
Globalization, e-Learning and The Art of War

by

*Tan Wee Hoe ^a & Stanley Richardson ^b

^a*Malaysian Institute of Information Technology
Universiti Kuala Lumpur, 1016, Jalan Sultan Ismail, 50250 Kuala Lumpur
Tel : 03-2175 4000, E-mail : whtan@miit.unikl.edu.my*

^b*Faculty of Management
Multimedia University, 63100 Cyberjaya, Selangor
Tel : 03-83125672, E-mail : s.richardson@mmu.edu.my*

ABSTRACT

Global education is boosted by the emergence of e-learning technologies. However, the impact of globalization has created a new scenario of teaching and learning environments. Under the setting of e-learning, various challenges await those involved in the business of education, including the policy makers, administrators, academics and supporting staff. In recent years, though the use of the principles of Sun Tzu's 'The Art of War' in education is getting common, its use in e-learning is still rare. This paper explores the potential and challenges of e-learning technologies. It aims to apply some principles of 'The Art of War' to current e-learning in our globalization era, and discusses the possible advantages and dangers thereof. Sun Tzu's 'The Art of War' concerns much more than the conduct of war. It is a book of proverbial wisdom—its influence permeates the paper.

1. Introduction

This paper highlights the relationships between globalization and e-learning technologies. It presents the potentials and challenges faced by those involved in e-learning. It aims to apply some principles of 'The Art of War' to e-learning and discusses the possible advantages and dangers thereof. 'The Art of War' refers to Sun Tzu's philosophy as described in an increasing number of books; Sawyer (1994) is one among many. His approach is used to gain insights into the topics discussed herein.

2. Globalization

The term ‘globalization’ has a lot of definitions, some are general and others are specific (see MacGillivray, 2006; Wikipedia, 2006; Prokash & Hart, 2000). There are around 30 definitions which can be found by using Google Search Engine (Google, 2006). Besides, there are four genres of books available which define and describe globalization differently, as shown in Table 1.

Genre	Characteristics
1. Academic books by sociologists & political scientists	Claim that the phenomenon is something new, rather exciting and utterly complex.
2. Popular books by activists and journalists in late 1990s	Warn that globalization was new, but taking a more negative view and identifying multinational corporations as the culprits.
3. Economists	Globalization is good news for everyone—if only we would embrace it fully
4. Individual commodity histories	Maintain a sense of proportion, and situate their chosen commodity in the broader context of global economic, cultural and social history.

Table 1: Four genres of books on globalization (MacGillivray, 2006)

To ease the understanding of the concept of globalization, MacGillivray (2006) divided the definitions into two groups: the pro-capitalist tight economic definitions, and the anti-capitalist broader social definitions. In the former definition, Krugman claims that globalization is a catchall phrase for growing world trade, the growing linkages between financial markets in different countries, and the many other ways in which the world is becoming a smaller place. The anti-capitalist definition was suggested by Steger: globalization is a multidimensional set of social processes that create, multiply, stretch, and intensify worldwide social interdependencies and exchanges while at the same time fostering in people a growing awareness of deepening connections between the local and the distant. Instead of creating a new definition, this paper adopts Steger’s idea but uses it in the context of education, which directs the focus of this paper to global education.

3. Global Education, Global Learning and e-Learning

In a study of school change in the USA in the early 1990s, Tye and Tye (1992), suggested that global education is a value-laden construct which means different things to different people, and toward which people respond based on those various meanings. It involves (1) the study of problems and issues which cut across national boundaries, and the interconnectedness of cultural, environmental, economic, political, and technological systems, and (2) the cultivation of cross-cultural understanding, which includes development of the skill of “perspective-taking”—that is, being able to see life from someone else’s point of view (ie empathy).

The new delivery mechanisms for most global education are electronic (Mason, 1998)—hence the term electronic learning or e-learning. E-learning is any use of web and Internet technologies to deliver solutions that enhance the instructional process (Tan et al, 2005). Aldrich (2003) proposed the idea of global learning which

integrates globalization and e-learning. He further emphasised the interdependency between globalization and e-learning by suggesting two scenarios (see fig 1).

Globalization without e-learning would be self-limiting because:	E-learning without globalization would be self-limiting because:
<ul style="list-style-type: none"> - Too few technical skills would exist to maintain and build the infrastructure. - Increased concentration of business skills accessed by the “have,” with increased numbers of “have-not,” would limit the human capital necessary to drive progress and generate new ideas - Too little ability to communicate meaningfully with people from different cultures, both within and outside of one’s enterprise, would create as significant a barrier to exchange as incompatible technical standards. 	<ul style="list-style-type: none"> - The size of audience would not be sufficient to create next generation courses - People in under connected regions would be less interested in taking courses if the opportunity did not exist to practice and benefit from the new skills, and - The technology infrastructure to deploy and run the content would not exist

Figure 1: Two scenarios that show the interdependency of e-learning and globalization (Aldrich, 2003)

4. The Advantages of Global Education and e-Learning

Mason (1998) listed four advantages of global education, ie: 1) access extended to educationally disadvantaged learners; 2) shared expertise among instructors; 3) multi-cultural course content; and 4) global student body. These advantages are consistent with the capabilities of e-learning that enable interoperability, accessibility and reusability of learning content. “Malaysia today faces the myriad challenges posed by globalization. The competition is now with the economic forces being set free...” (Ooi, 2006).

5. The Dangers and Challenges of Global Education and e-Learning

*“Those who do not thoroughly comprehend the dangers inherent in employing the army are incapable of truly knowing the potential advantages of military actions.”
Sun Tzu*

From the macro perspective, Mason (1998) gathered four arguments on the danger of global education (see Fig 2).

<p>Cognitive argument:</p> <ul style="list-style-type: none"> - E-learning causes the breakdown of linear, narrative structures associated with traditional text-based material - Fragmentation & superficiality induced by the hyperlinked structures of the Web-based materials. 	<p>Educational argument:</p> <ul style="list-style-type: none"> - The undesirable aspects of consumerism, wherein learning ceases to be about analysis, discussion and examination, and becomes a product to be bought and sold, to be packaged, advertised and marketed.
<p>Social argument:</p> <ul style="list-style-type: none"> - The breakdown of physical community. 	<p>Cultural argument:</p> <ul style="list-style-type: none"> - The loss of indigenous cultures and the relentless imposition of Western values.

Figure 2: Four arguments on the danger of global education.

Despite the impressive capabilities of e-learning, there are barriers, challenges and pitfalls to the realization of its potential. Clark and Mayer (2002) identified three major pitfalls of e-learning and their results (Table 2).

Pitfall	Result
1. Failure to define job knowledge and skills	Lessons do not build knowledge and skills that transfer to the job
2. Failure to accommodate learning processes.	Lessons overload cognitive processes and learning is disrupted
3. Attrition	Learners do not complete their instruction.

Table 2: Three pitfalls of e-learning. Source Clark & Mayer 2002.

Labonte (2003) further commented that e-learning sometimes fails to deliver expected results due to the incorrect application of e-learning as a single-event solution to a multiple-cause performance problem.

“This misapplication of e-learning is sometimes driven by internal competition and ego rather than sound analysis and decision-making. Besides, in the rush to get e-learning programs to learners, all too often the programs are poorly designed. E-learning may not get the front-end assessment, the task analysis, audience analysis, and assessment of learner environment required for quality design and effective learning. In the worst situations, the content of classroom programs are merged into e-learning without analysis or design appropriate for the differences and capabilities of each methodology.”

Morrison (2003) indicated the short term and medium term challenges for e-learning:

“In the short term because enterprise learning departments are being tasked with making e-learning work effectively using what are still embryonic tools; in the medium term because all e-learning practitioners are struggling to develop a clear and imaginative vision that will give direction to their current

efforts and mollify those making substantial investments in e-learning's promises."

In the non-formal educational setting, Dam (2004) depicted that through the lessons learned in twenty-five case studies of e-learning and blended e-learning implementation, companies are starting to uncover the reality of what works and what doesn't work in the "brave new world" of e-learning. He also gave insights into the most common challenges organizations have in aligning e-learning with business goals, designing e-learning and blended learning programs, and deploying e-learning solutions.

Morrison (2003) further claimed that everyone has learning needs but no one has e-learning needs—e-learning is a solution not an end in itself. He stressed the importance of right implementation in making e-learning a powerful way of meeting learning needs. He proposed a four key point e-learning continuum (see Fig 3) and provided strategic guidance for decision-makers, implementation teams and delivery teams. Morrison (2003) also identified two headline lessons of e-learning implementation:

- Learning should be driven by business requirements not training requirements.
- The learner not the training department is at the centre of learning in the enterprise.

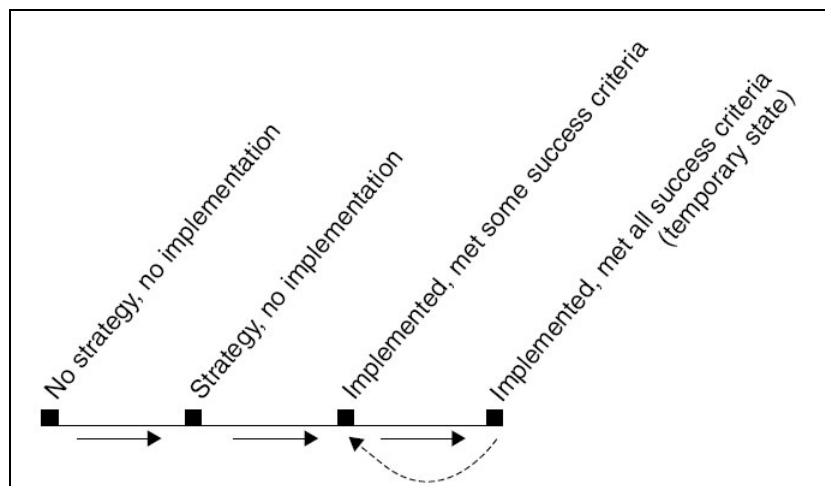


Figure 3: The E-learning Continuum. Source Morrison, 2003.

Labonte (2003) argued that e-learning is a single event solution that supports skills and knowledge improvement, but it is not a solution for complex performance problems that require multiple actions in the work environment to solve. He claimed that learning does not equal performance:

"Performance is achieved through the application of learning in a supportive work environment with management champions providing leadership and coaching. The enthusiasm with the technical capabilities of e-learning may lead to talking and acting as if e-learning is the silver bullet, the miracle cure for organizational and individual performance problems."

6. The Art of War

The Art of War is a Chinese military treatise written during the 6th century BC by Sun Tzu (544BC – 496BC). It consists of thirteen chapters (see Appendix A), which project four orientations (see Table 3):

Orientation	Description
Total orientation	Emphasizes the importance of total strategy and the wholeness in problem identification.
Active orientation	Emphasizes that action should be taken actively rather than passively.
Future orientation	Emphasizes that the study of strategy should be started at planning.
Pragmatic orientation	Emphasizes practicality and the importance of experiences and statistical information.

Table 3: Four orientations of Sun Tzu's The Art of War (Source Niu, 2003)

7. Application of Principles of The Art of War

7.1 Classroom Teaching and Learning

Sun Tzu said, "Know the enemy and know yourself; in hundred battles you will never be in peril. When you are ignorant of the enemy but know yourself, your chances of winning or losing are equal. Know neither your enemy nor yourself, you are certain in every battle to be in peril."

Commonly, an instructor analyses the teaching and learning setting to identify the learning styles and needs of learners. The findings are then used to determine the amount of learning content and the instructional methods in the teaching and learning process. Such practice reflects Sun Tzu's saying—know the enemy. However, most instructors ignore the need to know themselves. Self-analysis should be done to identify individual research methods, teaching and learning methods, preferences and expertise, in both skills and knowledge. This is important to nurture unique instructional method or style that meets both the instructor's and learner's needs.

7.2 Curriculum Design

Sun Tzu's The Art of War has been a standalone course in military science programmes at university level for years. The general aim of this course is to develop learners' strategic thinking skills. Some institutions, including Harvard University, make The Art of War as a core subject (Chu, 2002).

7.3. Learning and Instructing

According to Sun Tzu, 'Jiang' or the commander is one of the five constant factors that should be taken into account in one's deliberations when seeking to determine the conditions obtaining in the field. 'Jiang' stands for the virtues of wisdom, sincerity, benevolence, courage and strictness. These virtues should be applied in the learning and instructing process. Fig 4 shows the roles played by four key parties in relation to the five virtues of 'Jiang'.

Virtues of 'Jiang'	Management	Academics	Learners	Support Staff
Wisdom	Set the master plan for university development.	Possess the knowledge and skills in creating global learning environment.	Identify individual learning style and preferences.	Possess the technical knowledge and skills to support e-learning.

Sincerity	Trust the academics and support staff in executing plans.	Demonstrate ethical concerns while teaching or creating teaching materials and learning objects.	Trust the effectiveness and efficiency of the e-learning system.	Demonstrate technical concern and trustworthy behaviour.
Benevolence	Be considerate and fair in distributing workload among parties involved.	Be concerned with the learning progress of learners.	Appreciate the efforts of all parties involved in e-learning initiatives.	Be concerned with the stability and usability of the e-learning system.
Courage	Be ready to invest resources to initiate global learning.	Adapt and adopt new pedagogical approaches and educational technologies.	Dare to try new learning methods	Be ready to support technically.
Strictness	Set reward system. Be consistent in setting policies.	Ensure all learners involve actively.	Be participative and active and punctual.	Ensure the e-learning system works all the time.

Figure 4: Sun Tzu's Approach to Learning

8. The Globalization Process

Globalization and e-learning can be integrated with Sun Tzu's approach, which although originally designed for success in war. Its principles (see para 7) are applicable to activity in the private and public sectors. In Fig 4 can be seen how instructors and learners can benefit from Sun Tzu provided that the management of educational institutions and other organisations are appropriately committed and motivated.

9. Conclusions

Although written about 2,500 years ago Sun Tzu's 'The Art of War' is applicable to most human activity today. Its principles are particularly applicable to e-learning in the era of globalisation since the future cannot be predicted with certainty. The application of Sun Tzu's principles should ensure that instructors, learners and their organisations are balanced in their approach to e-learning.

References:

Aldrich, C (2003) Global Learning, 2008. In Piskurich, G.M. (2003) The AMA Handbook of E-learning: Effective Design, Implementation, and Technology Solutions, American Management Association, USA. p436 & 437

Chu, L.C. (2002) Research and Application of Sun Tzu's The Art of War. Zhe Jiang University Press, Hang Zhou, p335-348.

Clark, R.C. & Mayer, R.E. (2002). e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning, Jossey-Bass/Pfeiffer, USA.

Dam, N. (2004) The E-Learning Field book: Implementation Lessons and Case Studies from Companies that are Making e-Learning Work, McGraw-Hill, New York.
Google (2006) Definitions of globalization on the web. [Online] Available: <http://www.google.com.my/search?hl=en&q=define%3A+globalization&btnG=Google+Search&meta=>, [2006, June 24]

Labonte, T.J. (2003) E-learning and Performance. In Piskurich, G.M. (2003) The AMA Handbook of E-learning: Effective Design, Implementation, and Technology Solutions, American Management Association, USA. p361-372

MacGillivray, A. (2006) A brief history of globalization, Avalon, New York, p4-7.

Mason, R.(1998) Globalising Education, Routledge, London. p4-8

Morrison, D. (2003) E-learning Strategies: How to get implementation and delivery right first time, John Wiley & Son Ltd, West Sussex

Niu, X. Z. (2003) Sun Tzu: From Ancient Military Treatise to New Strategy, Guang Xi Normal University Press, Gui Lin, p22.

Ooi, KB (2006) Era of Transition: Malaysia after Mahathir, Institute of Southeast Asian Studies, Singapore, p78.

Prokash, A. & Hart, J.A. (2000) Coping with Globalization, Routledge, London, p3.

Sawyer, R. (1994) Sun-Tzu The Art of War, Metro Books, USA.

Tan, W.H.; Zalizah Awang Long; Fauzan Shukor; & Richardson, S (2005) "In Search of Effectiveness Factors: A Case Study of the UniKL IIM E-Learning Portal," Proceedings of International Symposium of E-learning 2005, [CD-ROM], 25-26 Jul, 2005, Kota Kinabalu, Sabah, Malaysia.

Tye, B.B. & Tye, K.A. (1992) Global Education: A study of school change. State University of New York Press, Albany, p85-87

Wikipedia (2006) Globalization. [Online] Available: <http://en.wikipedia.org/wiki/Globalization> [2006, June 24]

Appendix A

Chapters of Sun-Tzu's 'The Art of War':

1. Laying Plans
2. Waging War
3. Attack by Stratagem
4. Tactical Dispositions
5. Energy
6. Weak Points & Strong Points
7. Maneuvering

8. Variation in Tactics
 9. The Army On The March
 10. Terrain
 11. The Nine Situations
 12. The Attack By Fire
 13. The Use of Spies
- Translated from the Chinese by Lionel Giles.