misunderstood or, rather, mis-used. When set in historical context, while Lewin does talk about action research as a method, he is stressing a contrast between this form of interpretative practice and more traditional empirical-analytic research. The notion of a spiral may be a useful teaching device – but it is all too easily to slip into using it as *the* template for practice (McTaggart 1996: 249).

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- Due to space limitations the exhaustive list of references for this article are not published however to obtain a full anecdotal reference list and to explore a variety of links and resources connected with this article visit the authors web page at www.infed.org
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Action Research Links

There exist numerous web sites, journals (print and electronic), information and studies presented by School Boards and Departments of Education and University Web Pages world wide devoted to various aspects of Action research, Collaborative research Reflective Practice and the various research tools most commonly associated with these models. Two very interesting starting points include ARExpeditions- Action Research at www.arexpeditions.montana.edu and Action Research Journal at Sage Publications <http://arj.sagepub.com> Both are easily accessible by typing the titles as printed above. Other links include The Collaborative Action Research Network at <http://www.did.stu.mmu.ac.uk/carn>, Teacher Leaders Network (South East Center for Teaching Quality) located at www.teacherleaders.org, ERIC Clearinghouse on Teacher Education at <http://www.eric.ed.gov/>, Teachers College Record at www.tccord.org Action Research International at www.scu.edu.au/schools/gem/ar/ari/arihome.html, Educational Researcher (American Educational Research Association at www.aera.net) HYPERLINK "http://www.aera.net" and Research Questions that Teachers ask at http://curry.edschool.virginia.edu/go/clic/ques_r30.html

Participatory Action Research and Aboriginal Epistemology

Raven Sinclair

To our readers: I close my editorial responsibilities with *Teaching and Learning* by implementing an editor's prerogative to include in this issue selected passages from an article by Raven Sinclair. As an advocate for social justice within indigenous communities Raven continues to make strides within transformational challenge opportunities by implementing participatory action research in settings that require intervention and social change. I was introduced to this article by a friend of his at a conference I attended on aboriginal issues in education. The message contained therein has influenced my work as a teacher, counsellor, professor, researcher and storyteller. Unfortunately space does not permit a full reprint of Ravens article. I have tried to carefully select passages that do justice to the intent and message without disrupting the flow. In my life as a storyteller I borrow to share not claim to own. For the complete article and list of references refer to the web site described at the end.

PAR is guided by Paulo Freire's concept of 'conscientization' - this is a critical approach to liberatory education that incorporates helping the learner to move towards a new awareness of relations of power, myths, and oppression. By developing critical consciousness in this way, learners work towards changing the world.

The participatory action research approach (PAR) to community issues is a culturally rel-

evant and empowering method for indigenous people in Canada, and worldwide. The ongoing impact of colonization, neocolonialism and the forces of marginalization call for unique approaches to address the fall-out of these issues. Government and institutional research and intervention have failed because western methods have historically exploited native people and results have often used to perpetuate the status quo. Participatory action research gives a voice to the oppressed and marginalized, and the methods and processes promote empowerment, inclusivity, and respect. Most importantly, this approach serves to deconstruct the western positivist research paradigm that is, and has always been, antithetical to Indigenous ways of coming to knowledge on many levels; theoretically, cognitively, practically, and spiritually. PAR can, therefore, be quite significant to the inclusion of indigenous epistemology in the discourse of research.

Pre-contact indigenous societies were intact culturally, socially, spiritually, and economically. Driedger (1980) defined indigenous existence as an integrated "symbiotic nomos" wherein the world had meaningful order. Over time, contact result in colonial chaos for aboriginal people, and the destruction of a relatively harmonious way of life. Driedger utilizes a sacred canopy metaphor to illustrate the destructive impact of colonization. The canopy represents a "shelter from terror" which is held up by four stakes representing ideology, community, culture, and land (p.343). For indigenous people in Canada, these four stakes were nearly destroyed through colonial warfare, the imposition of colonial legislation, the reserve system, and the industrial/residential school systems. The resulting anomie in the indig-

enous psyche has reverberated through the generations and manifested in extremely challenging individual, family, and community issues. This historical context has created unique issues that require approaches to problem-solving that are relevant and effective.

Successive governments have spent millions studying the 'problems' facing aboriginal people and communities. They inform the communities that, yes, the problems exist as evidenced by the research, and more often than not, the directive remedial programs that have been implemented fail. Indigenous people are tired of being studied and are suspicious of government intervention. Sue & Sue (1990) discuss how minority groups are 'pathologized' by western research methods and that such research is often used to perpetuate stereotypes. They point out that historically, research followed one of two models: the genetically deficient model or the culturally deficient model (p.18). The genetically deficient model, adhered to at the turn of the century, pathologized minorities and research tended to support racist notions of minority inferiority and white supremacy. The culturally deficient model which followed in the 20th century viewed minorities as deviant and deficient due to cultural impoverishment. There are many examples in research history about the heinous exploitations of minority groups in the name of 'research'. Smith (1999) describes indigenous struggle with research as "attempts to escape the penetration and surveillance of ...the gaze of Western imperialism and Western science." This is done in an effort to 'reconstitute ourselves'. The picture is one of a science that dismembers the object of study. Sue and Sue (1990) point out that "there is a growing feeling among

ethnic minorities that research should go beyond the mere explaining of human behaviour. Research should contribute to the concerns and betterment of groups being studied." (p.23). Tobias (1982) defines participatory action research as a "commitment to working with those women and men in our different societies whose voices are not heard" (preface). It supports and contributes to the efforts of individuals, groups and movements which challenge social inequality and exploitation. Participatory research calls for democratic interaction between researchers and the researched. Tobias states that the oppressed are exploited by living and working conditions, and they are blamed for their own social conditions. The significance of the participatory research approach becomes evident under the yoke of colonization: "...lack of information and the daily preoccupation with survival often prevents people from understanding what the power structure is, how it works and what it does to them." (p.1).

The key aspect of the participatory approach is educational; participants are actively involved in analyzing their situation and defining their own solutions. Adult education is a central foundation of participatory research because adults decide what to learn and the best way to learn it. This draws upon Freire's notion of conscientization which involves "learning to perceive social, political, and economic contradictions and to take action against the oppressive elements of reality (p.3). Freire emphasized the point that people, especially those who have been colonized, must be supported in the belief that their knowledge and history are valuable.

Participatory research presents a non-directive, holistic approach to community research and action. For Indigenous communities,

disempowered by western research hegemony, the crucial concepts of PAR include respect of indigenous knowledge and worldviews, indigenous epistemology, respect and inclusivity in the research agenda. Western monopolization of education and theoretical imperialism has devalued indigenous knowledge and thought. PAR combats intellectual imperialism through its grassroots approach to supporting and nurturing the reconstruction of indigenous knowledge, and by operating on the assumption that knowledge and action that originates with the people, will be the most effective in addressing the problems of the people. These tenets are most closely aligned with indigenous science. Pam Colorado refers to popular wisdom and knowledge of aboriginal people as "Indian Science". She defines Indian science as a holistic and spiritual process which "gathers information from the mental, physical, social and cultural/historical realms" (1989:30). Traditional research tools of Indian science include feelings, history, prayer and relations. Colorado states that understanding, in native tradition, comes through feelings; history includes factual history and a connection to the ancestors through oral history; prayer is a way of finding balance within ourselves and others; and relations refers to the interrelated cosmocentric perspective of First Nations. All four of these tools are combined in the 'process' aspect of research that draws upon aboriginal epistemology and are exemplified in the author's reference to the work of Theresa Tuccaro...

Indigenous ways of knowing... encompass the four sacred aspects of life-mental emotional physical and spiritual.... Indigenous epistemology includes methods which in Western terms would be considered to belong to the realm of metaphysics.

Ermine (1995) examines the 'western' tendency to validate knowledge from the ideological premise that the metaphysical and scientific ought to be separate and distinct in the quest for knowledge. He argues aboriginal epistemology does not fragment aspects of life rather, is based upon a paradigm 'congruent with holism and the beneficial transformation of total human knowledge' (p.103). Aboriginal cosmology is manifested in the physical world through the spiritual components of aboriginal life; that is, aboriginal community developed and evolved around the concept that central to life was the spiritual and metaphysical journey. Indeed, these aspects of life experienced and explored through ceremony, vision quests, and dreams comprise aboriginal epistemology. The aboriginal paradigm equates experience with knowledge, and the path to knowledge of the physical world lies in the inner and inward journey. In Aboriginal epistemology, the greatest mysteries lie within the self at the spiritual level and are accessed through ceremony.

Knowledge is a sacred object, and seeking knowledge is a spiritual quest. At both the individual and community levels, research takes on an entirely new dimension with the acknowledgement of human realms beyond the mental. Research then, would become a holistic process as opposed to an academic goal.

This notion echoes the origins of PAR as eloquently outlined by Fals Borda (2001) in his discussion about the problematic concepts underlying western thought namely, instrumental rationality and instrumental reason, which are based upon the premise of controlling nature. Fals Borda explains the ecological impact of this rationality

which is currently evident in the state of the environment. Like Colorado, Fals Borda laments science's need for a 'moral conscience'. That moral conscience is evident within the sacred Indigenous paradigm. The call is clear - the new paradigm had to embody a philosophy that encompassed life experience, and commitment towards 'liberation and service'. Participatory action research embraces these demands.

For indigenous populations, PAR's inclusivity and moral/social consciousness provides an opportunity to reflect indigenous thought and ideology, and this approach supports and nurtures indigenous knowledge, and reconstructs indigenous 'voice' within the research discourse. PAR does not demand the separation of the mind, body, and spirit; rather these are viewed as legitimate ways of information gathering, and coming to knowledge.

Problem solving is placed within the hands of those most affected. Kirby and McKenna (1989) state that research "...can subdue, deceive, pacify and lull, or it can arouse, enlighten, stimulate and awaken...depending on the assumptions and processes we employ" (169). Participatory Action Research, with its emphasis on participation and hence, personal empowerment, can only invoke the life force.

Conscientization combats the 'culture of silence' where the oppressed are not heard in society, and where a lack of knowledge creates a high risk for the perpetuation of racism, discrimination and an ethic of 'blaming the victim' for their own situation.

For the text of the complete article and references please visit the home page of Aboriginal & Indigenous Social Work.