International Journal
of
Special Education

VOLUME 3 1988 NUMBER 2

- Subtypes of Family Climate among Kibbutz Mothers of Disabled Children
- Labelling in Special Education: A Problematic Issue in England and Wales
- Development of Education and Special Education in the Kingdom of Swaziland
- Developmental Psychology in the Soviet Union and its relevance for Special Education
- Early Intervention: Effectiveness on Children with Special Needs
- The Harlow Project: A Decade in Retrospect
- Study-Habits of Scheduled Tribe Students
- Introducing Computers in Special Education Programs in the People's Republic of China
- L'Arche from a Participant Observer's Perspective: The Creation of Universal Community
International Journal of Special Education

INDEX

Subtypes of Family Climate among Kibbutz Mothers of Disabled Children.................................................................101
  Malka Margalit, Yona Leyser and Yakov Avraham

Labelling in Special Education: A Problematic Issue in England and Wales........................................................................117
  Catherine Fenik

Development of Education and Special Education in the Kingdom of Swaziland..........................................................127
  Marg Csapo

Developmental Psychology in the Soviet Union and its relevance for Special Education.......................................................143
  Ivan Z. Holowinsky

Early Intervention: Effectiveness on Children with Special Needs......................................................................................153
  Schmuel Schulman and Carl Rubinroth

The Harlow Project: A Decade in Retrospect.........................................................163
  W.C. Nesbit

Study-Habits of Scheduled Tribe Students.................................................................171
  Harbans Singh and S.S. Chauhan

Introducing Computers in Special Education Programs in the People's Republic of China...............................................179
  Russel T. Osguthorpe, Jane Birch, Mickey Cochran, David Harrison, Zhou Lian and Mark Maddux

L'Arche from a Participant Observer's Perspective: The Creation of Universal Community...............................................187
  John Sumarah

VOLUME 3 1988 NUMBER 2
SUBTYPES OF FAMILY CLIMATE AMONG KIBBUTZ MOTHERS OF DISABLED CHILDREN

Malka Margalit

Tel Aviv University

Yona Leyser

Northern Illinois University, Dekalb

Yakov Avraham

Special Education
Kibbutzim Movement

The aim of the study was to identify subtypes of family climate as viewed by mothers of disabled children in the Israeli kibbutz. Four subtypes were identified by cluster analysis of family climate of 77 mothers of disabled children. They were conceptualized as family climate patterns emphasizing (a) personal growth orientation, (b) conflict orientation, (c) nonsupportive disorganized orientation, and (d) recreational avoidance orientation. Significant differences were found between the subtypes with regard to the family climate variables (internal validation), the Sense of Coherence measure, and the Satisfaction from Life measure (external validation). Cluster analysis of family climate of 77 mothers of nondisabled children added validation to the subtypes identified, revealing a similar pattern for three of the clusters. Only the nonsupportive disorganized family climate was unique for the mothers of disabled children in the Israeli kibbutz. These mothers were noted because of their lowest Sense of Coherence and dissatisfaction from their lives. Results demonstrated that different patterns of family climate characterized mothers of disabled children, offering a conceptual framework coping needs, within the gender style of coping with the prolong stress in their lives, yet calling for a differential approach in intervention planning, in order to adapt to mothers' specific needs.
SUBTYPES OF FAMILY CLIMATE AMONG KIBBUTZ MOTHERS OF DISABLED CHILDREN

Individuals are profoundly affected by the social matrix in which they are embedded. The stress and coping conceptual framework views adaptation as determined by a balance between normative life stressors and the stress resistance provided by (a) the individual's coping responses and (b) available social resources (Holahan & Moos, 1985). The presence of a disabled child in the family introduces additional prolonged stress, affecting the structure, function, and development of the entire family system (Friedrich, Witmer, & Cohen, 1985; Gargiulo, 1985). The bidirectional paths in this model reflect the idea that personal and environmental systems influence each other. These processes are conceptualized as transactional, suggesting that individuals within the family system influence and are influenced by each other (Monane, 1976).

System-oriented family theorists and clinicians (Moos, 1981; Reiss, 1981; Russell, 1979) have called attention to the means by which a family organizes and maintains itself as a social unit. As they pointed out, a certain amount of organization and control is necessary to maintain a consistent family milieu. Families need to balance their connectedness as a unit, while maintaining individuality and separateness; too much or too little of family cohesion or family adaptability is detrimental to family functioning (Russell, 1979). While an underemphasis on these areas may create a chaotic and unhealthy family milieu, an overemphasis may create a pathological environment which reduces possibilities for change and growth. From a life-cycle perspective (Combrick-Graham, 1985), one would expect that the optimum amount of interrelations within the family will differ at different stages in family life. The family with a young child needs more family cohesion in order to function effectively than the family with a teenaged child. A disability in the family may affect this expected development of the family system, reflecting the prolonged dependency of these children on their parents.

Family climate (Moos & Moos, 1976) can be described by a set of conceptually related dimensions: (a) The Relationship dimension reflecting the extent to which family members are involved with and supportive of each other, (b) The Personal Growth dimension reflecting the underlying goals towards which the family system is striving, and (c) System Maintenance dimension reflecting the degree of structure, clarity, and openness for change that characterizes the family system.

The personal growth dimension determines the direction of change, while the relationship and system maintenance dimensions influence the commitment to the environment, the extent of possible change, and the personal cost involved. Cohesive relationships amplify the influence of the personal growth dimension, and moderate the impact of highly demanding environments. Findings from research on the family climate have shown that the presence of a disabled child has been related to (a) fewer social activities, as revealed on the Family Environment Scale's (FES) Intellectual-Cultural and Active-Recreational indices (Baker, Sullaway, & Clark, 1982; Breslau, 1983; Margalit & Raviv, 1983); (b) a decrease in the open expression of emotion and in the cohesiveness of the family system, as revealed on the FES's Expressiveness.
and Cohesion indices (Breslau, 1983; Fowler, 1980; Margalit & Heiman, 1986); and (c) an increased structure in family activities as reflected by reduced independence of the family members (Independence index) and an increased need for organizing (Organization index) and controlling (Control index) the family system (Baker, Sullaway, & Clark, 1982). In a study of mothers' perceptions of family climate, Friedrich, Witurner, and Cohen (1985) described a group of families with developmentally disabled children which was successful in negotiating life-cycle transformations. These mothers scored high on the relationship dimension, were both cohesive and expressive, and scored low on the conflict index. They felt committed to other family members, yet felt that they were could discuss feelings and issues in a nonthreatening manner.

Increased demands on personal and familial resources require that all family members develop new roles and adapt their coping skills (Schild, 1976; Seligman, 1979), yet empirical data suggests that mothers seem to be most affected by the presence of a child with special needs (Margalit & Raviv, 1983). Mothers often feel that they are carrying most of the burden (Taylor, 1976). As Featherstone (1980) pointed out, their sense of loneliness reflects not only the realities of the situation, but also the vivid sense of being different. This increased need of mothers for interpersonal support was found not only in the western countries, but also in Japan (Uemura & Niimi, 1981) and can be explained in terms of gender related differences in the use of social support. Women tend to cope with stress by turning toward other people, whereas men often respond to stress with social withdrawal (Schmidt, Conn, Greene & Mesirow, 1982).

The realization that the impact of having a special child varies in different families (Schild, 1976) calls for the identification of various types of maternal reactions. The study of family climates presents an attempt to classify various family climate subtypes. Moos and Moos (1976), for example, reported on a multivariate cluster analysis of 100 family profiles, in which six types of family environments were identified. Three family types were oriented toward personal growth (independence, achievement, and moral-religion), two toward interpersonal relations (conflict, expressiveness), and one toward system maintenance (structure). An attempt to investigate subgroups of mothers presents methodological difficulties, particularly with regard to finding samples living in comparable environments. Usually comparable samples are very difficult to locate, yet the kibbutz which provides the families with most necessary resources, facilitate an attempt to differentiate between family climate subtypes.

The study of the kibbutz family presents a unique opportunity to investigate families of disabled children in an environment which provides for most major needs and where the disabled child cannot be considered the source of additional demands on the limited familial resources. The kibbutz as an independent economic community provides its members with an equal and sufficient supply of food, housing, clothing, physical space, recreational outlets, and medical care (Kaffman, Sivan-Sher, & Carel, 1981), and kibbutz children live and often even sleep in children's houses, spending several hours in the afternoon in their parents' homes (Beit-Hallahmi, 1981; Bettelheim, 1969; Gerson, 1978; Rabin & Beit-Hallahmi, 1982).
The role of childrearing in the kibbutz has attracted the attention of psychologists, sociologists, and educators. The ideological foundation underlying the communal childrearing practice was detailed by several authors (Beit-Hallahmi, 1981; Bettelheim, 1969; Gerson, 1978; Rabin & Beit-Hallahmi, 1982). In this child-centered community, where resources are provided according to personal needs, and where normal daily maternal duties, as well as the additional daily caring for the disabled child, are minimized through the communal food preparation and childrearing, the emotional impact of having a disabled child, in terms of the family climate, has special theoretical meaning. It is also important to investigate the mothers' subjective level of satisfaction from their family lives: The emotional stress related to raising a disabled child may be also expressed in a decreased of the global level of satisfaction with the family.

The continuous sorrow faced by these mothers may affect not only their views of their families, but also of themselves as persons in their world (i.e., their sense of coherence). Sense of coherence has been defined as a generalized orientation that expresses the extent to which a person has an enduring dynamic feeling of confidence in the predictability of his/her internal and external environments, and a belief that a high probability exists that things will work out as well as can reasonably be expected (Antonovsky, 1979, 1987). The presence of the disabled child in the family may lower the mothers' sense of coherence. This construct, which is composed of three components, comprehensibility, manageability, and meaningfulness, can provide an index of the mothers' feelings of distress.

Comprehensibility is the extent to which one perceives confronted stimuli as making cognitive sense, and the environment as being ordered, consistent, structured, understandable, and predictable. The manageability component is the extent to which one perceives the resources that are at one's disposal as adequate in meeting the demands of the environment. The meaningfulness component is conceptualized as the emotional counterpart of the comprehensibility component. It refers to the extent to which one feels that life makes sense emotionally and that some environmental demands are worthy of energy investment.

Based on the assumptions that (a) the presence of the disabled child in the family introduces systemic changes even in an environment that controls all major resources and provides for all major needs of its members, and (b) the family climate among mothers of disabled children even in the kibbutz has demonstrated these changes (Margalit, Leyser, Avraham, & Osin-Levi, in press), the aim of the present study was to identify subgroups among mothers of disabled children with respect to their perceptions of family climate and feelings of confidence in their environment. An attempt to identify family typologies among such fathers, and to compare them to family patterns reported by fathers of nondisabled children, pinpointed attention on four adaptive family climate clusters, yet emphasized differences between groups in terms of personal growth opportunities and their contribution to the sense of coherence levels in the different groups of fathers (Margalit, Leyser, & Avraham, in press). In the present study, it was hypothesized that similar subtypes of family climate would be found for mothers of disabled children and for mothers of nondis-
abled children; however the role of family support in predicting the personal sense of coherence will be emphasized.

METHOD

Sample

The sample consisted of 154 mothers living on 47 Israeli kibbutzim (plural of kibbutz) throughout the country, divided into two groups: mothers of 77 disabled children, and mothers of 77 nondisabled children. Control mothers were matched on personal and child variables and resided in the same kibbutzim as the mothers with disabled children. The handicapped children (58 males and 19 females) demonstrated chronic disabilities that severely interfered with their daily functioning and independence. The handicapping conditions included learning disabilities (n=21), mental retardation (n=21), emotional disabilities (n=20), and sensorily and physically handicapped (n=15). It should be emphasized that children with mild difficulties, who were able to participate in regular educational systems with the support of resource teachers, were not included in the sample.

The two groups of mothers showed an age range of 27.0 to 58.0 years (M = 41.1, SD = 7.3) and a mean educational status of 12.8 years (SD = 2.7). The number of children in the families ranged from 1 to 7 (M = 3.4, SD = 0.97), and the age of the disabled children ranged from 1 to 29 years (M = 12.2, SD = 3.5). No significant differences were found between the two groups of mothers on any of these variables.

Instruments

Sense of Coherence Scale (SOC). The SOC (Antonovsky, 1987) consisted of 29 statements on a 7-point Likert-type scale ranging from Never (1) to Always (7). Statements such as "Doing the things you do every day is ..." were rated from A source of deep pleasure and satisfaction (7) to A source of pain and boredom (1). The alpha coefficient measure of internal consistency for the entire scale was .90.

Family Environment Scale (FES). The FES (Moos & Moos, 1976, 1983) was used to reflect mothers' perceptions of their family climate. The short form of the FES consisted of 45 true-false items which yielded nine subscale scores: Cohesion, Expressiveness, Conflict, Independence, Achievement Orientation, Intellectual-Cultural Orientation, Active-Recreational Orientation, Organization, and Control (Moos & Moos, 1976). The Moral-Religious subscale was not included because most kibbutz families were not religious and found the subscale irrelevant to their lives. In the short form, five items were selected from each of the nine subscales, using the item-to-subscale correlation coefficient index, as found in several previous studies (Margalit & Ben Arzi, 1986; Margalit & Heiman, 1986; Margalit & Raviv, 1983).
The subscale scores were defined by the number of correct answers, with a range of 0 to 5 for each subscale. The scores for the three dimensions (Relationship, Personal Growth, and System Maintenance) were calculated from the scores of the subscales subsumed under each dimension, with a range of 0 to 5 for each dimension. The short form Hebrew adaptation showed an alpha reliability of .66 for the Relationship dimension; .64 for the Personal Growth dimension; and .65 for the System Maintenance dimension. Alpha coefficients for the nine subscales ranged from .62 to .89.

Global Measure of Satisfaction from the Family (SF). Mothers were asked to rate their satisfaction with their lives in their families on a 5-point scale from Not at all (0) to Very much (4).

Procedure

Mothers of disabled children were contacted by the third author, who is the director of the special education department of the Kibbutz Movement, and were interviewed in their homes by the second and the third authors. Mothers of nondisabled children from the same kibbutz were matched and then asked to complete the same questionnaires.

Cluster analysis. This technique was used here to group similar individuals over a predefined set of variables - the FES. Grouping is based on a similarity measure derived from the basic data of the study. Using this procedure, mothers were assigned to clusters according to the Euclidean distance between the individual and the mean of the cluster. The SPSS-X Statistical Package was used to perform the clustering analysis.

RESULTS

Family clusters

The disabled children composed an extremely heterogeneous sample. However, among mothers of disabled children no significant differences were found for either the FES variables or the Sense of Coherence scores with regard to the disabled children's sex, age, or disability categorization. These results as well as clinical experience in family consultation with families of disabled children indicate the need to attempt a definition of family climate subtypes.

In order to define family subtypes according to family climate patterns perceived by mothers of disabled children, a K-means clustering procedure was used to group mothers on the basis of similarity over the nine FES variables. Four clusters were identified. Means and standard deviations of the FES for each cluster are presented on Table 1. The four clusters may be conceptualized as follows:
Table 1

Means, Standard Deviations, and F Scores of the Family Clusters for Mothers with Disabled Children

<table>
<thead>
<tr>
<th>FES/Clusters</th>
<th>A(n=30)</th>
<th>B(n=12)</th>
<th>C(n=14)</th>
<th>D(n=21)</th>
<th>$F(3,73)$</th>
<th>Pairwise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>M</td>
<td>4.57</td>
<td>3.92</td>
<td>1.93</td>
<td>4.62</td>
<td>24.23**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.86</td>
<td>1.08</td>
<td>1.54</td>
<td>0.81</td>
<td>B=A</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>M</td>
<td>3.73</td>
<td>3.83</td>
<td>2.50</td>
<td>3.29</td>
<td>3.69**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.48</td>
<td>0.94</td>
<td>1.45</td>
<td>0.78</td>
<td>C=A,B</td>
</tr>
<tr>
<td>Conflict</td>
<td>M</td>
<td>1.53</td>
<td>2.67</td>
<td>2.21</td>
<td>1.81</td>
<td>2.52</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.11</td>
<td>1.07</td>
<td>1.63</td>
<td>1.40</td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>M</td>
<td>4.23</td>
<td>4.08</td>
<td>2.93</td>
<td>3.91</td>
<td>6.98**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.73</td>
<td>0.90</td>
<td>1.14</td>
<td>0.94</td>
<td>C=A,B,D</td>
</tr>
<tr>
<td>Achievement-</td>
<td>M</td>
<td>2.90</td>
<td>1.67</td>
<td>1.57</td>
<td>1.95</td>
<td>7.24**</td>
</tr>
<tr>
<td>Orientation</td>
<td>SD</td>
<td>0.85</td>
<td>1.23</td>
<td>1.45</td>
<td>0.97</td>
<td>A=B,C,D</td>
</tr>
<tr>
<td>Intellectual-</td>
<td>M</td>
<td>3.67</td>
<td>3.33</td>
<td>2.07</td>
<td>2.81</td>
<td>6.44**</td>
</tr>
<tr>
<td>Cultural</td>
<td>SD</td>
<td>1.09</td>
<td>1.55</td>
<td>1.39</td>
<td>1.17</td>
<td>C=A,B,D</td>
</tr>
<tr>
<td>Active-</td>
<td>M</td>
<td>3.53</td>
<td>3.42</td>
<td>1.50</td>
<td>1.86</td>
<td>18.77**</td>
</tr>
<tr>
<td>Recreational</td>
<td>SD</td>
<td>0.94</td>
<td>1.17</td>
<td>1.09</td>
<td>1.11</td>
<td>B=D</td>
</tr>
<tr>
<td>Organization</td>
<td>M</td>
<td>4.23</td>
<td>1.58</td>
<td>3.00</td>
<td>4.24</td>
<td>29.17**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.77</td>
<td>1.00</td>
<td>1.24</td>
<td>0.83</td>
<td>A,B,D</td>
</tr>
<tr>
<td>Control</td>
<td>M</td>
<td>3.17</td>
<td>1.83</td>
<td>1.79</td>
<td>3.10</td>
<td>5.71**</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.12</td>
<td>1.53</td>
<td>1.05</td>
<td>1.64</td>
<td>C,B=A,D</td>
</tr>
<tr>
<td>Sense of</td>
<td>M</td>
<td>4.99</td>
<td>4.54</td>
<td>4.35</td>
<td>4.74</td>
<td>2.74*</td>
</tr>
<tr>
<td>Coherence</td>
<td>SD</td>
<td>0.78</td>
<td>0.72</td>
<td>0.68</td>
<td>0.73</td>
<td>C=A</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>M</td>
<td>3.50</td>
<td>3.42</td>
<td>2.79</td>
<td>3.14</td>
<td>3.76*</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>0.57</td>
<td>0.67</td>
<td>0.89</td>
<td>0.73</td>
<td>C=A,B</td>
</tr>
</tbody>
</table>

*p > .05

**p > .01

Cluster A. Personal Growth Orientation (30 mothers - 38.96% of the sample): Mothers viewed their families as emphasizing and encouraging every aspect of the personal growth of its members. The climate in these families was perceived by these mothers as supportive, stressing open and free expression of emotions within a cohesive, organized, and controlled system.
Cluster B. Conflict Orientation (12 mothers - 15.6% of the sample): Conflicting interactions were highlighted in these disorganized families. Free emotional expressions as well as most aspects of personal growth were emphasized.

Cluster C. Nonsupportive orientation (14 mothers - 18.2% of the sample): In these extremely noncohesive and highly disorganized family systems, free expression of emotions was discouraged, and conflicting interrelations were evident. Opportunities for personal growth in these nonsupportive family systems were rather limited.

Cluster D. Recreation Avoidance Orientation (21 mothers - 27.3% of the sample): Mothers described their families as cohesive, controlled, and organized systems, in which recreational activities were discouraged. Their activities reflected a serious, task-oriented attitude to life.

Internal and external validation.

In order to determine whether the clustering technique produced clusters that differed significantly on their variables in line with Blashfield's (1980) suggestions, a MANOVA was performed. The overall MANOVA was significant, F(33,185) = 9.69, p<.01, as was each of the univariate analyses presented in Table 1. The clusters also differed on two measures that may be treated as external validation of the clustering groups: Sense of Coherence and Global Satisfaction from Family Life. Mothers in Cluster A expressed the highest levels of satisfaction from their families and viewed themselves as the most coherent persons. In Cluster C, the mothers demonstrated the lowest scores on the Sense of Coherence and the Family Satisfaction measures.

Demographic variables were examined in a post-hoc fashion. Chi-square analyses revealed no significant differences between clusters with regard to mother variables (age, education, and number of children in the family), or disabled child variables (sex, age, and clinical category).

Family Subtypes Among Control Families.

In order to investigate whether the four clusters found for mothers of disabled children were unique or whether they represented a general typology for mothers in the Israeli kibbutz, a cluster analysis of the control sample was performed for the same FES variables. Three clusters were identified. Significant differences between the clusters were found for each variable, and in the multivariate sense, F(22,130) = 5.78, p<.01. Means, standard deviations, and the F scores of the univariate analyses of the FES are presented in Table 2.
Table 2
Means, Standard Deviations, and F Scores of the Family Clusters for Mothers with Nondisabled Children

<table>
<thead>
<tr>
<th>FES/Clusters</th>
<th>A(n=31) M</th>
<th>B(n=17) M</th>
<th>D(n=29) M</th>
<th>F(3,74)</th>
<th>Pairwise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>4.94</td>
<td>4.47</td>
<td>4.72</td>
<td>3.74*</td>
<td>A=B</td>
</tr>
<tr>
<td></td>
<td>0.25</td>
<td>0.94</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressiveness</td>
<td>4.23</td>
<td>3.77</td>
<td>3.41</td>
<td>4.41*</td>
<td>D=A</td>
</tr>
<tr>
<td></td>
<td>0.81</td>
<td>1.60</td>
<td>0.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict</td>
<td>1.39</td>
<td>1.94</td>
<td>0.83</td>
<td>7.87**</td>
<td>B=D, A</td>
</tr>
<tr>
<td></td>
<td>0.76</td>
<td>1.25</td>
<td>0.89</td>
<td></td>
<td>A=D</td>
</tr>
<tr>
<td>Independence</td>
<td>4.55</td>
<td>3.77</td>
<td>3.90</td>
<td>5.78**</td>
<td>A=B, D</td>
</tr>
<tr>
<td></td>
<td>0.62</td>
<td>1.20</td>
<td>0.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achievement-</td>
<td>2.68</td>
<td>1.77</td>
<td>2.69</td>
<td>3.90*</td>
<td>B=A, D</td>
</tr>
<tr>
<td>Orientation</td>
<td>0.94</td>
<td>1.15</td>
<td>1.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intellectual-</td>
<td>4.07</td>
<td>4.00</td>
<td>3.35</td>
<td>3.19*</td>
<td>A=D</td>
</tr>
<tr>
<td>Cultural</td>
<td>0.85</td>
<td>1.17</td>
<td>1.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active-</td>
<td>3.71</td>
<td>2.88</td>
<td>2.38</td>
<td>8.99**</td>
<td>A=B, D</td>
</tr>
<tr>
<td>Recreational</td>
<td>0.97</td>
<td>1.61</td>
<td>1.21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td>4.03</td>
<td>2.53</td>
<td>4.52</td>
<td>20.01**</td>
<td>B=A, D</td>
</tr>
<tr>
<td></td>
<td>1.01</td>
<td>1.63</td>
<td>0.50</td>
<td></td>
<td>D=A</td>
</tr>
<tr>
<td>Control</td>
<td>2.71</td>
<td>2.29</td>
<td>3.24</td>
<td>3.12**</td>
<td>B=D</td>
</tr>
<tr>
<td></td>
<td>1.10</td>
<td>1.61</td>
<td>1.24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sense of</td>
<td>5.31</td>
<td>4.91</td>
<td>5.34</td>
<td>4.30*</td>
<td>B=A, D</td>
</tr>
<tr>
<td>Coherence</td>
<td>0.56</td>
<td>0.52</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>3.87</td>
<td>3.53</td>
<td>3.83</td>
<td>4.34*</td>
<td>B=A, D</td>
</tr>
<tr>
<td></td>
<td>0.34</td>
<td>0.52</td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p > .05
**p > .01

Cluster A. Personal Growth Orientation (31 control mothers - 40.3% of the sample). This cluster validated Cluster A for the group of mothers with disabled children, and no significant differences were found between the two mother groups.

Cluster B. Conflict Orientation (16 control mothers - 21.6% of the sample). This cluster validated Cluster B for the group of mothers with disabled children, and no significant multivariate difference between profiles was found.
Cluster C. No cluster similar to Cluster C for the group of mothers with disabled children was identified in the group of mothers with nondisabled children.

Cluster D. Recreation Avoidance Orientation (29 fathers - 37.7%). This cluster validated Cluster D for the group of mothers with disabled children. Only two variables accounted for the significant difference between clusters for the two groups of mothers, F(11, 38) = 3.58, p<.01: Conflict, F(1, 48) = 7.5, p<.01, and Achievement Orientation, F(1, 48) = 4.1, p<.05. Control mothers also reported higher levels of personal coherence, F(1, 48) = 12.4, p<.01, and satisfaction from their family life, F(1, 48) = 18.6, p<.01.

In order to further investigate the unique pattern of each cluster, a step-wise multiple regression was performed for the two groups of mothers, with Sense of Coherence as the dependent variable and the three dimensions of the FES as the independent variables. As can be seen in Table 3, the Relationship dimension was the best predictor in Cluster A, explaining 14% of the variance. The System Maintenance dimension entered as the second variable, explaining an additional 3% of the variance, and reaching a multiple R of .41.

Table 3

<table>
<thead>
<tr>
<th>Predictor variable</th>
<th>Step</th>
<th>r</th>
<th>R²</th>
<th>MR</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>1</td>
<td>.37</td>
<td>.14</td>
<td>.37</td>
<td>9.26**</td>
</tr>
<tr>
<td>System Maintenance</td>
<td>2</td>
<td>-.20</td>
<td>.17</td>
<td>.41</td>
<td>5.75**</td>
</tr>
<tr>
<td>Cluster B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>1</td>
<td>.45</td>
<td>.20</td>
<td>.45</td>
<td>6.74**</td>
</tr>
<tr>
<td>System Maintenance</td>
<td>2</td>
<td>.27</td>
<td>.24</td>
<td>.49</td>
<td>4.20**</td>
</tr>
<tr>
<td>Cluster D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship</td>
<td>1</td>
<td>.45</td>
<td>.20</td>
<td>.45</td>
<td>12.27**</td>
</tr>
<tr>
<td>Personal Growth</td>
<td>2</td>
<td>.44</td>
<td>.28</td>
<td>.53</td>
<td>9.12**</td>
</tr>
<tr>
<td>System Maintenance</td>
<td>3</td>
<td>.18</td>
<td>.32</td>
<td>.57</td>
<td>7.28**</td>
</tr>
</tbody>
</table>

*p>.05
**p>.01

In Cluster B, the Relationship dimension was the best predicting variable, explaining 20% of the variance, and the System Maintenance dimension explained an additional 4% of the variance, reaching a multiple R of .49. In Cluster D, all three dimensions
significantly predicted the Sense of Coherence; as in Clusters A and B, Relationship was the best predictor, explaining 20% of the variance. Personal Growth entered second, explaining an additional 8% of the variance, and the System Maintenance dimension entered as the third independent variable, adding 4% to the prediction of the dependent variable, reaching a multiple R of .57. It should be emphasized that the FES dimensions predicted only a low yet significant proportion of the variance (17% to 32%) for each of the three clusters. The small number of mothers in Cluster C prevented analysis for this cluster.

DISCUSSION

The aim of the study was to identify subtypes of family climate, as viewed by mothers of disabled children in the Israeli kibbutz. Four subtypes of family climate were identified for the mothers of the disabled children, but only three for the mothers of nondisabled children. Cluster C of family climate (nonsupportive orientation) was found only in mothers of disabled children. This cluster can be regarded as reflecting the impact of the disabled child. These mothers viewed themselves as the least satisfied and the least coherent. Their family climate reflected a nonsupportive, disorganized system, characterized by conflictual interrelations and diminished opportunities for personal growth. It is not clear how these mothers would have functioned without having a disabled child. An attempt to define any common objective characteristic for these mothers was unsuccessful: No unified picture emerged with regard to children's disabilities and/or demographic variables.

Two of the other three family climate clusters were similar in both groups of mothers. The largest group of mothers with disabled children was composed of mothers who felt most coherent and satisfied, and who perceived their families as emphasizing a personal growth orientation within a cohesive, supportive, and structured system (Cluster A).

In the conflict oriented subtype (Cluster B), mothers of disabled and nondisabled children alike described their families as the least structured and yet as providing opportunities for personal growth. As this family pattern was found in both groups of mothers, it cannot be considered a result of the direct impact of the disabled child. No significant differences were found between the two groups of mothers in these two clusters, and a similar configuration was also found in a study of fathers' family climate subtypes (Margalit, Lyser, & Avraham, in press). However, the fathers of disabled children in these two clusters viewed their families as less enabling opportunities for personal growth, whereas the mothers' comparison did not reveal significant differences. It should also be emphasized that in the conflict-driven families, mothers' opportunities for personal growth were not affected, whereas fathers viewed their families not only as less supportive and less organized (similar to mothers), but also as less enabling opportunities for personal growth.

In the fourth subgroup (Cluster D), mothers emphasized a task-oriented approach which did not allocate time for recreational activities. Neither group of task-oriented mothers emphasized opportunities for personal growth in their structured, cohesive
systems as an important aspect of their lives. However, in this cluster, mothers of disabled children felt less coherent and less satisfied than mothers of nondisabled children. They viewed their familial interrelations as more conflictual, and being less supportive of personal achievements. A similar family subtype profile was found in the fathers’ analysis; however, the only difference between fathers of disabled and nondisabled children was one aspect of the family’s system maintenance: Fathers of disabled children viewed their family system as less controlled.

The findings demonstrated the existence of similar family climate patterns among the two groups of mothers living in a similar environment, pinpointing attention to the one cluster identified only for the mothers of the disabled children. In this unique subtype of family climate, the lowest levels of satisfaction and personal coherence were reported within the least supportive system. These mothers also reported having limited opportunities for personal growth viewed themselves as being less able to develop independence, and perceived limited opportunities for intellectual and recreational activities. Also mothers in the fourth cluster demonstrated the impact of the disabled child, through viewing the relations in their family climate as more conflictuals, and less being a source of satisfaction.

The Sense of Coherence represents a global measure of optimism and confidence in personal efficacy and in the availability of environmental support. The findings demonstrate the importance of the personal interrelations within the family system to the personal coherence of mothers in all clusters, emphasizing the critical value of family support and interpersonal relations in their lives. This finding corroborates the vast research dealing with social support as a buffer which diminishes the effects of diverse, pervasive, and often unavoidable life stressors (Mitchell, Billings & Moos, 1982; Vaux & Athanassopoulou, 1987). It was found that women cope with stress by turning to other people, viewing personal relations and social support as their major source of assistance, and efficient coping, whereas males in similar situations usually cope by emphasizing an individualistic, instrumental approach in which the role of social support is considered less critical for their adjustment (Schmidt, Conn, Greene & Mesirow, 1982). In our study, mothers viewed family support as a critical variable for their personal coherence, whereas fathers emphasized their role of the personal growth opportunities as the key for their coherence.

It should be emphasized that the family climate variables provided only a partial explanation for the mothers’ personal sense of coherence. Further studies are needed to explore patterns of family systems and personality variables that may contribute to adjustment and buffer the impact of the prolonged stressful situation. The lack of significant differences between mothers with children of different ages and clinical categories should also serve as an impetus for further research, focusing on the possible role of the kibbutz environment in decreasing differences between family climates at different life-cycle stages, and between children with different handicapping conditions.

Results demonstrated that different patterns of family climate characterized mothers of disabled and nondisabled children, similarly to patterns found in previous research on fathers. The similarity between subtypes for the two groups of mothers high-
lighted the unique cluster found among mothers demonstrating the adverse impact of the disabled child on his/her mother in this family subtype. In contrast to the expectations that the impact of the prolonged stress of having a disabled children would be reflected especially by mothers, our findings, in line with clinical impressions, demonstrated the need for a careful and differential approach. Some mothers within different subtypes of family climate, were able to cope efficiently with their difficulties. However, it should be emphasized that these mothers were noted for their higher levels of cohesion and free expression of emotions. Their sense of coherence and level of satisfaction were not lower then those of mothers with nondisabled children. Further studies should be directed toward investigating the variables that may contribute to higher levels of personal coherence, with special attention given to the role of connectedness between the family members and acceptance of the expression of feelings.

The patterns in the three similar family climate subtypes direct special attention to the unique cluster of mothers who demonstrated the impact of stress. Further studies are needed to identify this specific subgroup's needs and coping strategies. The study's findings emphasized the value of an individualistic approach to understanding the stress impact among mothers with disabled children, and of attending to systemic differences in the family functioning. Consultation programs, in order to be effective, should emphasize the need to avoid the bias of expecting specific expressions of stress in mothers of disabled children, and should facilitate interactions with these mothers in an attempt to meet their needs.

This study has special value for resource providers and social security agents. The investigation of mothers with disabled children in the kibbutz provided a unique opportunity to study the impact of the disabled child on mothers, when their chronic sorrow (Wikler, Wasow, & Hatfield, 1981) is separated from their increased daily and childrearing duties. The results of this study demonstrated that providing resources according to needs has different meanings for mothers in different family subtypes. Different types of intervention planning should be attempted so as to identify the optimal modes for moderating the mothers' stress, geared to their different family systems and personal needs. Additional studies of families living in different environments may contribute to a better understanding of whether the clusters reported here are typical of a specific environment such as the kibbutz, or whether they are typical of families in general. Of special interest will be comparisons of family climate and personal reactions among families of disabled children in different cultures.

REFERENCES


*The authors would like to acknowledge the editorial assistance of Dee M. Bargteil.*
LABELLING IN SPECIAL EDUCATION: 
A PROBLEMATIC ISSUE IN ENGLAND AND WALES

Catherine A. Feniak

Lancaster University

This article utilizes sociological perspectives to examine underlying political, historic and economic influences that affect the categorization and labelling of pupils who are regarded as having special educational needs. An examination of recent statistics is used to determine whether integration is occurring in accordance with the 1981 Education Act. The current non-categorical system of classification, initiated in April 1983, is problematic in that much of the information pertinent to the groups of children receiving a special education is no longer reported in the official statistics.

An analysis of the history of the special education system in England reveals that provision for the disabled has been compatible with promoting and safeguarding the wider interests of those groups who retain power within the field. Historically, special education developed as a part of the mass education system designed to assist industrial expansion. Education was seen as a means to train pupils in skills marketable in the workforce (Tomlinson, 1981). Such educational practices as 'payment by results' and then, later in the twentieth century, the expansion of examinations, resulted in the exclusion of troublesome children whose academic attainment was poor or whose behaviour was deemed inappropriate for the mainstream classes. Commenting on this trend, Bart (1984) stated that special, ungraded classes were developed to appease "...those experts (teachers, administrators and related medical personnel) who, having a personal stake in the perpetuation of the existing educational system, needed a rapid and non-socially organizing solution to their newly acquired 'problem' " (p.86).

It has been suggested that the critical determinates underlying these trends were the changes in the academic requirements that were needed to compete for employment in an increasingly technical society (Tomlinson, 1982). Those who could not cope with the academic attainment level characteristic of a main-stream education were transferred into special education classes which were 'designed' to suit the needs of low attaining pupils. In many cases, these were the same types of pupils who formerly had been retained in the mainstream classes and upon leaving school had been able to find employment.
One of the justifications which has been provided to explain the development of this sub-system of education was based on humanitarian ideologies and Christian reformist principles. Many sociologists have expressed concern that egalitarian and humanitarian ideologies serve to obfuscate the economic and political factors which dictated the need for segregated schooling. Tomlinson (1982) is critical of these egalitarian ideologies, maintaining that rhetoric is used to persuade these pupils to expect certain social and occupational benefits when in reality these ideologies are acting to preserve the economic, social and cultural values of the dominant society. The act of segregating students is, in itself, in direct opposition to the tenets of egalitarianism, indicating the pervasiveness of egalitarian policies.

The controlling aspect of the special schools allows for the transmission of values which are deemed important for these students. Social control is achieved as a result of the coercive measures which are employed. Atkinson, Shone and Rees (1981) identified vocational training programmes as likely to emphasize obedience, docility, punctuality, appearance, demeanour and subordination. Although such traits are valued by many employers, there are currently few employment opportunities. The positions that become vacant are sought out by many well qualified workers making it less likely that those with a special education will be considered.

The 1944 Education Act (D.E.S., 1944) was a highly significant development for special education as it marked the zenith of statutory labelling of pupils. The concept of 'disability' became enshrined in this legislation. In total, eleven categories of disability were identified, nine of which were conditions having an organic basis. It was at this point that diabetics and epileptics were included in the categorization of children who required a special education. This is evidence of the tremendous power that the medical profession once wielded in labelling children. Physicians were responsible for the development of the medical-diagnostic paradigm that is still pervasive in special education (Ysseldyke and Algozine, 1982). According to this philosophy, a given behaviour is judged to be characteristic of a specific disorder. That same behaviour may then be attributed to the personality of an individual, resulting in the belief that the disorder is characteristic of that individual. The individual is then diagnosed and labelled as 'having' the disorder. The existence of some of these disorders is relatively easy to establish in the case of obvious conditions such as hearing or sight impairments. In contrast to these obvious, or normative categories, are the non-normative categories which include disabilities for which there is little diagnostic agreement (Tomlinson, 1982). The non-normative categories such as the mildly handicapped and the maladjusted are difficult to definitively diagnose due to the high degree of similarity between them.

Officially, diagnostic categories have been set up to meet specific administrative functions such as allocation of funding, research, treatment of specific conditions and programme placement. Ysseldyke and Algozine (1982), however, warn that in addition to these 'official' functions of categorization, the 'payoff' of the label must be assessed from the point of view of the individual who has been labelled. As Algozine and Mercer (1982) stated ... "labelling may actually be harmful to the child. When a child's perceptions and behaviour, as well as those of others, are altered by labelling
in a manner which results in restricting the social, emotional and/or academic growth of a child, labels are harmful" (p. 111). While Gallager (1976) listed as profane the use of labels that keep minority groups from opportunities that would be open to them if an ordinary education was possible.

Some researchers have indicated that labels were developed to obscure the incongruencies in the educational system (Casap, 1984). The creation of labels which attribute academic failure to: cultural, social, linguistic or emotional deprivation allow professionals to blame these factors rather than to accept responsibility for the child's educational problems. For example, in a study by Tomlinson (1981), low social status coupled with a 'deprived' cultural background were indicated in the labelling of many mentally handicapped students.

The 1970 Education Act (D.E.S., 1970) was particularly significant for educational psychologists. The apparent need to expand the psychological services was explained in part by the education system accepting responsibility for the educationally sub-normal from the health services (Barraclough, 1984). The importance that has been placed on assessment as a 'scientific' means of labelling children has guaranteed the continuing employment of educational psychologists. The vested interests of educational psychologists make it likely that pupils will continue to be assessed, labelled and referred to special classes. Galloway (1981), however, indicates that these referrals may also be dependent on the types of educational provision which is available ..."the number of problem children referred to psychologists for special education has increased in direct proportion to the availability of resources" (p. 169). The current political polarization of the 'radical right' and the 'militant left' have acted to influence social trends that effect the disabled (Fish, 1985). The dominant, competitive ideology of the right has resulted in a mandate to increase educational standards to meet the economic needs of the country. The emphasis on ability and achievement is perceived by some as evidence of a less caring attitude by the dominant society. Fish (1985) stated, "Consciences are apparently salved by charity rather than acceptance" (p. 132). This 'less caring' attitude may be exacerbated by the fact that society must support individuals who, as a consequence of a special education, are not able to find work. The government do not appear to be willing to commit their resources and efforts to special education services that do not yield economic returns. Thus, the power of humanitarian concern can be queried once it is subjected to a test of economic rationality.

The 1981 Education Act (D.E.S., 1981a) in accordance with the recommendations made in the Warnock Report (D.E.S., 1978a), resulted in the abolishment of the established categories of handicap and, thus, the use of 'official' labels was apparently abandoned. One of the justifications that is used to support this administrative change is that a non-categorical approach which abolishes labels tends to lessen the stigma that society imputes on those identified as having a disability. Individuals who have been labelled are, according to these rationalizations, the victims of a process of stigmatization which can have lasting negative effects. As in the past, humanitarian ideologies are being used to obfuscate the political and economic interests that this change in policy was designed to meet. The ability to alter a system that promoted
stigmatization has become a powerful justification to allow for the changes legislated in the 1981 Education Act (D.E.S., 1981a).

STATISTICAL INFORMATION AS PROBLEMATIC LABELLING

An evaluation utilizing sociological perspectives on recent statistics collected by the Department of Education and Science, ostensibly provides an assessment of the trends in special schools in terms of the labelling of pupils. In fact, the most significant aspect which is revealed when investigating these statistics, is that the official abolition of the 'categories of handicap' has made it impossible to downplay the fact that children who were once given highly stigmatized labels, continue to be segregated rather than integrated into the mainstream educational system. The statistics which were used to compare the special school population to the total school population are concerned only with those pupils who were attending English schools for the years 1978 and 1983 (D.E.S., 1980, 1984). The 1981 Education Act (D.E.S., 1981a), which was implemented in the schools April 1, 1983, shifted the emphasis away from reporting statistics that highlighted groups by virtue of disability, to reporting groups by 'curriculum need' (see Table 3). For this reason, 1983 was chosen for investigation since it represented the last year that the data reflected information about disability groups.

Table 1

Special School Pupils and Total School Population in England
Aged 5 - 15, 1978 - 1983

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1978</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Special School Students</td>
<td>Total School Population (millions)</td>
</tr>
<tr>
<td>5-10</td>
<td>46,089</td>
<td>4.30</td>
</tr>
<tr>
<td>11-15</td>
<td>73,322</td>
<td>3.87</td>
</tr>
<tr>
<td>Total</td>
<td>119,411</td>
<td>8.17</td>
</tr>
</tbody>
</table>

Table 1 compares the number of pupils in special schools with the number of pupils in the total school population for the years 1978 and 1983. Between 1978 and 1983, the total school population of pupils aged five to fifteen years of age fell from 8.17 million to 7.19 million, a decrease of twelve percent. During this same period, the special school population decreased from 119,411 to 110,624 reflecting a drop of 7.3%. While this may sound encouraging to those concerned with integration, it can be concluded that the total school population declined more rapidly than...
did the special school population. This is particularly significant since this decline resulted in an increase in the proportion of pupils attending special schools during this period, from 1.46% to 1.54%. This finding is almost identical to Swann's (1985) evaluation of the years 1978 and 1982. It can therefore be concluded that for the two periods 1978-1982 (Swann, 1985) and 1978-1983, there is a lack of evidence that would indicate a trend towards the integration of pupils with special educational needs.

**Table 2**


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Special School Students Per 10,000 of Total Population</td>
<td>52,530</td>
<td>53,196</td>
<td>74.0</td>
</tr>
<tr>
<td>ESN(M)</td>
<td>19.734</td>
<td>24.2</td>
<td>19,191</td>
</tr>
<tr>
<td>Maladjusted</td>
<td>12,549</td>
<td>15.8</td>
<td>13,084</td>
</tr>
</tbody>
</table>

Table 2 indicates the number of pupils in special schools representing the three major categories of disability for the years 1978 and 1983. These categories of disability include the labels: educationally sub-normal (moderate) or (ESN(M)), educationally sub-normal (severe) or (ESN(S)), and maladjusted. Although these non-normative labels represented a disproportionate 70.5% of the total special school population in 1983, there still is little agreement among the professionals who are involved in labelling these groups. A clearly stated operational definition differentiating these disabilities has been lacking making it probable that many pupils in the non-normative categories have been miscategorized. A revealing finding in Table 2 indicates that despite a decrease in the total school population of 12%, the proportions of special school pupils labelled as ESN(M), maladjusted and ESN(S) have increased by 12.6%, 10.3% and 15.2%, respectively. These results strengthen the contention made by Swann (1985) that in England there is evidence of a national trend towards the segregation of students in the non-normative categories of disability.
Table 3
Number of Pupils by Curriculum Need in English Maintained Special Schools, 1985

<table>
<thead>
<tr>
<th>Curriculum Need</th>
<th>Mainly Day Schools</th>
<th>Mainly Boarding Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Mainstream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>6,144</td>
<td>3,108</td>
</tr>
<tr>
<td>Modified</td>
<td>34,753</td>
<td>20,225</td>
</tr>
<tr>
<td>Developmental</td>
<td>17,470</td>
<td>12,801</td>
</tr>
<tr>
<td>Total</td>
<td>58,367</td>
<td>36,134</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum Need</th>
<th>Hospital Schools</th>
<th>All Special Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>Mainstream</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support</td>
<td>288</td>
<td>189</td>
</tr>
<tr>
<td>Modified</td>
<td>237</td>
<td>124</td>
</tr>
<tr>
<td>Developmental</td>
<td>1,100</td>
<td>713</td>
</tr>
<tr>
<td>Total</td>
<td>1,625</td>
<td>1,026</td>
</tr>
</tbody>
</table>

Adapted from D.E.S. Table A 19/85 (A19/84)

Table 3 indicates the format that is currently being employed by the D.E.S. (1985b) to report the number of special education pupils that are being educated 'by curriculum need'. It is obvious that the statistics which are being reported no longer indicate pupils by category of disability. It is difficult to know how students are chosen to receive either a 'developmental' curriculum, a 'modified' curriculum or a 'mainstream plus support' curriculum since the new format drastically reduces the amount of information which is supplied. This apparent decrease in statistical information may be one way of deliberately obscuring such issues as the current trend towards segregated special schooling. Specifying that children are to be educated according to their 'curriculum need' has not altered the fact that the schools still retain their unofficial labels. The amount of autonomy given to the special education system will make it difficult for the D.E.S. to ensure that continuity is maintained for these three designated curriculum modes in Local Educational Authorities throughout the country.
Clearly, the landmark decision to abolish the categories of disability has not substantially altered the labelling practices which had been used prior to the 1981 Education Act (D.E.S., 1981a). The D.E.S. statistics indicated that in 1983, the year before the change towards a non-categorical approach in special education occurred, there existed an increase in the proportion of students given labels from the non-normative categories. The fact that this increase occurred despite the knowledge that in the following year the categorization practices were to officially change suggests that the attitude in the schools was one which supported the retention of a labelling system that was well known and relatively simple to use. Such attitudes resulted in covert labelling practices once the non-categorical system of classification was introduced. Labels which were formerly attached to each of the special schools are still well known, and as a consequence, students can be labelled by association.

Thus, the adoption of a non-categorical system of classification has largely been unsuccessful in abolishing the labelling of students with special needs. This system of classifying students according to their educational needs has been very successful, however, in obfuscating much of the information that was previously reported by the Department of Education and Science. It is now difficult to determine if unpopular trends are still occurring, as was noted in the rise in the segregation of special students prior to 1982. The non-categorical approach to teaching students with special educational needs ensures that the economic and political interests of those in positions of power will be maintained. It is these vested interests that are governing shifts in administrative policies rather than the humanitarian principles that are often cited. The net result is that the educational needs of these students are not being addressed.

REFERENCES
DEVELOPMENT OF EDUCATION AND SPECIAL EDUCATION IN THE KINGDOM OF SWAZILAND

Marg Csapo

University of British Columbia

The educational policy of Swaziland, not unlike that of the majority of post-independence African governments emphasized democratization of the school system resulting in unprecedented expansion of services. However with a population growth rate of 3.5% and the rate of economic growth at 2.2% per annum, the economy can no longer provide jobs for the number of school leavers who seek employment. A recently published government report estimated that there are only 3,000 jobs for the 7,000 school leavers per year, resulting in 4,000 unemployed (Government of Swaziland, 1985). As half of the country's population of 689,000 in 1985 were under 15 years of age, the number of school leavers is likely to increase rapidly creating a lower rate of employment opportunity for those seeking jobs in the modern sector or the civil service. Furthermore the lack of practical skills in the curriculum has produced school leavers who are rather ill-equipped for employment. This paper reviews the characteristics of the education system of Swaziland and the steps offered by the government to solve the dilemma of expanding education.

The post independence government of Swaziland after 1968 considered education an inalienable right of every child, and the document, The Philosophy, Policies and Objectives of the Imbokodvo National Movement, clearly stated the aims of education: "all education shall be designed to inculcate love for our land, loyalty to our King and country, self-respect, self-discipline, respect for the law accompanied by the highest degree of knowledge and the building of character" (Government of Swaziland, 1972, p. 27-28). In order to help every child realize this "inalienable right, the key factor in individual and national development", King Sobhuza II appointed a National Education Commission in 1972 to advise on future developments. The re-
port published by this commission in 1975 formed the basis of the education policy of the Third National Development Plan (1978/79-1983/84). The guidelines that the provision of lower levels of the system of education would respond to social demand, and the higher level enrolments would be determined by manpower needs, promoted further the expansion of primary services. This document also included the following long term targets:

i) universal primary education (seven years of education) for all children 6-13 years of age by 1985;

ii) universal primary education to be extended to ten years for all pupils by 1995;

iii) enrolment in high school to be restricted by manpower requirements; and

iv) expansion of teacher education facilities.

While the Third National Development Plan aimed at the further-expansion of education services, it also embodied objectives for qualitative improvement, diversification of the curriculum towards the extension and strengthening of the teaching of practical subjects, with the expectation of producing school leavers with skills for employment and self-employment in both urban and rural areas.

I. THE FORMAL SYSTEM OF EDUCATION

Education is dispensed through three types of schools which differ according to the level of government support and method of control. The control of schools lies with the government. Government schools form 20% of all schools and all their expenses are paid by the government and control is exercised by the headmaster. The majority of secondary schools are government owned. The aided schools mostly affiliated with missions represent 71% of the primary schools. In these schools the government provides only for teachers salaries and they are controlled by the grantee. Private schools, approximately 9% of the schools receive no financial support and their control lies with the Chairman of the School Committee. Bill No. 8, 1981, the Education Bill, contains regulations for the establishment and operation of all schools. Education is divided into primary, secondary and post-secondary systems.

1. Primary and Secondary

Primary education is seven years and leads to the Swaziland Primary Certificate. Entry is at six years of age. During the first three years the medium of instruction is siSwati, English begins at grade four. Students who pass the Swaziland Primary Certificate examination with first and second class stand a better chance of being admitted to Junior Secondary school than those with a third class pass.

Secondary education consists of five years, three years at Junior Secondary and two years at High School. If the student passes the Junior Certificate examination s/he
may proceed to high school, or the Swaziland College of Technology for Vocational/Technical Training, or primary teacher training at one of the three Teacher Training Colleges, or the College of Nursing.

The two year High School prepares the student for the Cambridge Overseas School Certificate. Those who pass may continue their education at the University College of Swaziland for degree, diploma or certificate programs, or the Swaziland College of Technology for Vocational/Technical Training, or secondary teacher training, or the College of Nursing.


The democratization of education resulted in:

i) a rapid expansion of enrolment and a corresponding increase of schools as illustrated in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Schools</th>
<th>Enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td>Year 1970</td>
<td>351</td>
<td>38</td>
</tr>
<tr>
<td>Year 1980</td>
<td>450</td>
<td>86</td>
</tr>
<tr>
<td>Increase</td>
<td>99</td>
<td>48</td>
</tr>
<tr>
<td>Percentage of Increase</td>
<td>28%</td>
<td>126%</td>
</tr>
</tbody>
</table>


The increase was unprecedented even though merely 80% of the primary, 46% of the junior secondary and 20% of the senior secondary age population had been enrolled in schools by 1980 (Government of Swaziland, 1981). Pre-schools, which date back to the 1940's and which were run by private and church organizations, were taken over by the Ministry of Education in 1979 with approximately 5% of the 3-6 year olds enrolled. Their numbers increased rapidly, especially in urban areas.

ii) an increase in the teaching force

The rapid expansion of schools was accompanied by a rapid increase of the teaching force (Table 2).
Table 2
Increase of the Number of Primary and Secondary Teachers

<table>
<thead>
<tr>
<th>Category</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>1706</td>
<td>432</td>
</tr>
<tr>
<td>1980</td>
<td>3278</td>
<td>1270</td>
</tr>
<tr>
<td>Increase</td>
<td>1572</td>
<td></td>
</tr>
<tr>
<td>Percentage of increase</td>
<td>92%</td>
<td>194%</td>
</tr>
</tbody>
</table>

Government of Swaziland, 1981.

In addition, 1,150 unqualified school teachers were upgraded through the Primary Teacher In-service program using face to face and distance training methods. The increase of the number of teachers resulted in the reduction of the pupil/teacher ratio of 103:1 to 33:1.

3. **Educational Developments After 1980**

The increased expansion stimulated a number of educational changes:

i) The opening of Ngwane Teacher Training College in 1982 increased the enrolment of prospective primary teachers.

ii) Rapid expansion of subject of agriculture (Table 3)

Table 3
The Number of Schools Teaching Modern Agriculture

<table>
<thead>
<tr>
<th>Category</th>
<th>Primary</th>
<th>Junior</th>
<th>Secondary</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982</td>
<td>9</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>77</td>
<td>52</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>82</td>
<td>57</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Government of Swaziland, 1983.

Teachers of agriculture were in short supply and their number was further reduced by some of them taking up positions in the Ministry of Agriculture and in the administration of agricultural projects within the school system. This situation was slightly corrected by sending 18 teachers for further training to Luyengo and abroad. At the
Gnwane Teachers College, agriculture is a well established subject but at the Nazarene Teacher's College it is offered only to male students. The University of Swaziland offers a B.Sc. in Agricultural Education at Luyengo obviating the need for overseas training. Extensive in-service training at the primary level was instrumental in the rapid expansion of the School's Agricultural Project. The Ministry's School Garden Scheme has provided special assistance to schools for the introduction of practical experience in agriculture.

iii) In addition to agriculture as a subject in the regular schools, Farm Schools were established:

The Dokolwako Farm School at Croydon, a small Salesian project began with a one year training course for local young people in 1983. The local chief has allocated several acres of Swazi Nation Land to the project. A School's Agricultural Centre was established at Emlalatini.

iv) Rapid expansion of facilities for home economics

In 1983, 338 primary and 61 secondary schools taught the subject and as of 1983, the Swaziland Primary Certificate Examination includes home economics. Courses at the primary level consists of Needlework and Domestic Science, at the secondary level of Family Living, Health and Hygiene, Family Resources, Local Foods and Recipes. As in the case of teachers of Agriculture Specialist teachers leave to take up positions at the Ministry of Agriculture or at other ministries or are lost to transfers and promotions.

v) Expansion of adult and non-formal education

The Adult and Non-formal Education section of the Ministry offers programs through the following programs:

i) the Rural Education Centers (REC)
ii) Adult Literary Education Program (Sebanta)
iii) St. Mary's School of Appropriate Farm Technology (SAFT)
iv) the Manzini Industrial Training Center (MITZ)

More than 540 rural adults have taken advantage of programs offered by REC, such as community improvement projects, sewing, knitting, woodwork, carpentry, masonry, nutrition and cookery, handicrafts and literary education. Vocational training is being offered by SAFT and the Dvokolwako Farm School. The Sebenta National Institute runs literacy classes in both siSwati and English. In 1983, 5,409 adults 10 were enrolled. The MITZ set up by the Salesian community in Manzini in 1980 and strengthened in 1983 by the involvement of the Sisters of the Order of the Holy Paraclete at St. Michael's Mission in Manzini offers two year courses in building and carpentry to a number of school leavers and drop-outs to improve their chances for employment. In 1983 the Anglican Diocese donated seven hectares of land to expand the project to metal work, motor and diesel mechanics, sewing and knitting, etc.

vi) Special education

The care of mentally retarded, physically handicapped, hearing and visually impaired children was assigned to the Ministry of Social Welfare, later to the Ministry of Local Administration and finally to the Ministry of Education which dispenses services
through voluntary organizations coordinated by the Swaziland National Society for the Handicapped.

vii) The University of Swaziland was established in 1976 as a constituent college of the University of Botswana and became an independent university in 1987. The five faculties have enrolled 1,063 students in 1982.

4. Present Issues and Concerns

The quantitative expansion of education was not accompanied by qualitative improvement which resulted in a number of problems:

i) Decrease in standards of performance at the Cambridge Overseas School examination

The number of failures in English language in 1981 at 45.9% increased to 48.9% by 1982. Failure in English literature at 35% in 1981 rose to 53.2% in 1982. The number of failures in maths were also over the 50% mark.

ii) Wastage of student resources:

Repeating grades and dropping out of school places a heavy burden on school finances and defies the purpose of providing education to a large number of children.

Table 4

<table>
<thead>
<tr>
<th>Student Category</th>
<th>Total Enrollment</th>
<th>Repeater</th>
<th>% of Repeaters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
</tr>
<tr>
<td>Primary</td>
<td>62,978</td>
<td>62,325</td>
<td>125,303</td>
</tr>
<tr>
<td>Jr. Second.</td>
<td>10,360</td>
<td>10,608</td>
<td>20,968</td>
</tr>
<tr>
<td>High School</td>
<td>3,068</td>
<td>2,433</td>
<td>5,501</td>
</tr>
</tbody>
</table>

Government of Swaziland, 1983

a) Repeaters

A study carried out by Eklund (1981) showed that it takes 15.2 years to produce a primary graduate, as some children 12 repeat as many as five times. Due to the presence of these overage school pupils, 23,600 (21%) of primary school age children are without places in school.

b) Drop-out rate
Only two percent of the children who complete secondary school will obtain the Cambridge Overseas School Certificate. Out of every 1,000 children who enter grade one only 250 complete grade seven without repeating or dropping out. Of these only sixty reaches Form V (Government of Swaziland, 1987). Substantial numbers drop out in the lower grades who usually lapse into illiteracy.

iii) Increase of unqualified teachers

With the rapid expansion of schools, teachers were hired in large numbers without appropriate qualifications (Table 5).

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Primary</th>
<th>Secondary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>360</td>
<td>120</td>
</tr>
<tr>
<td>1980</td>
<td>493</td>
<td>300</td>
</tr>
<tr>
<td>Percentage of</td>
<td>15%</td>
<td>23.2%</td>
</tr>
<tr>
<td>teaching force</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Government of Swaziland, 1981.

As the result of the increase of unqualified teachers, 314 (32%) of the secondary teachers are expatriates especially in the fields of mathematics, science and technology. This increase of unqualified teachers at the secondary level is reflected in the small percentage of successful candidates for the Cambridge Overseas School Certificate which dropped from 76% in 1971 to 36% in 1980. The poor performance of the teachers is probably largely due to requiring them to teach all subject areas and large classes.

iv) Large pupil/teacher ratios

The pupil/teacher ratio in primary schools is 38:1 ranging from 17:1 to 72:1.

v) Increasing number of unemployed school leavers

Between 1975 and 1983 the number of primary school leavers increased by 30%, by 195% at Junior Secondary and by 71% at the Senior Secondary level. In 1983 no jobs existed for about 37,400 school leavers. It is estimated that by 89/90 an additional 12,800 will join the ranks of the unemployed (Government of Swaziland, 1983). Most have not completed their formal education. Others are not trained for the skills required by the labour market. It is predicted that in spite of the alarming rate by the labour market. It is predicted that in spite of the alarming rate of unemployment there will be a shortage of skilled technical trades people of approximately 260 per annum up to 1989/90.

vi) Pre-school services
Existing services are unevenly distributed. Over-enrollment results in over-crowded conditions. Preschool teachers receive no training. Preschool services have expanded rapidly in urban areas like Mbabane and Manzini.

5. Movement Towards Finding Solutions:

The Cabinet of the Kingdom of Swaziland set up a National Education Review Commission (NERCOM) in March 1984 with the mandate to review the entire education system and consider how the quality could be improved and equal opportunity be provided so that all children in Swaziland would succeed within the system.

The guidelines centered around three major areas of need:

i) alternative education programs for the increasing number of school leavers who do not enter higher secondary education and who do not find employment.

ii) improvement of the quality of primary and lower secondary education and directing more resources into this area where the majority of students are concentrated; and

iii) the provision of adequate resources for the Ministry of Education to carry out the expanded functions.

The Commission was charged to come up with recommendations in order to improve the quality of education at all levels, to seek alternative education programs leading to alternative examinations that would "help all children of Swaziland to develop pride in their nation, respect for elders, and loyalty to the monarch" (Government of Swaziland, 1985, p.1). The government wanted the nation to participate in the formulation of educational policies. Seeking constructive ideas essentially from the general public on the direction the education system should take, the Commission held meetings in urban and rural areas across the country, distributed questionnaires and received written and oral submissions and organized a National Conference on Education with the help of UNESCO in December 1984. The synthesis of the views of a wide spectrum of Swazi society were published in the report, Reform through Dialogue, in the spring of 1985 and presented to the government. An annex containing the submissions to the National Education Review Commission appeared in a separate volume.

The report contains a number of recommendations for immediate action and long-term goals to shape the direction of the education system at all levels:

- **Pre-school**

  Pre-school operations lack clearly defined policy for their operation, administration, establishment, locations, buildings, teacher qualifications and coordination of different types of activities. They are also unevenly distributed.

- **General objectives:**

  To establish preschools for all Swazi children, four to six years of age, to promote their socialization, development of their audio-sensorial and communication skills in
siSwati and English, cf potential aptitudes, of personality and character building in preparation for entrance to the primary school.

- Long term objectives:
  The provision of free pre-school education for all Swazi four to six year old children, living in both urban and rural areas, within two kilometers of his/her home. In isolated areas transportation is to be provided to facilitate children's attendance. Time schedules are to be closely related to the climatic conditions.

- Short term objectives:
  The Ministry is to draw up policies on the standardization of the curriculum, building codes and on the employment and training of pre-school personnel at the teachers colleges. Local communities are encouraged to establish preschools and parent/community involvement is invited at all levels of the operation of preschools. The government intends to provide equipment. The Ministry of Health is to undertake health screening at the pre-school level.

*Primary education*

The following inefficiencies were highlighted by the report: unequal distribution of primary schools which makes access difficult for some children, parents find school fees a financial burden, many teachers are unqualified and lack motivation; facilities are inadequate, the curriculum does not prepare pupils for a life of work and lack coordination with the secondary curriculum, administrative practices are not efficient.

- General objectives:
  The development of children's moral, intellectual, cultural, spiritual and aesthetic values in preparation for life, is the broad aim of primary schooling.

- Long term objectives:
  The provision of eight years of primary education for all Swazi children between the ages of 6 and 14 years. This education to be free for the first four years, would be enhanced by diversifying the curriculum and making it relevant in terms of every day life and in preparation for work. By limiting classes to 40 pupils and distributing school and classroom facilities equitably or within walking distance across the country and providing transportation for those who need it universal access is hoped to be achieved.

- Short term objectives:
  SiSwati will be the medium of instruction in the first years and English will be introduced in grade three with siSwati remaining as a subject. By interlinking the primary and secondary curriculum the transition from one level to the other is expected to be smoother. Repetition will be allowed only once between first and fourth grade and once between fifth and seventh grade. Remedial instruction and psychological guidance to cater for the needs of slow learners as well as continuous assessment are to be introduced to prevent wastage of pupil resources. The Swaziland Primary Certificate will be awarded on the basis of continuous assessment and a national examination. Teacher education is expected to emphasize practical arts and to specialize in primary education subject areas, such as math, science, English, home economics and agriculture, and remedial instruction be introduced. In-service training for teach-
ers on individual reporting, record keeping, continuous assessment and at the upper level, vocational and guidance services will be held for all teachers, as well as training in administration and school management for headmasters. Regular inspection, provision for the maintenance of buildings and school facilities are included among the short term objectives.

Secondary education

The recommendations focussed on quality and relevance and the following constraints were cited: over-age students and high rates of repetition, inadequate curriculum diversification, lack of alternatives for students who do not wish to participate in the purely academic studies, the curriculum provides little preparation for work, fees and boarding expenses are high, many teachers lack appropriate qualifications and strong motivation, increase of discipline problems, tact of headmasters lack administrative and management skills and schools are not regularly inspected.

- General objectives:
  To develop higher learning by strengthening the foundation laid in primary school, to foster skills which would benefit both the individual and the community and to give equal status to both academic and vocational programs, are the general objectives for secondary schooling.

- Long term objectives:
  A close coordination between primary and secondary curriculum as well as diversification of the curriculum to enable the system to move away from the narrow academic orientation are main long term objectives. By establishing a streaming process in the first year, students would be directed to vocational and academic streams based on aptitude test results and manpower needs. The first two years will stress preparation for the "O" level Cambridge Overseas Certificate or alternative vocational fields, making transfer possible during grades 8-9 upon recommendation. Academic, vocational specialization will take place in grades 10 and 11. Shifting gradually the emphasis to local examination, the "O" level or equivalent to "O" level examination will take place at the end of four years, followed by "A" level studies in academic or in vocational, technical, commercial, and agricultural subjects. Admissions to secondary schools will be based on academic achievement. Psychological and guidance services will be made available.

- Short term objectives:
  The Ministry of Education will develop coherent policy to strengthen and expand secondary schools on a regional basis. In addition to core academic subjects, basic, practical studies such as agriculture, technical, commercial studies, and home economics will be introduced in grades 8 and 9. Pre-vocational and practical arts will become an alternative stream of education and will end in a national examination equivalent to institutionally accepted levels of proficiency in this subject. By the establishment of Vocational Training Centers, the Swaziland College of Technology and university preparatory courses advanced studies will be made available at the "A" level. Technical and vocational teacher education as well as the utilization of competent people in various vocational and trade occupations to be utilized. The implemen-
tation of the Industrial and Vocational Training Act, 1982, will facilitate developments in industrial and vocational training at all levels. Government farms will be included among the sites for agricultural training. Further emphasis on traditional arts and crafts to lead to self-employment will be emphasized.

**Teacher Education**

Falling standards in training, lack of motivation of trainees and inadequate practical preparation were the main shortcomings reported.

- **General objectives:**
  
  To provide improved teacher education in order to prepare suitable and competent persons as teachers.

- **Short term objectives:**
  
  Under the University of Swaziland, an overall coordinating body be created for regulating activities of instructors. The training program of three years after “O” level will be instituted with practice schools attached to colleges. Practical arts subjects, teaching the physically handicapped in regular classes will be offered to compliment core areas: principles and methods of education, psychology and social education and school administration. With two years of probationary teaching the training experience will be five years for teacher educators. Periodic refresher courses and inspection of teachers” colleges aim at improving quality of training.

**University Education**

University education is aimed at high and middle level of manpower training and academic learning.

- **General objectives:**
  
  To operate according to the functions stated in the University of Swaziland Act, 1983.

- **Long term objectives:**
  
  i) "A" level examinations; two years after the successful completion of “O” level will be introduced as entrance exams. iii) Short term objectives:

  A one year post-graduate diploma in education for advanced studies is introduced.

**Non-formal and adult education**

- **General objectives:**
  
  The Ministry of Education continues to aim at producing an informed public.

- **Long term objectives:**
  
  The Ministry of Education will strengthen the non-formal and adult education programs.

- **Short term objectives:**
  
  A post of a director of non-formal and adult education is necessary to define and coordinate the functions of the various institutions providing services. Community participation is seen as essential for the successful operation of these centers. Rural Education Centers will be built as formal education establishments and regarded as regional outlets for non-formal and adult education.
**Special education**

Presently services for handicapped children are mainly provided by non-governmental organizations. The urgent need to improve existing facilities and to identify the seemingly large number of handicapped pre-schoolers and school age children demand increased participation from the Ministry of Education to ensure educational provisions for children in need of specialized education.

- **General objectives:**
  Special education should become the direct responsibility of the Ministry of Education as an integral part of the education system. A flexible approach will facilitate an interchange of pupils and teachers between regular and special curricula.

- **Long term objectives:**
  The Swaziland National Society for the Handicapped attempts to provide a supporting role providing social welfare support to families of the handicapped and the creation of vocational outlets for school leavers. The transcribing services of the Blind Resource Centre and the signing instruction of Siteki School for the Deaf will be taken over by the Ministry of Education. Guidance services to include psychological and diagnostic testing are necessary for appropriate streaming and programing of children with learning problems. The Ministry of Education will provide funds for the improvement, renovations and expansion of boarding and learning facilities at the Siteki School for the Deaf, the Zambian and Ekwetsemi School for the Mentally Retarded as well as teaching aids for these students. Preschool services for young, deaf children and itinerant teachers for the hearing impaired are the necessary first steps to improve the education of the deaf. In-service and pre-service training will provide all teachers with skills to teach children with physical handicaps and mildly handicapped children who are enrolled in regular classes.

**Education administration and school management**

The public issues of special concern, curriculum development, adequacy of institutionalized support, the link between levels of education and curriculum developers and teacher trainers and shortage of training staff need to be addressed.

- **Long term objectives:**
  Regional headquarters will be established to achieve decentralization of authority and responsibility for education. The Ministry of Education encourages and strengthens participatory management at all levels. An in-service training program for all persons at ministry headquarters is anticipated to improve general communication skills, to delegate power and decision making. The principal function of each level or organization are to be clearly defined.

- **Short term objectives:**
  A distinct body will be set up to coordinate curriculum development and a coherent national policy for close cooperation between curriculum developers and Teacher Training Colleges will be developed. The curriculum is to include cultural aspects of Swazi culture, history and traditional values.
II. Special Education

Existing provision for handicapped children are directed to meet the needs of a small number of mentally retarded, hearing impaired, visually impaired and physically handicapped.

Four special schools were established by charitable organizations to meet special educational needs of these children: The Ekwetshembeni School for mentally retarded children in Mbabane, St. Joseph Resource Centre for the Blind, Manzins, Zama School at Mzimbotu for mentally retarded, The Siteki School for the Deaf. In addition two facilities, the Ekululameni Adult Rehabilitation Centre and the Vocational Rehabilitation Center, established by the Ministry of Interior Mbabane offer assistance to the adult handicapped. These facilities cater only to a small number of children with handicaps. The others remain on the waiting list or await identification. The educational facilities of these centers are far from adequate. The prevalence of handicapping conditions is estimated to be high. According to Dr. McGrath, specialist pediatrician at the Mbabane Government Hospital (1987) the health status of pre-school children in Swaziland is poor as shown by the following facts:

Fifteen percent of the infants die in their first year, 15% are born underweight, 40% of the children under five are stunted in their growth, 25% of all pregnancies are wasted through prenatal and postnatal death. Syphilis is very prevalent and affects some 20% of all pregnancies. Middle ear and bone infections, heart disease, burns, skeletal injury from trauma are all prevalent and suggest a considerable prevalence of handicapping conditions.

Before the end of the Third Plan period the Department of Social Welfare of the then Ministry of Social Administration was responsible for special education. Now the Ministry of Education has taken over the responsibility for the education of handicapped children. In the annual report 1982/83 (Kingdom of Swaziland, 1983) Ginindza (1983) recommended that the Ministry of Education improve the status of special education in the country by declaring a clear policy of special education, establishing posts for trained special education teachers, and a facility for training.

The National Review Commission’s main report, Reform through Dialogue (1985) lists major problems, issues and concerns relating to the education of handicapped children. These are:

- The existence of a large number of handicapped children who await identification, definition of needs and appropriate placement. - An increasing popular demand for the education of handicapped children.
- The identification of an increasing number of multi-handicapped children.
- The need for a significant expansion of facilities especially for pre-school instruction, primary and continuing education and for the establishment of an assessment facility.
- Teachers are not trained to cater for specific needs of children requiring special education.
• Conditions in the normal school system has to be made ready for integration of children with different learning capabilities and capacities.

• Special needs of children need to be identified at the earliest age and the Educational Testing and Psychological Guidance Services be fully equipped to identify those with special needs. Appropriate terminology relevant to special education has to be introduced and the general public needs to be educated to understand its meaning.

• Learning facilities and opportunities have to be made available from pre-school to tertiary education for children with learning disabilities.

The objectives deriving from these guidelines address the services needed to provide for handicapped pupils: expansion and improvement of the educational facilities in existing schools for handicapped children, provision of both pre and in-service for all teachers so that many handicapped children could be integrated in the regular school system, establishment of pre-school service for young handicapped children at the existing special schools, and a resource center, a clearing house for educational materials. Technical education and vocational training as well as the encouragement of public interest in the education of handicapped children complete these objectives.

The provision of education for all handicapped children in Swaziland between the ages three to 18 years is an ambitious proposal. The Swaziland National Society for the Handicapped in its 1985-86 annual report (S.N.S.H., 1986) stressed the fact that education is first of all a social right that should not be denied to any group. In working with the Ministry of Education concerning special education the society reconfirmed that special education needs to be viewed as an integral part of the education system, the direct responsibility of the Ministry of Education. The Society is willing to assist by a number of projects carried out by volunteers. For example, students from Waterford-Kamhlaba High School regularly volunteer time to work with handicapped children three times a week, as part of their community service program. A vision and hearing screening program in the Mbabane primary schools is being coordinated, and run by these volunteers who also provide special therapy: swimming lessons, as well as entertainment and playtime for long term patients on the children's ward.

The report recommended the position of a director for Non-formal Adult and Special Education with the mandate of co-ordinating activities, developing policy and providing guidelines for the functioning of all institutions under his supervision. The recommendations contained in Annex 1 with regard to special education stated that handicapped children be well cared for in normal schools rather than rehabilitation centers and that teachers be taught how to handle them.

The task force set up to x-ray the achievements of the system and highlight problems on the basis of recommendations made by the National Education Review Commission and to recommend the necessary strategies for the achievements of high quality education, produced a report, Draft Implementation Plan of NERCOM Recommendations (1987) which spelled out the following policy guidelines for the education of the handicapped:
• Universal access to education is an inalienable right for every child.
• Education should be adapted to the capabilities of each individual student.
• Remedial education, though an integral part of formal education should be considered as special education.
• To distinguish the needs of mild, moderately and severely impaired and the difference between limited learning opportunity.
• Academic bias to be avoided and greater emphasis be placed on practical skills to be acquired through both formal and non-formal education and training.

Summary

Swaziland has made great strides since independence in expanding its system of education. The objective of the system inherited from the colonial days with an emphasis on academic skills, did not serve the needs of the new country. However, the energy and education focussed on the democratization of education, that is the quantitative expansion left little room for qualitative improvement until the problem of lack of employment for school leavers presented itself. The need for a broad based and practically oriented curriculum for all children, the coordination of economic activities and training were the main recommendations of the National Educational Review Commission. The notion that education is not a panacea to all social and developmental problems is hard to sell while life styles between those working in the modern sector and government service and those in traditional agriculture continue to show a great discrepancy.

The overriding objective to provide education for all children makes basic adjustment necessary within the school system to allow for the integration of children with special needs. The realization of this proposal does require a massive teacher training and retraining project. NERCOM with input from the population has identified glaring weaknesses and strength of a proposed school system heavily based on the system of education of developed countries. While the proposals serve the political objectives of a more sound and more expensive Western model, the economic conditions necessary for their realization may not be readily available unless supported by international loans. Reform Through Dialogue is void of financial calculations or even guesstimates as to the economic feasibility of the proposed innovations. While several references are made to the coordination between the economic demands and secondary education, there is little guarantee that the massively overhauled system will produce graduates who will find jobs or will be able to create jobs for themselves. Educational research to determine local variables favorable to scholastic achievement to guide politicians and popular opinion and to make the existing system more efficient is badly needed. Educational research in Swaziland into factors which may promote students’ learning is just beginning (Magagula, 1984; Altink and Straatman, 1986) but it is mostly directed toward secondary education.

Imaginative alternatives based on the strengths of the Swazi traditional culture and sound economic foundations should be considered before the adoption of a totally
westernized model of education which often fails to serve Western children and youths adequately.

BIBLIOGRAPHY
DEVELOPMENTAL PSYCHOLOGY IN THE SOVIET UNION
AND ITS RELEVANCE FOR SPECIAL EDUCATION

Ivan Z. Holowinsky

Rutgers University

This paper discusses Soviet developmental psychology and its relevance for special education within the context of Soviet psychology as it evolved within the framework of the Marxist ideology.

It would be beyond the scope of this article to present in depth analysis of Soviet developmental psychology. Interested readers should consult, for example, Cole (1978; 1979/80), and Kozulin (1986). Instead, this article presents a brief overview of the topic, within the context of Soviet theoretical formulations. As every student of the Soviet Union knows, all activities taking place there should be understood within the framework of the Marxist ideology, political reality and socio-historical determinism. Paper of Yaroshevsky (1974), a noted historian of Soviet psychology, helps us to understand the roots of the development of Russian psychology, which eventually became Soviet in terms of its Marxist-Leninist ideology. Those roots are traced by him to the 1860's, more specifically to the debates between Yurkevych, who represented an "idealistic" view of psychology, and Chernyshevsky, who is considered to represent "materialistic" views. Impetus toward the development of scientific psychology in Russia was provided by the writings of Sechenov, primarily his book: "Reflexes of the Cortex." Sechenov, a noted psychophysiological, believed that it should be possible to condition development of a "new person." He maintained that it will be possible to "construct" people with "non-free will" in that sense that they: "are unable not to create good, can not not to serve people, can not not to offer themselves for humanity" (Yaroshevsky, 1974, p. 7). Yaroshevsky informs us that Sechenov was in pre-revolutionary Russia a symbol of materialistic, scientific psychology. Lenin was a student at Kazan University, where he enrolled in 1887. He must have been familiar with the work of Bekhtiarev, who in 1885 organized at Kazan University the first psycho-
physiological laboratory in Russia. Yaroshevsky also mentions that both Sechenov and Lenin were determinists. However, Sechenov's views were formulated on the foundations of anthropological materialism, while Lenin's upon historical. In Soviet psychological literature, Lenin is credited with development of the principle of "historism," which gives methodological orientation in current discussions on the determination of mental activity, and permits a critical analysis of opposing views such as those leaning toward historical interpretation and those that consider such an approach as irrelevant for the explanation of behavior.

A leading contemporary Soviet psychologist, Krutetsky (1970), considers the 1917-1936 period as an initial stage in the formation of Soviet psychology. He believes that prior to 1936 there were still some psychologists in the Soviet Union whose publications reflected the influence of idealistic psychology, typical of prerevolutionary Russian psychology. Recently, Orlova (1979) pointed to Kornilov as the first Russian psychologist who became "Soviet" in the political as well as ideological sense. Kornilov was a student of G.I.Chelpanov, a noted 19th century Russian psychologist, who organized and was the first director of the Russian Psychological Congress in Moscow. Kornilov read a paper recommending that psychology should be established on a dialectical-Marxist basis. Soon after this speech Kornilov replaced Chelpanov as the director of Moscow State Institute of Experimental Psychology. He also has been credited with being the author of the first Soviet textbook on psychology. Kornilov outlined three broad objectives for the establishment of psychology on Marxist ground. To become Marxist, Soviet psychology should be materialistic, political, and dialectical. Contemporary Soviet psychology appears to follow the guidelines recommended by Kornilov. It adheres rigidly to the philosophical and ideological materialism and socio-historical determinism (Leontiev, 1968).

The Soviet view of learning disorders is based upon Pavlovian psychology and upon dialectical materialistic interpretations of behavior. To this respect, the Soviet views of behavior considers development of complex cortical functions both from the ontogenetic and phylogenetic points of view. From the ontogenetic point of view, Soviet psychology acknowledges the importance of training and conditioning in the development of mental abilities (Vygotsky, 1956; Obukhova, 1966; Krutesky 1972). From the phylogenetic point of view, complex cognitive abilities are viewed as adaptive mechanisms of the organism to its environment and as such influenced by socio-historical and cultural evolution. In this respect, the Soviet view of behaviors according to Piaget (1971) differs from 19th century orthodox materialism.

Just like Soviet psychology in general, Soviet developmental psychology evolved within the context of dialectical materialism and socio-historical determinism.

It is generally acknowledged that a unique contribution to the development of child psychology in the Soviet Union was made by Vygotsky. He is credited with the development of the concept of historical emergence of specific human cognitive traits. Vygotsky's contributions have been widely discussed in psychological literature (for example, see: Bozhovich, 1977; Leontiev and Luria, 1976; Kozulin, 1986). Perhaps no other psychologist achieved such a degree of influence in the Soviet Union and became widely known in the West as Lev S. Vygotsky. His achievement is even more remarkable when we consider that Vygotsky died at the age of 38 and published most of his works in the ten year period (1924-1934).

Vygotsky introduced into psychology an historical approach to the understanding of human mental development and the study of child’s mental development based upon Marxist ideology. He maintained that from a psychological point of view a physical defect has meaning as a disturbance of the social form of behavior. He regarded training and education as a systematic, purposeful and conscious influence on the natural growth process of the child’s organism. Leontiev and Luria (1956), former students and coworkers of Vygotsky, provided some explanation for his psychological position. They consider Vygotsky as one of the first Soviet psychologists who recognized the importance of the study of consciousness for the materialistic psychology. He pointed out that by ignoring the problem of consciousness psychology ignores complex problems of human behavior. By excluding the question of consciousness from the realm of scientific psychology, one perpetuates the dualism of subjective psychology.

Recently, Vygotsky received a distinctly unique honor in the Soviet Union as psychologist. In December of 1981, a conference was organized in Moscow devoted entirely to his works. Nineteen papers and six panels discussed in depth his contributions. This was the first such conference in the USSR organized in honor of one psychologist (Radzikhovsky, 1982).

Among Western psychologists and special educators, Vygotsky is well known for his notion of the "zone of proximal development." According to Vygotsky, "proximal" development does not occur spontaneously, but emerges in the child, who has potential for the new stage of development, with the assistance of others. Such assistance does not have to be direct, it can be indirect. Vygotsky explained (Gilboukh, 1987) that when a student is doing homework after he/she has been given an example in school, he/she continues to work in cooperation with the teacher, although the teacher is not staying next to him/her. Gilboukh also pointed out that Vygotsky suggested the ZPD notion toward the end of his life and left much of the elaboration to be completed by his students. Significant input into further development of this concept has been made by Rubinstein (Gilboukh, 1987), who suggested that it is not sufficient to divide the examinees into two groups; those who can and those who can not solve problems without help. The latter group should be further subdivided into those who improve, versus those who do not improve with help.

The question of the realization and enhancement of children's cognitive potential for long held high theoretical and practical interest among psychologists and educators. There is considerable psychological literature available on that topic. Earlier Vygotsky
(Leontiev and Luria, 1956), and more recently Feuerstein et al. (1981), can be considered as advocates of a position of modifiability of cognitive abilities. For current review of Feuerstein's position, the reader might consult Savel'ev et al. (1986) and Spitz (1986).

In addition to Vygotsky, a number of Soviet developmental psychologists are known in the West.

Leading contributions to developmental psychology and preschool education in the Soviet Union have also been made by a Ukrainian psychologist A.V. Zaporozhek (Voprosy Psikhologii, 1980). He organized and for twenty years (1960-1980) has been director of the Institute of Pre-School education of the Soviet Academy of Pedagogical Sciences. From 1944 until 1960, Zaporozhek was directing the psychological laboratory of preschool children within the Academy of Pedagogical Sciences. In the context of our present discussion, it is relevant to mention that his academic career as a psychologist began in Kharkiv in 1931.

Seminal work of Piaget has been known to Soviet developmental psychologists. There is evidence that in the 1920's Vygotsky was familiar with Piaget's work of that time (Leontiev and Luria, 1956). As a more recent example of this interest, four studies will be reviewed here briefly.

Filippova (1976) maintained that Piaget did not adequately explain how transition takes place from one stage to others. In her study, Filippova investigated the process of classification of geometrical figures. Classes consisted of color, form and size. Centrism was manifested by the fact that children determined only one characteristic of the object and on the basis of this information assigned an object to the class. Because of fixation upon one relevant characteristic, children in this study were unable to comprehend simultaneous common classification of objects to a number of possible classes. Filippova organized a teaching experiment for eight subjects. Preliminary results of her study suggested that children five years, six months of age were able to progress from pre-operational to operational level of thinking.

An interesting study on generalization and transfer of learning was conducted by Proskura (1969) and reviewed in detail by Holowinsky (1970) elsewhere. The sample for this study consisted of 80 children, 20 at each year level. The year levels under investigation included 3, 4, 5, and 6 years old. The performance of the children at various age levels compared closely to original Piagetian notions of concept development. The preschool children in this sample did not reveal ability for conceptual serialization. Most of the performance was based upon trial and error approach. Definite positive progression with age has been indicated. It would appear that regardless of instructions, three- and four-year old's are incapable of abstract generalizations.

Development of cognitive activities in children in the process of communication with adults and peers, was discussed by Lisina (1982). She suggested that under the broad generic term of cognitive activity two more specific designations should be used: (a) mental activity, which includes intellectual, perceptual and sensory components; (b) intellectual activity, described more precisely as thinking and creative process. For her study Lisina utilized a sample of 28 children (eight in the experimental and twenty in the control group). The experimental group received training for 30
sessions in the period of two months. When the experiment began the children were two to four months of age. However, no intellectual level is reported for either the experimental or control group. It is reported that after training the experimental group manifested a number of positive behaviors when compared to the control group. The children in the experimental group: exhibited longer playing time with toys; showed more orienting activity; engaged in longer manipulation of objects utilizing visual-motor coordination; they extinguished faster impulsive movements; mastered faster than the control group goal directed movements; explored objects more frequently; exhibited stronger expression of happiness. Lisina concluded that communication with other humans determines quantitative and qualitative characteristics of children's cognitive activity.

Egocentrism and comprehension of spatial relations by the preschool children was studied by Proskura (1975). She concluded that egocentric solutions do not take place when the problem is either too complicated or too simple for the child. Egocentric solutions represent a transitional period from a change solution to correct solutions. The problem of egocentrism has also been researched in the United States by De Lisi, R., et al. (1976).

Piaget's developmental stages are well known and recognized. It might be of interest to consider chronological and developmental stages as suggested by Davydov (1976) in the USSR.

Three chronological stages and six developmental stages have been suggested by him. Three chronological stages he described as: early childhood (0-3 CA); childhood (3-20 CA); adolescence (11-17 CA). Six developmental stages he identified as: (a) the stage of effective communication (0-1 CA), during this stage the infant forms needs to communicate with other humans; (b) the stage of object manipulation (1-3 CA), in active cooperation with adults emerges language and concrete-active thinking; (c) the stage of play activity, (3-7 CA), within this stage emerges symbolic functioning; (d) the stage of learning activity (7-11 CA), during this stage basic elementary learning takes place; (e) (11-15 CA), during this stage develops appreciation for functioning within a collective; (f) (15-17 CA), the beginning stage of the formulation of vocational-professional activities. Of interest should be the emphasis during adolescence for functioning within a collective.

Soviet psychologists (Matiushkin and Kuzmina, 1983) view as a positive development establishment of the Institute of Psychology within the system of the Academy of Sciences of the USSR. This should enable the Institute of General and Educational Psychology of the Academy of Pedagogical Sciences of the USSR to concentrate its research upon problems which have crucial importance for the development of developmental and educational psychology. With the publication of a new journal, Psikhologitcheskii Zhurnal (Psychological Journal), Voprosy Psikhologii will be able to focus almost exclusively upon issues of developmental and educational psychology. This renewed emphasis upon educational research is associated with school reforms. Until recently, formal academic schooling began in the USSR when a child became seven years of age. Proposed new curriculum will begin formal academic instruction at six years of age.
In the fields of neuropsychology and mental retardation leading position for many years has been held by the new student and coworker of Vygotsky, the late A.R. Luria.

According to him (Luria, 1966), intellectual and perceptual processes should be understood as complex functional systems of socio-historical origin. Luria believes that even relatively uncomplicated process is the result of simultaneous activity of several cortical zones, each playing an important role in those functional systems. A local brain lesion in addition to producing a specific defect, also leads to a secondary disturbance of the total functional system. For example, according to Luria (1966), disorders of writing appear in lesions of temporal, postcentral, pre-motor and frontal lesion. These and other complex or higher psychological functions are multireceptive and develop progressively in humans throughout their life span. Soviet psychologists and defectologists firmly believe that intellectual and psychological processes should be viewed as complex forms of reflex activity which is self-directed toward adaptation and survival of the organism. From this point of view accommodation and adaptation should be viewed in the context of continuous interaction between structure and function. One may say that a structure in one way, predetermines a function, however, a function continuously is in a process of modifying a structure. In a temporal sense this process occurs during ontogenesis both structure and function have been influenced by phylogenetic and socio-historical evolution. In addition we should also be aware how various levels of structure are related to the complexity of function. The structure could be viewed as localized or diffused in a topological, mechanical, or molecular sense. The function obviously can also be observed at various levels of complexity. As a function increases in complexity its relationship to cerebral cortex becomes increasingly diffused. Therefore, the higher more complex cortical functions have no direct structural counterpart. Furthermore, higher or more complex function, e.g., reading contains other less complex functions. It should be noted that in terms of etiological factors, a defect affecting learning potential could occur within etiological, mechanical or molecular-neurochemical sphere of the cortex. Furthermore, it should also be remembered that the time of the onset of the defect is extremely important as well as any subsequent pathological conditioning or learning. Soviet research related to learning disorders reflects the above mentioned theoretical orientation.

Luria is well known in the field of mental retardation for elaboration upon the concept of mediational deficit in mentally retarded children. Luria and his co-workers (1961) have devised a quite ingenious and potentially valuable technique for illustrating the poverty of the retarded child's generalization ability. Monitoring of a physiological component of the orienting reflex (OR) is done while the child is presented with a stimulus word, e.g., "cat." The subject is instructed to press a button at each presentation of this, and only this word. In addition to "cat," words of two other categories are also presented to the child in random order. The first group consists of words semantically related to the stimulus; examples in this case would be "animal," "dog," "mouse," etc. The second group includes words which sound similar to "cat" but are not related semantically, e.g., "can," "hat," "cup." Using the above
procedures, Luria reports the following results. Normal school-age children show strong and clear orienting reflexes to all presentations of the stimulus word. In addition, physiological monitoring reveals consistent ORs to the group of words in the semantically related category, even though the child shows no button-pressing response to these words. The oligophrenic subject, on the other hand, shows the reverse results, having ORs to the stimulus word and the phonologically similar words but not to the words which are related in meaning. These findings are more pronounced as the degree of retardation increases.

Luria's mediatational deficit position provided impetus for numerous studies in the USA, providing supportive (Milgram & Furth, 1963; Rieber, 1964) or contradictory (Balla & Zigler, 1964; and Zigler & Balla, 1971) evidence. Much of the controversy seems to have arisen because samples used in Luria's and other studies are not directly comparable. Zigler and Balla themselves stated: "Furthermore, it appears probable that his (Luria's) retarded subjects were physiologically impaired." (Zigler & Balla, 1971, p. 401). This writer believes that it is not just probable but certain that Luria's subjects were physiologically impaired, otherwise they would not have been classified as oligophrenics in the Soviet Union. It would be interesting to see whether Luria's hypothesis is applicable to those who might be classified in the United States as mentally deficient.

The generally accepted view in the Soviet Union links mental retardation with cerebral pathology. This theoretical position influences classification practice and programming for the mentally retarded children (Holowinsky, 1974; 1986).

In conclusion it should be stated that Soviet development psychology while being aware of leading European trends of the late 1920's and 1930's, acquired its own identity in 1930's based upon dialectical Marxist orientation.

REFERENCES
Davydov, V.V. (1976). Main problems of developmental and pedagogical psychology at the contemporary stage of education. *Voprosy Psikhologii, 4*, 3-16.

Filippova, E.V. (1976). Psychological mechanism of the transition to the operational stage of development of intellect in preschool age children. *Voprosy Psikhologii, 1*, 82-93.


EARLY INTERVENTION: EFFECTIVENESS ON CHILDREN WITH SPECIAL NEEDS

Schmuel Shulman

Tel Aviv University and Jaffa Community Medical Health Center, Israel

Carl Rubinroit

Jaffa Community Medical Health Center

Early intervention programs with young children at high risk for school and social failure are widely supported. Most of the programs include families as agents as part of the intervention process, but children's attendance at daycare centers and lack of parental cooperation and motivation has led to a need for developing alternative modes of intervention. A group of 72 less adjusted 3-year-olds was detected in 9 daycare centers of an impoverished area. Children were given social emotional treatment and cognitive enrichment over a period of ten months. The nature of the treatment program and its effectiveness with different kinds of children are discussed.

The importance of early intervention with children who are at high risk for school and social failure is widely accepted and intervention programs have been applied in many countries. Most early intervention programs fall into one of two major categories: Direct educational enrichment of children via pre-school or home instruction programs; and improvement of the child's emotional environment via various models of intervention with parents.
The former developed chiefly by educators focus on the children of low income families and attempt to stem the tide of repeated school failure. Their major aims are to strengthen cognitive skills and increase motivation for learning.

Parallel to the development of early intervention programs which emphasized educational enrichment, mental health professionals have become increasingly aware of the importance of early intervention to prevent emotional maladjustment.

Cowen et al. (1973) found that children with poor interpersonal relationships are at high risk for adjustment problems in adulthood. Oleweus (1984) reported several studies which showed the stability over time of aggressive, withdrawn and inhibited behavior in children.

Programs of mental health intervention with infants and preschool children have also appeared in the last decade. Freiberg et al. (1981) suggested that the mental health of infants can be best be promoted by the positive emotional investment of their parents, the primary caregivers. Lieberman (1985) presented a similar program for intervention with high risk infants. The program included infants and their families and was based on a model of coordination between existing service delivery systems in the community.

Though mental health professionals agree on the importance of preventive intervention with parents, the primary caregivers, they are often frustrated in their attempts due to lack of motivation, strengths and cooperation on the part of parents. Assuming Rutter's (1981) contention that the attachment formed with caregivers other than parents may also be crucial for the child's later emotional development, an alternative in such cases is intervention via secondary caregivers.

Chazan (1976) discusses possible strategies for helping young poorly adjusted children, in educational settings and notes that the opportunity to participate in relaxed activities in school may be of therapeutic value.

In summary, children may benefit from extra attention given by an adult in a nursery. Therapeutic playgroups may be a further mode of intervention with the preschoolers and a combination of these modes could be the basis for a therapeutic nursery.

In low income communities a significant secondary caregiver is the neighborhood daycare center. The day center can be an ideal location for an early intervention program for several reasons: It provides a natural environment for observing young children and screening them for cognitive and emotional disabilities. It is also an environment which provides direct care to children and has regular contact with parents. Further, the daycare center is generally accepted and frequently utilized by low income families who tend to see it as a desirable non-stigmatized service. The close proximity to the home and practical usefulness of the service encourages steady attendance. The child is exposed to the same caregivers several hours per week throughout the year. (Here in Israel the child attends the center 45 hours per week 50 weeks per year.) Many of the children attend the daycare center for at least two successive years which allows for significant continuity of care. In addition, daycare center personnel are extremely interested in the assistance of child specialists to help
deal with problem children since they are often overwhelmed or frustrated by these children.

The effectiveness of early intervention programs has been a subject of considerable controversy. Therefore, there have been many studies concerning program evaluation. Programs stressing educational enrichment and enhancement of cognitive functioning have been chiefly evaluated via cognitive measures. Zigler, et al. (1982) reported that the most frequent type of evidence for standard measures of intelligence. Zigler, et al. raised the question whether a change in IQ does not also reflect a motivational change in the child. Early age is a crucial era in the development of the sense of the self and the relationship to significant others. Developmental arrest of these features may affect later adaption in various aspects of life. Therefore, affect later adaption in various aspects of life. Therefore, Zigler and Trickett (1978) have argued that social competence, namely a comprehensive measure of adaption should be considered for evaluation of program effectiveness. Zigler and Trickett suggested four major classes of variables for assessing the outcome of early childhood intervention. First is physical health, second is formal cognitive functioning, third is achievement, and last are measures of motivational and emotional variables. The latter include self esteem, relationship to others (children or adults), and attitude toward school. Considering the emotional and educational needs of children of low income background, a comprehensive evaluation of the child's functioning on these aspects may more accurately reflect the child's general improvement and may later lead to differential modes of intervention that consider the different facets of adaptation. Furthermore, considering the differential needs of the children, emotionally or cognitively, the question must be raised whether the specific needs of children are indeed being met.

The objectives of this study were twofold: The first was to present a program which was established in neighborhood daycare centers for early detection and treatment of 3-year-olds who exhibited low levels of cognitive and emotional functioning. The second was to evaluate the effectiveness of the program generally and its contribution to the child's specific needs. The Tal-Taf Intervention Project

The Tal-Taf (pre-school learning and treatment) project was established by the staff of the Community Mental Health Center of Jaffa in cooperation with the Regional Department of Special Education.

The project's aim is the early detection and treatment of cognitive and emotional disabilities of pre-school children. The program operates within 9 daycare centers, with a total population of approximately 1,000 children between the ages of 6 months and 4 years. The centers are located in low income communities of Jaffa and South Tel Aviv. At least 25% of the children are from families who receive welfare assistance.

Each daycare center was assigned a part time diagnostic and treatment team consisting of a clinical psychologist, a speech therapist and a special education teacher. The team screens all children in the day center seeking to identify children with developmental, social-emotional, and cognitive disabilities. Children with possible medical problems are referred to the appropriate specialists for further evaluation.
Children with minor dysfunction are assisted primarily via consultation with their parents and the day center staff. Approximately 10% of the children are selected for direct treatment by the staff of the diagnostic-treatment team.

Social-emotional treatment included individual play therapy and play therapy in small groups. Cognitive enrichment focused on language skills, concept formation, and creative activity.

METHOD

Subjects:

Prior to the summer recess, day center caregivers of the two-year olds were asked to identify the five least adjusted toddlers on various aspects of functioning such as level of cognitive achievement, aggression, withdrawal, and competence. The project teams selected the 72 toddlers that exhibited the lowest levels of functioning. The cohort consisted of three subgroups according to their major domain of malfunctioning. 26 - showed mostly social emotional problems (MAL-EMO); 19 showed a lower cognitive functioning (MAL-COC); and 25 showed lower levels of both cognitive and emotional functioning (COC-EMO).

Measures:

The Tal-Taf Behavior Check List (TTBCL):

Program circumstances permitted children to be evaluated by their regular and special education teachers. Generally it is known that clinical and educational staff are reluctant to participate in research projects (Shulman and Margalit, 1985), and they often perceive research as an interference with their direct efforts and investments in the child. This fact led to the development of a rating scale which could not only serve the teacher as a mode for the evaluation of intervention and change, but also could highlight specific aspects in need of further intervention. Items were selected from a variety of questionnaire and included the following domains: Cognitive performance, adaptive classroom behavior, relationship to teacher and other children, emotional maladjustment, and various symptoms. Items consisted of positive and negative behaviors. The scale included 42 items.

Procedure:

At the end of the first month the children were evaluated by their regular day center teacher and their special education teacher. The procedure was repeated every two months during the school year. Thus, each child was evaluated five times by each one of the teachers.
RESULTS

Results are reported only on those 53 children who were evaluated on all five occasions by the special education teachers and the regular teachers. This cohort consisted of 18 children who revealed mostly social emotional problems (MAL-EMO), 13 children who revealed a lower cognitive functioning (MAL-COG) and 22 who revealed lower levels of both cognitive and emotional functioning (COG-EMO). Evaluations of teachers were factor analysed. Four main factors which accounted for 66.3 percent of the variance were found: Social Emotional Functioning (SEF), Cognitive Functioning (COG), Competence (COM) and Adaptive Classroom Behavior (ACB). Aspects of reliability and validity of the rating scale will be reported in another article by the authors. Intervention effectiveness as derived from the evaluations of the special education teachers and regular teachers respectively are presented below.

Evaluations by Special Education Teachers

Program effectiveness was analysed by comparing special education teachers' evaluation of children during the school year. An ANOVA with repeated measures was performed on the four factors. Significant differences were found between the different year-long evaluations on three of the factors: SEF, F(4,200) = 11.83, p<.001; COG, F(4,200) = 5.90, p<.001; and COM, F(4,200) = 4.84, p<.001. Means and standard deviations are presented in Table 1. As can be seen improvement developed gradually and reached a significant level only at the end of the school year, on the three factors of Social Emotional Functioning, Cognitive Functioning and Competence. No improvement was found on the factor of Adaptive Classroom Behavior.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>SEF Mean</th>
<th>SEF SD</th>
<th>COG Mean</th>
<th>COG SD</th>
<th>COM Mean</th>
<th>COM SD</th>
<th>ACB Mean</th>
<th>ACB SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Evaluation</td>
<td>5.27</td>
<td>4.81</td>
<td>14.31</td>
<td>5.17</td>
<td>9.54</td>
<td>2.90</td>
<td>6.00</td>
<td>2.04</td>
</tr>
<tr>
<td>2nd Evaluation</td>
<td>8.04</td>
<td>2.73</td>
<td>16.09</td>
<td>4.97</td>
<td>10.90</td>
<td>2.30</td>
<td>6.59</td>
<td>1.36</td>
</tr>
<tr>
<td>3rd Evaluation</td>
<td>9.13</td>
<td>2.23</td>
<td>17.09</td>
<td>4.96</td>
<td>11.68</td>
<td>2.07</td>
<td>6.68</td>
<td>2.00</td>
</tr>
<tr>
<td>4th Evaluation</td>
<td>8.68</td>
<td>3.45</td>
<td>16.04</td>
<td>7.03</td>
<td>11.31</td>
<td>4.16</td>
<td>6.40</td>
<td>2.68</td>
</tr>
<tr>
<td>5th Evaluation</td>
<td>9.45</td>
<td>2.97</td>
<td>18.04</td>
<td>4.57</td>
<td>12.27</td>
<td>2.25</td>
<td>7.00</td>
<td>1.52</td>
</tr>
</tbody>
</table>

In order to evaluate the effectiveness of the programs across the three subgroups, further two-way ANOVAs with repeated measures were performed comparing the initial and final evaluations on the four factors, for the three subgroups. Few children
lacked the five year-long evaluations. Therefore the two way ANOVAs were computed separately.

Significant improvement was found for three factors: SEF, $F(2,50)=22.15$, $p<.001$, COG, $F(2,50)=45.77$, $p<.001$, COM, $F(2,50)=26.42$, $p<.001$. No significant improvement was found on the ACB factor. Differences between initial and final level subgroups were found on two factors: COG, $F(1,50)=8.56$, $p<.001$; and COM, $F(1,50)=4.02$, $p<.05$. No significant interactions were found between subgrouping and program effectiveness. Means and standard deviations are presented in Table 2. However as can be seen different processes characterize the program's effectiveness in the three subgroups for various dimensions of functioning. On the SEF factor, at the end of the year all the groups reached a similar level of functioning. Improvement was mostly contributed to by the MAL-EMO group which started at the lowest level.

**Table 2**

Means and Standard Deviations of Initial and Final Evaluations by Special Education Teachers of the Three Sub-groups Across the Four Dimensions

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>MAL-EMO Mean</th>
<th>SD</th>
<th>MAL-COG Mean</th>
<th>SD</th>
<th>COG-EMO Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social-Emotional Functioning (SEF)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>5.11</td>
<td>4.30</td>
<td>7.15</td>
<td>4.37</td>
<td>6.31</td>
<td>4.80</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>9.11</td>
<td>2.34</td>
<td>8.76</td>
<td>4.12</td>
<td>8.59</td>
<td>3.01</td>
</tr>
<tr>
<td><strong>Cognitive Functioning (COG)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>17.33</td>
<td>6.09</td>
<td>12.00</td>
<td>4.47</td>
<td>13.22</td>
<td>2.70</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>20.66</td>
<td>5.31</td>
<td>14.69</td>
<td>4.11</td>
<td>16.36</td>
<td>3.17</td>
</tr>
<tr>
<td><strong>Competence (COM)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>10.38</td>
<td>3.23</td>
<td>9.23</td>
<td>3.63</td>
<td>8.22</td>
<td>4.25</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>13.38</td>
<td>1.78</td>
<td>11.61</td>
<td>2.02</td>
<td>11.63</td>
<td>1.96</td>
</tr>
<tr>
<td><strong>Adaptive Classroom Behavior (ACB)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>5.61</td>
<td>2.00</td>
<td>5.76</td>
<td>1.83</td>
<td>5.86</td>
<td>1.98</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>6.44</td>
<td>2.00</td>
<td>6.61</td>
<td>1.55</td>
<td>6.36</td>
<td>1.64</td>
</tr>
</tbody>
</table>

On the COG factor, differences were found among the three subgroups at the time of the initial evaluation and at the time of the final evaluation, however a similar level of efficacy was reflected in all of the three subgroups. Concerning the COM factor a similar phenomenon was found. Differences between subgroups remained, although all the subgroups showed progress.
On the last factor of Adaptive Classroom Behavior no difference existed between the three subgroups at the beginning of the program nor at the time of the final evaluation of the program.

EVALUATIONS BY REGULAR TEACHERS

An ANOVA with repeated measures on the regular teachers' evaluations of the children during the school year was also performed. Significant differences were found between the different year-long evaluations on three of the factors: SEF, $F(4,196)=2.88$, $p<.05$; COG, $F(4,196)=7.02$, $p<.001$; and COM, $F(4,196)=6.35$, $p<.001$. Means and standard deviations are presented in Table 3. As can be seen regular teachers also perceived improvement to develop gradually and reach a significant level approaching the end of the school year. Like their special education counterparts, regular teachers did not perceive any significant improvement on the ACR factors.

Table 3

Mean and Standard Deviations of Children's Evaluations on Four Dimensions During the School year by the Regular Teachers

<table>
<thead>
<tr>
<th></th>
<th>SEF</th>
<th>COG</th>
<th>COM</th>
<th>ACB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>1st Evaluation</td>
<td>5.88</td>
<td>5.52</td>
<td>13.70</td>
<td>5.83</td>
</tr>
<tr>
<td>2nd Evaluation</td>
<td>7.52</td>
<td>3.93</td>
<td>16.88</td>
<td>4.94</td>
</tr>
<tr>
<td>4th Evaluation</td>
<td>8.58</td>
<td>2.71</td>
<td>16.64</td>
<td>5.57</td>
</tr>
<tr>
<td>5th Evaluation</td>
<td>8.64</td>
<td>2.91</td>
<td>17.82</td>
<td>4.78</td>
</tr>
</tbody>
</table>

Further two-way ANOVAs with repeated measures were performed comparing the initial and final evaluations on the four factors, for the three subgroups. Across subgroups, significant change was found on two factors: SEF, $F(1,50)=5.58$, $p<.05$ and COM, $F(1,50)=8.24$, $p<.01$. No significant improvement was found on the COG and ACB factors. Differences between subgroups were found only on the COM factor, $F(2,50)=4.13$, $p<.05$. No interaction was found between the subgrouping and the program's effectiveness. Means and standard deviations are presented in Table 4.
Table 4
Means and Standard Deviations of Initial and Final Evaluations by Regular Teachers of the Three Subgroups Across the Four Dimensions

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>MAL-EMO</th>
<th>MAL-COG</th>
<th>COG-EMO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Social Emotional Functioning (SEF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>5.61</td>
<td>3.83</td>
<td>5.69</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>8.05</td>
<td>3.22</td>
<td>6.38</td>
</tr>
<tr>
<td>Cognitive Functioning (COG)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>16.72</td>
<td>7.60</td>
<td>10.46</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>19.44</td>
<td>7.94</td>
<td>11.38</td>
</tr>
<tr>
<td>Competence (COM)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>10.16</td>
<td>4.70</td>
<td>7.46</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>12.72</td>
<td>4.76</td>
<td>9.30</td>
</tr>
<tr>
<td>Adaptive Classroom Behavior (ACB)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Evaluation</td>
<td>5.22</td>
<td>2.48</td>
<td>5.38</td>
</tr>
<tr>
<td>Final Evaluation</td>
<td>5.94</td>
<td>2.62</td>
<td>5.30</td>
</tr>
</tbody>
</table>

As can be seen the improvement on SEF, is mostly contributed to by the MAL-EMO group and the COG-EMO group. On the COM factor general improvement of the three subgroups did not change the difference among them.

DISCUSSION

Results revealed that children's improvement on three dimensions: Social Emotional Functioning, Cognitive Functioning, and Competence. These findings indicate that the program's emphasis on the combination of emotional and cognitive intervention was effective. It can also be deduced that a period of a year is required in order to bring significant improvement to these children. The monitoring of the children's progress, although a research question in essence, also enabled the special education teachers to outline explicit objectives throughout the year.

The Tal-Taf program may be viewed as an integrative model of mental health implementation and educational enrichment. The children were met at their natural environment - the day center.
At this stage the parents were not involved except for a monthly 14 consultation. This is not meant to negate the importance of the parents and the family in shaping development at the early childhood level. In this instance most of the parents worked, and they were less available for some mode of intervention. Furthermore, most of the children did not display either a clear psychopathology or a sufficiently low level of cognitive functioning that would motivate parents to apply for some kind of help. It was mostly the children’s lower level of functioning compared to that of their peers that has led to their detection. Thus it would seem that the program could also be considered a model for prevention in early childhood.

Another question was which kind of child responds best to the program. It was found that in general all the children improved and reached the same level of social-emotional functioning at the end of the year. This finding is expected because the program applied a variety of play therapy approaches and weekly staff meetings emphasized the areas of child and personality development and therapeutic approaches. It may be assumed that this approach fosters social-emotional improvement across in the different subgroups.

On the cognitive functioning and competence dimensions all children improved. However, the difference that existed between the three subgroups at the beginning of the school year was still present on the last evaluation. The program did not enable all children to reach similar level. The degree of improvement was found to be dependent on the initial level of the child’s cognitive functioning and competence. This finding raises the question of whether educational techniques should be tailored differently for children with different initial levels of functioning.

The differential efficacy of programs on children has already been documented. Klein (1982) claimed that group-care settings must be attuned to the differential temperaments of children. Klein found that highly persistent children benefit from a structured program whereas highly active children adjust better to a program where the child is left to choose the activity. Susman, et al. (1980) also found impulsive children were able to be less aggressive and more prosocial in a less structured class.

It seems that our Tal-Taf program that applied a variety of therapeutic and educational modes of intervention, enabled most children to benefit from the program.

All of these notions are consistent with the special education teachers’ evaluations. Evaluations by the regular teachers gave somewhat different outcomes. In general regular teachers perceived change to take place and to develop gradually during the school year. Like special education teachers, regular teachers, also reported improvement on the three factors of Social-Emotional Functioning, Cognitive Functioning and Competence. But the regular teachers’ evaluations across the three subgroups was less clear. Differentiation between subgroups was not distinctive on measures of Social Emotional Functioning and Cognitive Functioning. It may be that regular teachers were not as sensitive to the special needs as were special education teachers. Further, it may be that regular teachers were more familiar with Competence which characterizes the child’s general level of school adaptation, and that they were able to perceive more accurately the processes taking place in the development of competence. Although it may be that differences between special education teachers’
evaluations and those of the regular teachers can best be understood in the light of
the intrinsic disparity between various raters (Gresham, 1982), it would seem that a
further analysis of children’s improvement on the main factors, as perceived by reg-
ular teachers, could lead to further understanding of processes.

REFERENCES
and E.C. Raybould (Eds). The early identification of educationally *at risk* children. Educational
Review, University of Birmingham, pp. 36-42.
early detected vulnerable children. Journal of Consulting and Clinical Psychology. 41, 438-446.
measurement considerations and practical applications. Journal of School Psychology. 20, 131-
144.
Klein, H.A. (1982). The relationship between children’s temperament and adjustment to kinder-
Child Psychology. 14, 196-201.
Kaplan, J.J. Konecni, and R.W. Novaco, (Eds.). Aggression in children and youth. The Hague:
Journal of Orthopsychiatry. 51, 4-28.
Susman, E.J., Huston-Stein, A. & Friedrich-Cofer, L. (1980). Relation of conceptual tempo to so-
order to improve economically disadvantaged children’s IQ scores? Child Development, 53,
340-348.
Zigler, E. & Tricket, P.K. (1978). IQ, social competence, and evaluation of early childhood inter-
THE HARLOW PROJECT: A DECADE IN RETROSPECT

W.C. Nesbit, Coordinator of Special Education
Memorial University of Newfoundland

In the Spring of 1975, the Department of Educational Psychology of Memorial University of Newfoundland established a teacher-training program in Special Education that is unique by Canadian standards. The program placed eleven student teachers in British schools for a segment of their professional training. The program has successfully continued for eleven years and has involved one hundred and thirty Newfoundland special educators. Salient aspects of the cross-cultural Harlow experience are presented.

My personal benefit from this will be the formulation of a philosophy which I believe will be the best of both worlds.

Melva Humber
Harlow Intern, 1976

It might be of interest to take a cursory look at the historical roots of the Harlow Project. In 1970, while Lord Taylor of Harlow was Memorial University President, the University acquired a modest campus in Old Harlow, Essex. Located twenty-five miles north of London, the campus is comprised of the “Maltings,” a thirty-three student residence, the name of which reflects the fact that once it was a Victorian maltings used to cure grain, and “St. John’s House,” a refurbished schoolhouse with an attached schoolmaster’s cottage which now serve as residences for Memorial faculty. In 1972 a Certificate of Commendation was presented to the University by the
Harlow Civic Trust acknowledging the renovation, upgrading and redeployment of the Harlow campus buildings.

Since its inception the campus has been utilized by various faculties - Arts, Business, Education, Engineering, Medicine and Nursing. The Faculty of Education with its various teacher-training components has had the greatest involvement with Harlow. Within Education, Memorial’s Bachelor of Special Education program has had a major role and strong links have been established with Essex educational facilities for "special needs" children.

This paper represents both student and personal observations and attempts to succinctly describe the Harlow experience and to evaluate its various facets in terms of training teachers of exceptional children. Student reactions to the English school system, guest lecturers, field trips and the cross-cultural experience in general have been integrated.

The First Special Education Practicum

During the Spring Semester 1976 eleven students enrolled in the Special Education program were granted permission to follow studies in England as part of their teacher training program. The students selected for the practicum experience in Harlow were preparing to enter the schools of Newfoundland as teachers of exceptional children upon completion of their university training. The expressed long-range intention of the Harlow semester was that the acquired skills and increased sensitivity resulting from this unique teacher training experience would directly benefit Newfoundland school children requiring specialized teaching techniques and curriculum planning.

Students were selected for the practicum on the basis of their interest in exceptional children and the level of professional potential demonstrated during Special Education courses which they had already completed. Only students who had completed the theoretical orientation courses (approximately fifty per cent of Memorial's Program) were given consideration as candidates. Eleven students selected in terms of these criteria arrived in Harlow on April 15th, 1976, to commence the first Spring Semester internship.

Student Placements

With the initial group, each student was placed in a Special Education setting in Essex County in cooperation with the West Essex Area Education Office situated in the town of Epping. Prior to the students' arrival placements were selected by the Area Education Officer to align with descriptions of each student's professional preparation and preference with regard to age-level and area of exceptionality. The support and cooperation of the Area Education Office has been a functional requisite throughout the project.

Since 1976 placement details have been coordinated through the Epping Office, however, the placement selections have been suggested by Memorial faculty based
upon familiarity with the system from previous experiences. At first placements involved three Harlow schools and one school in each of three other Essex centers: Braintree, Chelmsford and Chigwell. During the last ten years a variety of new placements have been established to supplement the list of choices.

As a general statement it is true that placements during the first few years were in the area of mental retardation. Placement alternatives have expanded to include socially maladjusted children and physically handicapped children. Most recently, learning disabled and partially hearing children have been included.

The evolution of the practicum experience at Harlow has reflected the evolution of British educational thought as contained in the Warnock Report (1978) and the Education Act of 1981. Two of the 1986 placements illustrate this, one with a resource teacher in a comprehensive high school, the other with a "special education needs support service team" composed of twenty specialist teachers who support integrated learning disabled children in regular classroom settings. Even within the traditional special schools which provide education for more severely handicapped children, social and community integration has become a heightened priority.

The practicum begins approximately May 1st each year and concludes at the end of the English school term in mid July. During this time the Memorial interns are in school from Monday to Thursday each week, with Fridays open for seminars and field trips.

**Group Seminars & Educational Field Trips**

One course from Memorial's list of Special Education electives which is regularly offered in Harlow is Education 3640 - Problems and Issues in Special Education. Differing from its offering at the St. John's campus, the Harlow version focuses upon issues within the British context. Seminars at the Maltings have included a variety of guest lecturers. Among these during the past ten years have been:

H. Bliss, Area Education Officer for West Essex, Categories of need and handicap.
C. Cooke, Deputy Head, Hayward School, Chelmsford, Music and the mentally retarded child.
V. Jepps, Harlow Parents' Helpline, Child abuse and the role of the teacher.
R. Ledgerton, Teacher, Hayward School, Chelmsford, Work study and school leavers programme.
H. Reeves, Harlow Gypsy Warden, Gypsies and the education of their children.
L. Robb, Hayward School Assessment Unit, Chelmsford, Early childhood assessment of learning problems.
B. Smith, Resource Room Teacher, Stewards Comprehensive School, Harlow, The computer in the resource room.
C. Withrington, West Essex Special Education Needs Support Service Team, The special needs support team concept.
Another component of the Problems and Issues course involves visits to special educational settings in various parts of Essex and neighboring counties. On each field trip a guided tour of the facility is conducted and the students' attention is directed to key educational facets of the facility. Students are invited to ask questions concerning aspects of educational planning.

Students have visited Leywood Adult Training Center (Braintree), Turner's Village Hospital (Colchester), the Spastics Society's Meldreth Manor School (Royston, Herts.), Pyne's Training Center (Harlow), High View School (Chigwell), St. Elizabeth's School for Epileptic Children (Much Hadham) and Hare Street Infants School's Partially Hearing Unit (Harlow). On each field trip a member of the student group is designated "monitor", keeping extensive notes which are later edited and distributed to each group member.

**Individual Field Experience**

In addition to structured group activities, individual learning experiences present themselves each year. One student-teacher was invited to join her co-operating teacher on a visit to BBC headquarters in London to observe the production of "Playtime", a popular children's program. On another occasion three students visited the University of London Institute of Education to attend a lecture by Dr. D. Stott.

In 1976 student interns placed at Harlow's Tye Green School joined the teaching staff as part of an extended school excursion to the Skegness coastal area. Each year the two Memorial students assigned to the Edith Borthwick School in Braintree take an active part in a one-week camping expedition to East Mersea with developmentally delayed children.

On several occasions students have visited Harlow's Fernhill gypsy caravan site to consider the educational implications of the gypsy lifestyle. In 1986 the student placed at Stewards School in Harlow accompanied her students to the popular London musical production "CATS". The range of individual learning experiences is almost limitless and the Memorial students eagerly accept the invitations which are presented.

**Cultural Benefits**

Harlow's proximity to London is a real advantage and has done much to expand and heighten cultural awareness. One's education is more complete after having visited "poets' corner" in Westminster, having seen the beauty and intricacy of St. Paul's Cathedral and having examined exhibits at the British Natural History Museum.

Students are encouraged to travel. Many students have had the good fortune to attend the Royal Shakespeare Theatre at Stratford-upon-Avon. Some have visited such diverse places as the Colchester Museum with its Roman artifacts, Canterbury Cathedral and the walled city of Chester. Students are afforded a chance to experi-
ence both rural and urban England. Each year two students spend three nights per week with an English family while completing their practicum in the Braintree area. The cultural enrichment of studying in England cannot be overlooked.

**Summation**

When attempting to evaluate the Harlow experience during the past decade it is imperative to achieve reasonable objectivity. Ten years of involvement with Harlow project helps to establish a realistic perspective, detached from the overwhelming tendency of the first two years to gild the experience.

It is warranted at this point to address an obvious question What has the Harlow experience to offer academically that is not available in Newfoundland?

Special Education needs are universal. Historically, except- ionality has been an indigenous part of human existence rather than uniquely associated with a particular cultural or social setting. It is the educational approaches and methodologies which vary from one country to the next rather than the basic shared philosophy that exceptional individuals must be given the opportunity to develop their potential. In England, as elsewhere, there are children who for any one of a number of reasons find it difficult to take full advantage of the usual classroom curriculum. In England, as elsewhere, there are positive minded individuals attempting to provide quality care and special services for these children.

In a broad philosophic sense, the major thrust of England’s Warnock Report (1978) closely aligns with the intent of U.S. Public Law 94-142 and has had as profound an impact on the concept of Special Education in the United Kingdom. It is at the pragmatic implementation level that differences exist. Viewing the Harlow experience with hindsight allows the Newfoundland intern to compare British and North American delivery systems and to select methodologies from an enhanced information base.

To say that Special Education efforts in Newfoundland are not worthwhile would be erroneous and inconsistent with the writer’s honest belief. Students who do the practical aspects of their teacher training in Newfoundland are placed with qualified and knowledgeable teachers, and they benefit greatly. Those who are granted the opportunity to study at Harlow have the advantage not of being exposed to better teachers, but to a more diversified experience. Because of England’s sizeable population there are more children who are defined as exceptional, and as a consequence, there are more facilities, researchers and teacher training programs related to special needs.

An added advantage of studying in Harlow is that the student teacher is confronted with a wide variety of new programs and teaching materials of British origin. Again, this is not meant to imply that everything which is English is worthwhile and should be adopted in a wholesale fashion. It does mean, however, that when the student returns to Newfoundland to begin teaching she has a wider variety of resources and ideas to select from as she approaches her assignment.

An aspect of the special education system in England which impresses one favourably is the thorough diagnostic service which schools employ before placing a
child in a particular program. Over the years Memorial students have been invited to various "admission conferences" where school personnel, social workers, educational psychologists and medical practitioners meet to discuss the prognosis for individual children.

The assessment of specific need begins very early in England. Many schools such as the Hayward School, Chelmsford and the Edith Borthwick School, Bocking, have an assessment unit where preschool children having irregular development patterns, birth injuries or known etiologies related to developmental delay attend a one year observational period. During this time "high-risk children" are evaluated in a learning environment by teachers, social workers, psychologists, and medical personnel. At the end of the year the teachers and parents, together with others involved with the child, decide upon an educational strategy and appropriate placement. Although each assessment unit is physically associated with a special school, it is not always the case that the child will be placed at that school. In many cases, placement is in a regular school after the one year assessment terminates. Basically, it is an attempt to meet needs at an early age rather than after failure has taken its toll. Occasionally one of Memorial's students will request to focus his practicum on diagnostic services and placement is arranged with an assessment unit.

The philosophy of Special Education in England strongly establishes the essentiality of adequate socialization. Although socialization of the exceptional child is a pervasive aim in educational planning in most countries, the English schools place a particularly heavy weighing upon helping the child overcome his handicap and merge with the community in a positive, productive fashion. It would appear that the child's self-esteem and social competence take precedence over some aspects of academic development. This does not mean that academic pursuit is sacrificed; it means that a larger segment of the syllabus is devoted to the development of personal competencies. Each teacher is given the responsibility to plan and implement her program within broadly defined guidelines.

The English philosophy would appear to be more holistic than that of many parts of North America where the development of marketable skills would appear to have the greater weighing in educational planning than social life-skill development. Consistent with this philosophy which fosters social and emotional development, British Special Education programs provide varied activities emphasizing communication, physical education, and the cultivation of hobbies and interests. As Essex is a fairly prosperous county, the facilities to support these segments of the program are themselves exceptional. As described earlier, farms, soccer and cricket pitches, gardens and swimming pools are not uncommon. The Memorial students are exposed to educational programs which range from camping to sailing to horse-back riding.

It is the writer's belief that in addition to the field trips, guest lectures and seminars, the Memorial students gain much from the daily routine of working with exceptional children. As the term progresses confidence grows, better questions surface, more definite ideas are posited and integration of theory and practice become apparent. If one's personality is like clay during the adolescent years, changed just a little with each touch, the Harlow experience with its exposure to numerous people and new
ideas contributes greatly to the shaping of students who are afforded this opportunity. In the view of many students the most lasting memories are of people. The cooperating teachers openly and unhesitatingly share a wealth of expertise. Optimism, awareness, and positive regard tend to permeate endeavours in Special Education in England.

REFERENCES

STUDY-HABITS OF SCHEDULED TRIBE STUDENTS

Harbans Singh and S.S.Chauhan

Himachal Pradesh University

The present study has been undertaken to examine the difference of sex, birth order and self-concept in relation to study-habits among scheduled tribe students along with their interactional effects. The sample consisted of 300 students attending grade X at high and senior secondary schools of Himachal Pradesh (India). The results revealed significant differences in study- habits in relation to sex and self-concept. Study-habits do not differ significantly at different orders of birth. None of the interactional effects is significant.

Scheduled tribes in India have been living in isolation since thousands of years and were deprived of social interaction and educational facilities to their children. This has resulted in a peculiar personality pattern among the tribals. After Independence, through the process of universalisation of education, education reached these tribal people. The national government has started various welfare programmes in terms of fellowships, reservation of seats for them in educational institutions and jobs, in order to bring them in the mainstream of society.

The first generation learner has a number of difficulties in adjusting in the school environment and developing proper study-habits. The present paper analyses the study-habits of scheduled tribes in Himachal Pradesh (India).

Research has shown the importance of study-habits in school achievement and the relationship of study-habits to various socio-psychological factors. Schmeck, Ribich and Ramaniah (1975), Keetz (1979), Cavanaugh (1983) and Koivo (1983) found significant sex differences in relation to study-habits. Contrary to these Christian (1983) and Rao, Parvathy and Swaminathan (1983) found that boys and girls do not differ significantly with regard to study-habits.
Vedavalli (1956), observe that first born students showed better study-habits than those born later to their parents. Gadzella and Williamson (1984) found that study-skills and self-concept are positively interrelate. The aims of this study were to investigate differences of sex, birth order, and self-concept in relation to study-habits of scheduled tribe students.

**METHOD AND PROCEDURE**

*Sample*

150 boys and 150 girls from scheduled tribe students attending grade ten at High and Senior Secondary Schools in Kinnaur and Lahaul-Spiti districts of Himachal Pradesh (India) were selected randomly.

*Tools of data collection*

For the collection of necessary information following tools were used:

*Self-Concept Inventory by Mohsin (1979)*

This inventory contains 48 items. The positively and negatively phrased statements are equally balanced in number, all positively phrased statements affirm a positive quality and all negatively phrased statements deny a negative quality. The acceptance of a statement as characterising oneself signifies, in either case, positive evaluation of the self. Two halves reliability of Mohsin self-concept Inventory (MSCI) was found to be 0.57 for half and 0.73 for the full inventory. The correlation with Maslow’s SI test was -0.351 and with Mohsin Parent-Child Inventory, it was 0.396 for a sample of 150 undergraduate students. Both values are significant at less than .01 level. The obtained correlations may be taken as indices of construct validity of the MSCI.

*Study Habits Inventory by Patel (1975)*

This inventory consists of 45 items, which depict seven major areas i.e., home environment and planning of work; reading and comments; planning of subjects; concentration; preparation for the examination; habits and interests; and school environment. For each item there are five categories of responses namely; always, frequently, casually, rarely and never. The respondent was to tick ( ) the preferred category. Both of the above mentioned tools are in Hindi which is the medium of instruction in schools selected for the study.
Procedure

The subjects were assigned to high, average, and low levels of self-concept in the following manner:
(a) Subjects who obtained self-concept scores equal to (Mean + 0.75 S.D) or more than this were categorised as the high self-concept group.
(b) Subjects whose self-concept score was equal to (Mean - 0.75 S.D) or below this were classified as the low self-concept group.
(c) Subjects whose self-concept score fall between the two above mentioned groups were named as the average self-concept group.

RESULTS AND DISCUSSION

To examine the main effects of Sex (A), Birth Order (B), and Self-Concept (C) along with their interactional effects, a 2 X 2 X 3 factorial design was used involving 2 levels of sex i.e., boys and girls (A,A ), 2 levels of birth order i.e., first-born and later-born (B,B ) and 3 levels of self-concept i.e., high, average and low (C,C,C ). The analysis was carried out on unequal and disproportional cell sizes. The summary of results is given in Table 1 below:

Table 1

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>SS</th>
<th>MS(4)</th>
<th>F-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (A)</td>
<td>1</td>
<td>2927.5429</td>
<td>2927.5429</td>
<td>4.9836*</td>
</tr>
<tr>
<td>Birth Order (B)</td>
<td>1</td>
<td>1.5386</td>
<td>1.5386</td>
<td>0.0026</td>
</tr>
<tr>
<td>Self-Concept (C)</td>
<td>2</td>
<td>12872.2587</td>
<td>6436.1293</td>
<td>10.9564**</td>
</tr>
<tr>
<td>Interaction (A X B)</td>
<td>2</td>
<td>72.1434</td>
<td>72.1434</td>
<td>0.1228</td>
</tr>
<tr>
<td>Interaction (B X C)</td>
<td>2</td>
<td>3030.9823</td>
<td>1515.4912</td>
<td>2.5799</td>
</tr>
<tr>
<td>Interaction (A X B X C)</td>
<td>2</td>
<td>1092.7290</td>
<td>546.3645</td>
<td>0.9301</td>
</tr>
<tr>
<td>Error Variance</td>
<td>250</td>
<td>283.6881</td>
<td>141.8441</td>
<td>0.2415</td>
</tr>
<tr>
<td>Total</td>
<td>261</td>
<td>167138.0030</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01

The results indicate a significant difference of sex in relation to study-habits. Boys had significantly better study-habits than girls. This result corroborates those of Schemeck, Ribich and Ramamiah (1975), Keetz (1979), Cavanaugh (1983), and Koivo (1983), who also observed that study-habits of boys and girls differ significantly.
This result is not in agreement with that of Christian (1983) and Rao, Parvathy and Swaminathan (1983), who found no sex difference.

In order to find out difference among boys and girls in seven major areas of study-habits ‘t’ test was used. Means of boys and girls in seven areas of study-habits are given in Table 2 below:

<table>
<thead>
<tr>
<th>Areas of Study-Habits</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Environment and Planning of work</td>
<td>26.99</td>
<td>25.67</td>
</tr>
<tr>
<td>Reading and Comments</td>
<td>34.15</td>
<td>32.56</td>
</tr>
<tr>
<td>Planning of Subjects</td>
<td>18.79</td>
<td>18.22</td>
</tr>
<tr>
<td>Concentration</td>
<td>14.55</td>
<td>13.79</td>
</tr>
<tr>
<td>Preparation for the Examination</td>
<td>18.82</td>
<td>18.57</td>
</tr>
<tr>
<td>Habits and Interests</td>
<td>29.05</td>
<td>27.87</td>
</tr>
<tr>
<td>School Environment</td>
<td>19.12</td>
<td>18.53</td>
</tr>
</tbody>
</table>

From the means of study-habits scores of boys and girls in seven major areas ‘t’ values were computed. The results are given in Table 3 below.

<table>
<thead>
<tr>
<th>Areas of Study-Habits</th>
<th>Mead Differences Between Boys &amp; Girls</th>
<th>SED</th>
<th>t-Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Environment and Planning of work</td>
<td>1.32</td>
<td>0.66</td>
<td>2.00*</td>
</tr>
<tr>
<td>Reading and Comments</td>
<td>1.59</td>
<td>0.84</td>
<td>1.89</td>
</tr>
<tr>
<td>Planning of Subjects</td>
<td>0.57</td>
<td>0.55</td>
<td>1.04</td>
</tr>
<tr>
<td>Concentration</td>
<td>0.76</td>
<td>0.50</td>
<td>1.52</td>
</tr>
<tr>
<td>Preparation for the Examination</td>
<td>0.25</td>
<td>0.64</td>
<td>0.39</td>
</tr>
<tr>
<td>Habits and Interests</td>
<td>1.18</td>
<td>0.77</td>
<td>1.53</td>
</tr>
<tr>
<td>School Environment</td>
<td>0.59</td>
<td>0.60</td>
<td>0.98</td>
</tr>
</tbody>
</table>

* p > 0.05

The results in Table 3 reveal that boys scored higher than girls in all the seven areas of study-habits. But only one difference i.e., in the area of home environment and
planning of work is statistically significant. Boys find home environment significantly more conducive for study and they are more systematic in planning of work than girls. Differences in other areas of study-habits are not statistically significant. Table I shows that there was no significant difference for birth order in relation to study-habits. This result is not in agreement with that of Vedavalli (1956) who found that first born students had better study-habits than those born later to their parents.

Study-habits of scheduled tribe students differed significantly at different levels of self-concept. This result is substantiated by Gadzella and Williamson (1984) who found that study-skills and self-concept are positively interrelated.

Further, to find out the differences among the scheduled tribe students of high, average and low self-concept groups in seven major areas of study-habits ‘t’ test was used. The means of study-habits scores at three levels of self-concept in seven areas of study-habits are given in Table 4.

**Table 4**

<table>
<thead>
<tr>
<th>Areas of Study-Habits</th>
<th>Levels of Self-Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C₁</td>
</tr>
<tr>
<td>Home Environment and Planning of work</td>
<td>27.53</td>
</tr>
<tr>
<td>Reading and Comments</td>
<td>35.23</td>
</tr>
<tr>
<td>Planning of Subjects</td>
<td>19.62</td>
</tr>
<tr>
<td>Concentration</td>
<td>15.30</td>
</tr>
<tr>
<td>Preparation for the Examination</td>
<td>20.09</td>
</tr>
<tr>
<td>Habits and Interests</td>
<td>29.28</td>
</tr>
<tr>
<td>School Environment</td>
<td>19.28</td>
</tr>
</tbody>
</table>

From the means of study-habits scores of students in seven areas of study-habits at three levels of self-concept ‘t’ values were calculated. The results are given in Table 5.
Table 5

Differences of Means of Study-Habits Scores in Seven Areas of Study-Habits at Three Levels of Self-Concept 1.e. High Average and Low (C1, C2, C3), Standard Error of the Difference Between Means and ‘t’ Ratios.

<table>
<thead>
<tr>
<th>Pairs of Comparison</th>
<th>Areas of Study-Habits Differences</th>
<th>Mean</th>
<th>S.E</th>
<th>t-Ratios</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 – C2</td>
<td>Planning of work</td>
<td>0.97</td>
<td>0.77</td>
<td>1.26</td>
</tr>
<tr>
<td></td>
<td>Reading and Comments</td>
<td>1.52</td>
<td>0.95</td>
<td>1.60</td>
</tr>
<tr>
<td></td>
<td>Planning of Subjects</td>
<td>0.51</td>
<td>0.60</td>
<td>0.85</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>0.83</td>
<td>0.55</td>
<td>1.51</td>
</tr>
<tr>
<td></td>
<td>Preparation for the Examination</td>
<td>1.34</td>
<td>0.79</td>
<td>1.70</td>
</tr>
<tr>
<td></td>
<td>Habits and Interests</td>
<td>-0.11</td>
<td>0.82</td>
<td>-0.13</td>
</tr>
<tr>
<td></td>
<td>School Environment</td>
<td>-0.70</td>
<td>0.68</td>
<td>-0.10</td>
</tr>
<tr>
<td>C1 – C3</td>
<td>Planning of work</td>
<td>2.86</td>
<td>1.01</td>
<td>2.83**</td>
</tr>
<tr>
<td></td>
<td>Reading and Comments</td>
<td>4.43</td>
<td>1.25</td>
<td>3.54**</td>
</tr>
<tr>
<td></td>
<td>Planning of Subjects</td>
<td>3.29</td>
<td>0.76</td>
<td>4.33*</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>2.60</td>
<td>0.76</td>
<td>3.42**</td>
</tr>
<tr>
<td></td>
<td>Preparation for the Examination</td>
<td>3.39</td>
<td>1.01</td>
<td>3.36*</td>
</tr>
<tr>
<td></td>
<td>Habits and Interests</td>
<td>3.43</td>
<td>1.08</td>
<td>2.81**</td>
</tr>
<tr>
<td></td>
<td>School Environment</td>
<td>1.51</td>
<td>0.81</td>
<td>1.86</td>
</tr>
<tr>
<td>C2 – C3</td>
<td>Planning of Work</td>
<td>1.89</td>
<td>0.84</td>
<td>2.25*</td>
</tr>
<tr>
<td></td>
<td>Reading and Comments</td>
<td>2.91</td>
<td>1.01</td>
<td>2.88**</td>
</tr>
<tr>
<td></td>
<td>Planning of Subjects</td>
<td>2.78</td>
<td>0.69</td>
<td>4.03**</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>1.77</td>
<td>0.66</td>
<td>2.68**</td>
</tr>
<tr>
<td></td>
<td>Preparation of the Examination</td>
<td>2.05</td>
<td>0.82</td>
<td>2.50*</td>
</tr>
<tr>
<td></td>
<td>Habits and Interests</td>
<td>3.14</td>
<td>0.97</td>
<td>3.24**</td>
</tr>
<tr>
<td></td>
<td>School Environment</td>
<td>1.58</td>
<td>0.74</td>
<td>2.14*</td>
</tr>
</tbody>
</table>

*p>.05
**p>.01

The results in Table 5 indicate that students with high self-concept had higher means of study-habits scores than the students with average self-concept in the areas of home environment and planning of work, reading and comments, planning of subjects, concentration and preparation for the examination. Whereas, students with average self-concept had slightly better means of scores in the areas of habits and
interests and an environment of the school than the students with high self-concept. None of the differences was statistically significant.

Students with high self-concept had significantly higher means of study-habits scores than the students with low self-concept in the areas of home environment and planning of work, reading and comments, planning of subjects, concentration, preparation for the examination and habits and interests. Though, students with high self-concept had higher mean of scores than the students with low self-concept in the area of school environment, yet this difference was not statistically significant.

Students with average self-concept had significantly higher means of study-habits scores than the students with low self-concept in all the seven major areas of study-habits.

None of the interactional effects was significant.

**CONCLUSIONS AND SUGGESTIONS**

The main findings of the study are:

Boys had significantly better study-habits than the girls. The detailed analysis showed that boys find home environment significantly more conducive for study and are more systematic in planning of work than the girls. This may be attributed to preferential treatment meted to boys in Indian society in general and in rural areas in particular. In tribal areas very little attention is paid to the education of girls and most of the time they were kept busy in the household work. This implies attitudinal changes on the part of the parents. Girls need better motivation and less household work, so that they can devote adequate time to their studies.

The study revealed that study-habits had a close positive relation with self-concept. Students with high self-concept had better study-habits than the students with average and low levels of self-concept. Self-concept of students can be built up by introducing creative work, problem solving games, essay, contests, debates, quizzes and group discussion -s in schools. Due recognition and appreciation in the above activities should be given. Camps and educational excursions, picnics or outings can help in developing group feeling among students. Greater importance should be given to the corporate life in the school where each student is assigned some responsibility and he or she finds himself a participant in running the institution. Parent Teacher Associations should meet frequently. Counselling services should be arranged for enhancing the self-concept of students.
REFERENCES
for high school students. Resources in Education (ERIC), 19(12), ED:246369.
Koivo, A (1983). The Relationship of students perception of study-habits and attitudes based on 
differences in sex, grade, and academic achievement. Dissertation Abstracts International, 
43(8), p.2624-A.
Patel, B(1975). Manual for study-habits inventory, Agra Psychological Research Cell, Tiwari Kothi, 
Belanganj, Agra (India).
Deonabir, Belapur, Varanasi (India), 1-3.
Schemec, R, Ribich, F. & Ramaniah, N. (1975). Internal-external control of reinforcement as a de-
Vedavalli, H.C.(1956). Study-habits of college students at Tirupati (India), Education and 
Psychology (3), 42-50.
INTRODUCING COMPUTERS IN SPECIAL EDUCATION PROGRAMS IN THE PEOPLE'S REPUBLIC OF CHINA

Russell T. Osguthorpe
Jane Birch
Mickey Cochran
David Harrison
Zhou Lian
Mark Maddux

Brigham Young University

Yvette Marrin

National Cristina Foundation Abstract

This article describes a technical assistance project designed to help special educators in Beijing, China begin to use computer technology with their disabled students. In 1986 the National Cristina Foundation, with the support of Apple Computer Incorporated, donated 100 computers to special education programs in Beijing. During a five week period in 1987, a Brigham Young University professor and five graduate students introduced American software applications in Beijing schools for students with visual impairments, mental retardation, and hearing impairments. The results of the first phase of the project showed that American software can be of benefit in Chinese special education programs, but primarily as a model for their own software development efforts.
During the summer of 1986, the National Cristina Foundation (NCF-a not for profit corporation devoted specifically to the promotion of technology in meeting the needs of people with disabilities) contacted Brigham Young University (BYU) proposing that a joint project be conducted in which computer applications be implemented and tested with disabled students in Beijing, China. The purpose of the project is to assist special educators in the People's Republic of China as they begin to use computer technology with their students for the first time. NCF, with the support of Apple Computer, Inc., donated 100 Apple II-e computers to the major centers for special education in Beijing. In its agreement with its affiliate organization, the China Fund for the Handicapped in the People's Republic of China, NCF will be providing additional computers, advisement and training support with reference to technology applications for people with disabilities.

During the winter of 1987, a BYU professor of instructional science and five graduate students gathered software from American vendors and then spent the month of March in Beijing introducing this software to Chinese special educators. The purpose of this report is to give a brief description of the activities carried out during that four month period.

**Preparing for the Trip**

An essential part of the project took place during the first two months of the semester as we made preparations for the work to be done in China. Since each of the BYU team members had different backgrounds, a two hour class was held daily prior to departure for China. The class focused on three main content areas: special education, computer applications with handicapped students, and the Chinese language. Other faculty in the college gave presentations on: visual impairments, hearing impairments, and assessment in special education, especially relating to those students with mild mental handicaps. Each graduate student also chose a recent book addressing computers in special education and then led a discussion with the team on the contents of the book. Since half of the team members were fluent in Chinese, they assisted the others in developing survival vocabulary in the language.

In addition to formal class time each of the team members participated in research that was then being conducted on applications of technology in special education. In one study the investigator was comparing tutor-assisted with computer-directed instructional approaches to teach keyboarding skills to students with learning disabilities. Team members assisted the researcher by administering tests, writing field notes to document the effects of the treatments on students, and supervising tutors to ensure proper experimental control. In another study team members assisted a researcher as she used a Power Pad to aid preschool handicapped children develop communication skills.

Along with increasing the team's skills in using computers with handicapped students, a primary task during the first two months of the project was to obtain software from American vendors that we could demonstrate in Chinese schools. Hundreds of programs were obtained, including public domain and commercial soft-
ware. When each piece of software arrived, team members reviewed it and assessed its potential usefulness for Chinese special education students. Rating forms were completed on each piece and used to make decisions about which software to introduce first in the schools in China. A database was created with software titles and rater’s comments which was used later in China to help create a software library. Once these tasks were completed, the team travelled to Beijing.

Settings

In Beijing most of our time was spent in five institutions: Beijing Number One School for the Deaf, Beijing School for the Blind, Beijing School for Intellectual Development, and the National Children’s Center. The school for the deaf was established in 1935. It consists of several small single floor buildings with tile roofs joined together by concrete courtyards where the students congregate and do their daily exercises. Prior to being used as a school, these buildings were family homes in the typical Chinese tradition (with a high stone wall surrounding a collection of small family dwellings). The school is located in downtown Beijing close to shopping and business areas.

The school for the retarded is also located in the city. In contrast to the school for the deaf, the classroom building at the school for the retarded is a large two-story brick building. Two additional small buildings provide meeting room areas, a music room, and the principal’s office. Although the schools for the deaf and blind have a long history in China, the school for the retarded was established only six years ago. Prior to that time, retarded students did not receive services from the education bureau.

The school for the blind is located about a half an hour’s drive Northwest from the center of Beijing. A Catholic missionary established the school in 1875. The school for the blind is contained primarily in one large three-story building with equally large teacher and student dormitories adjacent to it. Hundreds of acres of farm land surround the campus. Unlike the school for the deaf and the school for the retarded, which are both day schools, blind students live on campus in a residential setting.

The National Children’s Center is a modern estate-like complex, originally built as a home for government leaders. More recently the complex has been turned into an educational and personal development center for Chinese children. After school each day selected children are bused into the center to participate in a host of enrichment classes and experiences, including: music, physical education, science, and others. There is also a computer lab where students and teachers can learn programming skills.

Several secondary schools in Beijing form the network called the Kanghua Computer School and are analogous to community school programs in the U.S. During the day, each school has a tramed computer teacher who conducts classes in computer literacy for the nondisabled students in the school. After school hours, special instructional programs are held in the schools for handicapped students and their teachers. Special educators may enroll in programming classes during the
evening hours and adult handicapped people may also enrol in courses to improve their computer literacy and employability.

**Students**

Generally speaking, the students at the schools we worked with in China have less severe handicapping conditions than do their counterparts in America. Many of the students enrolled in day schools or residential schools in Beijing would be enrolled in regular schools with special support services in America. This is especially evident in the school for the retarded, where the majority of the students would likely be classified in America as mildly mentally retarded, with a few being classified in the moderate range. At the schools for the deaf and blind there are also very few students with multiple handicaps, unlike similar institutions in the U.S.

Foreign visitors are first struck with the impeccable behavior of all Chinese students. Chinese education is highly formal and teacher centered. Teachers typically give a brief didactic presentation (even to young children), priming the students to respond, and then ask the students to repeat the correct answers. During some of our initial observations the students seemed to all be paying attention to the teacher and to respond appropriately when asked. Off-task behavior was difficult to find. However, as the visit progressed, and as we became more a part of the environment, students’ behavior became more real and closer to that seen in American classrooms.

There are presently 155 students enrolled in the first through the eighth grades at the school for the deaf. They range in age from 7 to 20 years old. At the school for the blind, a residential facility, they used to wait until children were at least 12 years old before enrolling them; now they are beginning to enroll younger students as well. The school for the blind now has a total of 160 students enrolled in 12 different classes. The school for the retarded has 6 six-year-old students enrolled in a preschool program and 154 students, ages 7-16, enrolled in 11 additional classes.

**Teachers**

Chinese special educators are trained primarily through apprenticeship with other more experienced teachers. During the last two years of what we call high school, the Chinese student interested in becoming a teacher enrolls in a “normal school.” These schools train their students to teach elementary school, but there are almost no programs in China, even at this level to train special educators. Thus, most of the faculty in the special education institutions in China have not had an opportunity to obtain formal training in their profession. If the education bureau sends them to the school for the deaf, they learn sign language after they arrive at the school. If they are sent to the school for the blind, they learn braille by studying with more experienced faculty. In the fall of 1986, the first university level program in special education was initiated at Beijing Normal University. However, graduates of this program
will be hired at the normal schools to train other teachers; they will not actually enter the special education classroom themselves.

**BYU Personnel**

The BYU team included a wide array of expertise both in technical areas and in Chinese language proficiency. Three of the students were pursuing graduate degrees in instructional science and had interests in the application of technology in education. One had a degree in computer science with expertise in programming and software design and the other was pursuing a degree in electrical engineering. Three of the team members spoke fluent Chinese (one was a native Chinese woman). During the majority of the time in China, the team of six split up into three pairs -- each pair consisting of one fluent Chinese speaker. These pairs were assigned to one of the three schools for purposes of inducting software to special education teachers.

Prior to the trip, the five graduate students visited the Kendall Demonstration Elementary School at Gallaudet University, the Perkins School for the Blind, the Carroll Center for the Blind, and the Microcomputer Resource Center at the BOCES 2 Special Education Center, Centereach, New York. During these visits the students gathered information about these schools’ techniques for applying computer technology with their handicapped students. Each of these schools has been designated as a sister institution to the schools in Beijing, expressing a willingness to share information with Chinese special educators. NCF is coordinating the exchange of information and materials regarding technology applications between these institutions and the model facilities in China.

**Introducing Software in the Schools**

The main purpose of the project was to introduce Chinese special educators to a wide array of software applications for their students. In this section of the paper we will describe a representative day during the five-week period of technical assistance in Beijing.

Each evening the BYU group reviewed software to be presented the following day in the three schools. As we reviewed the software, we relied on impressions from the original reviews completed in the U.S. prior to the trip. We selected software that required the least skill in English and that would, in the opinion of the team, be appropriate for the Chinese curriculum. Curriculum judgments were made with the help of Zhou Lian, who had experienced the Chinese curriculum herself as a student in their schools.

Each morning each pair on the team traveled to the schools to which they had been assigned. Although the atmosphere and student needs differed substantially from one school to another, we usually spent the first part of the day introducing two or three new pieces of software to the computer coordinators in the school and then brought the students in later to give them an opportunity to try the software themselves. Each
time students were brought into the computer room, their classroom teachers came with them. Thus, introducing the software to students also provided an opportunity to introduce the same programs to teachers, most of whom had never been exposed to educational software of any kind. Using this approach, computer coordinators personally used between 50 and 75 different pieces of software during the five week training period.

In order to illustrate the process of introducing software in China, a description of how the school for the deaf reacted to Learning Company’s Math Rabbit may be helpful. Math Rabbit is a relatively new software package designed to teach basic arithmetic skills to lower grade elementary children. The morning we showed Math Rabbit was much like other mornings. The three computer coordinators were ready for our arrival and visibly anxious to see what we had brought to show them. It often felt like Christmas morning at the school for the deaf, watching these teachers open boxes with unknown contents. The surprise and enjoyment at seeing new software seemed to repeat itself often, even though by the end of the five week period, they had seen so many different pieces, it was difficult to remember them all. After five weeks of seeing the coordinators almost every day, they plead with us to show them even more. Often we felt that it was not effective to demonstrate too many pieces at a time because they did not appear to have enough time to gain a clear understanding of the purpose of the software and how to use it. Sometimes we felt that they were too fast to make a judgement, either positive or negative, regarding a piece of software they spent only a few minutes reviewing. As we began to show the piece to the coordinators at the school for the deaf, they were immediately intrigued with the little elf-like character on the screen, and loved to see him dance after they entered a series of correct responses.

One of the coordinators immediately began taking notes about the software. She wrote down English words on the menu that were critical for operating the software and then put their Chinese equivalents next to them in her notebook. She knew that we would leave the software with them when we left and she wanted to be able to remember each of the English terms necessary to use it with students. As she translated commands into Chinese (with Zhou Lian’s help) the senior teacher attempted to use the software herself. As much as they liked the graphics and the overall usability of the software, one teacher immediately expressed her concern that the software would not be valuable in the Chinese school because students in China are taught to do math in the early grades with horizontal equations, not vertical equations. Since Math Rabbit had focused heavily on vertical equations, she felt that the teachers in the school may not see the piece as appropriate for their students because it would be confusing to them.

Once the coordinators felt comfortable with the software, we asked if it would be possible to try the software with some deaf students. They agreed that first graders would be the most appropriate age group for the software and thought that they could interest a certain first grade teacher in bringing her class to the computer room to try the software. When we first discussed the possibility of bringing students to
the computer room to use the software, the coordinators were reluctant because they explained that the principal had said that only eighth graders (the oldest students in the school) were able to enter the computer room. As we explored the reasons behind this policy, we found that some in the school viewed the computer as a separate and distinct area in the curriculum (programming skills) and, therefore, believed that it would be best to wait until the students were in the eighth grade before introducing them to programming languages. When school personnel learned that there were other applications for the computers that were appropriate for younger students, they changed the policy to allow lower grade students to use the computers. Within minutes, the first grade teacher and 8 of her students were in the computer room eagerly awaiting instructions so they could push the buttons on the keyboard. The computer coordinator got the attention of all the students and then told them, using simultaneous communication (Chinese sign language and spoken Chinese) exactly what to do in order to start the first program. Since there were 8 students and 4 computers, the teacher assigned the students to work on the computers together in pairs. Their classroom teacher, other computer staff, and the BYU team gave individual assistance to the first graders.

One seven-year-old girl was especially memorable. She was “sharing” the computer with a classmate, but definitely dominated the scene. She immediately got into the section of the program drilling subtraction facts and answered them with almost perfect accuracy. Her face lit up every time the elf danced.

The vertical equations seemed to be as easy for her to handle as the horizontal ones. Each time she waited for a new section of the program to appear on the screen, she looked like she was at her own birthday party – hovering over the cake waiting to devour it. When her partner began to by the program, she soon lost patience. He was not quite as fast as she was; he needed more instruction in order to push the correct keys; and was not nearly as skilled with the number facts. Several times just as he was about to hit the wrong key, she leaned over and pointed to right key. If he did hit the wrong key before she could correct him, she scowled at him and asked if she could take charge of the keyboard again so that they could see the elf dance.

While the students were bying Math Rabbit, their classroom teacher was as involved as they were in the whole experience. She wanted to know exactly what the software contained, the sequence of the math facts, and the scope of the curriculum. During her lunch break that day she came into the computer room while the coordinators were in the lunch room so that she could continue to explore the software.

After the students had returned to their classroom, BYU personnel discussed the experience with the computer staff. The coordinator concerned about the vertical equations immediately admitted that it had not been difficult for most of the children, but still suggested that teachers should probably introduce the vertical equation in the classroom before the children saw such equations on the computer screen. We discussed the placement of the software in the curriculum and talked about ways of integrating it into existing curricula. We asked the coordinators if they thought teachers would be willing to become familiar with the software so that they could build it into their teaching plans. The coordinators said that some teachers would be more
interested in becoming involved than others, and they still expressed some concern
that administrators might not agree that Math Rabbit was the most effective use of
the computers because programming is viewed as the central function of the technology.

In order to document the reactions of students and teachers to each piece of soft-
ware members of the BYU team took field notes throughout the five-week period. We
also held periodic debriefing sessions at the end of the day, sharing the individual
experiences at each of the three schools. These field notes and discussion sessions
later formed the basis of ethnographic reports of the entire experience.

Some Observations

There is no such thing as culturally neutral software, but Chinese education can
gain important benefits from software developed in the U.S. Critical questions of how
this software can properly be integrated into the school's curricula are beginning to
be addressed. Some American software requires almost no proficiency in English,
mainly because it was developed for young children. Others merely require written
documentation in Chinese or the knowledge of a few specific English commands.

Chinese special educators were more impressed with packages that began with ba-
sic skills (such as number recognition in math instruction) and then moved to more
complex skills (such as long division). To what degree American software will find a
permanent place in Chinese education is still an important question.

Even with software, such as MECC's Mastery Math series, which had universal
appeal among Chinese special educators, cultural appropriateness remains an impor-
tant question. Chinese educators want to learn from U.S. software developers, but
are anxious to see Chinese characters appear on the screen when the disk is booted,
and to see Chinese cultural symbols throughout the program.

The problem of which U.S. software programs will be most useful in China will
continue to be examined. Additionally, the question of which software is important to
develop first in that nation, by whom, and with what funds will also be addressed.
These issues will be of major importance as the use of computers in Chinese educa-
tional settings continues to expand.
L'Arche is a world wide movement to create small communities with persons with mental handicaps. Founded in 1964 by Dr. Jean Vanier, L'Arche to date consists of 70 communities in 16 different countries. This paper attempts to understand L'Arche through the perspective of a participant observer. The author lived in a well established L'Arche community for three months. Copious notes were made on broad, focused and selected observations. Using a domain and taxonomic analysis of the data provided in the descriptive account, the author suggests that the purpose of L'Arche is not simply the creation of small communities with handicapped persons, but the creation of universal community.

L'Arche was founded in France in 1964 by Dr. Jean Vanier, son of the former Governor General of Canada, Georges P. Vanier. Beginning with Vanier's initial vision of living simply with devalued members of society, including persons with mental and physical handicaps, L'Arche has some 24 years later become a world wide movement with considerable impact on and recognition in the field of human services. To date there are 70 communities in 16 different countries including Canada, Australia, India, Belgium and the United States. Thousands of people are involved in the L'Arche movement, the goal of which is to create small communities where valued and devalued members of society may live and work together, assisting one another to grow in the various aspects of their lives.
At a glance, L'Arche communities may resemble group homes, even though L'Arche is not in essence based on the principles of normalization. In a previous article (Sumarah, 1987b), I examined the philosophy and ideology of L'Arche through the writings of its founder. (Vanier, 1971, 1975, 1979, 1981, 1985). L'Arche is based on a belief in the dignity of the devalued person, on a belief in the importance of positive personal relationships, on a belief in the value of community and on a belief in religious principles and practices (Sumarah, 1987b). More recently (Sumarah, 1987a) studied the L'Arche movement from the resident's perspective suggesting that L'Arche promotes a handicapped person's sense of agency and community.

Clarke (1973), Shearer (1976) and Clarke (1974) have shared personal reflections on their experiences in a L'Arche community. Wolfensberger (1972) provided a brief overview of his perceptions of L'Arche. The purpose of the present study is to enhance one's understanding of L'Arche through a more formal method of investigation; namely, participant observation.

**Methodology**

A well established L'Arche community in North America was chosen as the setting for this study. The community consisted of several small houses each containing three to six handicapped members and several assistants. Through a series of negotiations involving correspondence, meetings with Directors and others, it was mutually agreed that I spend three months in the community as a participant observer. The negotiation phases established the kind of trust and cooperation needed in a study of this nature. All aspects of their community life and all meetings and events were available to me.

L'Arche can be viewed as a social setting, a community or a subculture. As such it lends itself well to research methods aimed at understanding and describing cultural patterns which people use to make life meaningful. Any social group is governed by a set of rules which informs their behaviour and their interpretation of their behaviour; that is, the rules underlie what they do and what they say.

James Spradley's research methods (1979, 1980) were particularly helpful in viewing L'Arche as a subculture, while Bogdan and Taylor's qualitative approach (1975) assisted with interviewing. Spradley's highly structured and detailed methods were valuable in discovering the underlying cultural rules behind the words and actions of people. Bogdan and Taylor's work was helpful in establishing the kind of rapport needed with the members of the L'Arche community. Their work also provided a rationale for the kind of flexibility and responsiveness needed in such a study. (1975, pp. 4-5).

I was introduced to the L'Arche community as a person interested in sharing their way of life for a three month period in order to learn about their experiences. I participated with them in their daily living in order to observe their actions and understand their behaviour. I interacted with as many people as possible and attended as many meetings and events as time permitted.

An overview of the research cycle I followed is illustrated in Figure 1.
Spradley (1980) provides an elaboration of this research cycle. Briefly, broad, focused and selected observations were recorded with as much detail as possible using the language of the members of the L'Arche community. The observations were most frequently tape recorded at different intervals of each day and later transcribed.

Once the tapes were transcribed the data was analyzed using Spradley's method of domain and taxonomic analysis (1980). Domains are categories of cultural meaning. They are made up of three basic elements: a) a cover term (e.g. assistant), b) included terms (e.g. volunteers) and c) semantic relationship (e.g. a volunteer is a kind of assistant). The two semantic relationships used in this study were a) strict inclusion (e.g. setting the table is a kind of activity for residents) and b) means - end (e.g. hugging people is a way of welcoming them).

It was necessary to search the data for significant nouns and verbs to discover the domains. Each domain was written on an index card with the cover term, the included term and the semantic relationship.

One large domain, a taxonomy, was used to organize most of the cultural knowledge depicted in the other domains. The taxonomy is inferred by what people say and do.

**Description of Finding:**

The following is a description of a L'Arche community as experienced and seen through the eyes of a participant observer. The names of the members of the community have been changed to protect their identity. It was impossible to include all the data in the description but the major and most typical findings are included. Although presented in a sequential order, the events occurred not necessarily during the same day, but over a period of three months.

It is seven o'clock Monday morning. Peter is in the kitchen preparing eggs, toast, and coffee for himself. "Morning", he says to me. 'Good morning Peter, how are you?' I reply somewhat half asleep. 'Good game last night,' he continues; 'I've never
seen those guys play like that.' Peter is referring to the football game we went to last night. Anne is preparing her toast and peanut butter while Susan drinks her juice and Alice has her cereal. No formality at breakfast although we all sit around the table to eat our individually prepared meal.

Ted shouts out, 'It's 7:50, time to go to work.' Ted drives the van and Tricia the station wagon, the vehicles which drop the residents off at the workshop in town. These assistants return to L'Arche and Ted - then prepares soup for the community lunch. After the lunch preparation we are both off to the Monday morning meeting.

This meeting is held in the main meeting room. Assistants from the houses are present. Frank opens the meeting by jokingly hammering on the table. He then asks Tricia to read the thought for the week. Tricia reads, 'We are loved by God, not because we are strong but precisely because we are weak.' This is a quote from a pamphlet by Jean Vanier called Be Still and Listen. Frank encourages people to reflect on this passage during the week because it illustrates the gap between the ideal and the real. Frank proceeds with the agenda. It looks like a full week.

There are several requests from people who want to visit L'Arche. 'Who would like to welcome Mary Jo on July 31st? She'd like to come for a meal and hear about L'Arche.' One of the assistants says, 'Sure, we can welcome her into our house.'

Three people from Scotland are to arrive and stay for some time. Each will be welcomed into one of the three houses. Frank then proceeds with announcements directly from the agenda. 'Father Bob Dunne will be visiting our community on June 8. Maggie Black from L'Arche England will be at the New House from June 4-10. John's parents are coming on July 27.'

One of the assistants speaks up. 'Don't forget there's a farewell party for Ellen who's going back to Germany.' The birthdays for the month are mentioned. I get a sense of the organization required in a community this size. Frank continues, 'The drivers for the week are Sandy and Elinor, the community lunch is at the New House and tea is at the Big House.' The dates to remember are mentioned: community planning meeting, Darlene and Jack's wedding, the L'Arche picnic, the Board meeting, Agape and the meeting with the psychiatrist regarding Harry.

On the way from the Monday meeting Brian shouts out to me from the tractor, 'Don't forget the community lunch.' As I arrive for lunch, Peter from the farm team is reading the sports section of the paper. The huge salad that Ted had made is in the center of the table. People come in and sit at different times. They all have their own sandwiches and share the salad. Brian comes in and asks, 'How's your mom?' I answer, 'Fine, she's in Halifax.' There is some chatter around the table, with people commenting on how the morning went. People scatter after lunch, finding different places to relax. Peter is in the living room stretched out on the couch.

After lunch I see that Ben, the chief farmer, his wife and the farm team are picking strawberries. Mat, Clyde and Danny are sitting between the rows quietly picking. Clyde shares with me that he's looking forward to his holiday in Newfoundland. Danny is leaving the community today. He has been here for just a few months. He did not live in but worked with the farm team during the day. At 3 o'clock 11 we all go for a cold drink at one of the houses. There is some joking, some carrying on
during the break. Mat rides Peter over the results of the football game the previous night. In the kitchen Clyde compliments Kathy for her great lemonade. Then the farm team is back at it.

I proceed to another house to see if I can help with the housework. On the way I meet Sheila. After some initial conversation, she shares the following, 'In January I wanted to leave. It was a negative time in the community. The spiritual life was very low. It was a negative time in my own life. I felt I could be doing other things. But I hung on and then our house had visitors from Belgium, France and Honduras. They were on their way to the Federation of L'Arche meetings. Somehow I felt close to those new people whom I didn't want to welcome. It was the first time I had a sense of how big L'Arche is and what L'Arche means in the world and how important L'Arche is to the world. Somehow I felt so much at one with them even though I didn't know them.' Sheila discovers so much in her community and she is eager to continue her story with me. 'I originally went to L'Arche to do my own project in the community. Now after two years I'm just beginning to understand L'Arche. I am part of the community and together the community is doing things. I'm not just a person in the community doing my own thing. I am one part of a community working together. I finally recognize my bond with the other people and together we are called to do things. It's not just one person creating in an environment with other people.'

She continues, 'My attitude has changed a lot towards people. In the beginning I was doing things for the handicapped people because I was the assistant and they were the handicapped and the thing had to be done. I have really come around to doing things with people because I care about them. I want to see that they look good and that people won't laugh at them. It's not because they're handicapped that I am doing this but because I personally care for them. They're my friends. Sometimes when we're downtown and one of them does something funny I think people will interpret the action as the result of mental retardation but when you know the person you know they're doing it simply because of their personality.'

Supper time is fast approaching and I'm invited for dinner in one of the houses. As I enter the kitchen I see Anne preparing the food. 'Hi, Anne, how are you?' I greet her. She leaves her preparation and gives me a hug and a kiss. 'Do you like porkchops?' she says. 'I love them and I bet you're a fine cook.' I reply. I am touched by Anne's welcome. I had seen her only twice prior to this time. Her affectionate greeting makes me wonder about the whole idea of welcome. Anne seems to know what she is doing in the kitchen. Her recipe of porkchops, mushroom soup, along with green beans and cabbage salad was printed and pictorially illustrated in her book including what time the vegetables should be on the stove.

Since I am not needed in the kitchen I proceed to the living room. Elizabeth Ann is hooking a rug and Elaine is knitting. Morry joins us and the ladies talk about Morry's birthday. Elaine is going to do the cooking along with June who's away now in Africa. She looks at Morry, 'What's your favorite dinner Morry?' Morry utters something but I am not yet accustomed to his speech patterns. Elizabeth Ann translates for me, 'He said his favorite dinner is ham.' Elaine carries on, 'I'll make you a ham dinner and bake you a cake Morry, how would that be?'
Elaine looks at me, eager to share something. 'I've been awarded a candle, you know.' I reply, 'How lovely. What's the occasion?' 'I belong to Agape and we have a special dinner and celebration.' She speaks proudly now, 'I've been at L'Arche for ten years, that's why I got the candle.' I was to soon find out that Agape is a group of people at L'Arche who have been there longer than two years and who have committed themselves to the spirit of L'Arche. 

Two visitors arrive a few minutes before supper. They are the expected guests from a L'Arche house in Pennsylvania and another in Ontario. We're all introduced and it's evident that the residents have met them before. They seem happy to see each other.

The two friends are here for the Regional Council meetings. Representatives from all the L'Arche houses in the region are meeting to discuss how each community is progressing, as well as future plans and projects. The dining room, obviously the focal point of the house, is a huge room with lots of windows overlooking trees. The large wooden table is set and Anne rings the dinner bell. It is six o'clock. Everyone has a different seating arrangement than that of the last meal I shared here and the residents and assistants are again interspersed. The meal begins with a prayer by Anne. Conversation flows among the ten of us and Anne is complimented for her great meal. The hour and twenty minute meal has its share of humorous moments. Robert, from another L'Arche community, lived in this house some years ago. He shares, to the delight of everyone, some incidents of those years, about the septic tank that backed up and the dining room chairs that kept breaking. Some of the present residents were here at that time also and recall the incidents with great delight. Trudy is very excited and has difficulty containing herself. Mary gently calms her down with a hand on the shoulder and a look that says, 'take it easy'. Trudy knows the names of people in Robert's community. She asks him about each one. She also asks him about his children and about the residents in his community. Brian leaves the table and returns with pictures of the house and the community taken during the days to which Robert was referring. The old pictures bring about more laughter and joy. Jack attempts to give a speech on several occasions. He taps his glass to attract attention and stands up smoking his pipe. One of the assistants translates for everyone as Jack is sometimes difficult to understand. Jack says, 'I'm happy my friend Larry is here.'

After supper people gather in the kitchen.

Everyone knows the job to be done...washing, drying, taking out garbage, cleaning the table. I'm reminded that guests are free of doing dishes but that does not include me any longer. Morry grabs me before I take up the towel. He takes my hand to guide me to his room. I don't understand what he is saying but I'm sure I will in time. He wants to show me his brass bed. He is proud of his room with its vivid display of pictures of his family members - mother, father, brothers, sisters, nephews, nieces. There are on the wall some sayings from the Bible.

While most are doing the dishes a couple of people proceed to make their lunch. Henry shows me two sandwiches he has put away for the following day. The clean up is over and people start assembling in the living room. A candle burns in a
dimmed room. People sit on the chesterfield or on the floor. Ted plays the guitar and starts a song. All join in.

Patricia, the head of house, reads a passage from one of Jean Vanier's books. The content of the passage is that those who love will bear fruit and that one must be patient. She asks the group what it means to bear fruit and Trudy replies, 'You bear fruit when you love somebody.' Individual people pray spontaneously for people. Anne prays and gives thanks that Robert, Larry and I came to supper. Trudy prays for June in Africa. A special prayer is said for Carolyn who is 16 going to come back for another trial period. After a period of silence we hold hands and pray the Our Father.

The following day I join Helen who is in charge of organizing individual program plans for each of the residents. Helen asks Karen how she is progressing with Mary Jane. It seems that Karen is helping Mary Jane shower properly and brush her teeth. Karen helps in such things as regulating the water temperature, washing with soap, rinsing her hair, as well as towelling properly. Karen reports that Mary Jane is much more peaceful in the morning after having showered properly. Tony is helping Henry cook one meal a week. He reports humorously that Henry and he have decided to start with a simple meal of meat pies and peas. Everyone laughs. I'm impressed with the assistants' desire to help people grow in autonomy and self-esteem through attending to the details of daily living.

Later, I attend the head of house meeting in Frank's office. Each of the houses is represented, along with the Director and Assistant Director. Frank asks John to open the meeting with a prayer. John prays that they keep in mind the people in their houses and that they be attentive to each other. Frank expresses concern over the upcoming events, especially the retreats. He wants to make sure that the remaining people are not neglected. One of the retreats in August is for assistants who have been at L'Arche for some time and are thinking of staying.

Along with retreats there are holidays and all these events require a fair amount of organization. Frank mentions that it is also important to help the residents get to the Faith and Sharing retreats. He says, 'Residents need time away too and the community has to free them up.' The residents going on retreat require at least one assistant to go along with them.

Frank asks if someone would welcome Frederick for the weekend. The latter is a handicapped person who visits periodically. Pat from one of the houses agrees to welcome Frederick. All those present seem very tired of welcoming but they still do it. Frank raises the question of Sandy's wedding. The community decides to host the wedding reception. Arrangements are made for a Mass for Audrey who will be leaving for France to learn about houses for the profoundly handicapped and coming back to Canada with hopes of doing similar work here.

Frank then asks each head of house to share his/her personal feelings and reactions regarding life in his/her individual house. The comments are that life is proceeding fairly well. John, however, shares, 'I feel as though I'm just coping these days; it's a hard time with all the changes and the people leaving the community, organizing retreats and all that. I'm just waiting for September to come to get back to normal.' I be-
gin to think that there must be a balance between welcoming, extending oneself and nourishing oneself.

There is a special meeting at the main house tonight. Dave Foster, a friend of L'Arche comes once a week to a different house to have a meeting with the residents only. The purpose of the meeting is to help the residents communicate with each other. Consequently there are no assistants at this meeting and generally no invited guests. Dave asks the group if I might attend. They agree and Henry, who is chairing the meeting, phones me to indicate I may join them.

The meeting is held in the living room behind closed doors. Henry asks each of the eight people present how he/she spent the day, what problems may have been encountered and what good things happened. People respond well. Whenever one or two people act up the Chairman deals with the interruption appropriately by saying, 'It's not your time to speak.' His leadership role is respected because each person chairs a meeting. I sense very much the importance of this kind of meeting. Dave maintains a low profile throughout the course of the meeting to provide a climate of free expression among the residents.

Another climate facilitating free expression is the meeting of residents with the Director or Assistant Director. Here the hope is that residents will give feedback as to their perception of what is happening in the house. Again I am impressed by the desire of the community to help people express themselves and relate to each other.

I am invited to the Agape meeting Tuesday night.

Approximately thirty people in the community meet once a month for mutual support. This meeting involves a special meal and prayer service. These people are the backbone of the community, the more permanent people who provide the peace and stability of the community. There are more residents than assistants at the meeting but the discussion at the meal is animated primarily by the assistants. Following the meal there is a prayer service in the chapel. Frank talks about the importance of supporting one another and being faithful to L'Arche. He talks of the group assuming responsibility for the others in the community, others who come and go. June talks briefly of recognizing each other as brother and sister, because "we are all God's children." She talks also of the importance of enjoying one another as well as putting up with one another. There is a lengthy expression of individual prayers where people express gratitude for their friends in the community and friends who have left the community. I sense a unity with this group.

Upon reflection I think of the irony of the fact that the community is set up primarily for handicapped people and yet the latter are responsible for welcoming others into the community.

Paul, Elaine, and Colleen are moving to a Duplex, in town, the purpose of which is to provide a more independent dwelling for those residents and assistants ready and willing to move. The residents, for the most part, will manage the house. There's excitement in the air. It's celebration time. At 6 p.m. everyone gathers in the meeting room opposite the chapel. There are at least forty people present. The residents are all very well dressed, the women in dresses and the men in sport coats and trousers. The assistants with the exception of one or two are much more informal and less
festive in their attire. There is a spirit of joy and celebration in the room. The assistant in charge of the new residence makes a toast to Paul, Elaine and Colleen. There follows a presentation of the gifts - various objects for the new house. Everyone claps at the opening of each gift. Songs are sung. I become aware that I am smiling the entire time. I am impressed by the manner in which people relate to each other. At the end of the celebration, Paul, Elaine and Colleen are called upon to give speeches. I note the quality and appropriateness of the speeches. Elaine says, 'I want to thank everyone for coming here tonight, for the lovely gifts you've given us and although I've only been at the Duplex for one day, I love it and look forward to being there. It's a very nice house and I'm going to have you all down one of these days.'

**Analysis and Discussion**

A taxonomy is an attempt to describe the cultural meaning system that people at L'Arche use to organize their behaviour and interpret their experiences. From a careful analysis of the numerous domains discovered in the description, a taxonomy was inferred. This taxonomy illustrates an overview of how community is created, maintained and enriched.

Ways to Create a Home (Community)
I. Welcoming people
   A. From other houses on the compound
   B. From other L'Arche houses
   C. From society, family, friends and others

II. Sharing activities
   A. Household duties
   B. Meal preparation
   C. Social activities
   D. Eating together
   E. Prayerful activities
   F. Holidays, Pilgrimages, Outings

III. Celebrations

In the title of the taxonomy, the word 'home' is synonymous with 'community'. People at L'Arche use the two words interchangeably. The notion of home is therefore extended from that of one house with people living in it, to that home's relation to others in the same compound. When people talk of L'Arche as their home, they refer not only to the individual house in which they reside but to the community in which the house is embedded. This is the first sign of the notion of 'expansion', which notion will be elaborated on shortly.

The word "create" in the title is an important one, for it reflects the idea that the members of L'Arche perceive home or community as something to be created, rather than a given fact of life. Consequently, the activities involved in creating a community
are intentional on their part and are seen as a continual process rather than a static state. The moment that people stop intending to create community, is the moment that the community stops being created. (MacMurray, 1961).

The first way to create community is to 'welcome, people. This was a common theme throughout the observations. The notion of welcome points again to an 'expanded' sense of self. The more the self allows other people to enter its life, the more it expands. This expanded sense of self is manifested and nourished at L'Arche by the welcoming of many people. This is a demanding activity, for it often involves making extra food for the visitors and locating a place for them to sleep. The reason for the emphasis on welcome has to do with the concept of 'inclusivity'. The actions and beliefs of L'Arche members suggest that in order that relationships be fully positive, they must, in principle and in practice, be inclusive and without limits. Only when this happens does a community of persons really thrive. One small house on the L'Arche property expands itself so that it becomes united with other houses on the compound, other L'Arche members and other members in the town community.

Community involves shared activities. People need to meet often and do things together if they are going to establish and sustain their relationships. At L'Arche, sharing begins with the morning meal. After work, sharing involves preparation of the evening meal and setting the table. One of the most important shared activities of the day is this evening meal. It is the occasion for all members of the home to share their day's events, their plans, their joys and their disappointments. The evening meal ranges from one to one and a half hours. All members have something to say during the meal, although some are more quiet than others. The assistants take a leading role in animating the conversation, but the residents have their share of air time.

In the descriptive account, we note many meetings people involved at all levels of decision making. People are active in the creation of community, not passive recipients. The residents talk to the Director and Assistant Director. The assistants share freely at meetings, how they "feel", not simply what they think. This is an open system where democracy is practiced. Meetings are conducted with respect for individual persons. A person's input is valued, regardless of how small that input is.

Household activities are shared. People are encouraged to assume more responsibility for the community. At the Agape meeting, members were asked to take responsibility for welcoming new people into the community. Members of the community discover that they have "gifts". Some discover, with the help of others, that they organize well, that their guitar playing brings joy, that their welcome is warm and sincere, that they cook well, that their prayer is important to the community: They can 'do things' and the doing is an important contribution to the community.

Apart from other social activities, including dancing, singing and drawing which take place more spontaneously than planned, another significant shared activity is prayer. People at L'Arche pray together. The evening meal always starts with a prayer, usually by the resident who prepares the dinner. This meal is followed by a prayer time in the living room. Although attendance is not compulsory, most people are present. The prayer involves, generally, a short reading from scripture, individual petitions,
silence and candle light. The prayer does not seem to have a denominational focus although the Christian tradition appears evident. There is a reflective mood at each occasion of prayer.

As presented in the taxonomy the final way to create, sustain and enrich community is through celebration. Members' birthdays, special feast days, anniversaries, special occasions, etc., are celebrated in a festive mood. There is singing, dancing and sharing of food. These events impressed me as cohesive building, helping members of the community go beyond the day to day events and share with one another in a joyful manner. The celebrations in which I participated required effort and animation on the part of the assistants and residents. The celebrations were significant events often remembered long after their occurrence.

The cultural meaning system that people at L'Arche use to organize their behaviour and interpret their experience is a religious one. Throughout the observations of this study as indicated in the descriptive account, there is an emphasis in L'Arche's way of life on welcome, sharing, praying and celebrating. People at L'Arche organize their behaviour and interpret their experience through the religious beliefs and values in welcoming, sharing, praying and celebrating. These religious beliefs and values, although sometimes spoken, are most often silently at work in the lives of people at L'Arche.

L'Arche's notion of religion is not essentially denominational although there is much respect for this. Community is L'Arche's notion of religion; the creation of universal community. This notion of universal community was depicted in the account with the observation of the many visitors that were welcomed to this L'Arche community. Unlike other centers for the handicapped which can often be self-contained, L'Arche people travel great distances to be with one another. The rationale for and need of this sense of community for people is well formulated in Nisbet (1970) and Sarason (1974).

L'Arche is more than a home, more than a community. It is a world wide movement to create universal community. Further research and study are required to understand more fully the L'Arche movement and its implications in the field of human services.

REFERENCES


International Journal of Special Education

EDITORIAL POLICY

The International Journal of Special Education publishes original articles concerning special education. Experimental as well as theoretical articles are sought. Potential contributors are encouraged to submit reviews of research, historical and philosophical studies, case studies and content analyses in addition to experimental correlation studies, surveys and reports of the effectiveness of innovative programs.

Manuscripts should be typewritten and double spaced (including references). Submit one original typed manuscript (on 8½ x 11 inch paper) and two additional copies. Please include a stamped, self-addressed envelope for the return of manuscripts submitted. The original manuscript will be returned to the author if it is not accepted for publication. The other copies will remain the property of the Journal.

The review of the manuscript will be blind and impartial. Authors therefore are requested to include with each copy of the manuscript a cover sheet which contains the title, author's name, institutional affiliation, and date manuscript is submitted. The manuscript itself should contain the title of the article but not the author's name. The author should make every effort to avoid the inclusion of clues to his or her identity in the manuscript.

Manuscripts are reviewed by the Editorial Board. Accepted manuscripts may be revised for clarity, organization, and length.

Style: The content, organization and style of manuscripts should follow the Publication Manual of the American Psychological Association (Third Edition, 1983). A manuscript written in an obviously deviating style will be returned to the author for revision.

Abstracts: All articles will be preceded by an abstract of 100 - 200 words. Contributors are referred to the Publication Manual of the American Psychological Association for assistance in preparing the abstract.

Responsibility of Authors: Authors are solely responsible for the factual accuracy of their contributions. The author is responsible for obtaining permission to quote lengthy excerpts from previously published material. All figures submitted must be camera ready.

JOURNAL LISTINGS

Annotated and Indexed by the ERIC Clearinghouse on Handicapped and Gifted Children for publication in the monthly print index Current Index to Journals in Education (CIJE) and the quarterly index, Exceptional Child Education Resources (ECER).

SUBMITTING MANUSCRIPTS

Manuscripts should be sent to the member of the Editorial Board of the respective country.

SUBSCRIPTIONS AND CHANGE OF ADDRESS

The International Journal of Special Education (ISSN 0827 3383) is published twice a year, one volume per year.

Subscription rates per volume are $20.00 for institutions and $14.00 for individuals in Canada and the United States. An additional $1.00 for postage is charged for subscriptions in other parts of the world. Single and back issue copies, if available, are $7.00 each. Single copy orders must be prepaid.

Subscriptions and editorial correspondence should be addressed to the editor:

Marg Csapo
Faculty of Education
University of British Columbia
Vancouver, B.C. V6T 1W5

The International Journal of Special Education is published by The Centre for Human Development and Research.

Copyright © 1984 International Journal of Special Education

No specific permission of the editor is required to photocopy or reproduce a complete article as it appears in the International Journal of Special Education if the reprints are for free distribution within an organization or classroom. Permission for other reprinting or republication must be obtained from the editor.

Typeset and printed by The Printers, 129 - 470 Granville Mall, Vancouver, B.C. V6C 1V5
Dear Colleague:

It is our pleasure to offer you three journals in the field of Special Education:

**The B.C. Journal of Special Education** provides information about concerns and issues in the field related to the province of British Columbia.

**The Canadian Journal of Special Education** reflects national interests and stimulates academic research in the field.

**The International Journal of Special Education** provides forum for global issues, information about the status quo of special education in various parts of the world and insight into national concerns.

These three journals will bring you the latest professional information. With your support we will provide you with three quality journals with a focus on children and teachers with special needs.

In addition, we would like to call your attention to the **International Association of Special Education** (IASE), a non-profit educational organization of special educators, related professionals, and interested community members with a global interest and concern for the welfare of handicapped children. The membership fee is $20.00 for individuals and $30.00 for institutions. If you have already included the **International Journal** as one of your choices, please pay $6.00 (individual) or $10.00 (institutional) for your membership.

<table>
<thead>
<tr>
<th>Subscription Rates</th>
<th>Individual</th>
<th>Institutional</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.C. Journal of Special Education</td>
<td>$20.00</td>
<td>$25.00</td>
</tr>
<tr>
<td>Canadian Journal of Special Education</td>
<td>$14.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>International Journal of Special Education</td>
<td>$14.00</td>
<td>$20.00</td>
</tr>
<tr>
<td>All Three Journals</td>
<td>$45.00</td>
<td>$57.00</td>
</tr>
</tbody>
</table>

International Association of Special Education membership is:

☐ $20.00 (Individual)  ☐ $30.00 (Institutional) or
☐ $6.00 (Individual)   ☐ $10.00 (Institutional) for subscribers to the International Journal of Special Education.

---

**Subscription Form:**

NAME __________________________ PHONE NUMBER __________________________

MAILING ADDRESS _______________________________________________________

____________________________________________ AMOUNT ENCLOSED ____________

Please return this to: Dr. Marg Csapo, Professor, University of British Columbia, Educational Psychology & Special Education, 2125 Main Mall, Vancouver, B.C. V6T 1Z5.
The International Association of Special Education

Dear Colleague:

The International Association of Special Education (IASE) invites you to become an active member. The IASE is a non-profit educational organization of special educators, related professionals, and interested community members with a global interest and concern for the welfare of handicapped children.

The IASE aims at:
- Promoting understanding and awareness of international issues and concerns about the education and welfare of children with special needs;
- Providing a forum for professional communication among special educators in various countries through its English language publication, the International Journal of Special Education;
- Facilitating communication among its members and informing its members of conferences, publications, projects and concerns; and promoting exchange of ideas among its members through its Newsletter;
- Assisting with the arrangements for International Conferences in Special Education;
- Promoting cross-cultural research;
- Undertaking small projects to assist in the development of educational programs for handicapped children in developing countries.

The membership fee of $20.00 per year entitles a member of IASE to receive two issues of the International Journal of Special Education and copies of the Newsletter and a discount at international conferences sponsored by IASE. In addition part of the fee will be dedicated to small projects approved by the Board of Directors of the Association. Each member has voting rights to elect the executive.

As a member, you may wish to sponsor a special educator from a developing country who lacks the funds or who is prevented by currency restrictions to become a member.

MEMBERSHIP FORM: The International Association of Special Education

Please complete and return this form to: Dr. Marg Caspo, Professor, c/o The University of British Columbia, Department of Educational Psychology and Special Education, 2125 Main Mall, Vancouver, B.C. Canada V6T 1Z5

NAME __________________________________________

ADDRESS __________________________________________

________________________________________ OCCUPATION ______________________

PLACE OF EMPLOYMENT __________________________________________

SPECIAL PROFESSIONAL INTERESTS __________________________________________

Would you be willing to assist the executive or run for executive office? ________________

SPONSOR DUES $20.00 □
REGULAR DUES $20.00 □ Dues for 1987 ____________
STUDENT DUES $15.00 □ Dues for 1988 ____________ Total Enclosed $ ____________
Alternative Futures for the Education of Students with Severe Disabilities

Edited by David Baine, Dick Sobsey, Lorraine Wilgosh, Gerard M. Kysela

1988—University of Alberta Department of Educational Psychology
Based on the 1987 Severe & Multiple Handicaps: Alternative Futures Conference

Research, procedures and issues critical to current and future trends in educational and related services provided to people with severe and multiple disabilities.

Return order form with payment to: Publication Services, Faculty of Education,
4-116 Education North, University of Alberta, Edmonton, Alberta Canada T6G 2G5

I would like to order _________ copy(ies) of: Alternative Futures for the Education of Students with Severe Disabilities

Name: ____________________________________________

Address: ____________________________________________

________________________________________________________________________

Postal Code: __________________________________________

$10 per copy

20% discount on orders of 10 or more

Add Postage & Handling:
1 Book .................................................. $2.50
2 Books .................................................. $3.50
4 or more .......... 10% of total Price

please include cheque or money order

Please make cheques payable to Publication Services
KUWAIT
Dr. Kamal Monti
Kuwait University
LEBANON
Dr. Phillip Saigh
American University of Beirut
LESOThO
Dr. Barnabas Otaala
National University of Lesotho
LIBERIA
Dr. C.W. Snyder
Ministry of Education
LIECHTENSTEIN
Armin Meier
Heilpädagogisches Zentrum
LUXEMBOURG
Fernand Sauer
Institute de Formation Pour Educateurs et Moniteurs
MALAWI
F.R. Mkandawire
Malawi National Commission for UNESCO
MALAYSIA
Dr. Th. Tee Chua
University of Malaysia
MALTA
Dr. George Samuel
Department of Education
MEXICO
Dra. Margarita Gomez Palacio Munoz
Secretaria de Educacion Publica
NEPAL
N. Harsha Dhauhadel
Tribhuvan University
THE NETHERLANDS
Dr. P.J.M. Prins
University of Amsterdam
NEW ZEALAND
Dr. D. Mitchell
University of Waikato
NIGERIA
Dr. Clem Bakare
University of Ibadan
NORWAY
Dr. Terje Ogden
Universitet i Bergen
PAKISTAN
Dr. M. Miles
Mental Health Centre, Peshawar
PAPUA NEW GUINEA
Dr. David R. Boorer
University of Papua New Guinea
PHILIPPINES
Dr. Ma Lourdes Arellano-Carandang
Aranleo de Manila University
POLAND
Dr. Aleksander Hulek
University of Warsaw
PORTUGAL
Maria Lourdes Duarte Silva
Institute A A C Ferrea
SAINT LUCIA
Ruby Yorke
Ministry of Education and Culture Castries
SAN MARINO
Rina Meladini
Capo Desartimento Istruzione e Cultura
SAUDI ARABIA
Dr. Fares M. Sadek
King Saud University
Dr. Abdullah I. Hamman
King Saud University
SENEGAL
Sabeu Sarr
Ministry of National Education
SINGAPORE
Alister Fraser
Institute of Education
SOUTH AFRICA
Prof. P.A. van Nickerk
University of Pretoria
SPAIN
Dr. Alvan Marchesi Ullestres
Ministerio de Educacion y Asistencia
SRI LANKA
K. Piysena
Ministry of Education
SUDAN
Dr. Edith H. Groiber
Ahfad University
SULTANAT OF OMAN
Mr. Malen Bin Rajab Bin Khamis
Ministry of Social Affairs and Labour
SURINAM
Harry Mungra
Institute of Special Education in Surinam
SWAZILAND
Dr. Annie Nyeni
Ministry of Education
SWEDEN
Dr. Olaf Magne
University of Lund
SWITZERLAND
Dr. Alois Burli
Swiss Bureau for Special Education
TAIWAN
Dr. Chang Hsing-Wu
National Taiwan University
TANZANIA
Dr. Joseph Kisanji
University of Dar-es-Salaam
THAILAND
Frida D. Tungara
Institute of Curriculum Development
TOGO
Ayele Atayi
College Protestant de Lome
TRANSKEI
Dr. R.I. Molestate
University of Transkei
U.S.A.
Dr. James Kauffman
University of Virginia
URUGUAY
Jaan Korgozaar
University of Tartu
UGANDA
Daniel M. Kiggundu
Misanvu Teachers' College
VENEZUELLA
Dr. Nusia de Feldman
Instituto de Diagnostico
YUGOSLAVIA
Dr. Egidija Novtjan
University Edvarta Kardelja v Ljubljana
Zaire
Mboloka Imbili
University of Zaire
ZAMBIA
Dr. R. Serpell
University of Zambia
ZIMBABWE
Dr. F.B. Pesanai
United College of Education