A case study of educational practices for the aging global population

EunMi Park, Samuel C. Durso, and Gary J. Confessore

Over the past half century, the population of older adults has increased substantially. The United Nations projects continued rapid worldwide growth of this group. Adult educators need to understand the educational needs of such a rapidly growing population. Although many leaders in the adult education sector have discussed this issue, there is little comprehensive information about the global spectrum of current educational needs and practices for this population. In order to understand these contemporary global practices, a representative global organization was studied regarding their activities on this issue.

A purposeful qualitative sample of 163 cases addressing the contemporary multi-sector educational needs of the elderly was identified from the 3159 presentation abstracts published in the proceedings of The 2001 17th International Association of Gerontology World Congress (now International Association of Gerontology and Geriatrics). The authors concentrated on assessing abstracts of presentations by authors from the East Asia Forum on Adult Education (EAFAE) membership countries and special administrative regions (SAR) versus the remaining regions of the world. EAFAE's membership includes China, Hong Kong S.A.R., Japan, Korea, Macau S.A.R., Singapore, and Taiwan.
Keywords: Older Adult Education, Global Group Comparison

1 Introduction

Over the past half century, the population of older adults has increased substantially. The United Nations (UN, 2002) projects continued rapid worldwide growth of this group. Currently, several sectors are responding to meet the needs associated with this demographic trend. Health science is a leading sector working with the geriatric and gerontological needs of this growing population. The UN designated "education" as a sector for action in The 1982 Vienna International Plan of Action on Aging. Recent global actions and principles reflect the need for an active lifelong perspective for serving the older adult population, such as the 1999 International Year of Older Persons: Toward a society for all ages (UN, 1999/2000), and World Health Organization (WHO)'s Life Course (1999) and Active Aging (2002).

To produce effective educational implementations and outcomes, leaders in several sectors need to undertake innovative lifelong learning approaches for older adults. Although many leaders in the adult education sector, such Withnall and Kabwasa (1989) and ASPBAE (1999),

have discussed this population's educational needs there is little comprehensive information about the global spectrum of educational practices focusing on the needs of this population. The purpose of the present study is to describe recent educational practices intended to meet the educational needs of older people and to produce comparative information to outline contemporary global trends in this field. The authors believe the present study contributes to an understanding of current global practices and may be extended to generate further teaching and learning principles for interdisciplinary-based adult lifelong education practices for older life undertaken across the globe.

We especially hope to generate helpful information for the East Asia Forum for Adult Education (EAFAE) membership countries and special administrative regions (SAR). EAFAE's membership include China, Hong Kong S.A.R., Japan, Korea, Macau S.A.R., Singapore, and Taiwan. The study purpose is further refined to encompass a comparative assessment of EAFAE versus the remaining regions of the world. Based on this assessment and comparison, further studies may be undertaken to generate innovative theoretical principles to guide the design and evaluation of educational programs intended to meet the learning needs of older adults and those who serve them.

2 Research Question

1. How are educational leaders of the multi-sectors responding to the learning needs of older adults in the global society?
2. What are the implications of this for EAFAE leaders?

3 Methodology

This study induces an answer to the research questions from analysis of educational issues and practices reported by contemporary scholars and practitioners at a recent World Congress of the International Association of Gerontology.

4 Sample

A purposeful qualitative sample of 163 cases addressing contemporary multi-sector educational needs in aging was identified from the 3159 presentation abstracts published in the proceedings of The 2001 17th IAG-WC (IAG, 2001). The 163 presentations were extracted from the proceedings using the search keywords, "educat"ion/or/ing, "train,"er/ing, "learn,"er/ing, "teach"-er/ing, "instruct"er/ing. These presentations were authored by individuals from a total of 35 countries or special administrative regions.

The World Congress of the International Association of Gerontology (IAG-WC) was selected as our source of data for the following reasons: 1) Having begun in 1950, it is one of the largest and most longstanding worldwide meetings on aging; 2) sessions presented include both research and practice perspectives; 3) topics from across several disciplines, such as the

biological, medical, behavioral, and social policy and practice fields are included, and; 4) and sessions presented by co-authors from different nations are common. Working closely with other international nongovernmental organizations in a consultative relationship with the UN and WHO, IAG "promotes research, training and practice in the field of aging, as well as the interests of gerontology organizations worldwide" (UN, 2000).

A comparison of the session topics presented at the 16th World Congress of the International Association of Gerontology (IAG-WC), held in 1997, and the 17th Congress, held in 2001, reveals a substantially larger number of presentations involving educational issues presented in 2001. Indeed, in 1997 there were no session topics involving education at the 16th IAG-WC, while in 2001, under a special meeting theme, "Preventing and anticipating actions for education, self-care, and human resources building capabilities," there were 163 presentations. Finally, the 2005 18th IAG-WC included a special theme, "Preventing and anticipating actions for education, self-care, and human resources building capabilities." Although the 18th IAG-WC had already been held at the time of this study, the abstracts of the presentations made were not yet available for inclusion in the present study. Therefore, it was decided to utilize the abstracts from the 17th IAG-WC.

5 Analysis

Part I: Qualitative comparative analysis. Two of the authors independently analyzed the 163 sampled abstracts and assigned content category codes for each topic covered. Upon completion of this stage of analysis, the two authors compared their lists and reconciled their differences. To test the extent to which the immerging classification system "made sense," it was discussed with the third person who is familiar with issues of adult learning, medical education, and issues of gerontology. This aggregation process yielded the 24 content categories presented in Appendix A. Many of the abstracts were found to involve more than one content category and this resulted in a total of 360 entries in the database.

Next, the two authors independently interpreted the 24 specific content categories to produce the cross category patterns in a more general context. In the second iteration of this activity, the authors agreed on five general content categories, which are "Learner," "Setting," "Content," "Method," and "Outcomes." In this process, it became necessary to review the three initial categories to determine whether the abstract dealt essentially with methods, content, learner, setting, or outcomes (See Table 1), which included three codes of Intervention Protocol (IP), Policy Development (PD), or Program Development (PR) for 31 abstracts.

Table 1. Reduction of Specific Categories to Five General Categories

Specific Content Area	Category	No.
Caregiver-Relatives Education of Elderly Medical Education Nurse Education Professional Training	Learner	1
Abuse of Elders Creativity Elderly Elder Care Health Practices of Elderly Information Resources Mental Function Mental Health Occupational Therapy Physical Conditioning Intervention Protocols* Policy Development* Program Development*	Content	2
Client Involvement Intergenerational Teaching Strategies Intervention Protocols* Policy Development* Program Development*	Methods	3
Community-Based Programs Internet Person-Environment Technology Program Development*	Setting	4
Policy Development* Intervention Protocols*	Outcome	5

* Indicates abstracts coded to include these specific categories were reviewed for inclusion in the general code category. See Appendix B for details.

Part II: In the second phase of the study, the authors compared the content of presentations made by participants from the EAFAE membership region with those of presenters from the remainder of the world. This section focuses on issues of interest to leaders in the East Asia region, specifically for EAFAE member countries and regions.

6 Major Findings

Table 2 reports the estimated growth of the older population in each area. Currently,

roughly one in ten people in East Asia is 65 years of age or older. The estimates for the future are that one in five will be in the target population by 2025 and one in three by 2050. If the beginning age for this category were 60 rather than 65, these percentages in the EAFAE region would be up to 35.1% in 2025 and 42.3% in 2050 (UN, 2002a).

Table 2. The Within Group Estimates of Population 65 or Older

Country or region	2005	2025	2050
China	7.6 %	13.7 %	24.5 %
Hong Kong, S.A.R.	12.7 %	24.0 %	39.3 %
Japan	19.5 %	28.0 %	34.3 %
Korea	8.8 %	18.6 %	32.6 %
Macau, S.A.R.	7.9 %	19.1 %	30.3 %
Singapore	8.1 %	19.5 %	37.1 %
Taiwan	9.6 %	17.8 %	29.3 %
World	7.3 %	10.6 %	16.4 %
Africa	3.7 %*	4.7 %	8.0 %
Asia-Oceania	9.4 %*	14.7 %	22.3 %
Europe	17.7 %*	26.7 %	39.2 %
Latin America and Caribbean	6.3 %*	11.3 %	21.0 %
North America	15.5 %*	22.9 %	29.1 %
Less Developed Countries	5.5 %*	8.6 %	14.9 %
More Developed Counties	15.3 %*	21.2 %	26.4 %

Sources: U.S. Census Bureau (2005), * U.N. (2002). Approximation for the year 2000.

According to IAE-WC 2001 data, North American and European presenters comprised the majority (76%) in the studies and practices for aging. Presenters from the Asia-Oceania region were the next largest group at 17% (Table 3). This distribution is taken to reflect the level of interest in the study of issues related to aging.

Table 3. IAE-WC 2001 Presenters by Country

Region	Country	Presenter
Africa	10 (13%)	36 (1%)
Asia-Oceania	14 (19%)	711 (17%)
Europe	33 (44%)	993 (24%)
Latin America-Caribbean	16 (21%)	218 (5%)
North America	2 (3%)	2128 (52%)
Total	75	4086

Table 4 reports the distribution of presenters from the EAFAE membership region, other Asian countries including the Oceania area, and the rest of the world. A total of 4086 persons representing 75 countries and delegates presented 3159 sessions at the IAE-WC in 2001.

Among these, 163 studies (5%, 163 of 3159) were related to education. There was a low participation rate of the EAFAE membership region in IAG education-related sessions on aging research, training, or practices (11%, 467 of 4086). The portion of educational topics presented by EAFAE membership region was even smaller (9%, 14 of 163). Although the number of presentations representing current EAFAE regional practices in this category is small, these data provide a basis for valuable comparisons of the activity levels across the global community.

Table 4. IAE-WC-2001 Presenter Distribution and Educational Presentation

Category	Country and Other Delegates	Presenter	Ed. Titled Abstracts Among Total 3159 Abstracts†
Region of EAFAE Membership	5 (7%)	467 (11%)	14 (9%)
	China (C)	C: 146	C: 3
	Hong Kong S.A.R.(H)	H:　10	H: 1
	Japan　(J)	J:　246	J:　7
	Korea (K)	K:　58	K: 2
	Macau S.A.R. (M)	M:　0	M: 0
	Singapore (S)	S:　18	S:　1
	Taiwan (T)	T:　0	T: 0
Other Asia-Oceania ‡	8 (11%)	69 (2%)	2 (1% - India)
Rest of Other World	62 (83%)	3541 (87%)	147 (90%)
Total	75 (100%)	4086 (100%)	163 (100%)

† Searched by "educat" (87), "train" (31, overlap counting excluded), "learn" (32), "teach" (11), or "instruct"(2).

‡ Other Asia-Oceania (presenter number): Fiji (1), India (15), Indonesia (8), Malaysia (5), New Zealand (24), Pakistan (1), Philippine (3), Thailand (12).

Tables 5 reports the distribution of presentations categorized as leaner, setting, content, method, and outcomes. The educational practices focused on the educational programs by learner groups (52%, 187 of 360), methods (21%, 74 of 360), contents (16%, 59 of 360), settings (10%, 36 of 360), and outcomes (1%, 4 of 360).

Table 5. Categorical Comparison: EAFAE Region vs. Others

Comparison \ Category	EAFAE member			Other			Categorical Total
	Frequency	Within Region	Between Regions	Frequency	Within Region	Between Regions	
Learner	11	79%	6%	176	51%	94%	187 (52%)
Method	1	7%	1%	73	21%	99%	74 (21%)
Content	0	0%	0%	59	17%	100%	59 (16%)
Setting	2	14%	6%	34	10%	94%	36 (10%)
Outcome	0	0%	0%	4	1%	100%	4　(1%)
Regional Total	14	100%	4%	346	100%	96%	TOTAL: 360 (100%)

The detail distributions in the categories of learner, setting, content, method, and outcome are as follows:

6.1 Education for Leaner Types (*n*=187, 52%)

Table 6 reports the analysis results of the "Learner" group pattern, which was the largest classification of educational practice (52%, 187 of 360) for educational programs. The larger group was comprised of professional program learners (65%) as opposed to other adult learners such as elders and caregivers (35%). The largest single category was professional training (49%, 89 of 187), followed by elder education (28%, 53 of 187), medical education (14%, 26 of 187), caregiver (6%, 12 of 187) and nurse education (3%, 5 of 187).

There were 11 (6% of 187) presentations in this category from the EAFAE member region. Presentations in this category from the EAFAE member region included professional training (5), medical education (5), caregiver (1), and none in either elderly education or nurse education. The presentations from this region were predominantly addressed to professional program learners (91%) rather than other learners.

Table 6. Distinguished Learner Type

Comparison \ Category	Professional Program Learners §			Other Learners «			Regional Total (percent)
	Frequency	Within Category	Between Categories	Frequency	Within Category	Between Categories	
EAFAE	10	8%	91%	1	1%	9%	11 (6%)
Other	112	92%	64%	64	99%	36%	176 (94%)
Total	122	100%	65%	65	100%	35%	TOTAL: 187 (100%)

§ Professional Program Learners: Learners in the programs of Professional Training (89), Medical
  education (26), Nursing education (5), and two related Program Development and Intervention Protocol.
« Other Learners: Learners in the programs of Education of Elderly (53) and Caregivers-Relatives (12).

6.2 Educational Method (*n*=74, 21%)

Table 7 reports the analysis results of the "Method" category. Beyond the additional teaching and training methods (16%, 12 of 74), 66% (49 of 74) were related to individual learner involvement methods such as client involvement in teaching and intergenerational involvement. Others (19%, 14 of 74) were related to intervention protocol (5), policy development (5), and program development (4). However, presentations regarding learner involvement from the EAFAE member region constituted a very small portion (2%, 1 of 49) (Table 8).

Table 7. Distinguished Method

Comparison \ Category	Individual Learner Involvement ¶			Other Methods			Regional Total (percent)
	Frequency	Within Category	Between Categories	Frequency	Within Category	Between Categories	
EAFAE	1	2%	8%	12	48%	92%	13 (18%)
Other	48	98%	79%	13	52%	21%	61 (82%)
Total	49	100%	66%	25	100%	44%	TOTAL: 74 (100%)

¶ Individual Learner Involvement Method: Client Involvement (43), and Intergenerational Method (6).

6.3 Educational Content (*n*=59, 16%)

Regarding the pattern of "Content" analysis, most (92%, 54 of 59) were on patient health issues including Physical Conditioning (15), Abuse of Elderly (12), Mental Function (6), Patient Policy Development and patient Program Development (6), Elder Care (4), Health Practices of Elderly (4), Information Resources (3), Mental Health Issues (3), and Occupational Therapy (2). There were no presentations from the EAFAE member region that dealt directly with content as the primary concern.

A small number (8%, 5 of 59) of cases covered content of Creativity in the Elderly which is more broadly applied to the non-patient elder population. Those programs were in Australia (1), Canada (3), Germany (1), and none of EAFAE member countries or regions. This kind of topic might be attractive to younger adults as they engage active learning related to aging prior to any preventive health related learning.

Table 8. Distinguished Content

Comparison \ Category	Patient Health Issues			Other Methods			Regional Total (percent)
	Frequency	Within Category	Between Categories	Frequency	Within Category	Between Categories	
EAFAE	0	0%	0%	0	0%	0%	0 (0%)
Other	54	100%	92%	5	100%	8%	59 (100%)
Total	54	100%	92%	5	100%	8%	TOTAL: 59 (100%)

6.4 Educational Setting (*n*=36, 10%)

Educational settings were person-environment (3), community-based (4), Internet (5) or other forms of technology (14) such as video-base learning settings. Program (2) and policy (8) development issues centering on the setting in which learning would occur were also included under the setting category.

Half (53%, 19 of 36) of the category in Educational Setting were related to informational technology (Table 9). Only one presentation (Korea - Technology) was made in this area by a representative of the EAFAE member region.

Table 9. Distinguished Setting

Comparison \ Category	Technology Based			Other Settings			Regional Total (percent)
	Frequency	Within Category	Between Categories	Frequency	Within Category	Between Categories	
EAFAE	1	5%	100%	0	0%	0%	1 (3%)
Other	18	95%	51%	17	100%	49%	35 (97%)
Total	19	100%	53%	17	100%	47%	TOTAL: 36 (100%)

6.5 Educational Outcome (*n*=4, 1%)

A small number of presentations were related to educational outcomes. This category included two program development sessions from Switzerland and Canada, two Intervention Protocols from the United States and Canada, and none from the EAFAE member region.

Table 10. Distinguished Outcome

	Program Development		Policy Development		Regional Total (Percent)
	Frequency	Percent	Frequency	Percent	
EAFAE	0	0%	0	0%	0 (0%)
Other	2	100%	2	100%	4 (100%)
Total	2	100%	2	100%	TOTAL: 4 (100%)

7 Discussion

With reference to the research questions addressed in this study, the data analyzed reveal that of the topics presented, only 5% (163 of 3159) addressed issues accessed by the search terms associated with education used in this study. This may be taken as an indication that the vast majority of gerontologists are focused on issues other than education. The UN's International Plan of Action on Aging also declares that, "Aging is a life-long process and should be recognized as such. Preparation of the entire population for the later stages of life should be an integral part of social policies and encompass physical, psychological, cultural, religious, spiritual, economic, health and other factors" (UN, 1999/2000, para. 25i). Yet, there is strong evidence that professionals who are responsible for designing and delivering services to this population do not appear to focus on the multi-dimensional perspectives of the elderly as lifelong learners.

This finding leads to a conjecture that the relative paucity of papers on education may be an indication that politically and financially the researchers are reflecting what policy makers are asking for and, as a result, researchers and policy makers are not preparing their countries to meet the new educational needs associated with the shift in age demographics. Also, given the type of educational (and possibly other gerontological research) reported, researchers may be focusing on a limited model of aging rather than looking at the multi-dimensional aspects of intergenerational activity and the social capital that experienced older adults can bring to educating other elderly adults and the youth of the population. Educators and other

researchers may not be focusing adequate attention on adult lifelong learners as a resource. At the same time, the support systems traditionally provided the elderly by the younger generation are eroding as members of the next generation focus more on their own needs than on the needs of their elders. There should be further study effort made in such areas.

Within the group dealing with educational topics, clear differences of focus indicate that presentations by the EAFAE member region have a different emphasis than those presented by participants from other parts of the world.. Examples of these differences are presented in Table 10. It appears that the presentations by participants from the EAFAE member region are focused on educational issues related to the preparation and continuing education of professionals, such as physicians, nurses, and other health professionals rather than on the education of the public including the elderly, informal caregivers and relatives of the elderly. It is also evident that presentations by participants from the EAFAE member region paid little attention to methodological issues that involve consultation with individual learners or concern for technological settings, such as use of the internet and multi-media. There were no presentations by participants from the EAFAE member region on specific content areas or program development, and only one on policy development.

Table 11. Summary of Distinguished Areas by Category

Category	Distinctive Area	Within EAFAE (between comparison)	Within Others (between regions)
Learner	Professional Program Learners	91% (8%)	64% (92%)
Method	Individual Learner Involvement	8% (2%)	79% (98%)
Content	Patient Care	0% (0%)	92% (100%)
Setting	Information Technology	100% (5%)	51% (95%)
Outcomes	Policy Development	0% (0%)	50% (100%)
	Program Development	0% (0%)	50% (100%)

These findings lead to a conjecture that there are essential cultural values that contribute to these differences in educational focus. There may be relative distinctions in values related to the individual's perception of the cultural status and identity of being old, and societal expectations of the status and roles of the elderly in East Asia when compared to those held in other regions of the world. If cultural factors negatively impact the acceptance of late-life learning, age-related education during youth may be a priority for the present. Greater study of attitudes and educational needs in preparation for this change may be necessary. Educators in each country should be working with gerontologists, geriatricians and social change leaders, and policy makers to anticipate each country's unique assets and needs.

This study analyzed the content of abstracts from a single annual meeting of the International Association of Gerontology. It is recommended that a broader study be conducted to gather information across a longer period of time and wider representation of information sources. It is particularly important to seek international collaboration in such further studies. This evolving situation appears to open possibilities for associations like EAFAE to step into

the widening gap between the learning needs of the elderly and the disinclination of gerontologists to include the elderly in the processes of lifelong learning. By focusing the resources of educationists on the need for and mechanisms of extending lifelong learning into later periods of life than is the current practice in East Asia, EAFAE may substantially increase its contribution to the greater good of humanity. Perhaps such an effort could have two separate tracks essentially divided into attention to the needs of reorienting professionals in gerontology and attention to the.learning needs of the elderly, their relatives and informal caregivers. We believe that taking a lifelong learner perspective is a key to linking multi-sector educational needs and multi-generational communications to foster effective outcomes.

References

Asian South Pacific Bureau of Adult Education (ASPBAE) (1999). Older people and adult learning (OPAL) Report of a public forum and expert working group. Learning and older people (LOP). November 6-8, 1999. Singapore. Available at [http://www.ala.asn.au/opal/w_group.html]

The International Association of Gerontology (IAG). (2001). Global aging: Working together in a changing world. Abstracts of The 17th World Congress, Vancouver, Canada July 1-6, 2001. Gerontology, 47 (Supplement 1):1-718. Basel, NY: Karger.

The International Association of Gerontology (IAG). (2005). The IAG Newsletter Vol. 17, No. 5 (June 2005).

The United Nations (UN). (1999/2000). International Plan of Action on Ageing, para. 25 (i). Conceptual Framework: Lifelong individual development. New York: United Nations Division for Social Policy and Development.

The United Nations (UN). (2000). International Non-Government Organization. New York: United Nations Division for Social Policy and Development.

The United Nations (UN). (2002 a). World Population Aging 1950-2050, New York: United Nations Department of Economic and Social Affairs Population Division.

The United Nations (UN). (2002 b). The 2002 Madrid international plan for action on aging, New York: United Nations Department of Economic and Social Affairs Population Division.

The United States Census Bureau (USCB). (2005). International Data Base (IDB).

[Computerized source: On-line query available at http://www.census.gov/ipc/www/idbnew.html]. Web-site last updated on April 6, 2005. Washington, DC: U.S. Census Bureau Population Division International Programs Center.

Withnall, A.M.E. and Kabwasa N.O. (1999). Education for older adults. In C. J. Titmus (ed). Lifelong education for adults: An international handbook. Oxford: Pergamon.

World Health Organization (WHO) (1999). A life course perspective of maintaining independence in older age. Geneva: World Health Organization.

World Health Organization (WHO) (2002). Active Ageing: A policy framework. Geneva: World Health Organization Noncommunicable Disease Prevention and Health Promotion Department.

Appendix A. Matrix of Origins and Topics of Session Presentations at the 17ᵗʰ IAG-WC

	AE	CG	CI	CP	CR	EC	EE	HP	IG	IN	IP	IR	ME	MF	MH	NE	OT	PC	PD	PE	PR	PT	T	TS	Sum
Argentina			1				1	1											1						4
Australia			2	1			3			1								1				4		1	13
Belgium																			1						1
Brazil			2				5	1					1			1					1	3			14
Canada	9	6	9	1	3	1	11		2	2	4	3	1	4	3	2	2	6	5	1	3	32	5	5	120
Chile			1				1	1										1				1			5
Czech Rep.													1											1	2
Denmark							1											2							3
El Salvador													1												1
EU				1									1					1	1			1			5
France										1								1							2
Finland																		1							1
Germany			3		1		4		1	1											1	4		1	16
India		1	2			1	2		1				1						2			2			12
Israel		1					1															4			6
Malta		1	2			1	3												2			1			10
Mexico							1						1												2
Netherlands							2																		2
Philippines													1												1
Romania							1	1			1							1							4
Russia													1								1			1	3
S. Africa			1						1																2
Spain		1																							1
Sweden																						2			2
Switzerland						1							2						1		1				5
Thailand			2				2												1						5
UK	2	1	6				8						4	1		2			2		1	13	1		41
USA	1		11	2			7		1	1	2		6	1				1	3	2	1	17	7	3	63
Subtotal	12	11	42	4	5	4	53	4	6	5	8	3	21	6	3	5	2	15	19	3	9	84	13	12	346
China													1						1			1			3
Hong Kong																						1			1
Japan													4									3			7
Korea			1																				1		2
Macao																									0
Taiwan																									0
Singapore		1																							1
Subtotal	0	1	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	0	0	5	1	0	14
Totals	12	12	43	4	5	4	53	4	6	5	8	3	26	6	3	5	2	15	20	3	9	89	14	12	360

AE= Abuse of Elderly

CG= Caregivers – Relatives

CI= Client Involvement

CP= Community-based Programs

CR= Creativity in Elderly

EC= Elder Care

EE= Education of Elderly

HP= Health Practices of Elderly

IG= Intergenerational

IN= Internet

IP= Intervention Protocols

IR= Information Resources

ME= Medical Education

MF= Mental Function

MH= Mental Health Issues

NE= Nurse Education

OT= Occupational Therapy

PC= Physical Conditioning

PD= Policy Development

PE= Person-Environment

PR= Program Development

PT = Professional Training

T= Technology

TS= Teaching Strategies

Appendix B. General Categories Assigned Abstracts

Region	Methods	Content	Learner	Setting	Outcome	Total
Argentina	1	1	1	1	0	4
Australia	3	2	7	1	0	13
Belgium	0	0	0	1	0	1
Brazil	3	1	10	0	0	14
Canada	23	31	54	10	2	120
Chile	1	2	2	0	0	5
Czech Rep.	1	0	1	0	0	2
Denmark	0	2	1	0	0	3
El Salvador	0	0	1	0	0	1
EU	0	2	2	1	0	5
France	1	1	0	0	0	2
Finland	0	1	0	0	0	1
Germany	6	1	8	1	0	16
India	3	2	6	1	0	12
Israel	0	0	6	0	0	6
Malta	3	1	5	1	0	10
Mexico	0	0	2	0	0	2
Netherlands	0	0	2	0	0	2
Philippines	0	0	1	0	0	1
Romania	1	2	1	0	0	4
Russia	1	1	1	0	0	3
S. Africa	2	0	0	0	0	2
Spain	0	0	1	0	0	1
Sweden	0	0	2	0	0	2
Switzerland	0	2	2	0	1	5
Thailand	2	0	2	1	0	5
UK	6	3	28	4	0	41
USA	16	4	30	12	1	63
Subtotal	**73**	**59**	**176**	**34**	**4**	**346**
China	0	0	2	1	0	3
Hong Kong	0	0	1	0	0	1
Japan	0	0	7	0	0	7
Korea	1	0	0	1	0	2
Macao	0	0	0	0	0	0
Taiwan	0	0	0	0	0	0
Singapore	0	0	1	0	0	1
Subtotal	**1**	**0**	**11**	**2**	**0**	**14**
Totals	**74**	**59**	**187**	**36**	**4**	**360**