

THE DEVELOPMENT OF SPECIAL EDUCATION IN MACAU

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Education is important for the sustainable development for Macau because there is no natural resource in this area. The only thing that the city can count on to survive and excel is the knowledge and skills of its people. Currently, there is limited literature on the education system of Macau, in particular the area of special education. It is the intent of this paper to draw more attention and discussion about this field. This paper presents an overall objective view of the development of special education in Macau from academic year 1996-97 to 2006-07 by looking at the figures provided by the authority. The figures cover three major areas: the number of schools, the number of students and the number of teachers. Based on the figures and the social conditions of Macau, our study reveals the challenges that Macau is facing in terms of special education development and offers some possible solutions.

Introduction

After four and a half centuries of Portuguese administration, the Government of the People's Republic of China resumed its sovereignty over Macau on 20th December 1999. The Macau Special Administrative Region was established in accordance with the Article 31 of the Constitution of the People's Republic of China. In harmony with the principle of *one country, two systems*, the prevailing capitalist system and way of life shall remain unchanged for fifty years.

Macau has grown in land area from 10.28sq.km. in the 19th century to the current size of 29.2sq.km. The region consists of the Macau peninsula and the two islands of Taipa and Coloane. The population of Macau is estimated to be 557,400. According to the by-census 2006, there were 8,298 residents with disabilities. Within this group, 42.8% were males and 57.2% were females.

Macau's economy relies heavily on the gaming and tourism industries. With the deregulation of the gaming industry after the political transition, Macau's economy has developed rapidly. According to the SAR Government website, the per capita GDP hit MOP292,200 which is equivalent to USD36,357 in 2007.

During the period of Portuguese administration, the Government paid little attention to the provision of education. According to Rangel (1991, p. 315): *Education in Macau became a priority only during the last decade of the Government's development plans*. Most of Macau's schools are private. Religious bodies, social service organizations, commercial enterprises and individuals run them. Before the transition, official schools mainly catered the children from Portuguese families and had very little linkage with the local society. It was only after the political change that the authority put in more efforts in the provision of education. More resources, human, financial and technological, have poured in to study and to improve the existing situation.

Development of Special Education in Neighboring Regions

The development of special education in East Asia and Southeast Asia was relatively recent compared with regular education due to political, economic, cultural and social reasons. In many regions, Western missionaries were the first to establish special schools (Deng, Poon-Mcbrayer & Farnsworth, 2001, Park, 2002). A more systematic and official development of special education provision generally started in the second half of the twentieth century. In East Asia, Japan is the most advanced country in terms of special education development. According to Misawa (1994), the first special

school was started in 1878 for students with visual and hearing disabilities. But the development was interrupted by the war and has to be reconstructed in the twentieth century. In Korea, the most important law is the Special Education Promotion Act, which was enacted in 1977 (Park, 2002). The law regulated that free education would be provided for children with disabilities in compulsory education agencies and support would be given to private schools, which enrolled children with disabilities. In the following years, it has been reauthorized several times. In Mainland China, due to political instability, the development of education was seriously hampered from the 1950s to 1970s. Under the leadership of Deng Xiaoping in the late 1970s, social order was gradually restructured. In 1986 the Compulsory Education Law was passed and schools were required to accept students with special needs (Deng, Poon-Mcbrayer, & Farnsworth, 2001). Across the Straits, Taiwan mandated early childhood special education in 1984 (Kang, Lovett, & Haring, 2002). In Hong Kong, the Education Department formed the Special Education Section in 1960 (Rowe, 1971). It is responsible for the supervision and inspection of all special educational facilities. In Southeast Asia, Governments only took a more responsible role in special education provision in the last two decades. In Singapore, special education services were provided by voluntary organizations. The breakthrough came in 1988 when the Advisory Council for the Disabled submitted their recommendations in the *Report of the Advisory Council on the Disabled: Opportunities for the Disabled* in 1988 (Lim & Nam, 2000). The administration of special schools was then shifted from private bodies to the Ministry of Education. The Ministry of Education is also responsible for fifty percent of the funding. In Malaysia, the Education Act 1996 defined students with special needs and the Ministry of Education provides special education programs for the three types of disabilities: hearing, visual and learning (Ali, Mustapha, & Jelas, 2006).

Although the speed of development of special education in these regions has been positive, there are many challenges that lie ahead. First of all, the economic conditions will affect the growth of special education. In developing countries, there are many social services that are in great demand and the Governments may not put special education at the top of their agenda. Second, people with special needs are still considered as a taboo in many regions. Kang, Lovett & Haring (2002, p. 14) notes: *Beliefs regarding fate in Chinese culture may prevent family from seeking outside help, either from a family experiencing similar problems or from professionals who offer their assistance.* Similar experiences were noted in Korea (Kwon, 2005). Third, better legislation in terms of quality and quantity is needed to support a more comprehensive development of the field. Fourth, more resources need to be pour in for the training of relevant personnel. Fifth, parents need to be involved and respected for policy discussion and making. Sixth, more research about disability and student differences are demanded. Seventh, very limited attention has been given to the provision of higher education to students with special needs. Eighth, vocational education for students with special needs has to follow the paces of the society and equip students with more relevant and practical skills.

Brief History of Special Education Provision in Macau

The development of special education in Macau follows the footsteps of the general situation. The responsibility of special education provision was originally taken by various private and religious organizations (Wang, 1994, Su, 2000). It was not until 1990 that the Government established a commission for the development of special education under the Education Department. In 1991, the Government enacted Law Number 11/91/M, which specified the overall education system of Macau. This law also addressed the provision of special education. More than a decade later, Law Number 9/2006 was enacted. This new law refined the structure of non-higher education in Macau and modified several areas of special education provision. Major developments could be noticed in the following areas: the target of special education provision, the diagnostic procedures, the mode of education, and the supporting policy for special education.

In the 1991 Law, special education solely aimed at people with disabilities. In the 2006 Law, the scope of special education was extended to cover gifted people. The issue of diagnosis was also added to the new Law. It stated that the diagnostic procedures would be conducted by government departments or entities appointed by the education authority. In addition, the issue of inclusive education was given high priority in the 2006 Law.

Scope of Special Education Provision in Macau

The scope of special education provision in Macau can be divided into two types: direct and indirect services (Chen, 1999). Direct services include counseling service for special class students, student appraisal and treatment service, and school placement suggestion. Indirect services provide assistance

to activities that are related to special education, such as technical and financial assistance, co-ordination between private special education institutions, and training of educators.

Special classes are offered to children with special needs. Students are placed according to their age, type of disability and learning ability (Su, 2000). Special classes can be divided into four categories: first stage, second stage, third stage and guiding class. In addition to the contents of these classes, the four stages are also divided according to the age of the students that they are serving. First stage classes serve students between age 6 and 12. Second stage classes serve students between ages 13 to 18. Third stage classes serve students age 18 or above and guiding class serves students age six or above. For the first stage special class, courses are developed to train the mental development, communication ability, social adaptability and self-management of students. Subjects like languages, mathematics, art, music and sports are taught. The second stage special class aims to enhance the students' ability to use tools, to improve their communication skills, to develop their music and sports ability and to increase their knowledge in civic education. It is the hope to equip students with the necessary skills to work and to co-operate with ordinary people. The major purpose of the third stage class is to improve their working abilities with the hope that they can integrate into the society. The purpose of the guiding class is to meet the demands of slow learning students. Special arrangements will be made according to their specific needs.

Different Types of Institutions Offering Special Education

The structure of special education is specified in the law. Special education stretches from pre-school level to secondary level. Until the academic year 2006, special education can be classified in four ways: the nature of the institution, the language of instruction, the span of education provision and the mode of education. The different types of institutions are shown in Table 1.

Table 1
Different types of institutions offering special education

Classification	Types
Nature of the institution	- Public - Private
Language of instruction	- Chinese - Portuguese
Span of education provision	- Pre-school + Primary - Pre-school + Primary + Secondary - Primary - Special Class
Mode of education	- Special education - Inclusive education

The number of institutions offering special education has not changed much during the past decade (Table 2). There was only one public institution taking up this responsibility, except for the academic year 2003-2004 when there were two. All the institutions were established privately. They received financial assistance from the Government and free education was offered to students with special needs.

Table 2
Number of special schools, 1996-97 to 2007-08.

Year	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Total	5	6	6	6	6	6	6	7	6	6	6	5
Public	1	1	1	1	1	1	1	2	1	1	1	1
Private*	4	5	5	5	5	5	5	5	5	5	5	4
Private	0	0	0	0	0	0	0	0	0	0	0	0
Public %	20.0	16.7	16.7	16.7	16.7	16.7	16.7	28.6	16.7	16.7	16.7	20.0
Private %	80.0	83.3	83.3	83.3	83.3	83.3	83.3	71.4	83.3	83.3	83.3	80.0

Note: The table is prepared with reference to figures released by DSEJ, Macau SAR Government.

Caption: Private* refers to the schools which have joined the Government subsidy scheme.

Besides having special schools, special education is also offered to students with special needs in ordinary schools. The two types of schools combined are called schools that offer special education. Before the academic year 1999-2000, the scope of education was divided into four types, namely, pre-school, primary, secondary and special class. From 2000-01 onwards, it was divided into pre-

school/primary, pre-school/primary/secondary, secondary and special class. The number of these schools is shown Tables 3 and 4.

Table 3
The number of schools which offer special education, 1996-1997 to 1999-2000.

School \ Year	1996-97	1997-98	1998-99	1999-00
Total	12	11	12	13
Pre-school	2	2	1	1
Primary	2	2	1	1
Secondary	1	1	0	0
Special class	10	9	10	10

Source: Education Survey (1996-1997 to 1999-2000), Statistics and Census Service, Macau SAR Government.

Table 4
The number of schools which offer special education, 2000-2001 to 2006-2007.

School \ Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Total	14	15	14	15	13	12	10
Pre-school/Primary	1	1	1	1	0	0	0
Pre-school/ Primary/Secondary	1	1	1	1	1	1	1
Primary	0	1	1	1	1	1	1
Special class	12	12	11	12	11	10	8

Source: Education Survey (2000-2001 to 2006-2007), Statistics and Census Service, Macau SAR Government.

The number of schools, which offer special education, can be divided according to the nature of their sponsorship, whether they are sponsored publicly or privately (Table 5). Compared to Table 2, the number of public schools, which offer special education, is greater. This shows that the public sector is mainly offering special education in special class. The percentage of special class, which is offered by the public sector, has decreased from 75% in 2000-01 to 50% in 2006-07. Special education at other levels is chiefly conducted by the private sector.

Table 5
The number of schools which offer special education, divided according to their nature of sponsorship, 2000-2001 to 2006-2007.

School \ Year	2000-01			2001-02			2002-03			2003-04			2004-05		
	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T	Pu	Pr	T
Total	9*	5	14	9	6*	15	8	6	14	9	6	15	7	6	13
Pre-school/ Primary	0	1	1	0	1*	1	0	1	1	0	1	1	0	0	0
Pre-school/ Primary/Secondary	0	1	1	0	1	1	0	1	1	0	1	1	0	1	1
Primary	0	0	0	0	1	1	0	1	1	0	1	1	0	1	1
Special class	9*	3	12	9	3	12	8	3	11	9	3	12	7	4	11
Special class %	75.0	25.0	100.0	75.0	25.0	100.0	72.7	27.3	100.0	75.0	25.0	100.0	63.6	26.4	100.0

School \ Year	2005-06			2006-07		
	Pu	Pr	T	Pu	Pr	T
Total	6	6	12	4	6	10
Pre-school/ Primary	0	0	0	0	0	0
Pre-school/ Primary/Secondary	0	1	1	0	1	1
Primary	0	1	1	0	1	1
Special class	6	4	10	4	4	8
Special class %	60.0	40.0	100.0	50.0	50.0	100.0

Source: Education Survey (2000-2001 to 2006-2007), Statistics and Census Service, Macau SAR Government.

Caption: Pu: Public Pr: Private *Estimated and corrected figures

Number of Students Receiving Special Education

The number of registered students receiving special education has grown from 408 in 1996-97 to 507 in 2006-07 (Table 6). In year 2001-2002 there was a sudden increase to 709 but the figure dropped dramatically in 2002-03. This fluctuation might pose problems for the authority to plan and execute the educational policies. In terms of composition, the percentage of male students has always been higher than 60%. This may mean that male students have been more privileged in terms of receiving special education.

Table 6
Number of registered students receiving special education, 1996-97 to 2006-07.

Year	Registered Students		
	Total	Male	Male %
1996-1997	408	282	69.1
1997-1998	433	293	67.7
1998-1999	478	316	66.1
1999-2000	548	356	65.0
2000-2001	567	378	66.7
2001-2002	709	456	64.3
2002-2003	589	384	65.2
2003-2004	575	376	65.4
2004-2005	565	365	64.6
2005-2006	515	325	63.1
2006-2007	507	323	63.7

Source: Education Survey (2000-2001 to 2006-2007),
Statistics and Census Service, Macau SAR Government.

In table 7, the number of registered students is further divided according to the level of education. It shows that the majority of students are registered with special class and not in ordinary schools. For the ordinary schools, the biggest proportion of students is at the primary level.

Table 7
Number of registered students according to the level of education, 1996-97 to 2006-07.

Year	Number of registered students				
	Total	Pre-school	Primary	Secondary	Special class
1996-1997	408	20	51	16	321
1997-1998	433	19	45	13	356
1998-1999	478	18	45	19	396
1999-2000	548	17	48	20	463
2000-2001	567	18	61	19	469
2001-2002	709	14	111	24	560
2002-2003	589	25	88	30	446
2003-2004	575	36	107	32	400
2004-2005	565	27	81	32	425
2005-2006	515	27	81	32	375
2006-2007	507	22	83	38	364

Source: Education Survey (1996-97 to 2006-2007), Statistics and Census Service, Macau SAR Government.

Preparation of Teachers

The effective execution of special education policy demands a group of well-trained administrators and teachers to cater for the needs of students. However, the number of teachers has not increased during the past decade (Table 8). During the year 2001-02 when there was a sudden increase in the number of students, the number of teachers only increased by about ten. Another special feature in this sector is the unbalanced proportion of teachers in terms of gender. In the academic year 2006-07, the total number of teachers in basic education is 4,578. The numbers of male teachers and female teachers are

1,196 and 3,382 respectively (DSEJ, 2007). The ratio is about 1:2.8. However, in special education, the proportion of male teachers is exceptionally low compared to the general situation.

Table 8
Number of special education teachers, 1996-1997 to 2006-2007.

Academic Year	Number of Teachers		
	Total	Male	Male %
1996-1997	105	14	13.3
1997-1998	91	13	14.3
1998-1999	81	10	12.3
1999-2000	93	12	12.9
2000-2001	105	14	13.3
2001-2002	112	16	14.3
2002-2003	106	17	16.0
2003-2004	116	21	18.1
2004-2005	104	16	15.4
2005-2006	100	17	17.0
2006-2007	100	19	19.0

Source: Education Survey (2000-2001 to 2006-2007),
Statistics and Census Service, Macau SAR Government.

Another problem in Macau is that there is no local degree course, which specifically develops teachers for special education. There are only short courses or seminars that are conducted in a non-systematic fashion. Teachers who are interested in this field need to go to Taiwan, Hong Kong, Mainland China or overseas to further their studies. This may affect the positive development of special education.

Prospects and Future

Compared to its neighbors, Macau has a short history in the development of special education. Although the Government is now more active in improving the situation, there are many problems that need to be managed effectively. Pang & Richey (2006) argue that there are several challenges facing the development of special education in China: (1) the lack of an effective identification and diagnostic procedures, (2) the lack of an appropriate vocational education system, (3) the scarcity of educational opportunities, and (4) the difficulty in establishing the family and professional collaboration. As noted in the literature, these problems are common in this part of the world.

Macau is no exception. The educational authority is only at its infant stage in terms of developing the identification and diagnostic procedures. There is a lack of local expertise and it is difficult and ineffective to execute any policies unless there is a clear definition and identification of what special education is. Macau is a tiny commercial city. Students with disabilities will have a hard time finding jobs if they have to compete with other candidates. The skills that students learn at school may not be able to equip them with the necessary survival abilities. Currently the number of schools, which offer special education, is still limited. It is possible that many students who have the need to receive special education have not yet been identified and are left at the ordinary educational system.

Macau is a Chinese society and many parents may be reluctant to talk about their children's disability. At the same time, not all parents will know the need for special education for their children.

In addition to the above challenges, Macau faces a dilemma. The Government is strongly encouraging the implementation of inclusion. This is a positive policy because students will have the opportunity to be embedded in an ordinary environment. Nonetheless, the schools and teachers who receive these students may not be fully trained and prepared. The pressure that they face is immense.

The private sector is now taking a heavy load in special education provision. Since the Government is enjoying good financial revenues from the industries, more resources should be poured into the public

sector. As noted above, there is a lack of local expertise in special education. The tertiary institutions and the education authority should co-operate to devise more appropriate courses to facilitate teacher training in the area.

Conclusion

After the political transition, the Macau SAR Government has worked hard to improve the overall education system. The enactment of the 2006 Law shows that there is some major advancement. However, the actual implementation of policies is more challenging. First of all, the Government needs to determine the identification and diagnostic procedures so that the front line actors can respond accordingly. Second, most of the responsibility falls on the shoulders of the private sector. We think the public sector should play a stronger role here and the two sectors need to have a better co-ordination. Third, the Government also needs to invest more in preparing teachers for special education. Lastly, the passage from special education to inclusion education should be carefully monitored and evaluated by the authority.

Traditional Chinese philosophy believes in education for all and education according to one's needs and potentials. The way people with special needs are met in modern society is also an important indicator of the quality of life. Special education in Macau has been improving but still there are plenty of rooms for improvement. The effective execution of special education requires strong cooperation among students, parents, schools, and the general public. In the current society, many students are molded for public examinations and outliers are often unwelcome by the system. It is important for the general society to understand that every student is different and there is a substantial group of them, who have special needs. Parents of students with special needs should come together and let their voice be heard by more people or even participate in the making of policy. The current Macau Government is focusing on inclusion education and the needs of gifted students. These are unarguably major advancements in this area. However, it is critical to research and monitor whether all stakeholders understand the mechanism of the system and are prepared and motivated in the process. This paper provides an overall view of the situation and discusses some opportunities and challenges that lie ahead. It is hoped that by drawing more attention to this area, better and more appropriate education will be provided to students with special needs in the future.

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