Learning Styles of Distance Learners in Japan:
Cultural Considerations

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Abstract

Distance education in Japan has a unique history and regulatory framework different from that of most Western countries. There have been discussions and studies on differences between Japanese and Western people in terms of their learning styles, reflecting their cultural and societal differences. E-learning, a mode of distance education in which the Internet is utilized extensively in the instructional delivery as well as interaction between teachers and students or among students, is spreading in the global market of higher education mainly from English-speaking countries. This paper will introduce the history and current status of distance education and e-learning in Japan, discuss characteristics of the learning styles of Japanese students in general, and consider the most appropriate methods and instruments to measure learning styles of distance learners or e-learners in Japan in order to explore the effect of learning styles on the learners’ satisfaction with their learning environments.

Introduction

Distance learning, the mode of education where students can take courses without physically attending classes on campus, has been around in Japan for the past 50 years. However, unlike those in the U.S., Canada, and Australia where distance learning has been flourishing with the effective utilization of information and communication technologies (ICT), in Japan, many distance learning programs are still follow the correspondence school model, using postal mail as the main delivery mode of instruction. With the widespread use of the Internet, e-learning has become popular in many parts of the world and Japan is not an exception. However, e-learning in
Japan is still far behind of the three Western countries mentioned above, not in terms of technology per se, but in terms of effective implementation of new paradigm of education where knowledge is created collaboratively using interactive media such as the Internet.

The Western style of distance learning or e-learning may not be readily adopted by Japanese people due to the differences in learning styles between Japanese people and people in Western countries. Though scientific data to demonstrate such differences are yet to be found, anecdotal evidence by people who have experienced education in both cultures suggests that there are differences. In past literature, Hayes and Allison (1988) suggest that cultural differences do exist in learning styles, as the culture of a country affects the way people learn in schools. De Vita (2001) also suggests that culture influences the development of learning styles. If such cultural differences of learning styles exist, future systems of distance education and e-learning in Japan should be developed differently from that of those Western countries, instead of trying to imitate and follow in the footsteps of Western countries.

The following sections discuss: 1) the history and current status of distance education and e-learning in Japan, 2) characteristics of learning styles of Japanese students in general, and 3) the most appropriate methods and instruments to measure leaning styles of distance learners or e-learners in Japan in order to determine the effect of learning styles on the learners’ satisfaction with their learning environments.

**Distance Education in Japan**

**History**

In Japan, the first occurrence of distance education can be traced back to the “lecture notes” used in higher education in the late 19th century. In the Meiji period when higher education had not taken a solid form yet in Japan and no textbooks existed in Japanese, the only learning
materials students could rely on were notes taken from the lectures given by professors. Thus, those “lecture notes” were printed and used by non-matriculated students in their study. Waseda University, Japan’s premium private college, is well known for being the first to implement this system. Those students who studied through “lecture notes” could take an exam to obtain a certificate of completion. At that time, those who could not come to Tokyo to take college courses, studied in this mode and took exams to gain certification. This is considered to be the origin of “correspondence education” or distance education in Japan.

In 1950, for the first time correspondence schools or distance learning schools were officially recognized by the Ministry of Education, which enabled recognized schools to offer degrees to their students. According to the Higher Education Council in Japan, this is the beginning of distance education in higher education in Japan. Since then, the Japanese Ministry of Education has maintained two separate accreditation systems or University Establishments Standards: one for traditional on-campus institutions and the other for correspondence education.

The majority of distance education in Japan is done by distributing print-based materials through the postal service. Though those distance learning programs were officially accredited to offer degrees, 30 credits out of the 124 credits required to obtain a bachelor’s degree had to be earned through face-to-face classes (i.e., schooling). In March, 1998, the requirement of earning the minimum of 30 credits through face-to-face classes was relaxed, and the government allowed those 30 credits to be earned through synchronous mediated communication such as videoconferencing. Then in March 2001, those 30 credits were allowed to be earned through interactions on the Internet. This made it possible to earn degrees solely at a distance without ever visiting the campus or learning centers.

Also in March 2001, graduate programs through correspondence education began to be recognized officially and four graduate correspondence schools were established in the next year.
In 2003, doctoral programs through correspondence education began to be recognized. Originally distance education programs were considered secondary to the regular on-campus programs. However, the notion has been slowly changing, and it has been discussed that the regulatory distinction between campus-based schools and correspondence schools will disappear soon.

**Current State of Distance Education in Japan**

At present, there are 35 4-year higher education distance education institutions, 18 graduate schools and nine junior colleges, in which the total of about 280,000 students are registered (see Table 1). Except for the University of the Air, all of them are private institutions. Among those 62 institutions, only two are virtual universities which do not have physical campuses except administrative offices and study centers. The other 60 institutions are actually the correspondence education divisions of existing universities.

<table>
<thead>
<tr>
<th># of Students</th>
<th>Undergraduate Institutions</th>
<th>Graduate Schools</th>
<th>Junior Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Schools</td>
<td>35</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>Matriculated</td>
<td>196,648</td>
<td>3,024</td>
<td>25,215</td>
</tr>
<tr>
<td>Non-matriculated</td>
<td>44,967</td>
<td>6,743</td>
<td>1,563</td>
</tr>
</tbody>
</table>

*Table 1: Number of Students in Distance Education Institutions in Japan (Association for Private University Correspondence Education, 2006)*

Most of those distance education institutions still exist in the forms of correspondence schools in which courses are offered through self-directed study using postal delivered printed materials with some requirement of schooling. The interaction between students and teachers is
minimal and no formal means of interaction among students are offered. Student assessments are usually done by progress reports submitted by students periodically and by exams conducted at their campuses or at their learning centers at the end of the course.

Though some of these correspondence schools are making efforts to transform themselves to e-school, among the 34 distance education schools at the undergraduate level, only six of them provide some sort of Internet-based learning management systems (LMS) through which students can regularly interact with other students, ask questions to teachers or administrative personnel, manage their own courses, submit assignments, and get supplemental materials for courses. Although the governmental regulation was changed in 2001 to allow 30-credit requirement of face-to-face classroom instruction to be replaced by Internet-based instruction, still the majority of schools are offering their programs in the traditional form of postal mail-delivered study materials and face-to-face schoolings.

**Current State of E-Learning in Japan**

E-Learning in Japan has a strong political connotation as the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) has been promoting the development of e-learning in higher education institutions in Japan as part of e-Japan Initiative conceived and announced in January 2001. The initiative set specific goals such as the tripling of the number of Japanese universities using advanced e-learning technologies by 2005. To further facilitate the adaptation of e-learning by higher education institutions, MEXT increased the acceptance of up to 60 credits earned through e-learning toward degree programs in March 2001.

Higher education institutions in Japan have slowly started to implement e-learning. According to the study done in 2005 by the National Institute of Multimedia Education (2006), 41.4 percent of the private institutions surveyed have offered e-learning classes while 69.3

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1 The Ministry of Education in Japan was reorganized and renamed as the Ministry of Education, Culture, Sports, Science and Technology (MEXT) in 2001.
percent of the national universities responding offered e-learning programs. In total, 36.3 percent of the universities surveyed have offered e-learning classes. As for the modes of e-learning, 31.4% of those surveyed offer e-learning as part of blended learning, and 20.8% of them offer e-learning as supplemental to classroom activities. Only 10 percent of those surveyed actually offer stand-alone e-learning courses in which students are not required to attend classes physically.

Respondents were also asked about factors that could be holding back the further development of e-learning at the university level in Japan. The most cited factor was the lack of content creation and system management skills among faculty (61.9 percent), the lack of knowledge and skills of developing e-learning systems (50 percent), the lack of understanding of educational effects among faculty (49.7 percent), doubts about the safety of intellectual property rights for contents placed on the e-learning systems (44.5 percent), and the lack of budget (42.4 percent).

In terms of the development of actual contents of e-learning, 30.8 percent of those surveyed said they develop contents at their institutions. Nearly half of the content was developed by faculty members as their individual efforts. As far as the tools of e-learning are concerned, learning materials created by presentation software such as Microsoft PowerPoint and streaming video have been increasing over the past four years while the use of text-based interactive tools such as discussion boards and chat has been decreasing. This indicates that e-learning in Japan is moving towards the model of traditional correspondence schools where students study on their own without much interaction with teachers and other students.

Distance education in Japan is deeply rooted in correspondence education. Though the technology has advanced and the regulation has been relaxed to enable distance education institutions to offer degree programs online, so far few institutions in Japan have actually
attempted to do so. Traditional colleges and universities in Japan have also started to offer e-learning; however, most of them offer e-learning to supplement classroom teaching by putting up lecture materials online or by making video-recorded lectures available online. In both cases, the technology is not used to enhance and promote interaction between teachers and students or among students, but to increase self-study options. Even the University of Air, Japan’s biggest distance education institution, has not evolved out of the traditional broadcast based programs.

**Characteristics of Japanese Learners**

In the previous section it was shown how distance education as it is implemented in Japan provides an educational environment with unique challenges and opportunities. To date, there has been no research that we know of done on Japanese distance learner’s experiences, hence our interest in doing such a study. This section will review what is known about the Japanese learner’s approach to learning in general, looking at research done in diverse areas such as management, anthropology, psychology and education. In particular, the issue of cultural influences on learning style will be explored, using three of Geert Hofstede’s (2001) cultural dimensions to organize this inquiry.

The idea that cultural factors influence learners approach to learning or learning style is neither new nor particularly controversial, though assessment and application issues are. Many teachers that work with diverse groups have noticed cultural differences, and anecdotal reports of these differences can be found in the literature (McCarty, 2005; McVeigh, 2002). In addition, common sense tells us that if culture shapes the values, beliefs, and schemata for behaviors in specific situations, it will do so within the realm of education as well. As the predominant educational paradigm shifts from a subject matter/teacher based approach to a learner-centered approach, the interest in better understanding individual learning style differences has increased.
Student learning style differences can be influenced by internal factors such as personality, age, gender, or by external factors such as national culture or the culture of the discipline or work environment. In terms of learning style, we are mainly interested in the outer layers of Curry’s (1983) model where preferences reside for specific types of instructional features and social interaction, all shaped by culture via socialization processes, i.e. child rearing, exposure to the media and participation in educational institutions.

Looking at general research into Japanese culture, Hofstede’s seminal research done in the 1960s and 70s found that national cultures differed significantly in terms of four key dimensions. In fact, Japanese and other Asian cultures ended up on the opposite side of America, Canada, England and Australia on all four dimensions, and these findings have been the basis for quite a bit of discussion and further research over the past 40 years. Ignoring for the time being criticisms of Hofstede’s findings that they are now outdated, do not capture the diversity found in many national cultures, and are easily misused to stereotype diverse cultures, Hofstede’s findings and related studies from various disciplines will be examined here to see what they indicate about Japanese learner’s approach to learning, in terms of how learning itself is viewed and the expected roles of the learner and teacher.

**Japan - High Uncertainty Avoidance**

One of the strongest findings in Hofstede’s survey in regards to Japan was, that relative to other countries, Japanese have a strong preference to avoid uncertainty and, hence, “are made nervous by situations which they perceive as unstructured, unclear or unpredictable.” (1997, p. 113). Yamazaki (2005) links uncertainty avoidance to the tendency to reflect before acting, and in a study with Kayes (2005) comparing the learning styles of American and Japanese managers using Kolb’s LSI, found Japanese managers more reflective and concrete than American managers who were more abstract and active. These findings were consistent with McMurray’s (1998) study of
Japanese undergraduates where Yamazaki’s data reanalysis showed a significant trend in the
direction of the same two dimensions, reflective observation (RO) and concrete experience (CE).
In a cross-cultural study (Thomas, Cox and Kojima, 2000), Japanese were found to prefer
concrete sequential learning, which like uncertainty avoidance is linked to a preference for clear
guidelines and goals, concrete performance and strict planning in a sequential manner.

Other studies support a general trend for Japanese to be uncertainty avoidant. Lynn and
Hampton’s study (1975) found anxiety strongly correlated with uncertainty avoidance, with Japan
having the second highest anxiety scores of 18 countries. A more recent study by Gudykunst,
Yang and Nishida (1987) found that reports of social anxiety were highest for Japanese students
and lowest for US students. Finally, Vishwanath (2003) looked at online auction behaviors in
three countries, the USA, Germany and Japan to see if Hofstede’s conclusions about their relative
degree of uncertainty avoidance would be reflected in buying and selling behaviors. In each
country’s Ebay website the same item was sold with the same amount of information provided.
The number of bids and final price of the sale item were found to be related to the uncertainty
avoidance index of each country, with Japanese buyers being the most risk averse of the three
groups, and USA buyers being the least risk averse.

The educational implications of Japan being a high uncertainty avoidant culture are that
students would tend to prefer well structured educational experiences, clearly explained
assignments and course requirements. High uncertainty avoidance students can be very concerned
with getting the “right” answers rather than discussing “shades of grey”. This can easily be seen
as the result of Japanese education being strongly oriented towards preparation for university
entrance exams. In addition, students with high levels of uncertainty avoidance may often feel
uncertain or worried about whether they understand the material or the assignments. Hence, it
seems that anxiety could easily arise in a distance educational environment that does not provide
face-to-face contact, because student misunderstanding is more difficult to observe, and the steps to clarify assignments more difficult to make. Morse (2003), in a study comparing the attitudes of Australians and a mixed Asian group of online learners, found that whereas a majority of the Asian students in his study felt that “instructors need to promptly respond to student input to take advantage of the immediacy of the communication medium,” only a third of Western students in his study agreed with this proposition. To summarize, high uncertainty avoidance in students could lead to 1) a strong need for structure in a distance course, as well as 2) a need for teacher immediacy behaviors provided to support students and clarify assignments.

**Japan - Moderately High Collectivism (Low Individualism)**

In Hofstede’s original study, Japan was found to be moderately collectivist (=moderately low individualist) in comparison to other countries. Trompenaar’s and Hampden-Turner’s (1998) large scale questionnaire study done in the 1990s found similar country-level results on questions related to individualism/communitarianism, (similar to collectivism), with the Asian countries, specifically Japan and China, tending to be considerably more collectivist than the USA, Australia and UK. According to Oyserman, Coon and Kemmelmeier, (2002, p. 10) who reviewed 27 studies in their meta-analysis of the Individualist/Collectivist dimension, the core element in regards to individualism is “valuation of personal independence,” and for collectivism, the “sense of obligation and duty to the in-group,” of which in collectivist cultures one belongs to fewer of, but has stronger ties to. There are several constructs discussed in various disciplines that are similar or equal to the collectivist dimension.

For example, Markus and Kitayama (1991), two cross-cultural psychologists, equate the individualism/collectivism dimension with what they term “independent/interdependent self-construal” (self-concept). With interdependent self-construal, “the self-knowledge that guides behavior is of the self-in-relation to specific others in specific contexts” (p. 227). They conclude
that although it is universal to need relationships with others, “an appreciation and a need for people will be more important for those with an interdependent self than those with an independent self” (p. 229). In a study of ESL student’s learning styles in American higher education (Wintergerst, DeCapua and Verna, 2003) using Wintergerst’s LSI, Asian learners (including Japanese, Chinese and Korean students) were more likely to prefer group activities over individual activities. This was also the case in Morse’s study of Australian and a mixed Asian group of students which used anthropologist Edward Hall’s “High Context/Low Context” dimension (linked to collectivism) to explore the learning related differences of Australian and a mixed Asian group of students, finding that while Asian students complained that they were not able to meet and make friends with classmates, Australian students did not mention this as a drawback. However, Japanese learners were found to prefer individual learning over group learning when assessed with Reid’s Perceptual Learning Style Profile in the previously mentioned study by Thomas and the original study by Reid (1987). Both mention this as a surprising finding that could be related to the fact that in an ESL classroom context, students would be asked to work in groups not of their choosing (ingroup members) but with students from other groups.

Yamazaki equates the collectivist orientation with Kolb’s Diverging learning style, which combines the concrete experience (CE) dimension, with its a strong sense of connectedness to the social contextual circumstances, and the reflective observation (RO) tendency to reflect and exhibit care to maintain harmony with important in-group members. The previously mentioned study by Yamazaki and Hayes of Japanese and American managers found, as predicted, Japanese managers favored a Diverging learning style and US managers a Converging learning style.

Collectivism implies sensitivity to the social environment and the focus on the needs of the ingroup members over the needs of the self, which could lead to a lack of self-directedness and a sense of passivity among students. That Japanese students might lack the necessary
autonomy to study at a distance is one of the major concerns of those like McCarty (1999) who have worked with Japanese university students for years and view an “independent learning style…as alien to Japanese, historically.” Particularly since the end of World War II, Japan has embarked on an aggressive path towards economic development, and McVeigh (2001) whose scathing “Japanese Higher Education as Myth” eschews “misty culturalist theorizings” writes that student passivity “springs forth from a politico-economically managed education system that overemphasizes examinations as a means of weeding out less than desirable workers (p. 115).” Studying for exams to enter university often becomes more important than the education received itself. For example, a questionnaire study by Lee-Cunin (2005) found that more than 80% of university students at one of Japan’s prestigious national universities recently reported that they occasionally or never practiced the following: “1) asked about extra reading on subjects, 2) tried to apply acquired class knowledge to a practical situation, 3) tried to see how facts and figures fit together, 4) use several sources and ideas for one assignment.” To summarize, the research on the collectivism/individualism dimension would point to: 1) learner preferences for an educational experience that is social and provides opportunities for interaction with ingroup members, and 2) learner tendencies to lack autonomy and self-direction in relation to their studies. It should be mentioned that Matsumoto (2005) has reviewed studies on collectivism in relation to Japan, finding little support for the contention that today’s Japanese are collectivist in orientation. In addition, it may be that the unique demands of a distance education program may only be attractive to more individualistic learners.

*Japan – Moderately High Power Distance*

Hofstede (1986) defines Power Distance as “the extent to which the less powerful persons in society accept inequality in power and consider it normal (p. 307).” A key point is that
in high power distance countries subordinates appreciate a social distance from authority figures, whereas in low power distance countries an egalitarian atmosphere is preferred. Although the power distance dimension mainly affects the manager - employee or student-teacher relationship, it is also a factor within in-groups, which are also characterized by a relatively rigid hierarchical structure. In high power distance cultures, the teacher’s position is highly respected and he/she is expected to strongly guide the student to knowledge. Knowledge is often seen as being transferred from teacher to the student, rather than discovered or “constructed”. Knowledge in this situation becomes objectified and is learned via accumulation. The desire for a professor who is an expert in his/her field would be likely in a student that sees the professor’s knowledge as an important factor in his/her success. Disagreeing with or questioning those in authority is not common when high power distance is the rule. Hofstede is of the opinion that in Asian cultures power distance is modified by Confucian beliefs, and people “accept and appreciate inequality, but feel that the sense of power should be moderated by a sense of obligation (1997, p. 40).” In other words, authority and power are tempered by paternalistic concern for those lower in the hierarchy, which engenders a corresponding sense of loyalty in the opposite direction, and thus, the rules that guide the reciprocal relationships between unequals lead to great stability in society in spite of inequality.

Hadley and Hadley (1996) in an open question survey study explored Japanese students views of what a good teacher is, and conclude, “the results seem to suggest that Japanese students are not concerned about what their teacher does, but rather who there teacher is. Character issues far outweigh any skills or abilities the ideal teacher might have (1996, p. 54).” This finding was corroborated by Ryan (1998) who in a comparative study of Japanese and Australian students asked, “What does a good teacher know?”, and found that Japanese students were much less likely to view teacher subject matter knowledge as being important than were Australian students, and
instead felt that knowledge of life, teaching ability and jokes/responses were more likely to be important. A “teacher centered” lecture format or a small group teacher led class is more conducive to this view of learning than a student-centered “teacher as facilitator” approach. To summarize, the research on the power distance dimension in respect to Japanese, points to, 1) a tendency to view the learner’s role a being fairly passive rather than active and learner centered, and 2) learners’ need and appreciation for strong direction from teachers who play the role of respected and caring authority figures. Hence, it could be that the preference that Japanese distance education universities have for designing their courses around video broadcasts of lectures may have less to do with a lack appreciation of the benefits of asynchronous modes of instruction than with a strong positive belief in the need of teachers to lecture in order to express character, moral authority and life wisdom.

To conclude, having reviewed research on the Japanese learning style and discussed how these tendencies might manifest in a distance learning environment, the next section will examine how to best assess students’ learning style in this unique educational environment.

Assessing Learning Styles of Distance Learners in Japan

There are an abundance of instruments which measure learning styles in one way or another. The literature on learning styles provide a copious amount of conceptual models and constructs which could confuse anyone who attempts to do a study on learning styles. The key in learning style research is to select the right instrument(s) to use for the particular purposes one has. In this study, there are three objectives: an immediate objective, a medium-term one, and a long-term one. An immediate objective is to assess the learning styles of distance learners in Japan to find out the relationships between the learning style of a distance learner and his/her satisfaction with the learning environment. The mid-term objective is to compare distance
learners and on-campus learners in Japan to see if there are any differences in their learning styles. Lastly, in the long run, the study aims to compare the preferred learning styles of distance learners cross-culturally, say between Japanese distance learners and distance learners in other countries, especially Western countries. The ultimate goal of the proposed study is to explore the differences of learning styles among distance learners in different countries so that those providers of distance learning programs in the global higher education market will be more aware of the diversity of learning styles among learners from different countries.

Curry (1983) proposed a model to organize the array of learning style constructs and concepts, which has inner and outer layers, suggesting three broad layers of “learning or cognitive style.” Her innermost layer contains the models of cognitive personality; her middle layer contains models of information processing style; and her outermost layer contains models of instructional preference. In the purposed studies, we are interested in the areas of learning styles that are modifiable and the innermost layer is rather irrelevant as it indicates relatively permanent personality dimensions which are not modifiable. The outermost layer, instructional preference, may bear little relevance in this study either as instructional preference is easily modifiable by the learners if they need to. The most appropriate learning style models for the proposed study seem to be the ones in the middle layer of Curry’s model, information processing style.

The most well-used learning style model and instrument in the middle layer of Curry’s model is Kolb’s Learning Styles Inventory (LSI). The advantage of using Kolb’s instrument is its popularity and prevalence in many studies on learning styles. As it is used in many studies, results can be readily compared with those from other studies. This is helpful as it is very difficult and demanding to conduct cross-cultural studies of learning styles. In addition, as Yamazaki (2005) proposed, there seem to be certain relationships between the dimensions of Kolb’s learning style model and the cultural dimensions suggested by Hofstede. The instrument derived from Kolb’s
and developed by Honey and Mumford (1992), Learning Style Questionnaire (LSQ), could also be useful and more easily translatable than Kolb’s as it employs Likert type scales instead of sentence completion choices that Kolb’s instrument has employed.

The majority of learners are forced into a certain learning style in a certain context regardless of their innate preferences as the educational system cannot usually accommodate the diverse learning style preferences of all the learners. Many learners that study via the distance mode do so because it is the best or only way they have to get the education they need, but often the educational systems are not designed to accommodate the diverse learning style preferences of all learners. For example, distance education as it is delivered in Japan provides little interaction between teachers and students or among peers. It requires a high level of motivation for a student to complete the course work successfully. Some learner’s learning style preferences may not be a good match with this learning environment.

As indicated previously, Japanese students tend to prefer well-structured learning environments with strong direction and active peer interaction. The current system of distance education in Japan, which is based on correspondence school model, may satisfy learners’ needs for well-structured learning environment. However, we do not know how well the environment actually fits the diverse needs of learners. Assessing the learning style of distance learners in Japan should give us indication of how e-learning systems should be developed in future.

References


Honolulu, Hawaii