provided the desired result. Some students engaged in triumphant "high fives" after getting the same answer on the screen, or called out 'Yes, yes, yes!". There is the sense here that the calculator entered into the interaction as a participant, as a partner doing half the work, as a dramatic prop in a playful and public activity. Observations such as these give substance to the sociocultural claim that learning is a process of appropriating cultural tools that transform tasks, and the relationship of individuals to the tasks, as well as to the other members of their community.

4.3 An Illustration of the Sociocultural Approach to Learning.

Using sociocultural learning theory as a guide, over the past decade I have conducted research with Ray Brown on community of practice classrooms at the primary school level (Renshaw & Brown, 1997; Brown, & Renshaw, 2000), and with Peter Galbraith and Merrilyn Goos in secondary mathematics classrooms (Goos, Galbraith & Renshaw, 1999). By appealing to "community" we are indexing the centrality of communicative practices in the social construction of knowledge. We are also indexing the view that knowledge is a tentative state - a working consensus between members of the classroom community which remains open to challenge and reconsideration.

These projects have taught me that adopting a sociocultural approach to learning creates particular challenges for teachers and students alike. It requires them to learn new skills in negotiating and listening to each other; new classroom discourse patterns for engaging in exploratory talk and for expressing tentativeness; new values such as courage to express ideas, persistence in problem-solving, and generosity in acknowledging the good ideas of others in the classroom. It requires new identities and roles. Teachers need to learn how to share power with students and trust them to be responsible. Students need to learn a more active and collaborative role as authors as well as consumers of knowledge. Finally, both teachers and students need to learn that there are limits to the degree of cohesiveness and agreement that can be attained in any classroom.

4.3.1 Collective Argumentation. One strategy we've used to help build a learning community in the classroom is *collective argumentation*, a small group format that is designed to extend the range of speaking opportunities available to students in the classroom. It is organised around a key word format - *represent* the task or problem alone, *compare* representations within

a small group of peers, *explain* and *justify* the various representations to each other in the small group, reach *agreement* within the group, and finally *present* the group's ideas and representations to the class to test their acceptance by the wider community of peers and the teacher.

Each step in the key word format challenges the students to adopt different speaking positions or voices. The initial speaking position is personal - "My representation". This step of representing alone, is important for creating a diversity of possible approaches to the task. Students become aware that different task interpretations and emphases are commonplace and that fellow students can have quite different but equally adequate ways of considering the task. It should be recognised that the representations produced by the students even at this initial step of collective argumentation are not simple expressions of a personal voice. Each personal voice is already multi-vocal, since diverse experiences at home, at school, and from the media will be drawn upon in constructing the representations.

The small group processes that follow this individual work are designed to move students to an agreed representation (or set of representations) of the task. Here the speaking positions alternate between explaining or defending personal representations and moving towards a common view. There is a movement from "my ideas" and "your ideas" to "our ideas". In the process of collective argumentation, students are required to ensure that all members of their small group understand the common approach to the task. That is, each member of the group must have a sense of their shared authorship of the group's ideas. Finally at the last step of collective argumentation, where the small groups present their ideas to the rest of the class, the students have the opportunity to explain their ideas to a broader audience. The speaking position here is similar to that of the teacher, affording the students both the status of "expert" as well as the challenge to present and defend solutions to an audience of peers.

4.3.2 Infinity Transcript – Multi-voicedness. To illustrate how collective argumentation can create a space for difference in the classroom, a short extract from one episode is presented below where a student, Angela, is reporting her group's ideas to the whole class. The task given to the groups had been to represent the idea of infinity. Prior to Angela's presentation, a number of other groups had already presented their ideas to the whole class - these consisted of drawings of lines, spirals, circles, and other closed geometric shapes which were meant to convey the idea of infinity as endless *space* and *distance* - with neither beginning or end. Angela's presentation of her group's ideas begins by focussing on *time*., and she uses the image of a clock with a very large array of hands to convey the idea of infinite *time*.

> Angela: *We drew a clock and we had, um, about, an infinite number of handles, because time goes on for an infinity. That's how we represented that, because time goes on.*

Teacher: *I didn't understand that phrase, could you say it again please.*

Angela: *Well, we drew a clock and we had an infinite amount of handles, the little things that go around, because time never stops. It just keeps going around.*

[Teacher clarified with Simon and Angela the term for the hands of the clock, and then Angela continued]

Angela: *Time has no beginning and no end like numbers. And we had the dictionary meaning which says this - infinity has the state of being infinite, infinity of the universe, infinity of space, time, quantity - so infinite space, so, it's so that you can't describe it. Um, (infinite) mass is the concept of increasing (mass) without volume. So we thought that we would make a meaning of our own. So we thought that infinity means everlasting number, object and the universe. So infinity is an everlasting thing.*

[Teacher recalled the key ideas from Angela's presentation.]

Angela**:** *Infinity can(not) be determined or explained over a vast amount or period of time, because it is an everlasting idea. And I made this up. I think the word infinity is similar to life. No one can fully explain it and just like infinity it has many definitions. We can't really explain life and we can't really explain the word infinity.*

Angela's presentation to the class shows an explicit awareness that particular ideas are related to the stance or position of the speaker - notice how Angela uses "we" "I" "you" and "no-one" to signal her adoption of a series of different speaking positions. For example she adopts four different stances as shown below:

the authoritative voice of the dictionary, *("And we had the dictionary meaning which says this")* ;

the voice of her group *("so we thought that we would make a meaning of our own")* ;

a personal voice *("..And I made this up. I think the word infinity is similar to life.") ;*

the generalised voice of an expert *("No one can fully explain it and just like infinity it has many definitions. We can't really explain life and we can't really explain the word infinity").* "No one" and "We" convey Angela's intention to speak authoritatively not on behalf of her small group, or personally, but generally on behalf of humankind.

Angela's presentation reflects the social practices and dispositions that we had envisaged in initially designing collective argumentation, namely, that students be made aware through the social practices of the classroom that knowledge is always constructed from a particular viewpoint and that the same idea can be expressed in many different ways depending on the context, the audience and the speakers' own goals.

5.0 PRIVILEGING SPECIFIC THEORIES ACROSS TIME

Why at this moment does *community* become a key concept in theorizing *learning*? One explanation is based on the discourse of scientific advancement and the progressive march towards enlightenment as sketched above. Certainly this fits the kind of narratives provided by well-known and influential researchers who moved to incorporate a community perspective in their theorizing of learning. Prominent among these scholars was the late Ann Brown, who in her AERA Presidential address (Brown, 1994) chronicled her evolution from a learning theorist primarily concerned with individual learning strategies, to a theorist intent on researching learning communities. In that article, Ann described in some detail how she and her team had successfully engineered such a learning community in ordinary classrooms by engaging children routinely in collaborative learning activities and building normative ground rules of trust and mutual respect. A similar story could be told about Jerome Bruner (1986) and his evolution from a cognitivist interested in discovery learning, to his current position that envisages learning as a cultural process necessarily embedded in community contexts.

Although individual scholars like Brown and Bruner can authentically point to their personal journeys towards a sociocultural theory of learning, as a general account of how learning theory evolved, the progressive account is flawed. If we revisit the early decades of the 20th century, many of the ideas central to each of the models of learning summarised in Table 1 were already in the public arena - not necessarily fully articulated nor with a wealth of research studies to substantiate or challenge their claims, but nonetheless already conceptualised and available. Let me just mention that by the early 1930s both Piaget and Vygotsky had written their key papers on development, John Dewey had articulated his progressivist view of learning and thinking as socially embedded, behaviourism was well established, and there was a substantial literature on problem-solving processes.

The issue isn't primarily one of progress – of movement forward – of the invention of entirely new models of learning, but of selection and privileging of certain models at certain times. The question is not how learning theories evolved but why certain theories found favour and a receptive audience at different moments in history. Why was a particular set of theoretical tools pulled from the tool-kit and promoted as relevant to the educational needs of particular generations of students? I sketch one possible account of this process below.

5.1. Behaviourist.

The prominence of behaviourist learning theory from the early 1900s through the middle decades of the 20th century, it can be argued, is based on its relevance to the kinds of life-tasks that confronted ordinary people. Bauman (2001) writing recently wonders why nobody much objected to the suggestion that learning for rats in mazes was equivalent in principle to learning for humans. He suggests it was because,

> the behaviourists' laboratory setting was so strikingly similar to the human predicament as visualised at the time…..The contrived plight of the rats-in-a-maze seemed a faithful laboratory replica of the daily predicament of humans-in-the-world. (2001, p.44)

The world of work and the classroom were characterised by external constraints and imposed authority regimes, by extrinsic rewards for the completion of assignments and tasks. Workers and students were tracked into hierarchically arranged social roles and opportunities, where development of skills and knowledge (at work and school) was limited by social position and where attitudes of dogged persistence and compliance with time on task rather than interest or enthusiasm characterised engagement in activities. This bundy-clock mentality was entirely compatible with the image of the learner (rat and human) provided by behaviourists.

5.2. Developmentalist.

By the time I began my Bachelor of Arts degree at Sydney University in the late 1960s, behaviourist learning theories were still prominent, but were being reconsidered and challenged. The human as rat was replaced by the human as constructive thinker and discoverer. We studied "the child", "the learner", not to see if they could comply with regimes of external rewards and punishments, but to observe and celebrate their insights and discoveries, and respond to their needs. Individual needs and intrinsic motivation were fore-grounded. This was a time when a focus on leisure and personal fulfilment at work and play were taking hold in the imagination of the young. If fulfilling and satisfying work was not available, the dream for many of this generation was to opt out of the "rat race", and search for oneself in an alternative life-style. These imaginary lives were seldom actualised, or only briefly flirted with. Nonetheless, the prominence given to the importance of personal insights, to creative and constructive thinking, and to the fulfilment of personal needs, at this time was entirely consistent with the developmentalist theory which was at its zenith then.

In the decade after the successful launch of Sputnik, the West was trying to match the achievements of the Soviets in space exploration. Central to this educational project was the production of creative thinkers – learners who could be inventive and constructive contributors to scientific advancements. Debate about the reform of schooling was guided by ideas appropriated from the 'open education' movement which envisioned students as intrinsically motivated and engaged learners who required only the facilitating and

supportive presence of a trusting teacher. Jerome Bruner, for example, promoted the notion of discovery learning that relegated adults and teachers to a secondary role in the educational process. Likewise, Piaget was suspicious of adult influence on children's authentic learning - he attached primary importance to the constructive activity of individuals. These ideas were influential in supporting the proponents of open education who argued for a radical new type of classroom – one where peer interaction and learner guided activities predominated and where teachers became diagnostic observers of such activities. Based on their observations teachers were expected to design experiences that could support further learner engagement. I completed my Honours thesis at this time (1971) where I examined the effects of peer interaction and conflict on the development of children's ability to conserve volume. My project reflected the themes I have highlighted above. It suggested that advances in reasoning could be engineered by establishing certain kinds of disagreements between children themselves without the direct intervention of adults. Few education systems actually implemented the open education philosophy and practices, although I visited a number of new schools in Canberra in the early 1970s that explicitly adopted open design principles. By the mid-1970s, however, a different voice was being heard – one that focussed on self-regulation, self-monitoring and self-control.

5.3. Metacognitive.

The theoretical shift from the constructive inventive and creative learner to a more self-regulating and controlled learner, coincided with a change in politics in Australia when Malcolm Fraser was elected. He reminded us that "life wasn't meant to be easy" and that the way forward was self-discipline and hard work. If it wasn't meant to be easy, it was meant to be self-regulated and accountable within a competitive system. Neither entirely manipulated by agents who controlled reinforcement schedules, nor trusted to discover and construct insights through open-ended experience and activity, the ideal learner was seen as internalising social forms of support and influence. We became managers of our own learning. Rather than having someone watch over our shoulder, we floated free of ourselves cognitively to watch over our own shoulder and guide our own actions. We became self-rewarders. Rather than being manipulated externally by agents who controlled reinforcement schedules, the learner had internalised this control and could now monitor task performance, reflect on progress and dispense self-rewards. We could learn how to stop and think before we acted – we could overcome impulse, delay gratification through symbolic manipulation. The meta-approach to learning offered the prospect of controlling the flow of our consciousness in the name of learning efficiency and effectiveness.

This self-regulated learner coincided with a different workplace imperative –characterised by the increasing competitiveness of the open market, the privatisation of previously publicly run enterprises, the out-sourcing of functions in large bureaucracies. External control and monitoring of workers

was less necessary. Middle management was offered redundancy as the key roles of monitoring and organising workers were devolved to workers themselves. Their performances could now be regulated within the constraints of competitiveness. The internalisation of these regimes of regulation have clearly been very successful – as recently revealed, for example, in working-hours statistics showing historically high and increasing levels of unpaid overtime. The ideal worker and the ideal learner were conceived as self-guiding self-regulating, and self-responsible individuals within a competitive marketplace – the epitome of the liberal ideal. Likewise, the ideal school was the "self-managing" school, led by a principal whose key skills were seen as those of a business executive, rather than a member of a professional community of teachers. Is it just chance that learning theorists became fascinated with self-regulated learning during this period?

5.4. Sociocultural.

I come to the contemporary moment. So why does the notion of community speak to our present era? One answer is provided by Gee Lankshear and Hull (1996). They analyse the way key terms from recent sociocultural learning theory have been appropriated by the business world to promote new regimes of work and new types of workers. They characterise the present era as one dominated by new fast capitalism, where enterprises are smaller scale, producing goods for niche markets using high-tech processes that engage workers in highly interdependent production teams. For such workplaces, the ideal worker needs certain dispositions, skills and knowledges, such as being a team player, predisposed to sharing their expertise in a distributed system, committed to joint projects but flexible and adaptive, able to move on, motivated by team success, but like sports stars, always available for transfer to another team or corporation if a market should collapse or a better offer is made.

In *New Learning*, the Australian Council of Deans of Education (2001) echo Gee Hull and Lankshear in suggesting that new economic imperatives and workplaces demand new types of learning, new forms of citizenship, and new identities for learners. To quote the authors of the monograph,

> *The new economy requires new persons: persons who can work flexibly with changing technologies; persons who can work effectively in the new relationship-focussed commercial environment; and people who are able to work within an open organisational culture and across diverse cultural settings. (2001, p.33)*

The kinds of classrooms that are compatible with the new economy bear a remarkable resemblance to the ideal promoted under the banner of a community of learners. For those of us who have invested significant time and energy in researching classroom learning communities, this synchrony between contemporary economic imperatives and the sociocultural theory of learning presents a number of dilemmas. I consider these dilemmas further below.

6.0 EDUCATIONAL DILEMMAS REGARDING COMMUNITY

There are pitfalls in linking learning and community. In the analogy I made earlier between air and learning, I argued that learning was too pervasive and encompassing, that it referred to all kinds of experiences, only some of which we would want to promote as educators. The same analogy works for community. There is not only one kind of community. When we mention community we might assume some comforting and close set of relationships, where we are at ease, where we are understood and understand others, where we can be ourselves, where we "are in flow", effortlessly able to follow what is occurring and contributing our own voice to the proceedings. However, real communities can be difficult and dangerous places as well, where members battle for power and prestige, where strict conformity is demanded on penalty of exclusion, and where strangers or those who are different are routinely turned away or treated with suspicion. So, to talk about a community of learners is just as empty and vague as to talk about learning per se. We need to specify what values and ground rules are embedded in community practices and how processes of participation are managed, and how issues of inclusion and exclusion are dealt with.

6.1 Inclusion and Exclusion

How does the process of community inclusion and maintenance actually operate? Matusov (1999) proposed three models that eventually produce a homogeneous community rather than a community inclusive of difference. The models are:- the *filter* model of exclusion, the *funnel* model of marginalisation, and the *linear* model of assimilation. The filter model of community maintenance establishes strict entry criteria so that difference is excluded by selective practices linked to tests, interviews and initial exchange of information where it is made clear that difference is neither desirable nor expected. The funnel model allows for diversity of intake but through silencing and marginalising of difference, those who do not fit into the dominant philosophy and practices of the community are required to leave ("love it or leave it"), remain on the margins, or perhaps resist in various ways. The linear model foregrounds the assimilatory processes that work over time to make difference appear odd or damaging to the comfortable consensus that binds the community together. The three models of community maintenance – filter, funnel and linear – provide a tool with which to evaluate our own communities, and the practices of classroom communities that we work with.

6.2 Conflict in Community

Creating a community of learners does not mean creating some blue-sky utopia of harmony – there will remain tensions and conflicts between members, and like any community there will be dynamic processes that change the relationships between the members over time. Some members may select a position on the periphery, some may decide not to participate in certain activities, and may challenge the ground rules that govern classroom

activity. To remain an inclusive community certain degrees of freedom must be allowed to individuals to change their relationship to the community over time; and certain procedural safeguards need to be implemented to facilitate critical feedback and monitoring of community processes. Two classroom incidents that I have analysed with Dr. Ray Brown illustrate how conflict might be managed within an inclusive community.

6.2.1 Living on the Periphery. The first incident involved a fifth-grade student of Ray Brown's who refused to participate in the key social processes of the classroom. She arrived at school with a resistant style reinforced by her father who was quick to criticise teachers. Her resistant and peripheral position in the classroom community was manifest in her self-chosen sitting position – at the back of the room with a small set of library shelves as a symbolic barricade between her and the other students. Classmates at times joined her behind the barricade, and one eventually became her classroom buddy, but her refusal to participate in presenting her ideas and solutions to problems was a source of irritation reflected in on-going student inquiries about why she didn't join in. Ray's strategy was to maintain the ground rule of the classroom – everyone was expected to join in – but not to force compliance. He said to the students that she would participate when she was ready. And she did – eventually, some many months after she entered the classroom. This student learned how to become a willing member of this class community rather than being forced to comply or asked to leave. Living on the periphery was an important learning experience for her and the other students.

6.2.2 Refusing to Stop and Listen. The second incident involved a direct challenge to the teacher's (Ray Brown) authority by a student who refused "to stop and listen to him". Two students were working together on a problem, and one had transformed the problem in a way that initially seemed inappropriate and would lead to an incorrect solution. His partner decided that she could see some interesting possibilities in his ideas so she began elaborating and extending his line of thinking and coordinating it with her initial representation of the problem. At this moment Ray arrived and noted what was happening and told them not to follow this approach because it wouldn't work. They resisted and Ray forcefully reiterated his view, "to stop and listen to me…..it won't work". As soon as he left, they went back to their discussion and ignored his advice. For the next few minutes, they played with the problem and began to see some patterns and relationships. When Ray returned he found them doing what he had told them not to. But now he too could glimpse the solution that they were working towards, and he began to listen to them. The conflict here was caused in fact by the teacher who tried to operate outside the ground rules of the classroom community, namely that students should explore and persist with ideas when they had good reasons for doing so. This incident became a moment of self-reflection for the teacher who realised that participating in this more egalitarian community of learners required new strategies and resources from him.

6.3 Conformity and Consensus

A basic prerequisite of a learning community is a high level of common knowledge and consensus, enabling the smooth conduct of everyday activities and easy transitions between activities. Brown Ash Rutherford Nakagawa Gordon & Campione (1993) suggest that everyday activities and roles need to become ritualistic, ceasing to be the object of explicit attention. Such ritualistic participant frameworks are collaborative and dialogical, which in turn produce shared systems of belief. Brown and her colleagues write,

> Dialogues provide the format for novices to adopt the discourse structure, goals, values, and belief systems of scientific practice. Over time, the community of learners adopts a common voice and common knowledge base…, a shared system of meanings, beliefs and activity that is as often implicit as it is explicit. (Brown et al. 1993:194)

Through conversation in the classroom, the teacher and students are trying to create a common language and worldview, and a tacit set of ground rules that sustain smooth interaction between community members over time. Where the members of a community are in complete agreement, however, there is a reduced potential for insights that arise from different perspectives. The emphasis on unspoken consensus suggests a movement from diversity to uniformity. It can be argued, however, that coming together around agreed goals, beliefs, strategies and activities in the classroom, is a necessary condition for the recognition of difference and the exploration of diverse viewpoints. There seems to be an irreducible tension here. That is, to learn about, appreciate and value difference, one first needs to get into conversation. To provide space in the classroom for the expression of difference, it may be necessary to build a working consensus, the kind of taken-for-granted ritualistic community practices that seem opposed to diversity, but may be the grounds on which it actually grows.

6.3.1 Consensus and Compromise. Recently I participated in a cyber literacy project for middle-school Aboriginal youth that was developed through the UQ Ipswich campus. With colleagues and doctoral students I acted as a tutor and researcher in the project, working with the students in a computer laboratory at the campus to design web pages, power-point presentations, email messages, and to navigate the web searching for relevant information. We tried to adopt a more informal and relaxed style with the students, chatting with them about their interests, hobbies and sporting achievements. On one occasion when I was walking with one of the boys, we passed a group of university students. After a moment he said something like the following, "Great looking girls here at University". I reflected for a milli-second to consider my response. Do I say enthusiastically, 'Yeeh, sure are', or 'I haven't noticed', or 'You can't say that', or 'Don't objectify women". What I said in a rather nonchalant way was just – "Yeah". In that insignificant exchange I affirmed a momentary bond – a bond based on heterosexual masculine discourse, or what a colleague later chided me for, a "blokey" form

of everyday sexism. The ease of our exchange was based on reproducing this discourse rather than challenging it. It is through such seemingly trivial everyday interactions that community practices are established around taken-for-granted values. In this instance I hoped that my 'yeah' would convey the message that his thoughts and reactions were acceptable within our learning community. I wanted him to feel at ease at the university not necessarily at ease within sexist discourse. The dilemma is that I affirmed both in order to maintain our sense of community. My guess is that it was the right thing to do, but consensus always involves compromise.

There was other evidence that many of these students felt as ease and part of a learning community – for example, one student visited the campus library on a weekend to show his family and friends what he had learned the previous week. The librarian wondered who this young school boy was, and why he seemed to think he could wander in and begin using the computers. She was delighted to tell us the story the following Monday that he had such a sense of belonging in the cyber literacy program that he was comfortable to come onto campus and demonstrate his emerging competencies to his own 'mob'.

Clearly, the project was successful in many ways, but the teaching and research team remained perplexed because establishing a learning community where these students were 'at ease', involved a trade-off. The main interests of these young Aboriginal students was typical of their generation – they wanted to use their cyber skills predominantly to search for popular music web sites, download Brittany Spears or Will Smith photos, log-on to chat lines and so on (Kapitske & Renshaw, in press). We regarded their appropriation of cyber literacies as reinforcing their participation in dominant popular discourses rather than providing a resource to affirm and extend their own Aboriginal identity. These incidents illustrate the dilemmas we face as educators in building a community consensus without unreflectively reproducing dominant and at times oppressive discourses. Again we judged that allowing certain degrees of freedom to these young Aboriginal youth in how they used their cyber literacy skills was worthwhile because they were developing skills that were transferable and could be deployed for other purposes within their own extended Aboriginal communities. In fact at the end of one set of workshops we had the opportunity to observe such a deployment. We were asked to speak to a group of Aboriginal Elders about the project and we asked a small group of the participants to come with us in order to demonstrate to the Elders what they had learned. After an introduction by the teaching and research team, we invited the Elders to mingle with the students and see what they could do. Within a few minutes the students had moved effortlessly into the role of experts, explaining how to download material from the net, how to construct web pages, how to combine text and images and so on. There was a sense of pride in the room as the Elders noted the competence of the students. We also noted practical outcomes as well, as various Elders speculated on how they might employ these cyber literacies for the benefit of their own communities.

7.0 CONCLUSION

The present moment is full of promise for educators. There has never been a time when learning is more valued, or the work of educators more integral to our collective future. The corridors of government, of commerce, of the professions, and of ordinary workplaces echo with references to the importance of learning. The language of learning is a powerful tool to mobilise change. So too is community. The paradox of our present moment is that community is an elusive phenomenon, yet it is being deployed broadly across institutions and the professions to provide a vision for change. The beguiling power of these words – community and learning – needs to be recognised. Our role as educators is principally to clarify what is worthwhile learning and what sort of communities we should be learning for and within. The account I have given above of my collaborative research on these issues demonstrates that such deliberations about worthwhile learning and valued communities are complex. Sometimes these deliberation need to be worked through *in situ*, in momentary interactions as illustrated by my response of "yeah" to the young Aboriginal boy's comment. Sometimes such deliberations are guided by longer-term planning and action with colleagues, beginning with envisioning better learning and community processes, followed by cycles of implementation, evaluation and reflection, as in my research with Dr. Ray Brown. These task remains crucial to the future of schooling and the kind of citizens we want our students to be. The kinds of classroom and schools that we construct with them – the kinds of communities that they experience and learn within, will provide the blueprint for their own community-building in the future. Let's hope it's …. .

Well, I wonder how each of us might complete that sentence. I hope to live in inclusive, interesting, sustainable, just and democratic communities, not unlike Carlo Petrini's vision, if I read the deeper significance of his manifesto correctly, and so I invite you to join your friends in long conversation with food and drink to consider these crucial matters of learning and community.

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[1] The recent tragic events in Bali (Oct. 2002), intensified feelings of community and public demonstrations of togetherness in Australia. Suspicion and fear were also heightened, however, and regrettably were reflected in reported attacks on Australian Muslims and their property. Community affiliations created in fear and insecurity tend to be closed and exclusive - intolerant of difference and diversity. The creation of inclusive communities, communities of difference, has become the major educational challenge of our era.

[2] A member of my immediate family wondered if the slow food movement assumed traditional gender roles where labour in preparing food was assigned to women and consumption to men?

[3] Recently Education Queensland recommended that local primary schools conduct an audit of the literacy practices and resources of their surrounding communities. This practice could be useful for teachers to develop a deeper appreciation of their students and families and provide the basis for on-going dialogue rather than transmissive monologue. Luis Moll, a sociocultural researcher working predominantly with Latino communities in the USA, also advocates a similar process for teachers, namely, a form of ethnographic research in which the local knowledge and skills of the surrounding community are documented in order to inform the curriculum and pedagogy of the school.

[4] In a similar vein, Professor Glyn Davis (2002) recently compared funding of universities in Australia and the USA. Using cases of comparable size and academic profile, he found that the US case (Michigan) received almost 4 times as much funding as the Australian equivalent (Melbourne). Again grand sounding slogans like "Australia's world class universities" begin to sound hollow when staffing and resources are necessarily limited by constrained budgets

[5] In this lecture I do not elaborate further on the computer-inspired model of information processing. This model continues to be a powerful influence on learning research, particularly since the field of neuroscience has begun to unravel some aspects of how the brain functions during information processing episodes (see Bransford Brown & Cocking,1999). The construction of the learner as a *cyborg*, half human half machine, and the emergence of the field of artificial intelligence, are part of the tradition that began with the computer-inspired notion of the learner as an information processor. The intersection of biology and computer technology will continue to drive research on the micro-processes (physiological, psychological, neurological) associated with learning.

[6] Adapted from Renshaw, 1998a.

[7] These observations were made as part of the ARC supported research project (Galbraith & Renshaw, 1998-2000): *The contribution of technology to enhancing the quality of collaborative action and individual reflection in the learning of senior secondary mathematics*