

Rothwell, William J. (2002). *The workplace learner: How to align training initiatives with individual learning competencies*. New York: American Management Association.

The Future of Workplace Learning

- "Change has become the only constant."
- Difficulty in analyzing trends
- Three-fold focus:
 - the Learner
 - the Trainer
 - the Organization
- Influence of technology



Rothwell (2002) writes, "It has become commonplace to note that change has become the only constant. That is as true for the field now known as WLP [sic] as it is for any other field. The future will not necessarily be like the past or present" (25).

Why is WPL a growing concern? What are the important facts about the Learner, Trainer, and Organization? Rothwell (2003) breaks these down into trends in Chapter 2 (pp. 25ff).

Rothwell's (2002) definition of a trend: "a recurrent phenomenon that takes place at this time and gives rise to speculation on the future" (26).

Rothwell's (2002) definition of a trends analysis: "an examination of these phenomena and speculation on the likely impact they will have in the future" (26).

Technology has a broad influence, one that is impossible to really measure as advances are made (Rothwell, 2002:26).

- Partitions between workplace and life
- Employers who encourage learning
- Employees take charge of own learning
- Learning organizations =
 high-performance workplaces
- Work groups and teams for learning



- Partitions between the workplace and other spheres of life are falling down.
 - -E-mails
 - -Wireless technology
 - -Videoconferencing

Trend 1 - Partitions between the workplace and other spheres of life are falling down.

- •Emails
- Wireless Technology
- Videoconferencing

All three of these points have influenced the globalization of companies over the past decade. They have allowed us to communicate at anytime to anyplace. This has made real time decisions possible within the global market.

<u>Emails</u> have allowed me to communicate to expatriates from Denso on a regular basis. When a problem presents itself to me I can email an expert in Japan for assistance.

<u>Wireless technology</u> has proven itself as a valuable asset to have any type of information readily available to us. We no longer have to rely on our unreliable memories for information. At the touch of a button we can obtain information regarding any subject matter.

<u>Videoconferencing</u> has given my company the ability to gain consensus on important decisions immediately. We can also brainstorm regarding quality problems or customer issues within minutes. Before, global companies would have been at a disadvantage without this communication tool.

- Individuals will increasingly seek employers who encourage learning.
 - -Create Learning Organizations
 - -"What's in it?"
 - Conditions to support workplace learning



Trend 7 – Individuals will increasingly seek employers who encourage learning.

- •Create Learning Organizations
- •"What's in it"
- •Conditions to support workplace learning

<u>Create learning organizations</u> within individual companies will be a necessity for survival. I feel that my current employer maintains my enthusiasm to provide continuous learning about the processes and the culture of my employer each day.

What's in it for me has been used for many years as a phrase to describe our personal needs. Employers will be faced with fulfilling this more in the future. They will have to develop ways to encourage the growth of individuals within the learning organization. One way that they may have to do this is by attaching incentives to performance evaluations reflective of learning progress.

<u>Conditions to support workplace learning</u> will be conducted through competitive management of training, tuition reimbursement, work assignments, and other means by which to help individuals develop themselves. Each of us are here to improve our own personal growth through higher education.

- Organizations will increasingly seek individuals who are willing to take charge of their own learning.
 - -Lowering costs
 - -Improved performance
 - -Self-motivation



Trend 8 – Organizations will increasingly seek individuals who are willing to take charge of their own learning.

- •Lowering Cost
- •Improved Performance
- Self Motivated

<u>Lowering costs</u> is detrimental to the pure existence of any organization now or in the future. Organizations must maintain their ability to compete within their respective market. This will ensure their survival and ability to make money.

<u>Improved performance</u> will be expected through the increase of learning and knowledge within their organizations. Goals and objectives will be aggressively set to achieve the company fiscal plan each year.

<u>Self motivated</u> employees will be recruited to fill vacancies within each organization. I do not see this as an important trait that is reflected in our current workforce. Employees are more governed by waiting for direction before taking action in today's workforce.

- Organizations viewed as learning organizations will become synonymous with high-performance workplaces.
 - High-performance organizations
 - -Organizational competitiveness
 - -Win "Talent Wars"



Trend 10 – Organizations viewed as learning organizations will become synonymous with high-performance workplaces.

- •High-performance organizations
- Organizations competitiveness
- •Win Talent War

<u>High performance organizations</u> will be able to perform at a higher level that the average organization. This will take place due to their ability to learn from each other and resolve problems quicker. They will be able to obtain success on a broader scale within the organization.

<u>Organizations competitiveness</u> will depend on their ability to converge learning and performance. This type of organization will satisfy the needs of individual echo thus, unleashing human potential.

<u>Win talent wars</u> will be accomplished by the fulfillment of each individuals desires to be successful. Everyone wants to be on a winning team. The team learning concept will captivate this for individuals who are self-motivated.

- Work groups and teams will become one of many vehicles by which to organize and direct learning experiences.
 - -Social purpose
 - -Knowledge
 - -Work-related goals



Trend 12 – Work groups and teams will become one of many vehicles by which to organize and direct learning experiences,

- Social Purpose
- Knowledge
- •Work-related goals

<u>Social purpose</u> is one way for creating a desire for learning. Most people acknowledge the need to interact outside of work. Through hobbies, social events, religion we have a social order. This social order is satisfied by having knowledge of the particular subject matter in order to interact during the event.

<u>Knowledge</u> is required within the team concept for interaction and contribution to the organization. Knowledge must be specific regarding the customer or product. This ensures the success of the team and organization.

<u>Work-related goals</u> motivate individuals each day of their lives. We assess current needs and compare them to our goals. Personal goals help us to achieve promotions in our careers. They also help us to fulfill needs for our families by providing a better and more secure life for them.

- Instructional technology affects all senses, incorporates expert systems
- Advanced knowledge of neurophysiology
- Awareness of links between learning and performance
- Recognition of cross-cultural differences in learning styles

- Instructional technology will encompass all senses and be paired with expert systems
 - Previous focus only on sight and touch
 - Future focus on seven intelligences related to learning:
 - Linguistic
 - Spatial
 - Bodily/Kinesthetic
 - Logical/Mathematical
- Intrapersonal
- Interpersonal
- Musical



Trend 3: Instructional Technology Will Encompass All Senses and Will be Paired With Expert Systems

- Until now: Instructional technology applications have been focused on senses sight and touch
- In the future: Efforts will be geared toward engaging the seven intelligences that relate to learning.
- 1. Linguistic
- 2. Logical/Mathematical
- 3. Spatial
- 4. Musical
- 5. Bodily-Kinesthetic
- 6. Interpersonal
- 7. Intrapersonal

The theory of multiple intelligences was introduced by Harvard University professor Howard Gardner in the early 1980s. The theory states that there are seven basic intelligences: logical-mathematical, linguistic, musical, intrapersonal, interpersonal, musical and bodily-kinesthetic. According to this learning theory, anything to be taught can be better conveyed through activities and techniques that target all or most of the seven intelligences. Technology is developing to integrate the usage and application of all the intelligences.

Armstrong, T. (Nov 1994). Multiple intelligences; seven ways to approach curriculum *Educational Leadership* 52(3) 26-29

- Advances in neurophysiology will yield new insights into the learning process
 - Medical science advances unlock secrets of
 - brain physiology
 - chemistry
 - the role of genetics
 - Expect knowledge to be applied to the learning process



Trend 6: Advances in Neurophysiology Will Yield New Insights into the Learning Process

•As medical science advances to unlock secrets of brain physiology, chemistry and the role of genetics, expect to see such knowledge applied to the learning

process.

•Example: Dendrites Research

Research indicates that dendrites, branching appendages of nerve cells, can adjust their activity in response to information they relay to the cell body. This process could play a major part in learning and memory.

Barinaga, M. (April 14,1995). Dendrites shed their dull image. *Science*, 268(5208), 200-201.

- Links between learning and performance will become more apparent, more measurable, and more convincing to Traditionalists
 - Learning too often considered "schooling" and "planned training experiences"
 - Trend toward core curriculum with "hands-on" and "minds-on" approach
 - Increased use of competency assessments, instead of traditional testing



Trend 11: Links Between Learning and Performance Will Become More Apparent, More Measurable, and More Convincing to Traditionalists

- •People too often think of learning as schooling and planned training experiences
- •The trend is moving toward core curriculum guidelines that call for emphasis on "hands –on" and "minds- on" approach to learning.
 - Assessments
 - •Examples: Radiology and Nursing

The trend is moving toward core curriculum guidelines that call for emphasis on "a hands-on and minds-on approach to learning. Future assessments will test students' ability to explain, analyze, and interpret processes.

Examples include Radiology and Nursing. In these fields of study the curriculum include didactic study in which the theory is taught and in the clinic the theory learned in the classroom is applied utilizing the 'hands-on' approach.

Stamp, N., & O'Brien, T. (Jan 2005). GK-12 partnership: a model to advance change in science education. *BioScience*, *55*, 70-78.

- Cross-cultural differences in learning styles will be more-widely explored
 - Cultural influences:
 - work habits
 - attitudes about authority
 - attitudes about performance
 - appropriate rewards
 - other key workplace issues



Trend 14: Cross-Cultural Differences in Learning Styles Will Be More Widely Explored

- •Culture influences:
 - -work habits
 - -attitudes about authority
 - -attitudes about performance
 - -appropriate rewards
 - -other key workplace issues

•Example: Cooperative Learning

Cooperative learning is a technique in which students work in heterogeneous groups of four to six members and earn recognition, rewards and grades based on academic performance of their group. This learning provides a viable alternative to traditional lectures. Learners appreciate increased academic achievement and social interaction. It contributes to increased intergroup and interpersonal relationships in multicultural situations. It also promotes cultural diverse learners' self-esteem and academic achievement.

Manning, M. & Lucking, R. (Sept-Oct 1993). Cooperative learning and multicultural classrooms. *The Clearing House*, 67, 12-16.

- Individuals take charge of own learning
- More learning occurs in "real time"
- Learning assumes broader definitions
- Practitioners become facilitators;
 their competencies are
 contingent on learners' success



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 - values initiative
 - knowledge of management is directly related to experience
 - keeps learner competitive with others



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- "More workplace learning will occur in real time."
 - increase in JITL and TBL options
 - may or may not require human interaction from trainers
 - suggests importance of proper program development (levels of education, learning styles, etc.)



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- --increase in JITL and TBL options
- --may or may not require human interaction from trainers
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Source: Mayo, A. (2004). Learning: It's hard work! Training Journal, 80.

- "Workplace learning will assume broader definitions."
 - learning goes on every day from Day 1 to
 Final Day of job
 - difficult to track objectives
 and evaluate program
 with such broad scope



- •"Workplace learning will assume broader definitions"
- --takes into account the learning that goes on everyday in a job, from day 1 to final day.
- --difficult to track objectives and to evaluate the program with such a broad scope

- "WLP practitioners will increasingly become facilitators of learning, and their competencies will be dependent on learner competencies."
- "teacher" becoming "facilitator" removes "classroom" stigma from training
- trainers only as strong as weakest learner
- trainer evaluation directly relates to learner's job performance





- "WLP practitioners will increasingly become facilitators of learning, and their competencies will be dependent on learner competencies."
- --Movement of "teacher" to facilitator will take the "classroom" stigma away from training.
- --Trainers will only be as strong as their weakest learner.
- --Evaluation of trainer will be directly related to the learner's job performance.

- "Learning ability, not educational attainment, will become a measure of success."
- Devaluation of college degree?
- Increase in Voc-Ed programs?



- •"Learning Ability, not educational attainment, will become a measure of success."
- --What will happen to the value to a college degree? Increase in voc-ed programs?

Peter Senge writes,

"A learning organization is one in which learning, in whatever form, becomes an inescapable way of life for both managers and workers alike."

- •"Learning Ability, not educational attainment, will become a measure of success."
- --What will happen to the value to a college degree? Increase in voc-ed programs?
- -- "According to Senge, a learning organization is one in which learning, in whatever form, becomes an inescapable way of life for both managers and workers alike."

Source: Learning at Royal Dutch Shell (2002). *Strategic Direction* 18(7), 10-12.



According to Peter Senge, learning organizations are:

"...organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together."

Senge, P. (1990) The fifth discipline. (at page 3)

Quote source: Smith, M. K. (2001) 'Peter Senge and the learning organization', *The encyclopedia of informal education*, www.infed.org/thinkers/senge.htm

"Productivity and competitiveness are, by and large, a function of knowledge generation and information processing: firms and territories are organized in networks of production, management and distribution; the core economic activities are global – that is they have the capacity to work as a unit in real time, or chosen time, on a planetary scale. (Castells 2001: 52)"

Quote source: Smith, M. K. (2001) 'Peter Senge and the learning organization', *The encyclopedia of informal education*, www.infed.org/thinkers/senge.htm

Knowledge that is visible tends to be explicit, teachable, independent, detachable, it also easy for competitors to imitate. Knowledge that is intangible, tacit, less teachable, less observable, is more complex but more difficult to detach from the person who created it or the context in which it is embedded. Knowledge carried by an individual only realizes its commercial potential when it is replicated by an organization and becomes organizational knowledge (ibid [Castells]: 71)