

**CANADIAN AND JAPANESE SECONDARY
TEACHERS' VALUES:
A CROSS-CULTURAL COMPARATIVE STUDY**

中等学校教員の価値意識：
カナダと日本の比較文化的調査

Edward R. Howe^{*}
エドワード・ハウ

PhD Candidate, The Ontario Institute for Studies in Education
University of Toronto
トロント大学オンタリオ教育研究所博士課程

Canadian and Japanese secondary teachers' values were compared. Teachers identified significant student learning outcomes; indicated upon successful completion of high school what students should be able to do; and provided descriptions of outstanding students. Significant cross-cultural differences and mutual values were found. Common themes included developing cognitive abilities, responsibility, social skills, independence, knowledge, work ethic, life skills, learning skills and positive attitudes. However, Canadian teachers tended to advocate getting students to think, solve problems and to work hard, while Japanese teachers stressed the importance of building relationships and learning a sense of responsibility. Further analysis elicited the following questions—How can researchers adequately take into account the cultural context of teaching and learning? Can comparative education find a suitable methodology to overcome the barriers of language? Suggestions were made for further comparative ethnographic studies in light of emerging sociocultural theory.

本稿はカナダと日本の中等学校の教師の価値意識を比較したものである。生徒の学習成果とは何か、卒業と認めるためには生徒は何かができるようになっていなければならないか、優れた生徒とはどのような生徒をさすのかを教師たちに回答

^{*} The correspondence address to Edward R. Howe is: Conforu Omiya Uetake #2-103, 1-362 Uetake-cho, Kita-ku, Saitama-shi, Saitama, 331-0813 Japan; his e-mail address is ehowe@oise.utoronto.ca.

してもらった。異文化比較学的に見て有意の差異の認められる項目と、共通の項目のあることが明らかにされた。認知的能力、責任感、社会的技能、自立心、知識、労働倫理、生活技能、積極的態度の育成は共通にあげられたテーマであった。しかし、カナダの教師は、考え、問題を解決し、一生懸命働くように生徒を育成することが大切であるとする傾向があるのに対し、日本の教師は、人間関係の構築と責任意識の育成が重要であると強調した。これらの分析は、いかにしたら研究者は教授・学習の文化的文脈を十分に考慮に入れることができるであろうかという問題を提起した。比較教育学は言語の壁を克服するのに適切な方法を見出すことができるであろうか。最近の社会文化論に照らして比較民族学的研究に資するためのいくつかの提案を行った。

INTRODUCTION

In the last decade, Japan and several Canadian Provinces, most notably British Columbia (BC), have implemented significant education reforms.¹ Through comparative study of these initiatives, improvements can be made to enhance teaching and learning in these two regions and elsewhere. British Columbia's Ministry of Education (2002) has mandated all curricula must emphasize problem solving and critical thinking, literacy and communication, teamwork and information technology. Similarly, Japan's Ministry of Education (Monbusho, 2002) has recommended reforms including an emphasis on individuality, cultivation of creativity, thinking ability and power of expression, humanization of the educational environment and coping with internationalization. However, to achieve any degree of success in such comprehensive educational reforms, all stakeholders should be surveyed regarding what matters most to them. Teachers and students must be at the centre of any reform efforts in education. Thus, with respect to the foregoing, this study provides an in-depth analysis of teachers' values associated with exemplary student learning outcomes and attributes while providing a framework for further research, discussion and comparison.

¹ For a comprehensive introduction to Japanese education see Rohlen (1998); Rohlen & LeTendre (1996); Takakura & Murata (1998); cf. Yoneyama (1999). For a historical overview of teaching in British Columbia, see Barman, Sutherland & Wilson (1995) and for an international comparative look at Canadian teachers see Goodson (1995).

Japanese education has been the focal point of several well-known ethnographic studies (Benjamin, 1997; LeTendre, 2000; Okano, 1993; Rohlen, 1983; Shimahara & Sakai, 1995; Singleton, 1967). However, perhaps due to the difficult nature of conducting cross-cultural research, the few international comparative studies focusing on teachers have been large-scale efforts done mostly by groups of western researchers with significant financial support from governments and large corporations. The International Association for the Evaluation of Educational Achievement (IEA) studies including the Third International Mathematics and Science Study (TIMSS) offer mere snapshots of teachers' values, perspectives and thinking. Another salient example, and perhaps the most comprehensive international study of teacher education was conducted by the U.S. Department of Education in order to investigate teacher induction in Pacific Rim nations (Moskowitz & Stephens, 1997). However, this study only scratched the surface of teacher induction within each nation. For instance, Canada's provinces have radically different education systems yet the study only surveyed Quebec's teachers.

Most comparative research into Japan's teachers has been from an American perspective (see for example, Britton, Raizen, Paine, & Huntley, 2000; Cobb, 1999; Cobb, Darling-Hammond, & Murangi, 1995; Hawley, 1990; Stevenson & Stigler, 1992). Tetsuya Kobayashi's (1993) work offers a refreshing comparative look at teachers from a Japanese perspective, while Shimahara and Sakai (1995) provide a cross-cultural and balanced analysis from both U.S. and Japanese educators. I share Hayhoe's (2001) vision for teacher education—a fusion between Eastern and Western thinking. With over ten years of secondary school teaching experience in both Canada and Japan, I am uniquely positioned to offer a cross-cultural insider's perspective.

METHOD

This study builds from my MA thesis (Howe, 2000), designed to compare and contrast BC and Japanese secondary school teachers' conceptions of critical thinking across the dimensions of culture, subject area, experience, age and gender. To facilitate this comparison, a two-part survey instrument was designed. The second part of the survey instrument included several open-ended questions associated with teachers' values not included in the thesis analysis. Thus, teacher responses to the following three questions provided data for this paper:

Identify the five most significant learning outcomes attained by your students:

Upon successful completion of high school students should be able to:

What five words best describe an outstanding student?

The sample originally consisted of 159 teachers from ten public secondary schools in BC and Japan. However, only 158 teachers provided data for much of the analysis reported here, as one BC teacher didn't answer these three questions. Six comprehensive secondary schools (grades 8–12) were selected from the Lower Mainland of BC. Three high schools (elite academic, comprehensive and technical vocational) and one middle school (general academic) were chosen from the Kanto region of Japan. Selective sampling was used to ensure a range of teachers of different subject backgrounds, ages and experience in order to facilitate comparison. Of the 71 BC teachers surveyed there were 38 men and 33 women. Of the 88 Japanese teachers surveyed there were 75 men and 13 women. The research was conducted from June–December 1998 in BC and March 1999 in Japan. In 2002 data obtained from the three questions was used to investigate the overall sense of secondary teachers' values and to compare Canadian and Japanese teachers' notions of outstanding student attributes and significant learning outcomes.

TEACHER CHARACTERISTICS

Table 1 summarizes the characteristics of the Canadian and Japanese teachers surveyed. Of the 159 teachers surveyed, the number of men ($n=113$) was much greater than the number of women ($n=46$). While the number of Canadian men ($n=38$) and women ($n=33$) teachers surveyed are nearly equal, 85 percent of the Japanese teachers surveyed are men. However, these demographics are characteristic of high schools within each region. At the time of this study, only 24 percent of the secondary school teachers in Japan were female (Monbusho, 1997) while in BC the number was 41.4 percent (British Columbia Teachers' Federation, 1998).

Table 1 —Characteristics of Selected Teachers in Canadian and Japanese Secondary Schools

	n	%	n	%	n	%	t-value	p
Gender	Total		Canada		Japan			
Women	46	28.9	33	46.0	13	15.0		
Men	113	71.1	38	54.0	75	85.0		
Total	159	100.0	71	44.7	88	55.3	4.65	.000
Age	n	%	n	%	n	%		
20–29 years old	22	13.8	15	21.1	7	8.0		
30–39 years old	51	32.1	22	30.0	29	33.0		
40–49 years old	49	30.8	18	25.4	31	35.2		
50+ years old	37	23.3	16	22.5	21	23.9		
Total	Mean	S.D.	Mean	S.D.	Mean	S.D.	2.17	.032
	41.40	9.55	39.59	10.10	42.85	8.92		
Teaching experience	n	%	n	%	n	%		
<5 years	27	17.0	20	28.2	7	8.0		
5–9 years	19	11.9	13	18.3	6	6.8		
10–14 years	26	16.0	8	11.3	18	20.5		
15–19 years	32	20.1	9	12.7	23	26.1		
20–24 years	19	11.9	6	8.5	13	14.8		
25–29 years	18	11.3	10	14.1	8	9.1		
30–34 years	14	8.8	5	7.0	9	10.2		
35 or more years	4	2.5	0	0.0	4	4.5		
Total	Mean	S.D.	Mean	S.D.	Mean	S.D.	3.33	.001
	15.93	9.90	13.11	10.30	18.20	9.01		
Subject Areas	n	%	n	%	n	%		
Language Arts	24	15.1	13	18.3	11	12.5		
Math	23	14.5	13	18.3	10	11.4		
Science	32	20.1	19	26.8	13	14.8		
Social Studies	19	11.9	9	12.7	10	11.4		
Fine Art	8	5.0	3	4.2	5	5.7		
Foreign Languages	15	9.4	5	7.0	10	11.4		
Other	38	23.9	9	12.7	29	33.0		

¹ Percent by column.

² Denotes a percent of the total sample.

Both BC and Japan's teaching populations are aging reflecting broader national demographic trends. With new, younger teachers replacing those retiring, it is not surprising that 45.9 percent of the teachers surveyed are in their twenties and thirties while 23.3 percent are in their fifties and sixties (see Table 1). The mean age of secondary

school teachers in this study was 42.85 years old for Japan and 39.59 years old for BC. These statistics compare well with data available from the Monbusho (1997) and BC Teachers' Federation (1998) giving the average ages as 41.6 and 43.0 (including administrators) respectively. Japanese teachers are proportionally older than BC teachers—both in this sample and in the teaching population as a whole.

Japanese teachers had more career experience (18.2 years) than Canadian teachers (13.1 years). This 5-year difference was statistically significant ($p < .001$). At any given age, Japanese teachers are likely to have more career experience than Canadian teachers. This is because Japanese teachers tend to begin university at age 18 and then go straight into teaching upon graduation so that by the time a teacher is in their mid-thirties they have at least ten years of career experience.

Teachers in Language Arts (24), Math (23), Science (32), Social Studies (19), Fine Arts (8) and Foreign Language (15) represented approximately 75 percent of the respondents. A number of subject areas less frequently identified were placed into the category "Other" in Table 1. These included seven BC subjects: Business Education (3); Computer Science (3); Industrial Education (5); Special Education (3); Counseling (1); Career Education (1); Learning Assistance (1) and six Japanese subjects: Agriculture (6); Home Economics (4); Technology Education (5); Architecture (2); Metalwork (1); Nursing (2). The specialization of Japanese subject areas is due to the selective nature of Japanese academic and vocational high schools, while the diversity of BC subject areas reflects greater course selection at BC's comprehensive high schools.

RESULTS: TEACHERS' VALUES

After analyzing the data in search of common patterns and interrelationships nine main themes were disseminated from teachers' responses to the three survey questions. Teachers shared other common values, however these themes were the most prevalent (numbers in brackets are a tally of the total number of times mentioned). Listed in rank-order they are as follows:

1. **Cognitive Abilities (325):** thinking (101); creativity (52); problem solving (50)
2. **Responsibility/Morals/Ethics (231):** responsibility (57)
3. **Social Skills (200):** cooperation (73); social (49); human/social relationships (34); making friends (12)
4. **Independence (168):** independence (58); act on their own (51); autonomy (30)
5. **Knowledge (110):** including basic (25); content (13); subject (12); for life in general (7)
6. **Work Ethic (109):** motivated (20); hard-working (16)
7. **Career/Life Skills (75):** preparation for future job/path (20); goal setting (18); leadership (9); post-secondary preparation (6)
8. **Learning Skills (49):** study skills (12); life-long learning (10)
9. **Positive Attitude (43):** positive (27), cheerful (11), happy (4)

The top three themes were mentioned by approximately three-quarters of the teachers surveyed. The most ubiquitous theme was Cognitive Abilities including creative, critical, independent, logical and higher-order thinking. Next was Responsibility/Morals/Ethics incorporating responsibility, fairness, empathy, conscientious, thoughtful, kind, and considerate and other terms relating to manners, respect, morals and ethics. A few teachers indicated ecological awareness and “thinking globally while acting locally” as important lessons for high school students. The third most prevalent theme was Social Skills including cooperation, building human/social relationships and making friends. Another popular theme endorsed by 60 percent of teachers was Independence including terms such as autonomy, independence, express/think/act on their own, self-discipline and self-directed. Knowledge was mentioned by 56 percent of the teachers surveyed. Work Ethic (hard working, dedicated, diligent, persistent, motivated, and making an effort) was endorsed by just over half the teachers surveyed. Career/Life Skills was endorsed by 37 percent of the teachers while Learning Skills figured prominently in 25 percent of the teacher responses to significant student learning outcomes and outstanding student attributes. Finally, 22 percent of the teachers (almost entirely Japanese) used terms such as positive, cheerful and happy. These were labeled Positive Attitude.

In addition, but to a lesser degree, a wide variety of behavioral objectives and personal characteristics (*inter alia*—intelligent, personality, humour, persistence, well rounded, and open-minded) were also mentioned by more than a few teachers. While these terms were frequently used to describe outstanding students, occasionally they were also found in response to learning outcomes. Overall, there was considerable overlap in responses to all three questions. To better understand the nature of secondary teachers' values in comparative perspective, the percentage of Canadian and Japanese teachers endorsing each of the nine themes were compared across the dimensions of culture, gender, age, teaching experience and subject area.

CANADIAN AND JAPANESE TEACHERS IN COMPARISON

As shown in Figure 1, there were significant differences between the percentage of Canadian and Japanese secondary teachers, supporting six of the nine themes. Cognitive Abilities and Work Ethic and were strongly endorsed by Canadian teachers while Responsibility/Morals/Ethics, Social Skills, Knowledge and Positive Attitude were of greater importance to Japanese teachers. The most significant student learning outcomes from the perspective of Canadian teachers was getting students to think, solve problems and to work hard. On the other hand, Japanese teachers felt students needed to build human relationships and to learn a sense of responsibility. Nearly all the Canadian teachers mentioned terms relating to Cognitive Abilities as significant learning outcomes. In contrast, Responsibility/Morals/Ethics and Social Skills were supported by most Japanese teachers. Canadian teachers tended to favour Cognitive Abilities over Social Skills or other learning outcomes while Japanese teachers mentioned responsibility, morals, ethics and human relationships more frequently than Cognitive Abilities. Other interesting differences were found in the themes of Independence and Work Ethic. A higher percentage of Japanese teachers indicated Independence was an important learning outcome and student attribute. A significantly higher percentage of Canadian teachers mentioned Work Ethic. Japanese teachers valued Positive Attitude by indicating cheerful, happy and positive as responses to outstanding student attributes as well as learning outcomes.

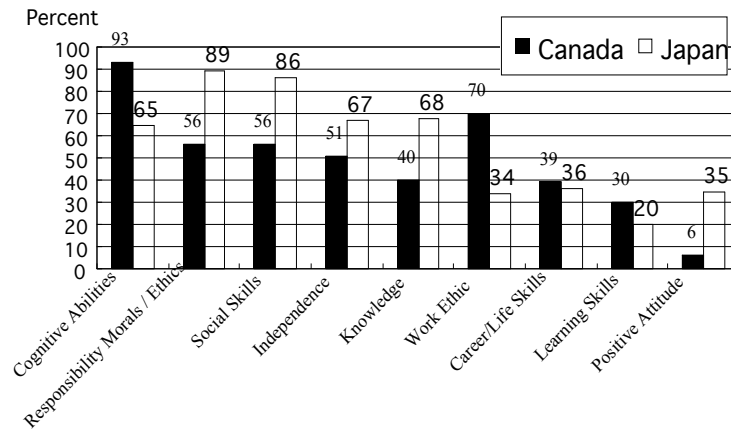


Figure 1 *Percentage of Teachers Endorsing Each of the Major Themes*

GENDER

Looking at the sample as a whole, there were few substantial differences based on gender (see Table 2). However, with 33 Canadian women and only 13 Japanese women in the sample of teachers, themes that were particularly strong for Canadian teachers would tend to be overly represented by Canadian women teachers' values. For example, Cognitive Abilities, Work Ethic, and Learning Skills each had support from a significantly greater proportion of Canadian teachers. Thus, looking at Canadian and Japanese teachers separately with respect to gender differences facilitates better interpretation of the data.

Table 2 Percentage of Teachers Endorsing Themes for Student Learning Outcomes and Attributes

	Total				Men	Women
	Total	Canada	Japan	p		
Cognitive Abilities	.77	.93	.65	.000	.75	.82
Responsibility/Morals/Ethics	.74	.56	.89	.000	.78	.64
Social Skills	.73	.56	.86	.000	.75	.67
Independence	.60	.51	.67		.61	.58
Knowledge	.56	.40	.68	.008	.58	.49
Work Ethic	.50	.70	.34	.000	.48	.56
Career/Life Skills	.37	.39	.36		.34	.47
Learning Skills	.25	.30	.20		.19	.40
Positive Attitude	.22	.06	.35	.000	.25	.16

Note: For Canadian teachers, n=70 (38 men; 32 women) while for Japanese teachers, n=88 (75 men; 13 women)
p values are based on 2-tailed t-test.

	Canada		Japan	
	Men	Women	Men	Women
Cognitive Abilities	.92	.94	.67	.54
Responsibility/Morals/Ethics	.55	.56	.89	.85
Social Skills	.50	.63	.88	.77
Independence	.53	.50	.65	.77
Knowledge	.39	.41	.68	.69
Work Ethic	.76	.63	.33	.38
Career/Life Skills	.32	.47	.35	.46
Learning Skills	.13	.50	.21	.15
Positive Attitude	.05	.06	.35	.38

If the sample is split first by culture and then by gender, an entirely different picture emerges (see Table 2). While there appear to be moderate gender differences for both Canadian and Japanese teachers for four of the nine themes, only Learning Skills for Canadian teachers was statistically significant ($p < .001$). For Canadian teachers, women showed greater support for Social Skills, Career/Life Skills and Learning Skills while men endorsed Work Ethic more strongly. On the other hand, a larger percentage of Japanese men mentioned Social Skills, than either Japanese *or* Canadian women. While Japanese men and women showed nearly equal support for themes of Knowledge, Responsibility, Work Ethic and Positive Attitude, Japan's teachers showed clear gender differences for Cognitive Abilities, Social Skills, Career/Life Skills and Learning Skills.

Analysis of gender differences based on whether Canadian and Japanese teachers were grouped together raises questions pertaining to the fragile nature of relationships between 'variables' and the dangers of adhering to the traditional units of analysis. Looking at gender separately from culture elicits different findings. Significant and even subtler gender differences are overwhelmed by more substantial cultural differences among teachers unless the cultural context is taken into account.

AGE AND CAREER EXPERIENCE

Teacher values were relatively consistent over the range of ages. However, several themes including Cognitive Abilities, Independence and Career/Life Skills, showed a gradual decline in support with increasing age. On the other hand, some themes had marked changes in support from the most senior teachers over fifty years old. For example, teacher support for Social Skills increased with respect to age from 64 percent to 82 percent for teachers in their twenties, thirties and forties only to fall back to 64 percent for teachers over fifty years old. Learning Skills decreased steadily from a high of 41 percent for teachers in their twenties to 16 percent for teachers in their forties. It then increased to 28 percent for the most senior teachers. Support for Positive Attitude increased to a high of 31 percent for teachers in their forties only to drop to a low of 11 percent for teachers over fifty years old. Caution must be advised in the interpretation of these results however due to the small sample sizes (see Table 1).

There was considerably more variation in the percentage of teachers endorsing each of the nine major themes with respect to teaching experience compared to the data for age. This can be attributed to the smaller groups of teachers in each of the five-year intervals of teaching experience (see Table 1). The rationale for grouping the teachers in this way stems from personal teaching experience and widely held beliefs about teacher acculturation. It takes at least 5 years to progress from a novice to a knowledgeable professional. Most teacher salary scales in British Columbia increase steadily for ten years reaching a maximum at ten to twelve years experience with a Master's degree. While most teachers in this sample had over ten years experience, a significant number of teachers (27) had less than five years teaching experience.

Thus it was arbitrarily decided to use 5-year intervals. Some of the dramatic variations can be attributed to the relative numbers of Canadian and Japanese teachers within each experience cohort. For example, a precipitous drop in support by senior teachers for Work Ethic from 83 to 11 percent, can be explained by the larger contingent of Japanese teachers (13) compared to Canadian teachers (5) with over 30 years experience (recall that overall only 34 percent of Japanese teachers supported this theme compared to 70 percent of Canadian teachers).

SUBJECT AREA

Teachers of Language Arts, Math, Science, Social Studies and Foreign Languages represented over 70 percent of the entire sample. Science and Math teachers were highly supportive of Cognitive Abilities while Language Arts and Foreign Language teachers tended to choose Social Skills. Interestingly, all of the Social Studies teachers (19) endorsed Cognitive Abilities. Also, Foreign Language teachers were more supportive of Responsibilities/Morals/Ethics. Again, this can be explained by culture, as there were ten Japanese and only four Canadian Foreign Language teachers (n=14 due to one incomplete survey). Recall that Japanese teachers were strong supporters (89 percent) of Responsibility/Morals/ Ethics as it is part of their curriculum while only 56 percent of the Canadian teachers endorsed this theme. In summary, it would appear that irrespective of gender, age, teaching experience, and subject area, cultural factors figure most prominently in this analysis of teacher values.

DISCUSSION

The most significant findings here are the cross-cultural differences in teacher thinking, values and perceptions. Originally, when this research was undertaken, I held the notion that teachers were the same throughout the world. "Surely, subject teachers share similar values with colleagues from abroad...and besides, how different could the teaching of various subjects be?" or so I thought. While I still believe this to a certain extent, I have a profound new way of looking at the world of teachers through multiple lenses. Culture permeates every nook and cranny of curriculum, teaching and learning. It seems impossible to isolate other variables.

How can researchers adequately take into account the cultural context of teaching and learning? Can comparative education find a suitable methodology to overcome the barriers of language? Before opening up this discussion, I would like to share some insights I have gained through my thesis work and subsequent reading.

Howe (2000) found significant differences in Canadian and Japanese secondary teachers' conceptions of critical thinking. Nearly 97 percent of the 159 teachers could correctly be classified on the basis of culture. Definers of critical thinking were selected by Canadian and Japanese teachers from a deck of 50 critical thinking cards, with Japanese on one side and English on the other. A number of critical thinking definers showed a marked contrast: *Decision making* was chosen by 70 percent of the Canadian teachers but only 25 percent of the Japanese teachers; *Divergent thinking* was chosen by 63 percent and 25 percent respectively. Canadian teachers conceptualized critical thinking through definers such as *Decision making*, *Problem solving*, *Divergent thinking*, *Metacognitive skills*, *Higher order thinking*, *Deductive reasoning*, and *Identifying/removing bias* embodied in the factors of *Cognitive Strategizing* and *Relevance*. On the other hand, Japanese teachers conceptualized critical thinking through definers such as *Fairness*, *Adequacy*, *Objective*, *Consistency*, *Completeness*, *Precision*, and *Specificity* exemplified by the factors of *Conscientious Judgements* and *Intellectual Engagement*. While *Fairness* was selected by 45 percent of the Japanese teachers, only seven percent of the Canadian teachers endorsed it. These definers describe behaviour and morality—concepts that are emphasized in Japan's schools. Thus, while Canadian teachers related critical thinking more to the cognitive domain, Japanese teachers tended to favour the affective domain. These sorts of contrasts between Eastern and Western thinking are well-documented (Cummings & Altbach, 1997; Gardner, 1989; Hayashi & Kuroda, 1997; Lewis, 1995; Reid, 1999; Rohlen & LeTendre, 1996; Shields, 1993; Shimahara & Sakai, 1995; Stevenson & Lee, 1995; Stevenson & Stigler, 1992).

Gardner's (1989) "key in the slot" story illustrates contrasts in Eastern and Western thinking eloquently. When traveling in East Asia, Gardner and his wife were intrigued by reactions to their two-year-old son attempting to return their hotel key at the front desk. Rather than demonstrating how to place the key in the slot, they let the child discover the process through trial and error. A Chinese observer questioned why

they don't simply show the child how to insert the key by guiding his hand and thus avoiding any "mistakes."

As there is only one "right" way of doing things, the Eastern philosophy is to have an expert teach the "right" way and thus avoid the common mistakes made by a neophyte. Once this is demonstrated it must be practiced over and over many times until it is learned. Traditionally, "mistakes" were not encouraged in Japanese classrooms. Students didn't question their teachers. There was knowledge to be transmitted from teacher to student with little room for debate. Perhaps these stereotypes are being challenged as Japan begins to embrace a critical thinking approach to learning.

While Japanese may be characterized as group oriented, Canadians are more independent. Japanese individuals do what is best for the group in order to keep harmony with others while maintaining a sense of honour and morality. Equality, patience, persistence, pride, humility, unity, and community spirit may best describe Japan's teachers. The Japanese school curriculum emphasizes in addition to course content, socialization, morality and behaviour, rather than cognitive abilities. On the other hand, Canadian teachers could best be described as diverse, self-reliant, individualistic, original and opinionated. The Canadian school curriculum emphasizes creativity, independent thinking and cognitive processes. Japanese students are taught lessons such as "do not say things to upset others," "don't voice your opinion," "the needs of the few do not outweigh the needs of the many," "the nail that sticks out gets hammered down" and "practice, practice, practice...practice makes you master." In contrast, Canadian students are taught to state an opinion, be critical, think for oneself and be oneself. Originality is celebrated and encouraged by Canada's secondary teachers, however the same can't be said for Japan's secondary teachers. Thus, "critical thinking" and other important educational terms will have different connotations within the cultural context of the two regions.

One possible explanation for discrepancies between Canadian and Japanese teachers' support for the themes of Work Ethic and Independence may have to do with the cultural context and specific values that are omnipresent with each society. For example, having a strong sense of work ethic is so pervasive in Japanese society; perhaps it is taken for granted and as such is not an explicit part of the student

learning outcomes. Other themes may be so ingrained in either society such that they are not considered worth mentioning. For example, Independence was endorsed by 67 percent of Japanese teachers and 51 percent of Canadian teachers. These results would seem to question the long-held notions of Western independence versus Eastern group mentality. However, in light of the Japanese educational reforms hinging on fostering independence, combined with the 'taken-for-grantedness' of this concept within British Columbia's education system perhaps these results are not too surprising. In any case, in order to investigate these culturally embedded questions, further research incorporating a different methodology is necessary. Further investigations of teachers' values and perspectives should go beyond surveys and interviews to include participant-observation in addition to the narratives of teachers.

While there have been few cross-cultural comparative studies of teachers' values and perspectives, the vast majority of these sorts of investigations have been highly quantitative and based entirely on Western survey research. The strengths of large-scale surveys have traditionally been greater external reliability and validity, however much of the finer points and considerable depth of analysis have been compromised. Moreover, the voices of other cultures may have been lost in the process. Nevertheless, recent developments in IEA studies include some degree of qualitative methods. TIMSS has provided a window into teaching and learning within different cultural contexts, but it is through other means that the complex nature of teaching and learning can be properly understood. In particular, comparative ethnographic studies show great promise. "Anthropological studies of education in every country and setting can help bear witness to the rich diversity of modes of cultural transmission and the great variety of experiences that can be called educational" (Masemann, 1999, p. 130). Ethnographic case studies have the potential to go well beyond the typical surface treatments of survey research to uncover deeper meaning. In addition, "more space devoted to comparative, ethnographic work would go a long way toward changing the current dialog about comparisons with Japan and perhaps inhibit the recurrent use of stereotypes and reasoning based on stereotypes that has afflicted so much of the current debate" (LeTendre, 1999, p. 43).

Perhaps the best window into the thinking of educators is through their own narratives (see Clandinin & Connelly, 1999; Farrell, 1986). As

Hayhoe (2000) indicated in her Comparative and International Education Society Presidential Address, *Redeeming Modernity*:

My 6 months in Japan helped me to see, in ways that are hard to capture through the grid of Western social science, some of the strengths of Japanese cultural resources....patterns of thought emerged that seemed to be deeply connected to the varied regional cultures.... Indigenous Japanese forms of expression—visual images or metaphors, expressed in the language of ordinary people, rather than abstract concepts from social science literature—seemed to go to the heart of Japanese culture. (p. 438)

Comparative educators shouldn't be too eager to embrace the multiple perspectives of postmodernism without giving further thought to metanarratives of practitioners from different cultures. There are culturally specific, different ways of perceiving, knowing, understanding and interpreting events (Masemann, 1990). Hayhoe (2000) characterized two such metanarratives as "humanizing modernity" in the case of China and "harmonizing modernity" in the case of Japan in contrast to her Western notion of redeeming modernity.

CONCLUSION

The data presented here can be used in conjunction with other cross-cultural comparative studies of values and perspectives to form a powerful case for further research. Language is not only embedded in culture but according to Hayashi and Kuroda (1997), language has directly nurtured Japanese culture. Hayashi and Kuroda's longitudinal study (1953–present) of Japanese culture in comparative perspective provides a framework for cross-cultural studies and important insights for comparative education methodology. According to Hayashi and Kuroda, we don't think alike in different parts of the world. Moreover, many cultural differences in thinking, values and perspectives can be attributed to language. Japanese language is diffuse and ambiguous. Japanese ways of doing things make sense to those who can learn to think and communicate in Japanese. Similarly, Japanese are just as individualistic as Westerners if they are thinking about a question in English. It is not simply a case of Eastern versus Western mentality, however as Hayashi and Kuroda point out, "the Chinese are very individualistic and rationally oriented, while the Japanese are human relations oriented in contextualism par excellence....The Japanese sense of self is considerably different from the Chinese self" (p. 118). Thus,

given that various cultures think and communicate differently, how can comparative education research be most effectively conducted? How can a survey or even an interview adequately take into account all the nuances of culture? Moreover, the picture becomes fuzzier still as it may be incorrect to assume that an entire nation contains just one homogenous 'culture' but rather contains a myriad of competing microcultures. The sociocultural dynamics of comparative education must be up front and centre for any emerging epistemologies or alternative theoretical frameworks.

Debates have raged for some years over whether comparative, international and development education is a distinct field with a defining framework and set of standard methodologies (see Wilson, 1994). Only recently have individuals offered insights into potential theoretical frameworks for comparative education in light of emerging sociocultural theory (see Arnove, 1999; Cole, 1996; Hoffman, 1999; Masemann, 1999; Welch, 1999). As the predominant unit of analysis continues to be nation-states, the problems inherent in various methodologies will continue to plague comparative education research. Until these limitations are confronted, comparative education researchers will be unable to adequately understand the intricacies of education and culture. Finally, alternative theoretical frameworks should make sense to practitioners and should be easily understood within different sociocultural contexts.

British Columbia and Japan have been undergoing significant educational reforms in efforts to improve student learning within the context of the emerging globalized world. Further research is needed into the way teachers perceive teaching and learning within these two education systems and elsewhere. Policy makers need to keep practitioners at the forefront of the development of educational reforms. Moreover, alternative frameworks for comparing the nature of education, as interpreted through a variety of lenses, should incorporate teachers' thinking, for the effectiveness of any reforms to education ultimately depends on the teachers.

Appendix: Summary of Canadian and Japanese Teachers' Values

Area	of	CANADA	JAPAN
------	----	--------	-------

Comparison		
Emphasis of reforms to student learning outcomes initiated since 1990	Problem solving, critical thinking, communication, literacy, teamwork and information technology	Individuality, cultivation of creativity, thinking ability/power of expression, humanization of the educational environment and internationalization
Induction programs and teacher acculturation	"Sink or swim" reality largely abates reflective practitioner model	National commitment to professional development of teachers; Strong guidance component
Most significant teacher values (percentage of teachers endorsing each theme)	Cognitive Abilities (93 %) Work Ethic (70 %) Responsibility (56%) Social Skills (56 %) Independence (51 %)	Responsibility/Morals/ Ethics (89%) Social Skills (86 %) Knowledge (68 %) Independence (67 %) Cognitive Abilities (65 %)
Critical thinking factors	Cognitive Strategizing Relevance	Conscientious Judgements Intellectual Engagement
Critical thinking definers that best distinguish Canadian and Japanese teachers (listed in rank-order)	Decision making Problem solving Divergent thinking Metacognitive skills Higher order thinking Deductive reasoning Identifying/removing bias	Fairness Adequacy Objective Consistency Completeness Precision Specificity
Learning Outcomes and Attributes	Predominantly from the cognitive domain	Predominantly from the affective domain

REFERENCES

- Arnove, Robert F. (1999). Reframing Comparative Education: The Dialectic of the Global and the Local. In C. A. Torres (Ed.), *Comparative Education: The Dialectic of the Global and the Local* (pp. 1–23). Oxford, U.K.: Rowman and Littlefield Publishers.
- Barman, Jean, Sutherland, Neil, & Wilson, J. Donald (Eds.). (1995). *Children, Teachers & Schools in the History of British Columbia*. Calgary: Detselig Enterprises Ltd.
- Benjamin, Gail R. (1997). *Japanese Lessons: A Year in a Japanese School through the Eyes of an American Anthropologist and Her Children*. New York: New York University Press.
- British Columbia Ministry of Education (2002). *Graduation Requirements Review: History of British Columbia School Revisions and Major Themes*. Retrieved February 16, 2002, from http://www.bced.gov.bc.ca/grad_req_rev/research/history.htm#sullivan
- British Columbia Teachers' Federation (1998). *Who are the teachers of B.C.?* Retrieved April 15, 1998, from <http://www.bctf.bc.ca>
- Britton, Edward, Raizen, Senta, Paine, Lynn, & Huntley, Mary Ann (2000). *More swimming, less sinking: Perspectives on teacher induction in the U.S. and abroad*. Retrieved December 21, 2001, from http://www.wested.org/online_pubs/teacherinduction/
- Clandinin, D. Jean, & Connelly, F. Michael (1999). *Narrative Inquiry: Experience and Story in Qualitative Research*. San Francisco: Jossey-Bass.
- Cobb, Velma L. (1999). *An international comparison of teacher education*. Washington, DC: ERIC DIGEST, ERIC Clearinghouse on Teaching and Teacher Education (ERIC Document No. ED 436 486).
- Cobb, Velma L., Darling-Hammond, Linda & Murangi, Kave (1995). Teacher preparation and professional development in APEC members: An overview of policy and practice. In V. L. Cobb (Ed.), *Teacher preparation and professional development in APEC members: A comparative study* (pp. 1-16). Washington, DC: U.S. Department of Education (Eric Document No. ED 383 683).

- Cole, Michael (1996). *Cultural Psychology: A once and future discipline*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Cummings, William K., & Altbach, Philip G. (Eds.). (1997). *The Challenge of Eastern Asian Education-Implications for America*. Albany: State University of New York.
- Farrell, Joseph P. (1986). *The National Unified School in Allende's Chile. The Role of Education in the Destruction of a Revolution*: University of British Columbia Press.
- Gardner, Howard (1989). *To open minds: Chinese clues to the dilemma of contemporary education*. New York: Basic Books, Inc.
- Goodson, Ivor F. (1995). A Nation at Rest: The contexts for change in teacher education in Canada. In I. Z. Holowinsky (Ed.), *Teacher Education in Industrialized Nations: Issues in changing social contexts* (pp. 125-153). New York: Garland Publishing, Inc.
- Hawley, Willis D. (1990). The Education of Japanese Teachers: Lessons for the United States. In E. B. Gumbert (Ed.), *Fit to Teach: Teacher Education in International Perspective* (pp. 31-62). Atlanta, GA: Center for Cross-cultural Education, Georgia State University.
- Hayashi, Chikio, & Kuroda, Yasumasa (1997). *Japanese Culture in Comparative Perspective*. Westport, Connecticut: Praeger.
- Hayhoe, Ruth (2000). Redeeming Modernity. *Comparative Education Review*, 44(2), 423-488.
- Hayhoe, Ruth (2001). Creating a vision of teacher education between East and West: the case of the Hong Kong Institute of Education. *Compare*, 31(3), 329-345.
- Hoffman, Dianne M. (1999). Culture and Comparative Education: Toward Decentering and Recentering the Discourse. *Comparative Education Review*, 43(4), 464-488.
- Howe, Edward R. (2000). *Secondary School Teachers' Conceptions of Critical Thinking in British Columbia and Japan: A Comparative Study*. Unpublished MA thesis, University of British Columbia (ERIC Document No. ED 451099).

- Kobayashi, Tetsuya (1993). Japan's Teacher Education in Comparative Perspectives. *Peabody Journal of Education*, 68(3), 4–15.
- LeTendre, Gerald K. (1999). The Problem of Japan: Qualitative studies and international educational comparisons. *Educational Researcher*, 28(2), 38–46.
- LeTendre, Gerald K. (2000). *Learning to be adolescent: growing up in U.S. and Japanese middle schools*. New Haven: Yale University Press.
- Lewis, Catherine (1995). The Roots of Japanese Educational Achievement: Helping children develop bonds to school. *Educational Policy*, 9(2), 129–151.
- Masemann, Vandra L. (1990). Ways of Knowing: Implications for Comparative Education. *Comparative Education Review*, 34(4), 465–473.
- Masemann, Vandra L. (1999). Culture and Education. In C. A. Torres (Ed.), *Comparative Education: The Dialectic of the Global and the Local* (pp. 115–134). Oxford, UK: Rowman & Littlefield Publishers.
- Monbusho (1997). *Monbu Toukei Youran Oukurashou Insatsu Kyoku (in Japanese)*. Tokyo: Monbusho.
- Monbusho (2002). *The Education Reform Plan for the 21st Century*. Retrieved February 16, 2002, from <http://www.mext.go.jp/english/topics/21plan/010301.htm>
- Moskowitz, Jay & Stephens, Maria (Eds.). (1997). *From Students of Teaching to Teachers of Students: Teacher Induction Around the Pacific Rim*. Washington, DC: U.S. Department of Education.
- Okano, Kaori (1993). *School to work transition in Japan: An ethnographic study*. Philadelphia: Multilingual Matters Ltd.
- Reid, Thomas R. (1999). *Confucius Lives Next Door-What Living in the East Teaches Us About Living in the West*. New York: Random House.
- Rohlen, Thomas P. (1983). *Japan's high schools*. Berkeley: University of California Press.

- Rohlen, Thomas P. (1998). Education and Training in Japan. In C. Björk (Ed.), (Vol. 1, pp. 1–45). New York: Routledge.
- Rohlen, Thomas P., & LeTendre, Gerald K. (Eds.). (1996). *Teaching and Learning in Japan*. New York: Cambridge University Press.
- Shields, James Jr. (Ed.). (1993). *Japanese Schooling: Patterns of Socialization, Equality, and Political Control*. Pennsylvania: Pennsylvania State University Press.
- Shimahara, Nobuo K., & Sakai, Akira (1995). *Learning to Teach in Two Cultures: Japan and the United States*. New York: Garland Publishing.
- Singleton, John (1967). *Nichu: A Japanese School*. New York: Holt, Rinehart and Winston.
- Stevenson, Harold & Lee, Shin-Ying (1995). The East Asian Version of Whole-Class Teaching. *Educational Policy*, 9(2), 152–168.
- Stevenson, Harold & Stigler, James (1992). *The Learning Gap: Why Our Schools Are Failing and What We Can Learn from Japanese and Chinese Education*. New York: Summit Books.
- Takakura, Sho & Murata, Yokuo (Eds.). (1998). *Education in Japan-A Bilingual Text: Present System and Tasks/Curriculum and Instruction*. Tokyo: Gakken.
- Welch, Anthony (1999). The Triumph of Technocracy or the Collapse of Certainty: Modernity, Postmodernity, and Postcolonialism in Comparative Education. In C. A. Torres (Ed.), *Comparative Education: The Dialectic of the Global and the Local* (pp. 26–49). Oxford, U.K.: Rowman and Littlefield.
- Wilson, David N. (1994). Comparative and International Education: Fraternal or Siamese Twins? A preliminary genealogy of our twin fields. *Comparative Education Review*, 38(4), 449–486.
- Yoneyama, Shoko (1999). *The Japanese High School: Silence and Resistance*. New York: Routledge.

編集者への注意:

この論文は、Excelで作業してから、コピー、形式を選択してはりつけ、図として貼り付けること。

Table 1の線の太さを調整のこと。