

SPECIAL AND INCLUSIVE EDUCATION IN ISRAEL

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Abstract – The present paper aims to describe the Israeli special education system historically and currently, as related in particular to the 1988 National Special Education Law, and to appraise future systemic trends. Discussion focuses on three major aspects: (a) changes in special education concepts and ideological perceptions; (b) systemic structural changes locally and nationally; and (c) curricular and intervention perspectives. The conceptual/ideological review includes changes in theoretical approaches to definitions and classifications, which influenced implementation issues such as diagnostic and intervention planning. The discussion of systemic structural changes focuses on the expanding process of inclusion for children with special needs into the regular education system and on the growing process of decentralisation in resource distribution toward local and regional support centres. Diverse solutions are examined to resolve the enduring major conflict between the need to provide the optimal help and support to meet the special needs of each individual child and at the same time to strive for the highest level of inclusion. Developments in curricula and intervention are described, consisting of revised goals, modified definitions, and new approaches to remedial education and intervention, including the integration of new technologies. In appraising future trends, the importance is highlighted of appropriate modifications in teacher training, student skill development, and setting design, as well as the evaluating and supervising resource distribution and treatment efficacy.

Introduction

The Israeli education system consists of 1.6 million students from three different sectors: Jews, Arabs, and Druze. The national Ministry of Education is responsible for these three sectors and is divided into five regions. Over the last three decades, the Israeli education system has been characterised by increasing autonomy and decentralisation for its schools. This process has led to a gradual shift in decision making from the Ministry of Education to the regions and to the schools themselves, enabling the latter to exercise their own educational initiatives in areas such as curriculum development, instructional methods, etc. It should be noted that these changes reflect the Israeli social reality featuring different religions, ethnic groups, and cultures in each of the three sectors (Zilbershtein *et al.*, 1995).

The special and inclusive education system in Israel provides services to less than a 10% of the total population and manifests the same systemic trends toward school autonomy and decentralisation. These trends, as well as other processes that have come into play historically and currently, will be the focus of this paper.

Two basic principles guide the field of special education in Israel: the promotion of human dignity and the aspiration for equal opportunity. Each and every child is entitled to learn, according to his or her own abilities. In order to provide equal opportunities, a range of special support systems and specifically adapted instructional modes have been developed for children with a variety of difficulties and disabilities. This paper will first provide a brief historical review of Israeli special education, including its major legislation. Then the current situation in Israeli special education will be described, and future developmental trends at the beginning of the new millennium will be appraised, with a focus on three major issues:

1. Changes in special education concepts and ideological perceptions.
2. Systemic structural changes locally and nationally.
3. Curricular and intervention perspectives.

Historical review

The first educational institute for children with special needs was established in Jerusalem in 1902, before the establishment of the State of Israel. This institute for children with visual impairments and blindness was supported by voluntary groups of parents. It was followed by a special school for children with mental retardation (established in 1929), and schools for children with auditory and/or visual impairments (established in 1932). With the establishment of the State of Israel in 1948 and the legislation of the national education law, more special education schools were established. The National Education Law mandated that any child between 5 to 18 years of age was entitled to free education, regardless of individual needs or difficulties. A direct result of these historical developments was the establishment of new, segregated educational settings for children whose disabilities posed formidable obstacles for the regular education system (e.g., mental retardation, sensory impairment, physical disabilities such as cerebral palsy). In parallel with these special settings, special classes were set up in regular schools (Alon-Reshef, 1994; Bendel, Palti, Vinter & Or-Noy, 1989; Liberman, 1991; Marbach, 1974; Margalit, 1980; Shprinzak & Bar, 1988).

Although the National Education Law provided educational services to children with special needs, it was the Israeli National Special Education Law of 1988 (Yunay, 1992) that had the most significant impact on the instruction and

treatment of these children. The law stated that an 'exceptional' child consists of an individual 3-21 years of age who has developmental difficulties (physical, cognitive, emotional, or behavioural) that restrict his or her adjustment and functioning. The objective of this law was to promote the abilities and competencies of exceptional children in order to support their inclusion into society.

The special education law defined entitlement for support in accordance with the medical-psychological model of pathology that emphasises a significant deviation from the standard in critical areas of functioning. The law also used the developmental model (age range of 3-21 years) in order to explain disabilities and their outcome in maladjusted functioning. Developmental delays were discussed in terms of various functional aspects, and a diversity of educational and treatment goals were suggested (e.g. promoting skills and abilities, reducing deficits, etc.).

According to the Bendel *et al.* review in 1989, 11% of the child population in Israel evidenced developmental and adjustment difficulties, resembling the percentages of other countries. However, in 1998, an Israeli Ministry of Education survey reported that the special education system provided services to less than a 10% of the total student population. This discrepancy may be an outcome of budgetary restrictions.

The major contribution of the special education law to the changes in the Israeli special education system will next be discussed, with regard to its concepts and ideology, structure, curriculum and intervention.

Changes in special education concepts and ideological perceptions

Variation over time in the labels given in the literature to students in the special education stream may reflect systemic changes in concepts and ideology. Early terms such as 'handicap', 'deficiency', and 'uneducable' demonstrated the perception that injury was the constant, unchangeable hallmark of these students. The terms, 'exceptional children', 'handicapped children', or 'special education children', underscore differences and abnormality, implying that regular education failed to teach these students as expected for their chronological ages (Hegarty, 1993). Therefore, it is not surprising that, in its first stages, Israeli special education was devised as an alternative educational system with separate curricula and instructional methods. Early treatments emphasised 'special instruction' and 'special settings' in separate schools or classrooms. This focus on illness and injury developed through a medical-psychological classification that emphasised the differences between children with and without disabilities (Hegarty, 1995). It should be noted that the Israeli Special Education Law of 1988 used the global term 'exceptional child', in contrast with the term 'child

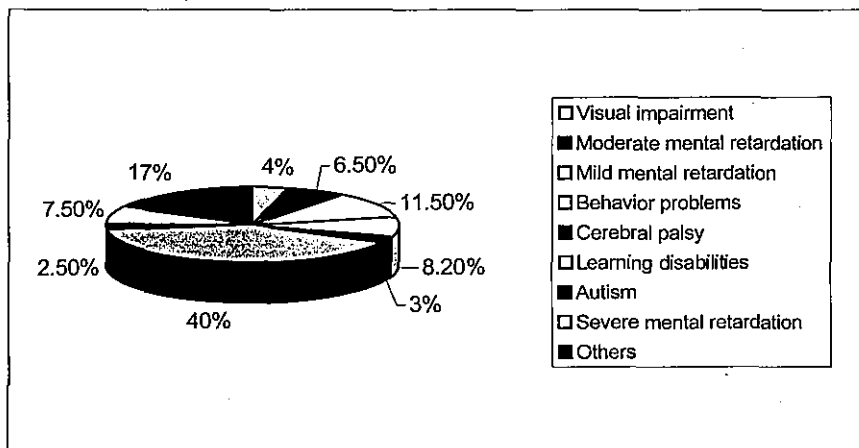
with special needs' that has recently been employed by many countries and which emphasises the need for a dynamic perception of the child's functioning and needs. Nevertheless, the law's implementation programme did provide ample detail on the different classifications of disabilities in order to calculate entitlement for services.

Today, in Israel, as internationally, the predominant terminology emphasises person-first language use and sensitivity to labelling among individuals with special needs (Folkins, 1992).

Similarly to the model used by medical professionals, the special education field also invested substantial resources into advancing differential diagnoses between classifications of disability (i.e., autism vs. mental retardation vs. learning disability, etc.). Efforts to discriminate between disabilities influenced several aspects of special education. Schools began specialising in the treatment of specific childhood exceptionalities, and specialised teacher training programs and curricula were developed (Margalit, 1999).

Figure 1 presents the current distribution of special education students according to their disabilities. As can be seen in the figure, students with learning disabilities comprise the largest group (40%). Second and third in size, respectively, are the groups with mild mental retardation (11.5%) and with behaviour disorders (8.2%). The 'others' category (17%) includes students with visual impairment, language delay, and others. In the 1999-2000 school year, the total population of students attending special education settings was 35,492.

FIGURE 1: The distribution of special education students according to their disabilities 1999-2000 school year



In recent years, an important theoretical argument has been raised concerning 'exceptional' classification models and their significance for conceptualising and implementing special education (Skidmore, 1996). To what extent has differential diagnosis contributed to educational programmes? Do children with different diagnoses receive different treatments? Has the link between diagnosis and instruction contributed to an improvement in children's functioning?

The answer to these questions emphasises two contrasting approaches to exceptionality classifications (Skidmore, 1996). The medical model, on the one hand, upholds the importance of the distinctions drawn between disability groups. According to the researchers and educators endorsing this approach, accurate diagnostic assessment and the planning of specialised educational treatment in line with this diagnosis are prerequisites for successful intervention for students in special education.

On the other hand, a second group of empiricists and education professionals have argued the unfeasibility of validating the clinical model and its frequent irrelevance while planning educational programmes. Advocates of the non-categorising model have corroborated their approach with the inconsistent findings demonstrated by research comparing formally classified special education students and students with learning difficulties who were not officially classified as having learning disabilities or other accepted diagnostic categories (Algozzine, Ysseldyke & McGue, 1995; Kavale, 1995; Kavale, Fuchs & Scruggs, 1994). Some of these researchers found significant differences between differently diagnosed students, whereas other studies failed to identify such differences. Other researchers focused on the fit between students' disabilities and the special instruction provided. For example, Algozzine and his colleagues evaluated 40 special classes in their 1995 study: 16 classes for students with mild mental retardation, 13 classes for students with learning disabilities, and 11 classes for students with behavioural disorders. In the majority of classes, observations did not reveal a significantly distinct usage of special instructional methods and strategies according to diagnostic classification.

Researchers from both of these approaches, those who accentuate the variance between disability groups and those who underscore the similarities between different students with learning difficulties, have not denied the need for special education students to receive special instruction. Both approaches concur regarding these children's failure to achieve age-appropriate learning levels within the regular educational system, as compared to their normally developing peers. Yet the non-categorising approach is unique in its focus on two weighty conceptual issues (Margalit, 1999). First, this approach asserts that the within-group variance for children with exceptionalities is not less than the between-group variance, thereby impairing the validity of well-accepted classification

procedures. Second, the non-categorising approach highlights ecological and multidimensional models that acknowledge the contribution of environmental variables and individual differences on children's learning (Skidmore, 1996).

Although the debate about the merit of exceptionality classifications deals with theoretical issues, its extensive impact on practical issues ranges from resource allocation, to decision making regarding criteria for entitlement to treatment, to the construction of educational programmes. This debate is also manifested in the usage of terms and appellations. In fact, replacing the term 'exceptional students' with 'students with special needs' represents an attempt to avoid controversial labelling.

In Israel, as in other countries, the special education law comprised a bid to integrate these two approaches. The law conceived a distinct classification for diagnostic and treatment procedures, yet concurrently emphasised the design of the Individualised Education Plans (IEP) that focus on the child's unique characteristics amidst the consideration of the severity of disabilities and needs. The law stipulated that an individual education plan be designed for each student, which will identify his or her particular needs.

Diagnostic procedures constitute another educational issue affected by the debate concerning the relevance of differential diagnosis to educational planning. Researchers have called into question the efficacy of standardised and detailed educational diagnoses that classify students, as compared to a dynamic diagnosis that supports and improves learning not only during the treatment but also during the diagnostic process itself, and that is continually modified according to the child's changing needs and abilities. In Israel, due to the absence of standard diagnostic procedures, the need to develop optimal diagnostic protocols holds crucial significance.

Alongside the changes in special education concepts and ideology, with their theoretical and practical implications, systemic structural modifications have evolved in Israeli special education.

Systemic structural changes in local and national education

This section will discuss the structural changes in Israeli special education, as manifested by (a) the inclusion of special education students within the regular education system, and (b) the decentralisation of special education resources.

Inclusion of special education students

The call for educators to match students who have special needs with local education settings that meet those needs, with as little exclusion as possible,

reflects the perception that neighbourhood schools should serve each and every child, including students with disabilities. Proponents of 'full inclusion', in its extreme, maintain that all students should be students in regular classrooms and receive all the necessary support/treatment services there (Cavett, 1994). Critics of 'full inclusion' assert its ineffectiveness in satisfying the unique needs of all children with disabilities. The development itself of the term 'inclusion' expresses the concept that regular schools should respond to a variety of students' different needs.

Similarly, the Israeli special education law has emphasised a commitment to placing students in the least restrictive environment (Alon-Reshef, 1994; Kauffman, Lloyd, Baker & Riedel, 1995). This commitment highlights the importance of providing support for students' special needs within regular education settings as much as possible; in their own neighbourhood schools if feasible. Likewise, for students who must be referred to separate special education settings, every effort must be made to minimise segregation and exclusion.

There is wide agreement internationally regarding the merit of inclusion into regular education for students with special needs. The United Nations of Education, Science and Culture Organisation (UNESCO, 1988, 1995) reported that three quarters of participant countries in their survey had declared an inclusion policy. The shift toward inclusion in regular education has even begun to appear in recent years in countries that in the past maintained segregated settings (Ashman, 1995; Ellger-Rutgardt, 1995; Kimonen & Nevalainen, 1995). However, cross-country research demonstrated wide differences in the perception and application of this principle (Williams, 1993).

An examination of the data for the Israeli special education system reveals a partial, rather than full, acceptance of the inclusion principle. A gradual shift has occurred in the structure of the settings for Israeli special education, in parallel with that of other countries. Over the first 25 years of Israel's existence, the number of children with special needs who attended special schools increased, as did the number of specialised schools. After 1975, with the acceptance of the inclusion approach, the number of special classes within regular schools began to increase, whereas the population attending separate schools began to decline (Alon-Reshef, 1994; Bendel *et al.*, 1989; Liberman, 1991; Marbach, 1974; Margalit, 1980; Shprinzak & Bar, 1988).

Diverse types of 'special classes' were also developed, beyond the initial special classroom that was completely separate despite its location in the regular school. New inclusive classes were implemented where students spent their days partly in regular classes and partly in special classes or where students with and without special needs studied together fully and were taught by two teachers (one regular and one special education teacher). These variations on inclusive

approaches reflect the conceptual transition regarding the term 'setting' – from a physical place such as a special school or classroom to a service that may not have separate physical boundaries yet provides special educational intervention (Repetto & Correa, 1996).

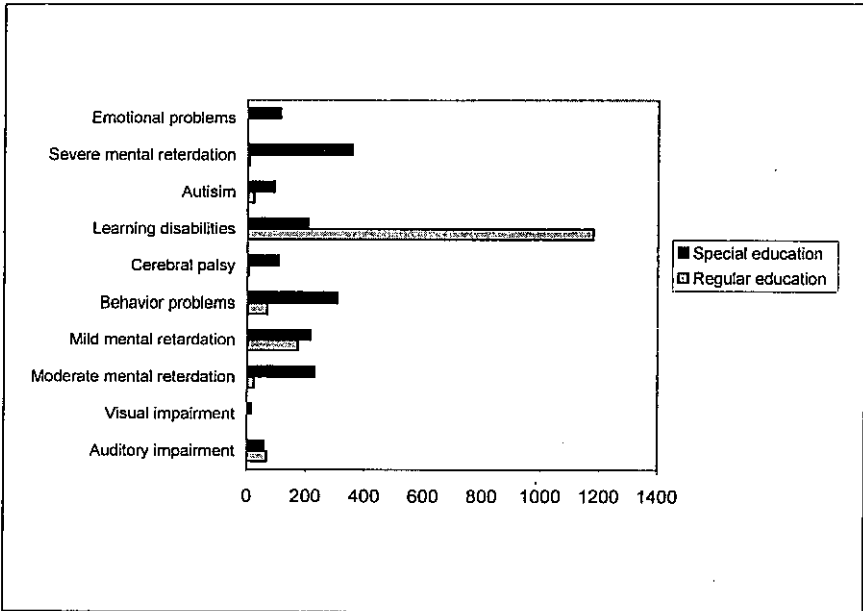
The move from separate schools to special classrooms within regular schools, and, more recently, to a variety of inclusive settings, attests to the Israeli system's increasing recognition of the importance of inclusion into regular education for children with special needs. The continual search for inclusion configurations that will suit children with different needs and abilities, reflects the system's attempts to provide diverse educational solutions to support heterogeneous student populations in their efforts to obtain age appropriate education (Fuchs & Fuchs, 1994; National Association of State Directors of Special Education, 1994). The decision to mainstream students with special needs into the regular education system or to place them in special settings must be made in accordance with an assessment of students' unique educational needs and functioning.

Additional support settings for children with special needs have also been developed to support the implementation of the special education law, including multidisciplinary resource centres for students in regular settings and unique programmes for students in segregated settings. Scattered multidisciplinary centres were established by the Ministry of Education adjacent to several regular education schools serving children with special needs. These centres provide assessment, support, intervention and treatment by special education teachers, occupational therapists, physical therapists, communication clinicians, art/movement/dance therapists, etc. It should be noted that over the last decade, the inclusion principle has been applied to these centres, emphasising the need to bring their services into the classrooms rather than removing children from class in order to visit the centres. Thus, these centres are now seen very rarely in Israel. In addition to the resource centres, unique programmes have been designed targeting children who have severe disabilities such as autism or cerebral palsy and attend special segregated schools. These programmes promote cooperation between special and regular schools, enabling such students with special needs to visit regular school settings on a part time basis. Recently, these students participate in inclusive programmes with intensive support.

Exploring the course of inclusion of special classes into the regular educational system in Israel demonstrates different processes for various disability groups. The first phases of inclusion were exercised only for students with mild disabilities such as learning disabilities, mild mental retardation, and mild behaviour problems. Gradually, the inclusion of students with moderate

and severe disabilities into regular education settings has begun, but these processes are still at an early stage. As illustrated in Figure 2, most separate classes for students with learning disabilities are located within the regular system, whereas most of the classes for students with severe disabilities such as mental retardation or autism continue to be located separately, outside the regular education system.

FIGURE 2: The number of special education classes and regular education classes in Israel in the 1999-2000 school year



The call for the inclusion of children with special needs into the regular education system must consider the evaluation of the effectiveness of this process. A review of the literature reveals three major axes of evaluation: (a) social development (b) learning achievement, and (c) quality of instruction and treatment.

Social development

Studies have indicated that students with special needs demonstrate less social initiation than do their peers. Inclusion with regular students has been shown to

promote their social skills (Madge, Affleck, & Lawenbraun, 1990; Williams, 1993). On the other hand, studies examining loneliness, social rejection, and friendship among these students demonstrated less consistent outcomes. Margalit (1994) found that, despite inclusion in the regular system, these students expressed high levels of loneliness and fewer social interactions. Sale and Carey (1995) reported that inclusion did not significantly improve the social status of students with special needs. These inconsistent results might be attributed to the studies' usage of different variables and conceptions, and their examination of different disabilities. Investigators of this axis of social development have highlighted the question of self-concept among students with special needs. Inclusion into a regular setting should involve students with similar disabilities in order to avoid the development of a sense of abnormality (Stainback, Stainback, East & Sapon-Shevin, 1994).

Learning achievement

Research that explored this issue demonstrated that different students learn at a variety of efficacy levels in different settings. Researchers reported inconsistent findings on the learning achievement among students following inclusion (Hegarty, 1991; Semmel, Abernathy, Butera, & Lesar, 1991). These findings reflect the need to implement a graduated sequence of distinct inclusive settings in order to suit individual needs (Hegarty, 1993).

Quality of instruction and treatment

The examination of teaching and treatment quality likewise has not reported consistent outcomes. Supporters of inclusion have cited research that revealed the difficulties demonstrated by most students with special needs in generalising learned skills to other areas. These difficulties suggest that instruction and treatment should be provided directly in the regular classrooms, to reduce the extent of generalisation necessary. Likewise, McWilliam and Bailey (1994) indicated that when treatment of preschool children with special needs was provided in the regular setting, in the presence of their normally developing peers, learned skills demonstrated a high level of generalisation and stability. On the other hand, inclusion opponents (Fuchs and Fuchs, 1995), have argued that the inclusion of students with special needs into different classes and schools raises serious questions about the education settings' ability to provide the same level of intensive, professional instruction and treatment as provided in the special settings. Another issue concerns the emotional responses and motivation of students with special needs when they receive extra instruction in regular settings.

Research has shown that inclusive students preferred to receive their special instruction and treatment outside the regular classes and by special teachers rather than their regular teachers (Pedeliadu, 1995).

In sum, according to these inconsistent evaluations of major aspects of inclusion, researchers have recommended exploring this issue as a philosophical and moral question (Hegarty, 1993). Contemporary communities tend to perceive inclusion as a universal value. Research has shown that segregated settings offer no distinct benefits, suggesting no reason why society should not provide equal educational opportunities (Hegarty, 1993; Kauffman, 1995). Studies have emphasised the importance of searching for diverse solutions to support this process, as no one solution is appropriate for all students (Cole, Mills, Dale & Jenkins, 1991; Hegarty, 1993; Self, Benning, Marston & Magnusson, 1991). For example, the ecological model recommended by Kauffman (1995) emphasised the importance of creating a variety of educational and treatment environments for the different needs and disabilities exhibited by children. In Israel, the emphasis on designing a variety of educational and treatment settings has promoted systemic changes in special education.

Next, the second area of structural change in Israeli special education will be discussed, with regard to the decentralisation of special education resources.

Decentralisation of special education resources

By virtue of the aforementioned inclusion processes in Israel, responsibility for children with special needs has largely shifted from the special education system to the regular education system, emphasising the question of systemic change in the distribution and utilisation of special education resources. Special education resources related to the diagnostic process, special instructional methods, unique treatment modes, special technologies, specialised teacher training, etc. are fundamental to the appropriate education, support, and intervention of students with special needs.

In recent years, the Israeli Ministry of Education has adopted a decentralisation special education policy for resources, as manifested in the establishment of Regional Support Centres in most regions of Israel. These centres hold responsibility for providing services to an entire region or area and for allotting special education resources to the area's various schools and inclusive settings. Governmental distribution of resources (i.e. weekly hours teaching by various teachers and therapists; hours for assessment procedures; specialised materials or curricula; teacher training programmes, etc.) to these support centres is determined by the number of students served by each centre and by their needs in accordance with diagnostic assessment. The basic assumption underlying this

decentralisation was that decisions about the allocation of resources should be made at the local level, in order to enhance their effectiveness and to decrease bureaucratic processes.

The process of decentralisation offers both promises and risks. Although it may promote the efficiency and quality of services, decentralisation may also cause inequity in service provision. Due to this risk, many countries such as England and New Zealand have developed a follow-up procedure to assure that resources do indeed reach their planned goal and to examine the quality of education and treatment provided to children with special needs (Mitchell, 1995). In England, the education system also developed a code of practice that defined the process of distribution and provision of special services (Fletcher-Campbell, 1994; U.K. Department of Education, 1994).

Studies have revealed two trends in resource distribution to regular education settings (Hegarty, 1995; Mitchell, 1995): (1) according to the number of children recognised as having disabilities, in order to meet each child's specific needs; and (2) according to the size of the total setting, to strengthen the educational system as a whole. The implementation of the special education law in Israel attempted to combine these two resource distribution trends. On the one hand, as described above, the Israeli regular education system receives resources through the Regional Support Centres according to the number and needs of the students enrolled who have been formally diagnosed by the educational system as having disabilities. On the other hand, additional support is provided by the Regional Support Centres directly to the regular schools in order to empower their capacity to provide appropriate special education and intervention solutions to children with special needs. This two-pronged approach to resource distribution, combining support of students and of settings, seems to have a potentially important contribution to the process of inclusion (Hegarty, 1995; Mitchell, 1995). However, in Israel, decentralisation of educational resources is still in its early stages, highlighting the need to strengthen its auditing system in order to ensure the quality of services actually received by children with special needs.

Curricular and intervention perspectives

A review of Israeli special education curricula and interventions reveals three major approaches that have characterised this arena since the beginning of Israel's existence. Teachers tend to emphasise one or more of these three approaches based on their examination of children's deficits and level of functioning. The three approaches include:

- *Instruction resembling that of the regular schools as much as possible:* This approach has led to much investment of effort in the instruction of subjects that at times had a low likelihood of success and low relevance for a significant subgroup of these children, due to the instruction's insufficient adaptation to children's special needs.
- *Functional instruction aiming to promote independent life skills:* This approach has focused on functional skills (such as environmental orientation or domestic skills) while relatively neglecting other different areas of instruction.
- *Intervention and treatment focusing on deficits or underdeveloped skills:* This approach has focused on areas of deficiency or underdeveloped skills (such as visual perception or fine motor skills) in order to improve a general level of skills and functioning.

In evaluating the effectiveness of curricula and intervention schemes, students' achievements have been a focus of study. In the early years in Israel, student achievement was assessed on an individual basis, comparing each child's improvement to his or her own baseline performance. However, the inclusion process into the regular school system emphasised the need to assess students with special needs in comparison to their peers. This process accentuated the need to pinpoint the products, achievements, and successes of students with special needs as compared to their peers, whenever planning or evaluating instruction, curricula, and interventions.

A review of the current trends in Israeli special education curricula and intervention reveals two major intervention approaches: one focusing on the student's environment and one focusing on the student's abilities and disabilities. The environmental approach refers to the adaptation of the environment – i.e., of the regular curricula or teaching methods – to suit the child's specific difficulties. Students may receive different modes of instruction to support their learning or tasks of reduced difficulty level related to the same subject matter studied by their peers. In the second approach, interventions focus specifically on students' abilities and disabilities. Students may undergo compensatory treatments to address their particular disability areas (e.g., speech therapy), learn strategic usage of various tools (e.g., technology, alternative communication), and receive skill training (e.g., social skills, behaviour regulation).

Any examination of curricula and interventions at the beginning of the new millennium would be wanting if it failed to describe the contribution of technology to the education system. Technology offers new modes for improving learning processes and modifying tasks to a variety of student needs and abilities. Research

has demonstrated the impact of the integration of technology on instruction and intervention with students who have special needs (Higgins & Boone, 1996). Although some studies indicated difficulties in utilising technology, these difficulties seemed to stem not from the tools themselves but rather from their mode of implementation (Ellsworth, 1994). There is wide agreement that successful technology integration must be combined with teacher training (Ellsworth, 1994; Higgins & Boone, 1996). The possibility of creating a partnership between home and school in this area has also been emphasised (Margalit, 1990).

Summary and future developmental trends

This paper examined the special education system in Israel from three major perspectives. First, changes in special education concepts and ideological perceptions were delineated, focusing on definitions and classifications of disabilities. Second, two major structural, systemic changes at the local and national level were reviewed: the broadening inclusion of special education students and the decentralisation of national resources. Third, changes in curricula, instruction, and interventions were discussed in accordance with conceptual and ideological developments.

This review highlights the strong impact that conceptual and ideological changes have had on decisions related to the implementation of the Israeli special education law. This ideological struggle has influenced diagnostic procedures, curriculum development, and the evaluation of student achievement. Yet in the first decades of the new millennium, several crucial issues should be maintained at the forefront while planning the future development of Israeli special education. The continuing systemic changes in Israel regarding student inclusion and resource decentralisation accentuate the importance of appropriate modifications in teacher training, student skill development, and setting design. In addition, two central future developmental trends should be considered: extending the role of the special education system and devising effective approaches for evaluating and supervising resource distribution and treatment efficacy.

Teacher training programmes

In line with the manifest inclusion policy and the aforementioned structural changes in the Israeli education system, teachers from regular and special education, require additional support and specialised training. Regular teachers who have students with special needs in their classes would benefit from guidance

support and instruction in the promotion of an accepting classroom environment. Moreover, these teachers must expand their professional knowledge about disabilities and treatment modes. Concurrently, as the actual number of students in segregated educational settings declines due to the broadening inclusion process, the professional training of special education teachers should be augmented to specifically incorporate the role of providing support and consultation for teachers in the regular system, as will be discussed below. Another important issue concerns teacher attitudes. Studies have demonstrated the major impact of teachers' and parents' attitudes on successful inclusion (Hegarty, 1993). A wide diversity of intervention programmes may promote changes in adults' perceptions and attitudes regarding disabilities, resulting in changes in instruction processes and home support (Jenkinson, 1993).

Social and adjustment skills

There is wide agreement that successful inclusion for students with special needs must involve social and adjustment aspects. Thus, teachers' knowledge on the treatment and instruction of social and adjustment skills, such as social initiation and behaviour regulation, should be promoted (Scarpati, Malloy & Fleming, 1996). Studies have indicated that social difficulties persist in partially and fully inclusive settings (Kavale & Forness, 1996). The combination of enhancing teacher awareness and designing specific social interventions might decrease the development of student behaviour problems and emotional distress.

Diverse settings

Research on the variety of special needs exhibited by children has highlighted the necessity to design a diversity of solutions (Kauffman *et al.*, 1995). In Israel, the implementation programme for the special education law emphasised the importance of the inclusive environment. Therefore, the process of designing settings for students with special needs should encompass settings with different levels of inclusion. A wider diversity of settings might offer solutions to a greater variety of student needs.

Extending the role of the special education system

The systemic changes that have evolved in regular and special education over the first half-century of Israel's existence have emphasised the need to expand and professionalise the unique role of special education teachers. The knowledge and support of the special education system may provide an important contribution to

those regular education settings that accommodate students with special needs (McLeskey, Skiba & Wilcox, 1990). Hegarty (1995) suggested that special education schools become centres that furnish services beyond solely providing intervention, such as knowledge, diagnostic evaluation, counselling to regular settings, and programme development. According to this model, the special education setting should offer knowledge and support not only to the regular education settings but also to families and to adult students with special needs. In fact, some special schools in England have shifted their role and have gradually transformed into knowledge, resource, and counseling centres (Fletcher-Campbell, 1994).

Development of evaluation and supervision processes

Research centres must be developed nationwide within academic institutions, in order to study special education resource distribution at the local level, to determine the efficacy of diverse treatments and interventions, and to draw and implement conclusions about how to optimally develop a variety of support mechanisms for the education system. In the U.S.A. and Europe, universities and research centers have significantly contributed to special education developments at the approach of the new millennium (Hasazi, Johnston, Liggett & Schattman, 1994). Similarly, two public committees were established in recent years in Israel. The first committee examined treatment effectiveness for students with learning disabilities (Margalit, 1997). A second committee is currently active in examining the implementation of the 1988 special education law. The establishment of these two public committees demonstrates the special education system's acceptance of the need to support and scrutinise the systemic changes in Israel.

In conclusion, it appears that closer collaboration between the special education and the regular education systems would take advantage of the special teachers' vast experience and knowledge base, with direct benefits for the regular teachers and, ultimately, for the students with special needs. Moreover, in order to sustain the changes in aims, roles, and structure of Israeli special education at the beginning of the new millennium, there is a need not only for collaboration between the special and regular education systems, but also for the involvement of families, communities, universities, and research centres.

Note

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