Institutionalization of Organizational Change: A Study of HRD Interventions in Singaporean, US, Japanese, and German Companies

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Institutionalizing organizational change has emerged as an issue among organization researchers and managers alike. Institutionalization of change is derived from change management theory in its emphasis on understanding the roots of organizational success and failure. The field of HRD appears particularly poised to help organizations institutionalize change. The purpose of this study was to identify what HRD interventions are being used to institutionalize organizational change in multinational corporations (MNCs). This paper presents empirical findings on the use of Cascade Training along with other methods, and the nature of significant differences found among companies from the four countries in their use of the HRD interventions.

Keywords: Institutionalizing change, Cascade Training, MNCs, Singapore

The purpose of this study was to identify what HRD interventions are being used to institutionalize organizational change in multinational corporations (MNCs) from four countries. *Institutionalizing* organizational change has emerged as an issue among organization researchers and managers alike (Kearney, 1999). Institutionalizing organizational change appears the best way to describe the relative perseverance of planned change efforts (Jacobs, 2002; Cummings & Worley, 1997). Perseverance means that the change effort has received sufficient acceptance by individuals and groups over a period of time to achieve the intended goals (Beer, Eisenstat, & Spector, 1990; Mirvis & Berg, 1977). Of concern here is whether the desired change becomes part of the organization's ongoing activities to replace what existed beforehand. Institutionalizing change is derived from change management theory in its emphasis on understanding the roots of organizational success and failure.

The field of human resource development appears particularly poised to help organizations institutionalize change. As shown in Figure 1, Jacobs (2003) introduced a framework for institutionalizing organizational change, adapted from the one presented by Cummings and Worley (1997). The framework presents how organization characteristics influence intervention characteristics and each of them in turn influences institutionalization processes, resulting in the desired institutionalization outcomes. The outcomes show the extent to which the change has taken hold and can, presumably, be sustained over a length of time. The framework, based on a systems theory perspective, suggests that the failure of change can occur because of inadequate or incomplete attention to any one or a combination of the organization characteristics, the intervention characteristics, or the institutionalization processes.

Following Cummings and Worley (1997), the framework posits that institutionalization processes infer a dependency relationship among employee competence, self-efficacy, commitment, incentives, and behavior modeling. More specifically, employees should first have the competence to meet the new expectations that, in turn, is dependent on employees having the self-efficacy to carry out the change. Self-efficacy is prerequisite for expressing the commitment behaviors, both words and actions, related to the change. Over time, commitment depends on the allocation of financial and non-financial incentives. Finally, institutionalization processes depend on individuals to model the change behaviors for others to observe and repeat (Washington, 2002; Klein, Wesson, Hollenbeck, & DeShon, 2001, Klein & Wright, 1994).

Research Problem

Institutionalization of organizational change has become an issue of increasing interest among organization researchers and managers alike. HRD has the potential to be useful in helping organizations implement planned change, primarily because institutionalization processes focus on key HRD concerns: employee competence, self-efficacy, commitment, incentives, and behavior modeling. These processes help determine the extent to which

institutionalization outcomes will be achieved. However, a review of the literature shows that few if any studies have been conducted to understand how HRD has actually been used to institutionalize organizational change. If HRD has potential for ensuring the institutionalization of change, and if few studies have been done to understand current practices that would help guide future practices, then more needs to be known about current institutionalization practices. Also, no empirical research could be identified that investigated this phenomenon so far. In addition, previous research suggests the importance of considering national culture in the study of management practices (Osman Gani, 2000; Hofstede, 1997).

The specific research questions of the study were the following:

1. What HRD interventions are being used to institutionalize organizational change?
2. Is Cascade Training being used as a specific means to implement institutionalization process?
3. Are there country-based differences in the ways multinational companies (MNCs) implement institutionalization practices?
4. Are there differences in the perceived effectiveness of the training methods used across countries?

Methodology

This study adopted an exploratory research design since no previous study on the issue of institutionalization of organizational change could be identified. The research was carried out in two phases in Singapore, where MNCs from various countries are operating for a long time as regional headquarters and are involved in making such decisions. First, interviews were carried out with human resource managers and general managers of twelve local Singaporean and multinational companies. In the second phase of the research, a questionnaire was administered to a sample of human resource managers and general managers. Managers from a total of 127 local and multinational companies (MNCs) from four countries participated in the study: Singapore, the United States, Japan, and Germany. The business sectors represented were: manufacturing, construction, finance and business, transportation, communication, commerce and information technology.

The sampling frame of the study was the "Singapore 1000" (2001/2002 edition), in which the top 1000 companies operating in Singapore with the highest sales turnover for the time period specified are listed in the annual publication. A sample of 411 companies from the four countries was selected from this sampling frame by using a proportionate stratified random sampling method.

The main source of data was from a survey conducted using a structured questionnaire, designed to solicit the opinion of HR or general managers from local as well as multinational corporations. The questionnaire method was chosen to enable a standardized format of collecting the necessary data required for this study. The questionnaire was designed based on literature reviews and the interviews with the managers. To ensure validity and reliability of the questionnaire, a pilot test was carried with ten of the 12 managers interviewed. The questionnaire was organized into four parts: Part I aimed to gather information about the general characteristics of the participating companies; Part II outlined the process of institutionalization of organizational change and is divided into six parts; and, Parts III and IV of the questionnaire respectively solicit job-specific as well as demographic information of the respondents.
In order to test for reliability, a test-retest method was used, and reliability coefficients (alpha) were computed for various section of questionnaire. There is relatively high level of internal consistency for most of the variables as shown by the alpha values ranging from 0.65 to 0.88.

A panel of experts consisting of the professors from Nanyang Business School, NTU, and HR and general managers of companies were consulted to test for content and face validity of the research instrument. Feedback from this panel was incorporated in finalizing the questionnaire before the final administration. In order to test for construct validity, factor analysis was conducted. Eigenvalue of more than one was used to identify the constructs consisting of the items with highest factor loadings and the items not loading properly in relevant construct were removed from the analysis

A combination of mail, fax, and E-mail administration methods were used for distributing the questionnaires. The research team called up each company and explained to the managers, the purpose of the study and requested for completing the questionnaire. A majority of the questionnaires were administered using mail administration, a procedure that holds advantages over others in terms of coverage, cost and confidentiality issues. A two-week deadline for the return of the questionnaires was set and return-envelopes were enclosed to encourage participation and thus, a higher response rate. Follow-up phone calls were made to non-returnees one week and two weeks after the deadline to serve as reminders. Due to initial low response rate, the research team followed a personal administration method after the two sets of follow-up calls. A total of 127 questionnaires were collected giving an overall response rate of 26.8%.

Results

The following are the results for each of the research questions of the study:

What HRD interventions are being used to institutionalize organizational change? Table 1 presents different types of training programs adopted by companies in dealing with organizational changes. It can be seen that the top five training programs most commonly adopted by companies are job-skills training, management training, IT training, certified technical training, and team-building courses.

Table 2 presents the training methods to deliver information about the organizational change. The most commonly used training methods are on-the-job-training (OJT), conference/seminar/workshop, classroom/lecture, mentoring, and computer-based training. Table 2 also presents the distribution of the effectiveness of the training methods, where OJT was found to be more effective than others.

*Is Cascade Training being used as a specific means to implement institutionalization process? (*For this study**,** Cascade Training has been defined as the process of providing critical change-related information that will flow through the organization in a planned way to facilitate subsequent parts of the institutionalization process.) The results generally showed that most respondents are not aware of cascade training as a method of change management. About 78% of the respondents indicated that they have not heard of the term although some organizations practiced it unknowingly. Table 3 shows a breakdown of the responses according to company ownership. A cross-tabulation of the results showed that the largest number of respondents who have heard of cascade training came from middle-level managers. An analysis by business sector showed that the manufacturing sector had most respondents who have heard of cascade training. Analyses by functions showed that the human resources function had the most number of respondents who have heard of cascade training, followed by general management Finally, a cross-tabulation on awareness by country showed that USA and German managers at 25 percent, while Japan and Singapore managers were 15.2 percent and 23.1 percent respectively.

The results also showed that 65.2 percent of the respondents who have knowledge of cascade training expressed interest in using this intervention. The results also showed that managers from USA and Singapore organizations were the most interested in adopting cascade training, once they understood the concept. Singapore, Japan and German managers rate the factor, “Top management support” the most important factor that would influence their decision to adopt cascade training. On the other hand, respondents from the USA rate the factor “Tested and proven successful” as the highest. Finally, the results showed that potential influences in adopting cascade training included the need for “faster dissemination of information” and “reinforce one’s learning”.

Are there country-based differences in the ways multinational companies (MNCs) implement institutionalization practices? Table 4 presents the factors considered important to implement cascade training by organizations from different country of ownership. The results showed that organizations from Singapore, Japan and Germany rated the factor, “Top management support” significantly higher in terms of influencing their decision to adopt cascade training. On the other hand, organizations from the USA rated the factor “tested and proven successful” significantly higher..

Table 5 presents the perceived effectiveness of initiatives having different country ownership. The results showed that “Communication” was rated significantly by respondents from all countries. However, only companies from Singapore and Germany rated “Education” as being significant and companies from USA rated “Participation and involvement” as being significant.

Table 6 presents the training methods used most frequently to implement change by country of ownership. The results showed that “On-the-job training”, “Classroom”, and “Seminar/Workshop” were rated significantly by respondents from the four countries. On-the-job training had the highest mean across all four countries of ownership.

Table 7 presents the strategies used by country of ownership. The results showed that countries differed across all approaches presented to respondents. The results showed that “Communication” was the highest rated approach across all respondents.

Are there differences in the perceived effectiveness of the training methods used across countries? Table 8 presents the perceived effectiveness of differing training methods across countries. The results showed that on-the-job training was significantly rated as the most effective training approach across all four counties. Self-instructional training was significantly rated the lowest among three of the four countries. Significant differences were also found in the degree of effectiveness for all the training methods used across the four countries.

Summary and Discussion

In general, the results showed that in the institutionalization process, communication and training initiatives play more significant roles over other change management strategies. With regards to the new concept of cascade training, a general lack of awareness was been found, although many companies are using it in various ways. Socio-cultural issues have also been shown to have significant influences on several aspects of the change management process. In determining the effectiveness of the institutionalization of change, several types of training programs were found to play significant roles. This study provides insights into the different strategies of institutionalizing changes; the potential of using cascade training as a means of institutionalizing change, as well as the influence of various cultural, organizational and demographical factors on the institutionalization process. In this study, respondents were exposed to a wider range of strategies and initiatives available to effectively manage changes in their organizations, and were asked to identify important influencing factors, and cultural differences were found to play significant role in this regard. The differences in the degree of effectiveness of the training programs can also be explained by the cultural factors of the four contrasting socio-cultural environments.

Overall, training interventions seems to be more effective in institutionalization of organizational changes compared to non-training interventions. This signifies the role of HRD in organizations from all national cultural background. Organizations are using a wide range of strategies and training methods to institutionalize changes, however, they have yet to explore the other areas of HRD from strategic perspective (such as career development, organizational learning). Organizations should review existing strategies and explore the ways to make HRD strategies more integrated with other organizational functions to ensure better success in institutionalization of change.

Although most respondents did not seem to have known about Cascade Training, it was found to be an effective method in faster dissemination of information and knowledge transfer needed for implementing the changes. Thus, managers should study this method and adopt it in their organizations for more effective institutionalization of change. This study involved respondents from organizations originating from only four countries, namely USA, Singapore, Germany and Japan. However, as the environment is ever changing, more countries are increasing their investment in Singapore and in other countries of Asia. Future research could involve MNCs from more countries and similarities and differences found from this study could then be compound so that a broader conceptual framework could be developed.

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Figure 1. Institutionalization of Change Framework

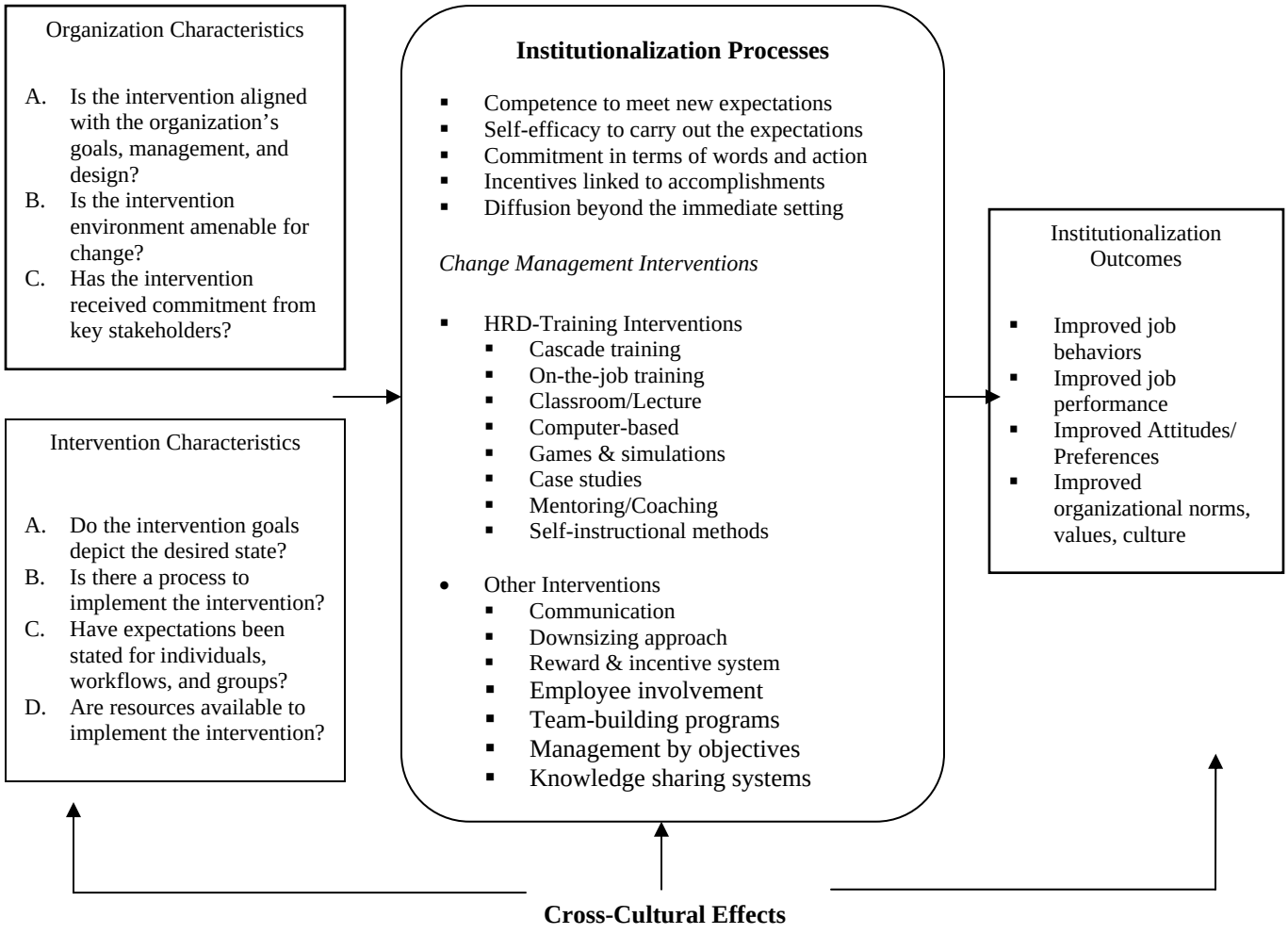

Table 1. *Types of Training Programs*

Training Programs	*N*	*Mean*	*S.D.*
Job skills training	127	4.10	0.83
Management training	127	3.50	1.03
IT training	127	3.31	0.94
Certified technical training	127	3.24	0.91
Team-building courses	127	3.14	1.21
Communication skills training	127	3.03	1.01
Sales & customer relations training	127	2.80	1.08
New product training	127	2.72	1.15
Situational leadership training	127	2.68	1.02
Production & quality training	127	2.67	0.98
Attitude/motivational training	127	2.41	0.89
Employee health & wellness training	127	2.17	0.78
Clerical & administrative training	127	2.10	0.81
Higher learning courses	127	2.08	0.96

(1=Least Frequent…5=Most Frequent)

Table 2. *Types of Training Methods*

Training methods	*N*	*Frequency*		*Effectiveness*	
		Mean	*S.D.*	*Mean*	*S.D.*
On-the-job training	127	4.44	0.66	4.48	0.60
Conference/Seminar/Workshop	127	3.67	0.92	3.76	0.80
Classroom/Lecture	127	3.54	1.06	3.55	1.13
Mentoring	127	2.99	1.19	3.17	1.05
Computer-based training	127	2.76	1.10	2.94	1.02
Audiovisuals	127	2.62	1.08	2.83	1.07
Self instructional training	127	2.56	1.14	2.69	1.03
Online training	127	2.49	1.02	2.62	0.93
Case studies	127	2.20	1.00	2.44	1.03
Games & Simulations	127	1.98	0.89	2.28	0.99
Adventure/ Outdoor learning	127	1.94	0.83	2.23	1.02

(1=Least Frequent/Effective…5=Most Frequent/Effective)

Table 3. *Degree of Interest in Cascade Training*

		Singapore		USA		Germany		Japan	
		N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Heard of	Yes	9	23.1	7	25.0	7	25.9	5	15.2
	No	30	76.9	21	75.0	20	74.1	28	84.9
Interest in adopting	Yes	6	85.7	6	100.0	2	40.0	1	20.0
	No	1	14.3	0		3	60.0	4	80.0

Table 4. *Summary Results of ANOVA on Factors to Adopt Cascade Training by Company Ownership*

Factors	Singapore			USA			Japan			Germany			f-value	Sig
	N	M	SD	N	M	SD	N	M	SD	N	M	SD		
Tested and proven successful	39	3.49	0.72	28	4.18	0.82	33	3.58	1.00	27	4.04	0.71	5.418*	0.002
Effective shown by research	39	3.44	0.60	28	4.00	0.98	33	2.82	0.95	27	3.96	0.81	13.563*	0.000
Top management support	39	3.72	0.89	28	4.11	0.69	33	4.12	0.93	27	4.19	0.68	2.409	0.070
Business expansion	39	3.62	1.04	28	3.61	0.83	33	3.67	0.74	27	3.81	0.83	0.341	0.795
Company's support system	39	3.51	0.89	28	3.93	0.81	33	3.48	0.87	27	3.52	0.64	1.954	0.124
Not applicable	39	1.41	0.75	28	1.54	0.58	31	1.35	0.95	27	1.04	0.19	2.586*	0.056
Satisfied with current method	39	1.41	0.75	28	1.86	0.89	31	1.42	0.67	27	1.04	0.19	6.535*	0.000

(1 = Least important……5 = Most important) * Significant at α=0.05

Table 5. *Summary Results of ANOVA on Effectiveness of Initiatives by Company Ownership*

Initiatives	Singapore			USA			Japan			Germany			f-value	Sig
	N	M	SD	N	M	SD	N	M	SD	N	M	SD		
Education	39	3.79	0.92	28	4.14	0.80	33	3.09	0.84	27	4.15	0.60	11.506*	0.000
Communication	39	4.23	0.71	28	4.46	0.51	33	3.91	0.68	27	4.59	0.50	7.151*	0.000
Creating a vision	39	3.56	0.72	28	4.25	0.70	33	3.36	0.93	27	3.96	0.76	7.879*	0.000
Participation and involvement	39	3.62	0.67	28	4.32	0.48	33	3.45	0.83	27	3.52	0.58	10.548*	0.000
Facilitation and support	39	3.54	0.56	28	4.18	0.55	33	3.24	0.94	27	3.37	0.57	10.970*	0.000
Negotiation and agreement	39	2.90	0.88	28	4.07	0.72	33	3.33	0.78	27	2.70	0.67	17.614*	0.000
Reward system	39	3.26	1.07	28	3.61	0.63	33	3.00	0.97	27	2.37	0.84	9.129*	0.000
Explicit and implicit coercion	39	2.46	0.88	28	2.89	0.83	33	2.64	0.65	27	3.26	0.76	5.941*	0.001
Stress management	39	2.41	0.94	28	3.14	0.80	33	2.73	0.91	27	2.26	0.66	6.138*	0.001
Redundancy	39	2.18	0.94	28	2.71	0.94	33	2.52	0.94	27	2.44	0.89	1.904	0.132

(1 = Least important……5 = Most important) * Significant at α=0.05

Table 6. *Summary Results of ANOVA on Training Methods by Company Ownership*

Training methods used	Singapore			USA			Japan			Germany			f-value	Sig
	N	M	SD	N	M	SD	N	M	SD	N	M	SD		
On-the-job training	39	4.38	0.71	28	4.57	0.50	33	4.18	0.73	27	4.70	0.54	3.790*	0.012
Classroom	39	3.51	1.12	28	4.04	0.96	33	2.82	0.77	27	3.96	0.90	10.537*	0.000
Seminar/Workshop	39	3.67	0.98	28	4.00	0.90	33	3.24	0.94	27	3.85	0.60	4.254*	0.007
Audiovisuals	39	2.10	1.10	28	3.07	0.90	33	2.06	0.75	27	3.59	0.57	22.725*	0.000
Computer-based training	39	2.15	1.16	28	3.14	1.01	33	2.42	0.90	27	3.63	0.49	15.744*	0.000
Online training	39	1.92	1.01	28	2.82	0.95	33	2.61	1.03	27	2.81	0.74	6.993*	0.000
Games & Simulations	39	1.85	0.96	28	2.54	0.88	33	1.73	0.80	27	1.89	0.64	5.486*	0.001
Case studies	39	2.03	1.01	28	2.54	0.88	33	2.30	1.19	27	1.96	0.76	2.123	0.101
Mentoring	39	3.23	1.42	28	3.07	0.81	33	3.30	1.24	27	2.19	0.68	6.096*	0.001
Adventure/Outdoor learning	39	1.74	0.75	28	2.64	0.83	33	1.76	0.71	27	1.70	0.72	10.576*	0.000
Self instructional training	39	2.10	0.97	28	3.11	1.03	33	3.24	1.03	27	1.81	0.83	16.521*	0.000

(1 = Least important……5 = Most important) * Significant at α=0.05

Table 7. *Summary Results of ANOVA on Various Strategies Used by Company Ownership*

Strategies used	Singapore			USA			Japan			Germany			f-value	Sig
	N	M	SD	N	M	SD	N	M	SD	N	M	SD		
Communication	39	4.28	0.69	28	4.68	0.55	33	4.06	0.86	27	4.56	0.70	4.625*	0.004
Adopt a "stick" approach	39	2.10	0.68	28	2.68	0.95	33	2.33	0.82	27	3.89	0.93	26.990*	0.000
Designing a new reward system	39	2.33	0.84	28	2.86	0.71	33	2.70	0.68	27	3.59	0.75	15.250*	0.000
Package for early retirement	39	1.87	0.73	28	2.36	0.83	33	1.58	0.61	27	1.48	0.64	8.818*	0.000
Knowledge sharing system	39	3.36	1.04	28	3.25	0.89	33	2.42	0.90	27	3.19	0.74	7.312*	0.000

(1 = Least important……5 = Most important) * Significant at α=0.05

Table 8. *Summary Results of ANOVA on the Effectiveness of Training Methods used by Company Ownership*

Training methods used	Singapore			USA			Japan			Germany			f-value	Sig
	N	M	SD	N	M	SD	N	M	SD	N	M	SD		
On-the-job training	39	4.41	0.68	28	4.57	0.50	33	4.27	0.63	27	4.74	0.45	3.588*	0.016
Classroom	39	3.72	1.10	28	4.11	0.79	33	2.58	0.97	27	3.93	0.92	16.090*	0.000
Seminar/Workshop	39	3.79	0.95	28	4.18	0.67	33	3.33	0.69	27	3.78	0.58	6.381*	0.000
Audiovisuals	39	2.51	1.12	28	3.46	0.92	33	2.09	0.72	27	3.56	0.58	20.233*	0.000
Computer-based training	39	2.64	1.09	28	3.43	0.88	33	2.33	0.82	27	3.63	0.57	15.098*	0.000
Online training	39	2.46	1.05	28	3.14	0.89	33	2.42	1.20	27	2.85	0.72	3.616*	0.015
Games & Simulations	39	2.38	1.04	28	3.11	0.79	33	1.70	0.81	27	1.74	0.71	17.063*	0.000
Case studies	39	2.51	1.00	28	3.14	0.80	33	2.33	1.02	27	1.74	0.81	10.713*	0.000
Mentoring	39	3.54	1.07	28	3.39	0.69	33	3.42	0.97	27	2.11	0.70	16.173*	0.000
Adventure/Outdoor learning	39	2.36	0.93	28	3.18	0.77	33	1.85	0.83	27	1.74	0.76	17.462*	0.000
Self instructional training	39	2.36	0.90	28	3.14	0.76	33	3.00	0.79	27	2.00	0.78	12.665*	0.000

(1 = Least effective……5 = Most effective) * Significant at α=0.05