1Number 4

Institute for Open & Distance Learning

The Fifth Occasional Lecture Series in ODL

4th ODL Occasional Lecture Series

2010

'Social Software, Social Networks, and Online Distance Learning'

By Professor Santosh Panda
University of the South Pacific, Fiji Islands
30 July 2010, Senate Hall,
Muckleneuk Campus,
Unisa, Pretoria

Preface

The ODL Occasional Lecture Series is an initiative of the Institute for Open and Distance Learning (IODL) of the University of South Africa (UNISA). It is meant to attract Open and Distance Learning (ODL) scholars from around the globe, to share current knowledge about the best ODL practices with the UNISA community as the African ODL Mega University in the service of humanity. Through this process, we shall be able to showcase the quality of our research activities and programmes, as a reputable centre of excellence in ODL practice as well as to facilitate collaboration and networking with international ODL institutions and organisations.

The premier presentation kicked off on 23rd February, 2009 with Prof Peter Jarvis from the University of Leeds in England. The title of his lecture was **"Teaching Whole People Through Distance Education",** while the second presentation was given on the 29th of June, 2009 by Prof Olugbemiro Jegede, the Vice-Chancellor of the National Open University of Nigeria, (NOUN). His lecture was entitled "**From convocation to flexible learning: The role of ODL in community development**"

On 27th May 2010, a lecture was presented by Prof Som Naidu from Charles Sturt University in Australia. The lecture entitled **"Unpacking the Affordances of Technology for E-Learning"** became the third in the series.

On 30 July 2010, a lecture was presented by **Professor Santosh Panda,** University of the South Pacific, Fiji Islands. The lecture entitled **'Social Software, Social Networks, and Online Distance Learning'** became the fourth in the series. It is the intention of IODL to have three such lectures each year. We took the decision to publish the guest lecturer's papers along with the contribution of each of the discussants of the presented paper, to be distributed freely among all ODL institutions globally as resource materials on ODL.

We want to acknowledge the financial contribution of UNISA towards the realisation of this noble initiative. We are profoundly indebted to the members of UNISA Management for their individual and collective support to IODL in making our lofty dream a reality.

Prof Dele Braimoh (Director of IODL, Unisa); Prof Santosh Panda (Director, Centre for Flexible and Distance Learning, University of South Pacific , Suva, Fiji islands); Prof MS Makhanya (Pro-Vice Chancellor, Unisa).

Programme

1. Programme Director:

- Dr Joe Diescho (International Relations & Partnerships - UNISA)

2. Opening remarks: **10:05-10:10**

- Prof Dele Braimoh (Director: IODL - UNISA)

3. Welcome address: **10:10-10:20**

- Prof Mandla Makhanya (Pro Vice-Chancellor- UNISA)

4. Introduction of the Speaker: **10:20-10:30**

- Dr Joe Diescho (International Relations & Partnerships - UNISA)

5. Guest Lecture: **Professor Santosh Panda**
University of the South Pacific, Fiji Islands
10:30-11:30

6. Discussant: **11:30-11:45**

- Prof KP Dzvimbo (Deputy Executive Dean:
Education & Research, CHS - UNISA)

7. Discussion **11:45-12:00**

9. Vote of Thanks and Closure: **12:00-12:10**

Dr M Makoe (IODL - UNISA)

Professor Santosh Panda, University of the South Pacific, Fiji Islands

Santosh Panda, *PhD* is currently Director, Centre for Flexible & Distance Learning, the University of the South Pacific, Fiji Islands. Starting university teaching since 1984, he has been a Professor of Distance Education for the past thirteen years; a senior Fulbright Scholar; Visiting/ Adjunct Professor at Manchester Metropolitan University & University of London/ UK, and University of New Mexico & University of Maryland/ USA; and contributor in various ways to institutional and staff development in open and distance learning in above twenty countries. In the past, he has been Director of Staff Training & Research Institute, and Founding Director of Inter-University Consortium for Technology-Enabled Education at Indira Gandhi National Open University; and Director of higher education policy and research at the Association of Indian Universities, India. He conducts research and contributes to international publications regularly; consults with international organisations and many governments; and sits in the editorial board of a dozen refereed international journals including *ALT-J: Journal of Learning Technology* (Routledge), *International Journal for the Scholarship of Teaching and Learning* (USA), *International Review of Research in Open & Distance Learning* (Canada). His recent books include: *Planning and Management in Distance Education* (Routledge/ London, 2003) and *Economics of Distance and Online Learning* (Routledge/ New York, 2008).

Welcome Address

Prof MS Makhanya
Pro Vice Chancellor
Unisa

Introduction

The Programmme Director, The Director for the Institute of Open Distance Learning Prof Braimoh, Professor Panda Santosh, Dr Mills, Members of Executive Management and Extended Management, ODL Coordinator Dr Prinsloo, Staff of the Institute of ODL, Ladies and gentlemen;

How many of you can remember a time before personal computers?
The first IBM mainframe 1963
You would only have to think back to the 1960s and 70s to remember when huge computer mainframes were housed in special rooms.

How many of you can remember a time before mobile phones?
Name: Motorola Dyna-Tac
Size: 9 x 5 x 1.75 inches
Weight: 2.5 pounds
Display: None
Number of Circuit Boards: 30
Talk time: 35 minutes
Recharge Time: 10 hours
Features: Talk, listen, dial
It wasn't so long ago when phones were huge bricks.

BG? Before Google? 2006

Google

Who can remember a time before Google when if you wanted to know something, you had to turn to an encyclopaedia or a dictionary or run to the library?
That was only four years ago. It's hard to believe.

And now our vocabulary is loaded with words that we didn't know existed five years ago, words like facebook, twitter and tweet, Web2.0, Mixit, clouds (not the ones in the sky), download, upload, blogs, audiostream, skype, 3G, broadband, cookies (not the kind you eat), wiki, Wikipedia, and software and social networking which is our topic for today at this, our 4th occasional lecture series for 2010.
It is obvious that we are living in times of rapid change.

A phone is a wonderful thing

Who could have believed ten years ago that someone would be able to watch TV, receive spoken directions to a coffee shop, send and receive email, play games and perform many other useful and useless functions on a portable phone no bigger than a calculator and considerably lighter than a wallet? And that very same phone can be used for teaching and learning (the limitations or possibilities of which we will be listening to shortly) and social networking.

Higher Education's Response to technology

On a more serious note, the role of technologies in higher education is becoming among the most researched topics in many domains.
The range of information
"*the role of technology in higher education"*

- *About 187,000,000 results (0.21 seconds)*

I typed the words "the role of technology in higher education" into Google, and came up with 187 million hits. Incidentally, the first hit was so useful that I downloaded it for future reading.

The Future of Higher Education (white paper)

Technology has had—and will continue to have—a significant impact on higher education. Nearly two-thirds (63%) of survey respondents from both the public and private sectors say that technological innovation will have a major influence on teaching methodologies over the next five years. In fact, technology will become a core differentiator in attracting students and corporate partners. It was the white paper from Economist Intelligence Unit called *The Future of Higher Education: How technology will shape learning* produced in 2008 and from which I would like to share with you some of the points made in the Executive Summary.

- *Online learning is gaining a firm foothold in universities around the world. More than two-thirds of respondents from academia say that their institutions offer online courses. Many of them, especially those with a public-service mandate, consider online learning key to advancing their mission, placing advanced education within reach of people who might otherwise not be able to access it.*

- *Corporate-academic partnerships will form an increasing part of the university experience, at a time* when locating funding and controlling costs are key concerns,

and when only one-quarter of university chief information officers (CIOs) have a place at the table when it comes to setting strategy. To attract corporate partnerships, institutions will need to demonstrate a commitment to advanced technologies.

- *University respondents view technology as having a largely positive impact on their campuses, but acknowledge that operational challenges may hinder the full benefits from being realised. In addition, technology may be disruptive in ways not intended: respondents note a rise in student plagiarism, cheating and distractibility, which they attribute to easy and ready access to mobile technologies*

- *Higher education is responding to globalisation. Distance education is also becoming increasingly global, with universities in the US and overseas leveraging advanced technologies to put education within reach of many more individuals around the world.*

But, as we are going to learn today, the most significant innovation to impact on Higher Education is the reach and power of social networking in the area of Open and Distance Learning and its possibilities for communities of practice.

As a comprehensive open distance institution, technology is one of the key resources with which we create an enabling environment for academics, students and the broader community to expand on scholarly activities be these research, teaching and learning or community engagement.

Already Unisa has successfully integrated MyUnisa, our web platform, with MyLife, our students' email account and we have a Facebook presence. These are all ways in which we are creating spaces for active participation and communication, and through which learning can become a relevant and current experience for academics and students. In addition, the University has recently revisited its *2015 Strategic Plan: an Agenda for Transformation* committing itself to providing our students with affordable access to a range of quality programmes and hardware in which we will use technology to enhance our students' learning experiences. The strategic thrust in 2015 revisited therefore highlights the importance of revitalizing our academic offerings and looking more closely at the ways in which an open and distance learning environment will ensure access with success.

Institute for Open Distance Learning

Since the inception of the Institute of Open Distance Learning at our University in 2008, the Director Prof Dele Braimoh and his team have set out to mainstream ODL research and to increase research outputs; looking at ways to develop our professional staff in ODL pedagogies; and building collaborative strategies with experts in the field of ODL.

Our 4th Occasional Lecture will hopefully provide us with an opportunity to rethink ODL practices in our institution, looking critically at the use of social software and networks in the learning environment. So we are especially privileged to have with us a global ODL expert, Prof Santosh Panda. As an academic who has witnessed but also participated actively in the transformation of higher education since 1980 he brings with him a rich knowledge on practices within ODL. A very warm welcome, Professor Panda. We are looking forward to some robust debate this morning.

And to Dr Roger Mills, who is visiting Unisa from the UK as Chair of Unisa's International Reference Group on ODL, welcome to you. I am delighted you could join us today. And welcome to you all, Colleagues. I think we are in for a stimulating morning.

Social Software, Social Networks, and Online Distance Learning

Professor Santosh Panda
The University of the South Pacific, Fiji Islands.

(Invited Keynote Lecture for UNESCO Chair & IODL, The University of South Africa, Pretoria, July 29, 2010).

Introduction

At the backdrop of the emergence and significant use of social software and various social networks, this presentation analyses the potentiality of social technologies and networks in their contribution to human learning and transformation of individual and social identities. The technologies and networks are basically online, and therefore, are believed to have the greatest potentiality to facilitate/influence learning which is web-based and online. A framework of online learning is outlined; and the placement of open source social technologies and networks within the online learning framework is reflected and examined from a constructivist pedagogic perspective.

Social Technologies and Social Networking

Many got surprised when the management guru Peter Drucker said that it may take a maximum of three decades to have the universities collapsed, a kind of large scale change when we first got printed books. Later, Noble (1997) while talking of digital diploma mills noted how techno-utopianism is emerging in which critics criticize the very technological tools, emails, computer software that they use every day. Technology has been all pervasive in our lives any way. The question is how to best use those to our advantage.

During the past few decades, new technologies, especially the social technologies with social software, have emerged which provide for faster, engaging, and open communication. Within education, technology developments have come a long way to the present form of interactive, collaborative and open technologies. In the process, three independent technological developments - *broadcasting***,** *telecommunications,* and *computing* **–** have converged within the web technology, and also that there has been convergence of digital broadcasting, mobile phones, and personal computers/laptops. The web (www), created by Sir Tim Berners-Lee and Robert Caillaian (in 1989) has resulted in 'semantic web'/Web 2.0, and novel approaches to social networking is extended in Web 2.0 over Web 1.0 through open software and social technologies (Figure 1, O'Reilly, 2005).

Web 1.0	Web 2.0
• Publishing (Britannica Online) • Personal websites • Content management • Directories (taxonomy) • Stickiness	• Participation (Wikipedia) • Blogging • Wikis • Tagging (folksonomy) • Syndication (RSS)
• Downloading • Consumer	• Uploading • Prosumer (consumer+ producer)

Figure 1: *Comparison of Web 1.0 and Web 2.0*

Each of the Web 2.0 tools has special functions to play:

- *Wiki:* Allows collaborative knowledge building (which needs to be scaffolded as authentic).
- *Blog:* Allows for personal journal of learning, facilitating reflection and meta-cognition.
- *Facebook:* Allows for connection through personal profiles and facilitates social presence.
- *Del.icio.us:* Allows for maintaining records of references in participation.
- *Tagging:* Allows for organizing knowledge systematically for ease of navigation.

In an online learning environment using open source technologies, the above features, combined together with any proprietary/ open source LMS or within wiki, significantly enhance interaction, engagement, reflection and quality of learning (as examined in a later section).

Dawson (2009) has presented a framework within which Web 2.0 is located with many features (outer circle), inputs, mechanisms, and emerging outcomes.

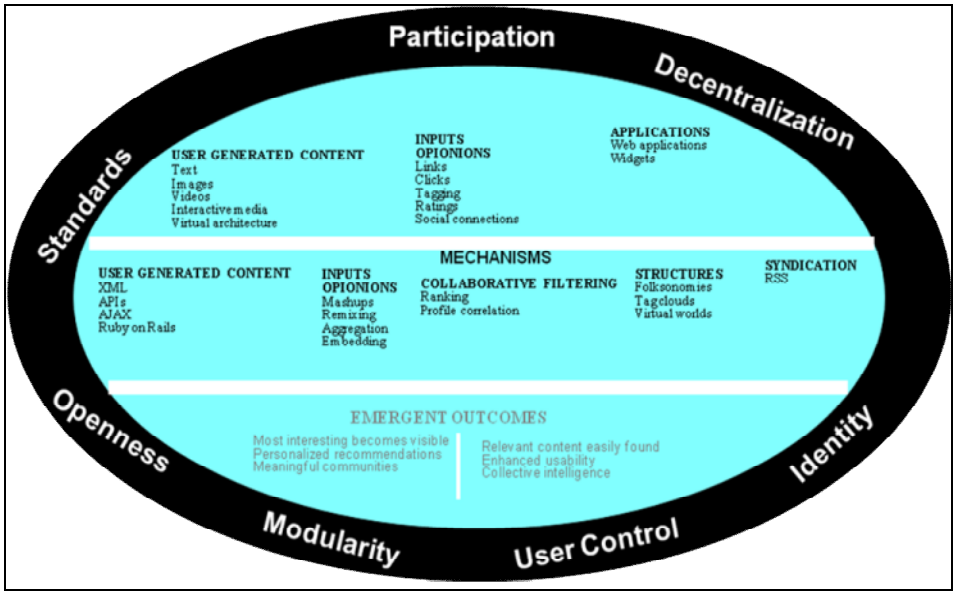

Figure 2: *Web 2.0 framework (Dawson, 2009)*

The technological developments within the tradition of open source (Figure 3) have provided for immense social networking possibilities through various technological services at social networking sites like Facebook, Linkedin, and MySpace.

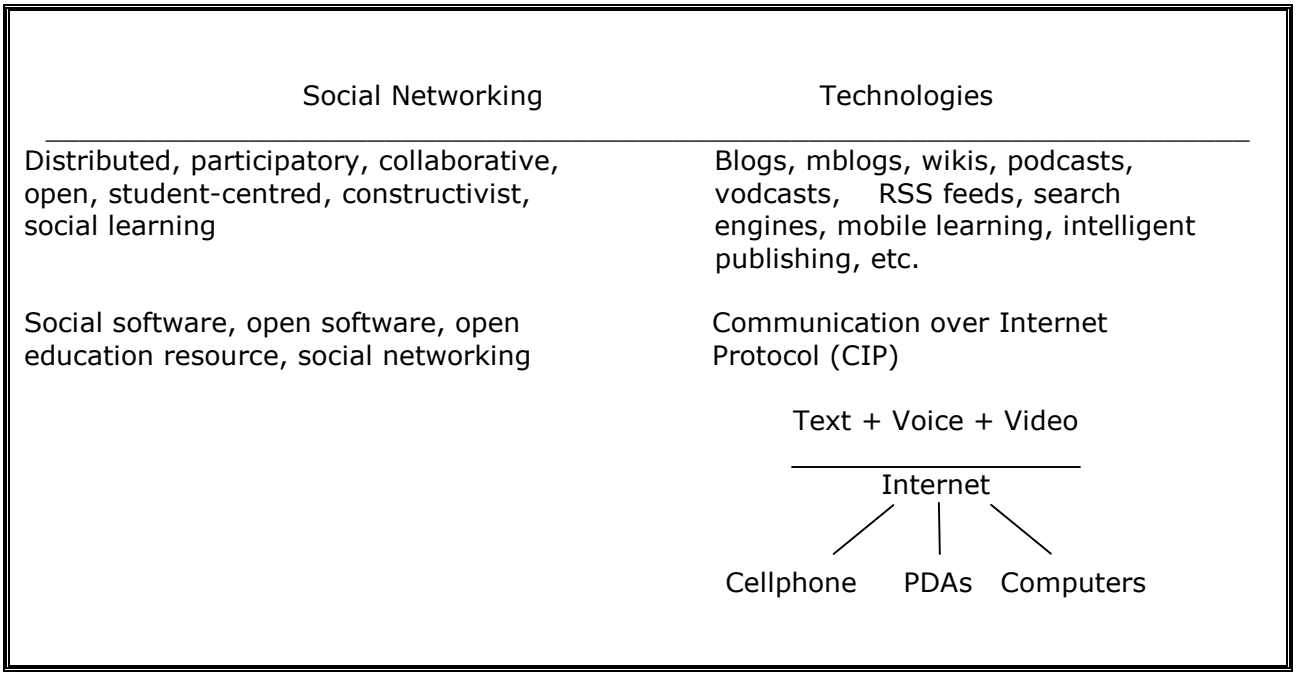

Figure 3: *Technologies and social networking*

The social technologies and the open source / open software throw open the entire gamut of technology-mediated interaction and knowledge creation (and interactive knowledge dissemination and use) - social publishing through YouTube and Blogs, social bookmarking through Bibsonomy and Del.icio.us, social cataloging through Folksonomy and Tag Clouds, and collaborative networking through Facebook, MySpace and Linkedin. Also, collaborative content creation through collaboration, contribution and editing is possible through the collective intelligence tool of Wiki. Wiki can be combined with other network tools within the Semantic Web. Social negotiation is possible through these tools which facilitate collective intelligence of the group by engaging in a common goal and shared practice.

A social software framework has been provided by Stuckey and Arkell (2006) in which institution- and member-driven, and informal and formal open technology initiatives can be located. With regard to institutionalization of open social technologies, they talk about two kinds of organisational cultures--'culture of compliance' with significant institutional control, and 'enabling culture' toward individually driven initiatives in an open source and social technology based environment (Figure 4). It is usual in organizations that individual choices (left quadrant) and institutional self regulatory control (right quadrant) are always in constant struggle—this largely influences institutional technology choice and deployment.

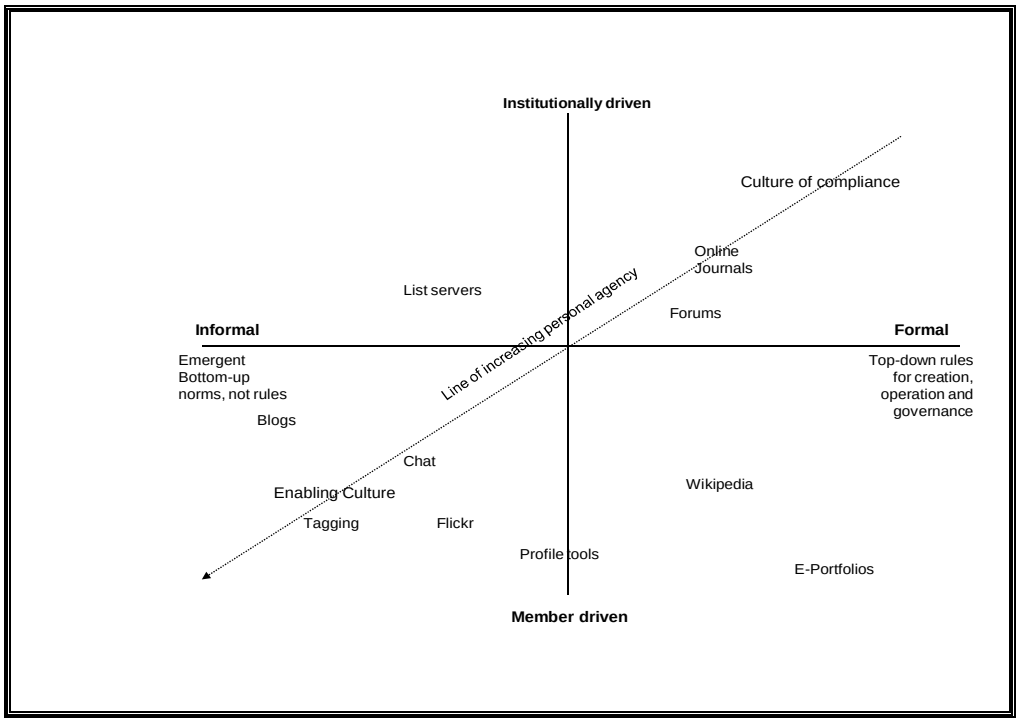

Figure 4: *Cultural emphasis of social software (Stuckey and Arkell, 2006, quoted in Evans, 2007)*

There are innumerable social networks in the context of learning, training and professional development. The C4LPT (Centre for Learning & Performance Technologies) as on July 21, 2010 lists 105 social networks for learning professionals on platforms like Ning, Facebook, Elgg, Groupsite etc. These are extremely collaborative and open social networks which contribute to a variety of professional needs of learning professionals. These sites provide opportunity for practice of making connections to like minded people for expanding knowledge, and the users can use 3-D virtual environment through, say, Second Life.

Open source software facilitates learners, for instance, to develop e-portfolios without the hassle of knowing web-authoring and use of HTML, undertake blogging as critical discussion sites; and CMS software help teachers to discuss student assessment. It is critical to examine these open source social technologies and networks from the point of view of (social) learning in a community of practice since the social networking tools affect the way people think, interact and learn.

Social Learning and Community of Practice

Learning is a social practice, and in this practice both individual and social transformations co-exist. In a community of practice (CoP), learning involves construction of identities (Wenger, 1998); and legitimate peripheral participation (LPP) (Lave & Wenger, 1991) suggests that in the process, the newcomers move toward full participation in the community with increasing commitment and engagement, and develop shared understanding of what is done and what it means to the group. Negotiation of meaning involves participation (engaging with the group for negotiation of meaning) and reification

(congealing elements of practice into some sort of artefacts). It is up to the group members to practice any of these, but both are essential in order to negotiate the meaning of any experience. However, besides the apprentices moving to the centre stage of social practice through learning, there are other engagements in a CoP like: learning for coping with new changes in the practices, and learning to change the existing practice through participation (Dreier, 2003). Rather than just conform to the goals of the CoP, individuals may also learn different things relating to their personal trajectories of participation. There are cross-CoP trajectories which posit varied learning and varied trajectories in multi-community of practice. Therefore, participation and reification are central to situated social learning (Wenger, 1998), though individuals may learn different things at different points of time and at different contexts, and therefore combine learning and/or modify learning and practices, and even change themselves in response to broader social practices.

A framework of reflective and transformative learning is presented in Figure 5 based largely on the work on Moon (1999), and drawing from the critical works of Mezirow (1990) on transformative learning and that of Richardson (2000) on learning styles of both campus-based and distance learners.

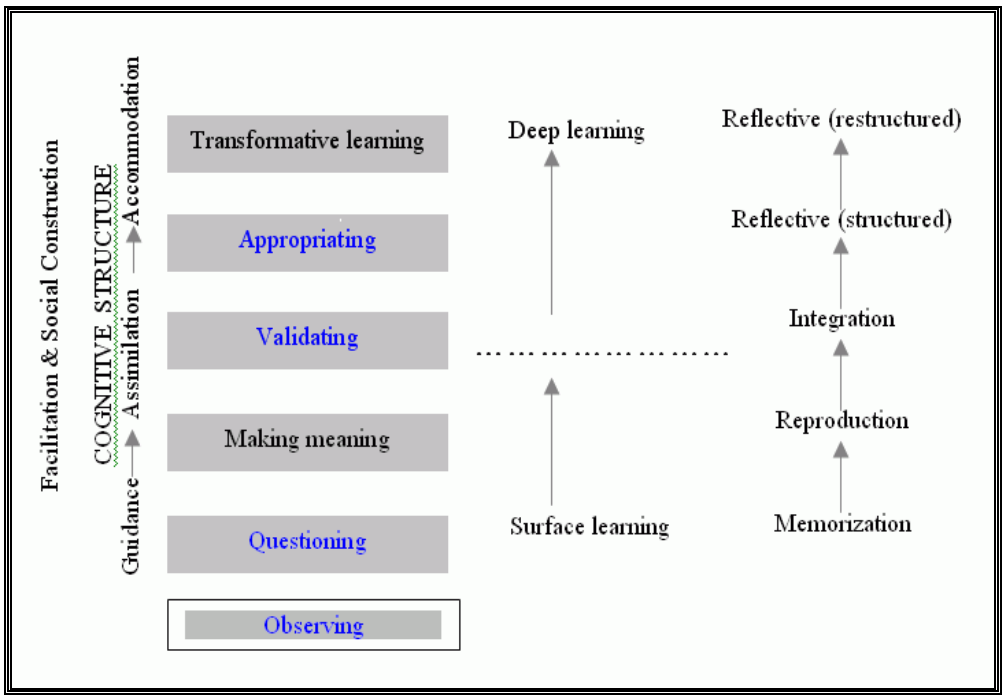

Figure 5: *Framework of adult learning (Panda & Juwah, 2006)*

The framework is grounded in the constructivist view of learning in that the focus shifts from the structured teaching of the teacher to learners' construction of their own knowledge organised in a network called cognitive structure. The cognitive structure given in Figure 5 (comprising guidance, assimilation, and accommodation) is spiral in nature and goes on at every stage of learning. The six stages of mental processes depicted in the framework are described as follows:

- At the stage of 'observing', the cognitive structure facilitates the individual to observe and recognise what is to be learnt; attitude, motivation and emotion play important roles in this process;
- At the stage of 'questioning' the learner uses questions to clarify areas of doubt, uncertainty; to seek affirmation and re-assurance of their understanding or actions;
- 'Making meaning' involves the learner building on prior knowledge, identifying possible links, establishing connections with present materials and assimilating new materials into the cognitive structure and relating the new meaning to established discipline;
- At the next stage of 'validation' the materials learnt are applied and validated in real life situations, processes and practices. This process also involves the private process of construction of meaning;
- 'Appropriation' involves using learnt material and the knowledge gained in new contexts and situations;
- The final stage of 'transformative learning' involves the extensive use of the cognitive structure. The learner becomes capable of evaluating one's own frame of reference, and others' knowledge and process of knowing.

As could be interpreted from above, learning is change in individual identity and subjectivity (i.e. individual transformation) in social context, and therefore change in social practice is brought in by changing individual identities. This suggests that personal learning trajectories across social contexts are important to appreciation of the contribution of the members in a community of practice. Of late, Lave (1999) has also considered learning as 'changing participation in changing social practice' and as identity changing transformation process in social practice. While participation in the CoP is social (and so also professional identity), learning is largely individual (i.e. personal identity) constantly negotiated in the CoP. Hughes (2009b) talks of identity congruence which arises from expressions of gender, class, ethnicity, and age in social, operational and knowledge building aspects of learning.

How do social technologies and social networks address this?

In the context of the web, we talk of 'virtual communities'. Rheingold (1993) who first popularized the term defines "virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace" (p5). Inherent in this is the fact that not only these are new forms of communities, also that technology drives formation of these communities—a kind of technological determinism in which technology and human behaviour are inter-related. Countering this, Weinreich (1997) argues that "community is a collective of kinship networks which share a common geographic territory, a common history, and a shared value system, usually rooted in a common religion". It could be a congregation of people 'virtually' rather than being a real community (Fernback & Thompson, 1995). A distinction is, therefore, made between virtual settlements and virtual communities (Jones, 1997)—the former a cyber-place which can be examined from the point of view of virtual artefacts like structure of website, postings in the listserve, content of website etc. with the help of cyber-archaeology in order to understand the latter. The existence of virtual settlement is a proof of the existence of virtual community.

Charalambos and Michalinos (2004) underline that "the existence of a learning community is bounded by a set of conditions and practices that give rise to it, such as the media used, forms of communication, social and learning practices, political values and commitments and the design of learning communities" (p136); and in CMC environment, network of

contacts, personal and distributed intelligence, mutual trust, quick response to questions, and psychological support from the group members bind the community together (Smith, 1992).

Web 2.0 and social technologies tremendously contribute the way people organize, communicate, collaborate, contribute and make meaning in the community of practice. Social software, i.e. socially based tools and systems facilitate digital social networking, and involvement and communication. They go beyond traditional publishing and dissemination of learning resources to creation of communities and community resources with built-in autonomy towards self-direction and self-management. Wiki is the best example of collaborative and shared content creation, use and revision. Wikis, Blogging, MySpace, Facebook - all are expected to contribute to critical and collaborative content generation in the community of practice.

Discourse through these social technologies takes place in networks; and therefore, network analysis in the digital context is essential to appreciate social structure and its influence on human behaviour and human learning. Besides studying what kinds of constraints posit network structures to affect social structure and social change, it also studies how the pattern of ties in a network affects the access of people in a dependency relationship. What is important is to study both the common possession of attributes and norms by the individuals as also their involvement in structured social relationships (Wellman, 1983).

Social networking (like Blogs) and Web 2.0 generally facilitate learner-generated content and circulation of personal and professional knowledge through informal communication (different from teacher/tutor dominated discipline/academic knowledge). In CoP, experts guide the novices. This is extended in Web 2.0 and social networking since they facilitate identity congruence and shifting of identity.

Learners shifting identity is crucial to learning, and they need to identify critically with general content and personal knowledge. However, negotiation of meaning and belonging to an appropriate learning community are also crucial. Writes Hughes: "The fluidity of identity is important for understanding the micro level of classroom or online interactions" (2009b, p293). Moore (2008) also states that use of social networking tools like for instance Facebook may pose discomfort in the participants to balance between self identity and the identity in the social place. Therefore, shifting of identity (i.e. construction and reconstruction) is very important—those who can't are generally excluded from (social) learning communities.

Social Technologies, Networking, and Online Distance Learning

As outlined above, learning is transformative through change in cognitive structure and reflection**.** Although knowledge construction/construction of meaning is an individual affair, this process takes place within a social setting or context, and, therefore, there is always an interaction between the learner and the context.

A framework of online learning (Figure 6) has been discussed further in relation to the variables of: context, community, culture, professional identity, collaboration and dialogue, and transformative practice.

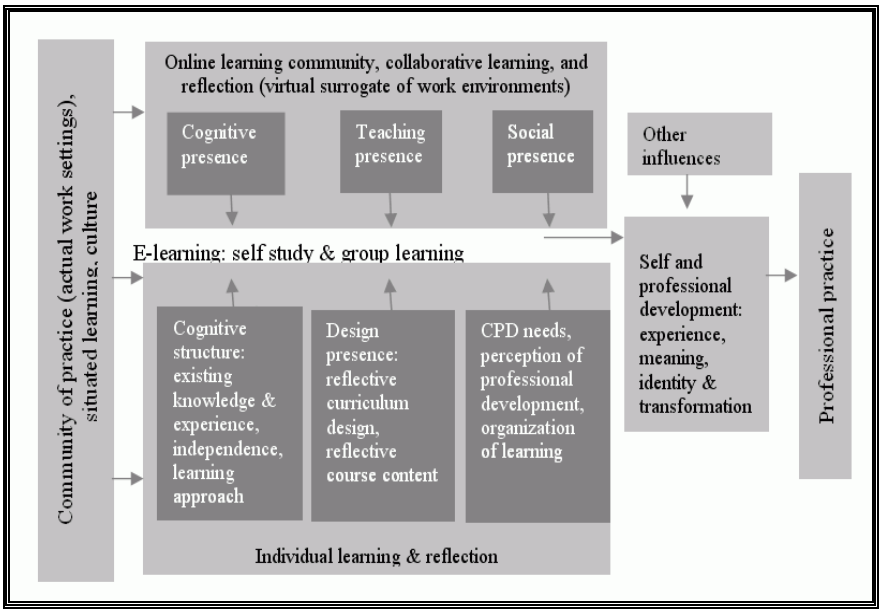

Figure 6: *Framework of online learning (Panda, 2003)*

- *Context* involves the online learning community (OLC), the community of practice (CoP), and one's social community/culture. Three types of contexts have been identified: culture, community of practice, and online learning community (Figure 26). This is consistent with Brown et al's (1989) idea that knowledge is contextually situated, is influenced by activity, context and culture. Situated learning provides a bridge between cognitive processes (and learning) and social practice, and LPP is the process of situated learning in social practice.

- *Community:* While Garrison and Anderson (2003) have used 'critical thinking' to define individual responsibility, and 'discourse' as a group activity in the community of inquiry, we have used 'reflection' for both individual and group interactions in the framework of online learning. Reflection is assumed to play the major role in underpinning the change in cognitive structure through independent study, online collaboration and negotiation, collaborative group/project work, knowledge construction and negotiation in the community of practice. Community creates the social fabric of learning (Wenger et al, 2002).

- *Identity* as a social process (Wenger, 1998) includes: membership of the community, a learning trajectory, negotiation of experience with others, and many forms of membership in relation to local and global contexts. In case on online learning, changes in individual cognitive structure and in transformative practice of the professional community are possible through transformation of individual cognitive structures due to individual reflection and social negotiation of meanings. And, if the community of practice is scattered over places (may be, all over the globe), the cultures of the communities play important role in affecting individual cognitive structure, social construction and negotiation of meaning in both online and offline interactions and collaborations. In online professional development contexts, the members of the online community also belong to other institutional communities. Hence it is important to take a holistic view of the learning community (online and offline).

- *Culture* is an important component of 'context' (the other two components being 'community of practice' and 'online learning community'). The role of culture within the above framework may be examined from the point of view of its direct effect on presence in and interactions within the online learning community. Further, one is influenced by different cultures at the same time and from that point of view, the community of practice may have its own culture (Rogers & Steinfatt, 1999). Based on the authors' experience, a sustained online community of online facilitators develops and is influenced by its own culture and modus operandus. In case of Web 2.0 culture, it may refer to an ideoculture—a system of knowledge, beliefs, behaviours, and customs shared by the members for further interaction.

- *Collaboration* requires an environment of shared goal, peer learning, use of personal experiences and problems, and *dialogue*. Online environment also promotes and facilitates dialogue and discourse among participants, in which they openly contribute to the meaning created by each other, and in the process reconstruct their mental models or frames of reference. As Burge and Haughey (1993) note: 'Dialogue for critical thinking requires two processes - the making of meaning that accompanies the use of language and the public recognition of that meaning' (p103). Practice in the CoP refers to the specific knowledge that the community develops, shares and sustains it.

- *Transformation:* Pallof and Pratt (1999) consider transformative learning as the final form of learning and 'real' learning that takes place online, and which 'represents a self-reflective process that occurs at several levels' (p.129).

Based on this foundation analysis, an online learning schema is described (Figure 7) which provides the framework within which social software and social technologies can be located in their operation and knowledge construction. The framework which is constructivist explains that the individual cognitive structure of the learner, which has in the past been shaped by culture, previous (situated) learning/education and the community of practice, undergoes transformation in the online learning environment.

From the framework, it is evident that a deeper approach to learning and transformative development as well as the transformation of identity can be made possible through enhanced facilitation of various learning activities and encouraging reflection by the mentor-observer. Also, the framework depicts the causal relationship amongst the various variables involved in online learning. From the framework, it is evident that a deeper approach to learning and transformative professional development as well as the transformation of the professional identity can be made possible through enhanced facilitation of various learning activities and encouraging reflection by the mentor-observer. Social software/technologies and social networks do play a crucial role and do contribute to this process (see Gunawardena et al, 2009).

Tryon and Bishop (2009) talk about e-mmediacy in the context of social cognition in e-learning—social cognition being interpreted as how people make sense of the social environment they live in—and systematic design of group social structure. Individuals develop schemas for processing social information, and use those for processing, evaluating and adapting their thinking. In online courses, instructors could design e-mmediacy strategies for facilitating social structure developments of the students—interaction design, support design, and follow-up design to ensure individual characteristics, dynamic social behaviour, and salient social functions.

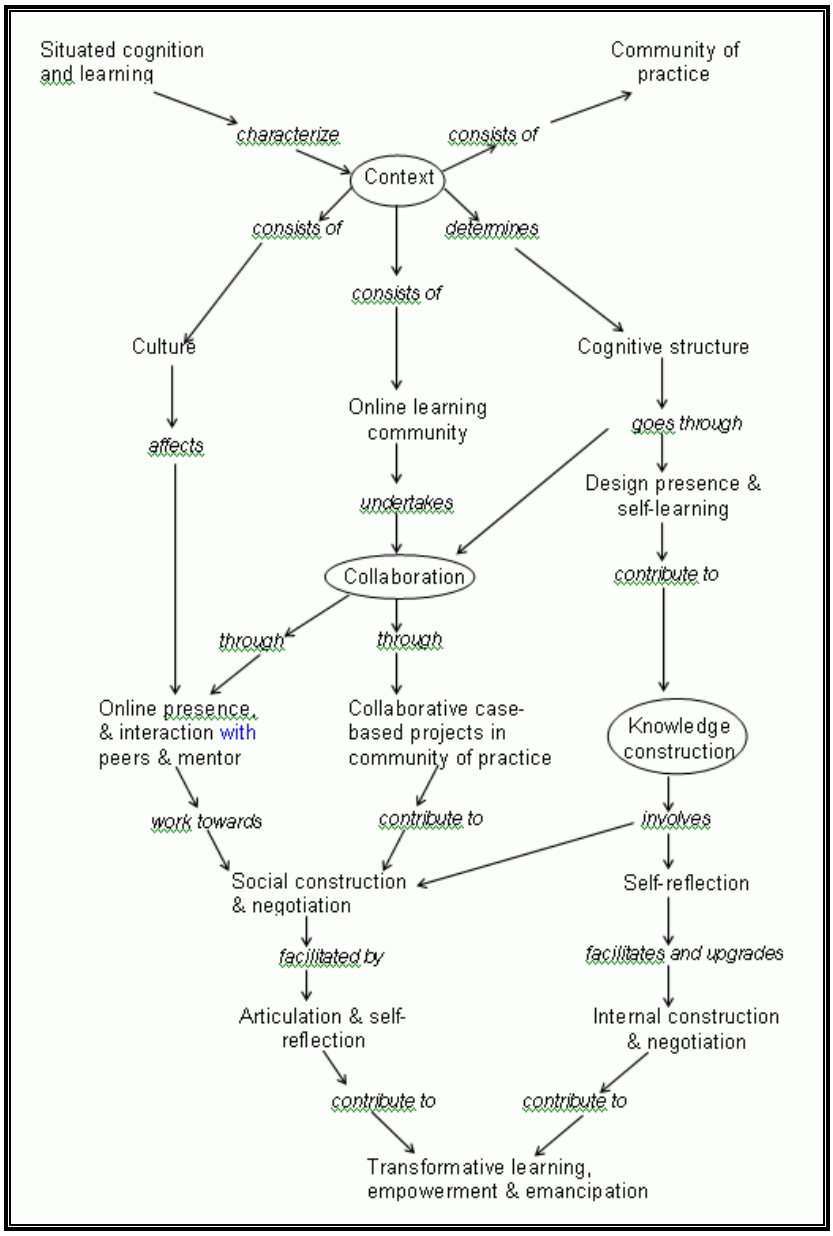

Figure 7: *Online constructivist professional development schema*

(© Santosh Panda, 2003)

For understanding and facilitating Networked Learning Communities NLC), de Latt et al (2007) suggest Social Network Analysis (SNA)—which studies patterns of relationship between people and relational rather than individual data-- for both teachers and students to reflect collectively on their performance and take collective decisions on how to proceed further. Network analysis in the digital context is essential to appreciate social structure and its influence on human behaviour and human learning. Besides studying what kinds of constraints posit network structures to affect social structure and social change, it also studies how the pattern of ties in a network affects the access of people in a dependency relationship. What is important is to study both the common possession of attributes and norms by the individuals as also their involvement in structured social relationships (Wellman, 1983). Digital social networking needs to study both the form and content of the networks in the context of social relationships.

In contrast to the emerging open source social technologies, online distance learning in a formal way has been using the traditional LMS for online learning. While LMS-based online learning is more structured, the social technologies and social networks provide opportunities for informal, personalized and group-congruent communication, interaction and knowledge construction. Web 2.0 supports instant interaction and contact, and also renewed identity due to availability of images, videos etc beyond the static text. Dalsgaard (2006), based on social constructivist approach to e-learning, suggests moving beyond LMSs to self-governed learning activities for the students through social software which provides them with personal tools and engages in various social networks.

Web 2.0 supports the social learning theory (Bandura, 1997) that collaboration, interaction, and cooperation in groups lead to learning. Knowledge has been considered a product of context, culture and activity (Brown et al, 1989) in which it is used.

How practically the social technologies and networks work towards contributing to dialogue and engagement in learning, and therefore to enhancement of the quality of learning?

Wiki, for instance, is found useful for cooperative learning (Bold, 2006)—e.g. collaborative web pages; democratic way of collaborative opinion making and research (Raitman et al, 2005). Grant (2006) studied the role of wiki in schools towards participation and reification. The framework for wiki was knowledge-building network (producing and advancing frontiers of new knowledge—without the danger of falling trap to shallow constructivism), and the researcher found that students did not work hard towards pushing the boundaries of their own knowledge, though it was underlined that it does have the potential to create and support such a network.

In a very recent study on online doctoral course on higher education finance which involved comparison of Web 2.0 tools (wiki, blogs, online discussion) and traditional graduate research paper, Meyer (2010) reported that students did not appreciate their assessment being done on work of peers, and there was the question of ownership in wiki; while others felt it to facilitate a comprehensive work not possible individually. Blogs were appreciated to provide contexts for learning more from others and ownership of content. Online discussion was most appreciated for sharing and learning, and relating to work environments. The traditional research paper ensured development of acquisition of skills and confidence in preparing research papers. The author concludes that "the level of learning achieved may have less to do with the tool chosen than the nature of the assignment" (Meyer, 2010, p6). Wiki has also the problem in accessing simultaneously when only one at a time can get open access and work on it.

In a work on heuristics of online communities, Gallant et al (2007) reported MySpace providing more interactive creativity and artistic form than Facebook in the creation of social relationships and social meanings. The intention of social reward offsets the concerns of social costs and privacy.

On the other hand, it may so happen that there could also be diverted sub-groups and presentation of negative behaviour due to/ in spite of social networks/ networking; and those having established access to the networks would consolidate further on it (as against those who could not access and sustain such networks for a variety of reasons). Exclusion is a phenomenon common to both earlier and newer social technologies (Oliver, 2007). Further, social networks may support learners at a very peripheral level, and may not be used for significant part of learning. Writes Hughes: 'Software that makes it easy to publish material online and makes links with other material does not necessarily challenge what counts as authentic knowledge' (2009b, p301). Therefore, negotiation of the construction of what is authentic knowledge is important in any design of open source and collaborative knowledge generation tools.

Therefore, even if SS/Web 2.0 technologies present opportunities for identity shifts and more engagement in learning due to facilitation of greater identity congruence, there are limitations—the marginalized learners (marginalized due to various reasons) may not gel well with their learning communities due to conflicts between various forms of knowledge and assessment strategies which generally reproduce inequality (Hughes, 2009b). Some learners may not at all be interested in social identity congruence as they may not like new groups and new ideas. Since also learning is largely an individual affair, addressing identity in SS and SNs needs to be done cautiously.

As would be seen, identity construction and reconstruction cannot be facilitated by social technologies alone; pedagogy has an equal role to play—there should be critical and reflective knowledge construction, and that assessment tasks through like e-portfolios and Blogs need to be transparent with high quality feedback to the learners. Tutors are critical to this—though social technologies and networks facilitate identity negotiation through interaction and negotiation of ideas and knowledge, they need to help the excluded ones in renegotiating the process in spite of the technology availability. This calls for knowledge based identity congruence.

There is little evidence available on the specific contribution of open/ social technologies and networks to serious formation of communities of practice and to engage social learning/ knowledge construction. There is also a debate whether Web 2.0 technologies/ tools can influence (higher order) learning. A recent critical work is by Gunawardena et al (2009) in the context of social software/ networking tools like Wiki (which also involved Blogs, Facebook, RSS Feeds etc) found significant contribution to socially mediated cognition through the phases in hierarchy of context, discourse, action, reflection, reorganization and SMC (Figure 8). The researchers note that these six phases (as described below) can progress 'in multiple interactions' and as 'an evolving process of collective intelligence gathering' (p13).

Context: Context of the site and of individuals towards collective intelligence creation.

Discourse: Interplay of identity and power in the shaping of meaning.

Action: Process of mediation of collective intelligence towards socially-mediated cognition.

Reflection: Both individual and group experience and thinking, and integration of multiple (unfamiliar) points of view.

Reorganisation: Reflection towards new understanding and insight to enrich the shared goal.

Socially mediated cognition: Mutual reflection on reasoning and group developmental process (group zonal of proximal development) through peer-to-peer mentoring and negotiation.

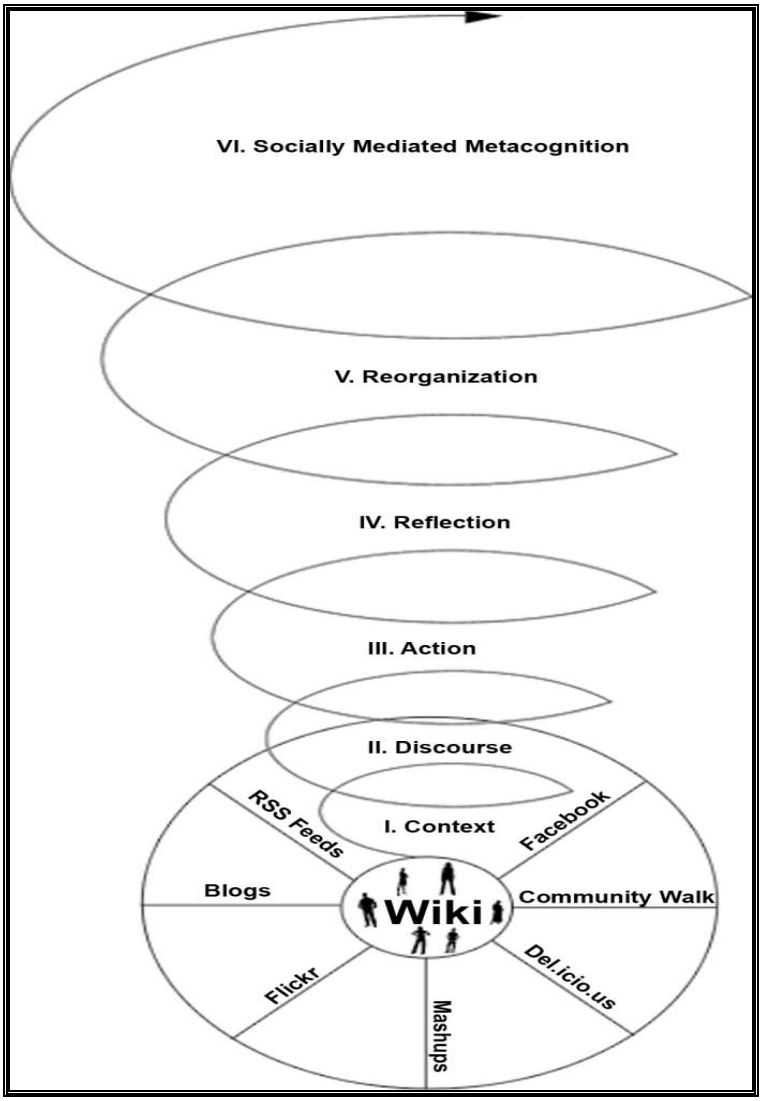

Figure 8: *Social networking spiral (Gunawardena et al, 2009)*

The researchers' success in applying and demonstrating the power of social technologies to contribute to higher order learning can be attributed to their own high order understanding of learning theories operating in social learning environments, as also the qualitative design of the socio-constructivist approaches to learning.

Conclusion

Dialogue has always been the hallmark of educational discourse—online or offline. Countering the claims (and contradictions) of the post-modernists, Feenberg (1999) remarks: "If we can resist simplistic appeals to managerial efficiency and focus our efforts on sustaining the dialogue that has always been at the heart of the educational experience, then technology holds great promise; if not, then we face a great threat" (p29). The social technologies and social networks need to be critically analysed, implemented and sustained—it needs negotiation of the development and cohesiveness of the community. Write Charalambos and Michalinos (2004): "Such decisions are deeply embedded in educational philosophies and epistemological assumptions about teaching and learning. Any choices made have certain implications for the kinds of communities that are envisioned and how these choices will privilege some and disadvantage others".

Social software may encourage some towards identity congruence, but may be disadvantageous to some others. Hughes writes: "a solution to inequalities in learning lies in pedagogies and assessments that enable learners to shift and transform identities and not solely in the variety of technologies available (2009b, p292). The quality work of Gunawardena et al (2009) is an indicator towards this direction. Shifting and transforming identity depend on the pedagogic beliefs and assessment strategies. It needs "a more fundamental critique of pedagogy and assessment practice in social learning" (Hughes, 2009b, p303). If the new technology/social software simply reproduce the existing social relations and the assessment practices reproduce inequalities, then social software/ web 2.0 reforming learning will be a far cry.

Fidji Islands

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Mainstream ODL research and increase research outputs

- Capacity building structures that promote cutting edge research in ODL together with other stakeholders.
- Enabling environment to undertake research in ODL and thus become a leader in ODL Research.
- Development of an intellectual platform and academic space for ODL discourses at UNISA.
- Increased research output on ODL through the ODL Research Task Teams at UNISA and using the MIT approach.
- ODL research projects in collaboration with other international ODL institutions.

Develop strategy foregrounding ODL (lectures, etc) through collaboration

- Establish platforms for ODL discourse at UNISA as a mega African ODL Institution.
- Effective participation and collaboration with other global ODL institutions and organisations.
- Organise international conferences.
- Invite international experts on ODL to present ODL Occasional Lecture Series and Research workshops to UNISA Staff members.

Organise Professional Development training programmes in ODL for employees

- Generic training programmes based on the understanding and principles of ODL.
- ODL Professional Development rollout of short learning programmes.
- Ongoing review process of the continuous professional development programmes.

Offer Postgraduate Programmes

- Production of doctoral proposals and engagement in field work by students.
- Establish collaboration with the School of Education - UNISA in offering PhD and Masters programmes, using the D Ed route.
- Collaboration with national and international institutions to attract post-doctoral fellows to teach and supervise in the postgraduate programmes and to engage in research.
- Encourage the exchange of scholars with other international tertiary institutions.

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