# Toward a Future Adult Learning Community:

# If Socrates had a PC…

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**ABSTRACT**

The integration of educational technologies in adult learning environments is viewed from three distinct perspectives. The three perspectives are the structuralist, the means-end, and finally, a view of technology as an extension of oneself based in the situatedness of an experiential-type learning environment.

The various constructs of adult learning are reviewed and a framework for future adult learning communities is proposed that identifies the learner and educator provided components needed for an effective adult learning experience.

A Socratic notion of the integration of technology is explored to parallel the notion of the invisible integration of technology into future adult learning communities.

There is only one good,
knowledge,
And one evil, ignorance.
*Socrates*

## Introduction

The infusion of technology in business as a necessity in global competitiveness goes without saying and needs no further explanation. However, the utilization of educational technology, when introduced in adult learning environments may be viewed from three distinct perspectives (Pickett, 1997).

The first notion being the "structuralist" school of thought, utilizing Bolman and Deal's (1997) structural frame espoused with Frederick Taylor's "scientific management". This extension of job-related skills is developed to enhance employee job competence and proficiency to achieve overall corporate goal attainment. With this approach, any or all personal and motivational benefits gained from the technology integration become a secondary, or serendipitous achievement (Pickett, 1997).

A second perspective utilizes the technology component as a means-end, process or integration of skills. This notion is typically demonstrated in the K-12 classrooms in ways such that either the lesson is "enhanced" through the use of multi-media, Internet or any means of technology interaction between the individual(s) and the technology media. This approach, while introducing the technology component, views technology as a separate entity in the setting (Pickett, 1997).

The third view integrates current technology to achieve an extension of the self, in other words, learning theories (e.g., distributed learning, constructivism and collaboration) and educational technology principles (e.g., newsgroups, chat rooms, etc.) are integrated with introspection, mentoring and life experience to cultivate a learning environment that provides the experiential-type of learning environments more closely aligned with current adult learning theory research (Pickett, 1997).

To clarify the above view, a definition of some general terms in adult learning theory is in order.

## Definition of Terms

Cooperative Learning

"Cooperative learning tends to be more structured in its approach to small-group instruction, to be more detailed in advice to practitioners, and to advocate more direct training of students to function in groups than does collaborative learning" (Matthews & Cooper, On-line).

## Collaborative Learning

"Collaborative learning practitioners are inclined to assume students are responsible participants who already use social skills in undertaking and completing tasks. Therefore students receive less instruction in group skills and roles and perform less structured reflection on group interaction than in cooperative-learning classrooms" (Matthews & Cooper, On-line).

## Constructivist Learning Theory

Constructivist theory posits that learning is constructed by a student through two processes: the resolution of conflict and reflection about theory. In essence, the students are "...self-structured..." and, "...self-motivated..." (Strommen & Lincoln, On-line).

## Socio-Cultural Theory - Zone of Proximal Development

Socio-cultural theory focuses on the causal relationship between social interaction and the individual's cognitive development. The zone of proximal development (ZPD) is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under the guidance or in collaboration with more capable peers (Vygotsky, 1978).

## Situated Learning/Knowledge

According to Brown, Collins and Duguid (On-line) there is an assumption of a separation of knowledge between "knowing" and "doing". Knowledge is assumed to be self-sufficient and independent of the situation in which they are learned. Situated learning posits that the situation in which knowledge is learned is an integral part of what is learned i.e., "Learning and cognition, it is now possible to argue, are fundamentally situated" (Brown, Collins & Duguid, On-line).

## Constructs of Adult Learning

Johnson and Johnson's (1993) meta-analysis of studies using college students as subjects found that of the 120 studies that have been completed since 1924, 70% have been completed since 1970. Some of the outcomes other than greater individual achievement were that cooperative learning builds positive relationships, increases self-esteem and leads to greater intrinsic motivation to learners. It is beyond the scope of this paper to include all studies, however, Johnson and Johnson's meta-analysis does bring focus to the derived benefits of cooperative learning in general.

### Adult Learning

Malcolm Knowles pioneered adult learning and identified several characteristics of the adult learner to include autonomy, self-direction, accumulation of life experiences and knowledge, goal-orientated, relevancy-oriented, practical and a need to be shown respect (Lieb, On-line).

### Experiential Learning

Dewey (1916), as an advocate of educational reform, not only viewed education as a condition of growth, but also saw experience as a biological and social transaction. Kurt Lewin's influence in the field of social psychology led to the development of 12 principles of experiential learning (Sherman, 1996):

1. Effective experiential learning will affect the learner's cognitive structures (action theories), attitudes and values, perceptions and behavioral patterns.
2. People will believe more in knowledge they have discovered themselves than in knowledge presented by others.
3. Learning is more effective when it is an active rather than a passive process.
4. Acceptance of new action theories, attitudes, and behavioral patterns cannot be brought about by a

piecemeal approach - one's whole cognitive-affective-behavioral system has to change.

5. It takes more than information to change action theories, attitudes, and behavioral patterns.
6. It takes more than firsthand experience to generate valid knowledge. Besides experience, there needs to be a theoretical system that the experience tests out, and reflection on the meaning of experience.
7. Behavior changes will be temporary unless the action theories and attitudes underlying them are changed.
8. Changes in perceptions of oneself and one's social environment are necessary before changes in action theories, attitudes, and behavior will take place.
9. The more supportive, accepting, and caring the social environment, the freer a person is to experiment with new behaviors, attitudes, and action theories.
10. In order for changes in behavior patterns, attitudes and action theories to be permanent, both the person and the social environment have to change.
11. It is easier to change a person's action theories, attitudes, and behavioral patterns in a group context than in an individual context.
12. A person accepts a new system of action theories, attitudes, and behavioral patterns when he or she accepts

membership in a new group.

Socio-Cultural Development

Vygotsky's (1978) socio-cultural development theory, to include the zone of proximal development (ZPD), provides the tools through which the social mind develops in which learners mediate through an activity. Vygotsky sees the mind as "...unlimited in the sense that its development is inseparable from the tools of mediation, which themselves are often corporeal things..." (Smagorinsky, On-line).

Similarities and Differences in Cooperative and Collaborative Learning

According to Matthews and Cooper (On-line), the areas in which cooperation and collaboration differ are, 1) the style, function, and the degree of involvement of the teacher, 2) the issue of authority and power relationships between the teacher and the students, 3) the extent to which the students need to be trained to work together in groups, 4) how knowledge is assimilated and constructed, and 5) a variety of implementation concerns.

Matthews and Cooper (On-line) also posit similarities between the two schools of thought such as 1) active learning is more effective than passive learning, 2) teacher's roles as facilitators and coaches, 3) balancing of lecture and small group activities, 4) development of higher order thinking skills, 5) intellectual development is enhanced as students share in the responsibilities of learning, 6) increased abilities to reflect on assumptions and thought processes, 7) the development of social and team skills, 8) increased retention and student success, and 9) the appreciation of diversity.

**An Educator's Challenge for the Future**

Paul Hersey, when asked at a recent Academy of Management meeting, "How did Situational Leadership come to be?" Hersey's response was, "By standing on the shoulders of giants, you are able to see farther" (P. Hersey, personal communication, August 9 & 10, 1998). Indeed, a very powerful metaphor which respectfully acknowledges the great works of previous scholars. Of the many giants that contributed to the evolution of Situational

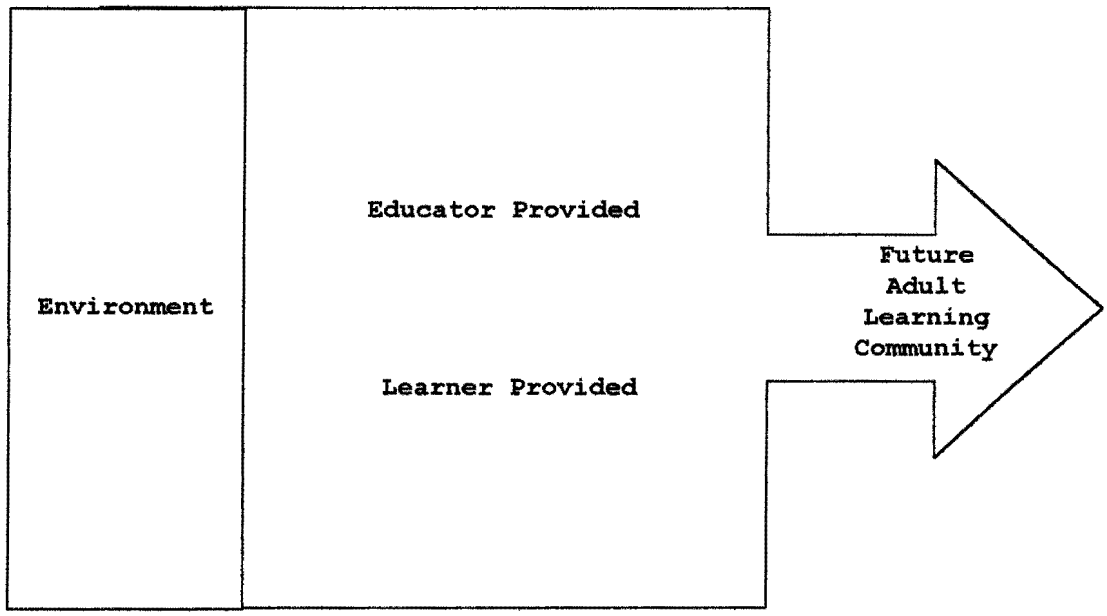
Leadership, the most significant giant that Dr. Hersey spoke about was Abraham Maslow.

The intuitive appeal of Maslow's hierarchy of needs has indeed enriched many lives though many scholars were unable to validate its proposed results through their studies. However, the central focus of the theory and model were that of well-defined needs. The adult learner, as mentioned previously, has very specific needs that differ from the non-adult learner. Therefore, educators must continually challenge themselves to acknowledge the core foundations of the very diverse adult learning community that is now a very strong and growing component of higher education.

## A Proposed Framework for Adult Learning

The following proposed framework builds on previous research and attempts to operationalize adult learning androgogy.

Figure 1. Framework for Future Adult Learning Community.




**Learner Provided**

- Autonomy
- Self-Direction
- Goal-Orientation
- Perception, Attitudes, Behaviors
- Skills
- Life Experiences
- Need for Respect

**Educator Provided**

- Collaborative/Constructivist Environment
- Relevance
- Experiential Learning
- Problem-Orientation
- Zones of Proximal Development

With an understanding that the learner is the center of the learning process, educators begin by providing a learning environment that challenges and extends the adult learner's "self". The educator then builds and extends the learner provided components through experientially-oriented learning environments, based on appropriate and

relevant situational environmental issues (Figure 1.) that will prove to enhance and build mutual respect between all participants.

Lastly, the situated context of the learning environment places a maximum emphasis on,

1) group activities and development of social and team skills
2) higher order critical thinking skills
3) intellectual development
4) shared responsibilities in self-regulated learning
5) abilities to reflect on assumptions and thought processes.

It is in this way the overall educational environment contributes to future adult learning communities. At this point, one may ask, "Where does the technology component fit in?" Alas, we have come full circle to understanding the value of the third view of technology integration - seamless and invisible; as an extension of the self.

This particular notion is not common and may not be popular in some circles as most schools of thought view technology as a separate component, hence perceiving the technology integration from either views one or two. However, this writer views technology as being integrated into the "situatedness" of the contextual adult learning experience.

**If Socrates had a PC…**

Socrates' ability to draw forth knowledge through a series of questions and implications of the student's answers led to the methods that we know today as the Socratic Dialog. This method is extremely effective in developing provocative thought, critical thinking skills and reinforces several of the previously mentioned principles of experiential learning. Two such examples are that people will believe more in knowledge they have discovered themselves than in knowledge presented by others and learning is more effective when it is an active rather than a passive process.

If Socrates had a PC, there is no doubt that he would have mastered the nuances of the device without reluctance, as he once stated, "Let him that would move the world first

move himself", or, "Wisdom begins in wonder".

If Socrates had a PC, the dialogic art form that he so keenly developed would not have been hampered by the technological maladies we experience today. Why? - because Socrates' true wisdom was evident through the debates of virtue and the disclosure of ignorance, hypocrisy and conceit. To eclipse the quest for knowledge and wisdom for the sake of technological integration would most certainly qualify to Socrates as, "…one evil…" or, that of ignorance.

It is evident that the Socratic view of knowledge and wisdom were situated in the activities and experiences of the moment, and as such, the collective nature of the Socratic Dialog will forever be espoused in the principles of future adult learning communities.

By seeking a greater understanding of adult learning needs, Socrates' one good, the precious gift of knowledge, passed on to us so graciously by the great philosophers, will prevail from within our future learning communities

-- even if Socrates had a PC.

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